Nepal

Demographic and Health Survey

2011

Nepal
Demographic and Health Survey
2011

Population Division
Ministry of Health and Population
Government of Nepal
Kathmandu, Nepal

New ERA
Kathmandu, Nepal

ICF International
Calverton, Maryland, U.S.A.

March 2012

USAID
FROM THE AMERICAN PEOPLE

New ERA

Ministry of Health and Population

The 2011 Nepal Demographic and Health Survey (2011 NDHS) was implemented by New ERA under the aegis of the Ministry of Health and Population (MOHP). Funding for the survey was provided by USAID. ICF International provided technical assistance for the survey through the MEASURE DHS program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

Additional information about the survey may be obtained from the Population Division, Ministry of Health and Population, Government of Nepal, Ramshahpath, Kathmandu, Nepal; Telephone: (977-1) 4262987; New ERA, P.O. Box 722, Kathmandu, Nepal; Telephone: (977-1) 4423176/4413603; Fax: (977-1) 4419562; E-mail: info@newera.wlink.com.np. Information about the DHS program may be obtained from MEASURE DHS, ICF International, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA; Telephone: 301-572-0200, Fax: 301-572-0999, E-mail: reports@measuredhs.com, Internet: http://www.measuredhs.com.

Recommended citation:

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International Inc. 2012. *Nepal Demographic and Health Survey 2011*. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and ICF International, Calverton, Maryland.

CONTENTS

Tables and Figures ix
Foreword xv
Acknowledgments xvii
Technical Advisory Committee and Technical Working Committee xix
Contributors to the Report xxi
Millennium Development Goal Indicators xxiii
Map of Nepal xxiv

CHAPTER 1 INTRODUCTION 1
1.1 History, Geography, and Economy 1
1.1.1 History 1
1.1.2 Geography 1
1.1.3 Economy 3
1.2 Population 3
1.3 Population and Health Policies and Programs 4
1.4 Objectives of the Survey 5
1.5 Organization of the Survey 6
1.6 Sample Design 6
1.6.1 Sampling Frame 7
1.6.2 Domains 7
1.6.3 Sample Selection 7
1.7 Questionnaires 8
1.8 Hemoglobin Testing 8
1.9 Listing, Pretest, Training, and Fieldwork 9
1.9.1 Listing 9
1.9.2 Pretest 9
1.9.3 Training of Field Staff 9
1.9.4 Fieldwork 10
1.10 Data Processing 10
1.11 Response Rates 10

CHAPTER 2 HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 13
2.1 Household Characteristics 13
2.1.1 Water and Sanitation 13
2.1.2 Housing Characteristics 16
2.1.3 Household Possessions 18
2.2 Socioeconomic Status Index 19
2.3 Household Population by Age and Sex 20
2.4 Migration Status 22
2.5 Household Composition 25
2.6 Birth Registration 25
2.7 Children's Living Arrangements, Orphanhood, and School Attendance 26
2.8 Education of Household Population 28
2.8.1 Educational Attainment of Household Population 28
2.8.2 School Attendance Ratios 30
2.8.3 Early Childhood Development Centers 33
2.9 Possession of Mosquito Nets 34
2.10 Prevalence and Causes of Food Insecurity and Coping Strategies 35

CHAPTER 3 CHARACTERISTICS OF RESPONDENTS ... 41
3.1 Characteristics of Survey Respondents ... 41
3.1.1 Spousal Separation ... 43
3.2 Educational Attainment by Background Characteristics ... 44
3.3 Literacy ... 47
3.4 Access to Mass Media ... 49
3.4.1 Access to Specific Radio and Television Programs ... 51
3.4.2 Preferred Media Source for Health-Related Programs ... 53
3.5 Employment ... 54
3.5.1 Employment Status ... 54
3.5.2 Occupation ... 57
3.5.3 Earnings, Employers, and Continuity of Employment ... 60
3.6 Use of Tobacco ... 61

CHAPTER 4 MARRIAGE AND SEXUAL ACTIVITY ... 65
4.1 Current Marital Status ... 65
4.2 Polygyny ... 66
4.3 Age at First Marriage ... 67
4.4 Median Age at First Marriage ... 68
4.5 Age at First Sexual Intercourse ... 70
4.6 Median Age at First Sexual Intercourse ... 71
4.7 Recent Sexual Activity ... 71

CHAPTER 5 FERTILITY ... 75
5.1 Current Fertility ... 75
5.2 Fertility Differentials ... 76
5.3 Fertility Trends ... 77
5.4 Children Ever Born and Living ... 78
5.5 Birth Intervals ... 79
5.6 Postpartum Amenorrhea, Abstinence, and Insusceptibility ... 81
5.7 Menopause ... 82
5.8 Age at First Birth ... 82
5.9 Teenage Pregnancy and Motherhood ... 83

CHAPTER 6 FERTILITY PREFERENCES ... 85
6.1 Desire for More Children ... 85
6.2 Desire to Limit Childbearing by Background Characteristics ... 86
6.3 Ideal Family Size ... 88
6.4 Fertility Planning ... 90
6.5 Wanted Fertility Rates ... 90

CHAPTER 7 FAMILY PLANNING ... 93
7.1 Knowledge of Contraceptive Methods ... 94
7.2 Current Use of Contraception ... 94
7.3 Current Use of Contraception by Background Characteristics ... 95
7.4 Trends in Current Use of Family Planning ... 97
7.5 Timing of Female Sterilization ... 98
7.6 Source of Contraception ... 99
7.7 Brands of Pills and Condoms Used ... 100
7.8 Informed Choice ... 101
7.9 Contraceptive Discontinuation Rates ... 102
7.10 Reasons for Discontinuation of Contraceptive Use ... 102

7.11 Knowledge of Fertile Period ... 103
7.12 Need and Demand for Family Planning Services ... 103
7.13 Future Use of Contraception ... 105
7.14 Exposure to Family Planning Messages ... 105
7.15 Contact of Nonusers with Family Planning Providers ... 107
7.16 Counseling During Postpartum and Post-abortion ... 108
7.17 Men's Attitudes towards Contraception ... 110

CHAPTER 8 INFANT AND CHILD MORTALITY ... 111
8.1 Assessment of Data Quality ... 112
8.2 Levels and Trends in Infant and Child Mortality ... 113
8.3 Socioeconomic Differentials in Childhood Mortality ... 114
8.4 Demographic Differentials in Mortality ... 115
8.5 Perinatal Mortality ... 116
8.6 High-risk Fertility Behavior ... 117

CHAPTER 9 MATERNAL HEALTH ... 119
9.1 Antenatal Care ... 119
9.1.1 Number and Timing of Antenatal Visits ... 121
9.2 Components of Antenatal Care ... 121
9.3 Tetanus Toxoid Vaccination ... 123
9.4 Place of Delivery ... 124
9.5 Assistance during Delivery ... 126
9.5.1 Care and Support during Delivery ... 128
9.5.2 Birth Preparedness ... 130
9.6 Postnatal Care ... 130
9.6.1 Timing of First Postnatal Checkup for the Mother ... 131
9.6.2 Provider of First Postnatal Checkup for Mother ... 132
9.7 Newborn Care ... 132
9.7.1 Provider of First Postnatal Checkup for the Newborn ... 134
9.7.2 Newborn Care Practices ... 135
9.8 Abortion ... 136
9.8.1 Knowledge that Abortion is Legal in Nepal ... 137
9.8.2 Knowledge about Places That Provide Safe Abortions ... 138
9.8.3 Pregnancy Outcomes ... 139
9.8.4 Reason for the Most Recent Abortion ... 140
9.8.5 Type of Abortion Procedure ... 141
9.8.6 Place and Provider for Abortion ... 142
9.8.7 Complications during and after Abortion and Contraception ... 143
9.8.8 Abortion and Post-abortion Cost ... 143
9.9 Uterine Prolapse ... 143
9.10 Problems in Accessing Health Care ... 143
9.10.1 Awareness and Practice of Health Services in the Government Sector ... 144

CHAPTER 10 CHILD HEALTH ... 147
10.1 Child's Weight and Size at Birth ... 148
10.2 Vaccination Coverage ... 149
10.3 Vaccination by Background Characteristics ... 150
10.4 Trends in Immunization Coverage ... 152
10.5 Acute Respiratory Infection ... 152
10.6 Fever ... 153
10.7 Diarrhea ... 155

10.8 Diarrhea Treatment 156
10.9 Feeding Practices during Diarrhea 158
10.10 Knowledge of ORS Packets 159
10.11 Disposal of Children's Stools 160

CHAPTER 11 NUTRITION OF CHILDREN AND WOMEN 163
11.1 Nutritional Status of Children 164
11.1.1 Measurement of Nutritional Status among Young Children 164
11.1.2 Data Collection 165
11.1.3 Measures of Child Nutrition Status 165
11.1.4 Trends in Children's Nutritional Status 168
11.2 Breastfeeding and Complementary Feeding 169
11.2.1 Initiation of Breastfeeding 169
11.3 Breastfeeding Status by Age 171
11.4 Duration of Breastfeeding 173
11.5 Types of Complementary Foods 174
11.6 Infant and Young Child Feeding (IYCF) Practices 175
11.7 Prevalence of Anemia in Children 177
11.8 Micronutrient Intake among Children 179
11.9 Nutritional Status of Women 182
11.10 Prevalence of Anemia in Women 184
11.11 Micronutrient Intake among Mothers 185

CHAPTER 12 HIV AND AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR 189
12.1 Introduction 189
12.2 HIV and AIDS Knowledge, Transmission, and Prevention Methods 190
12.2.1 Knowledge of AIDS 190
12.2.2 Knowledge of HIV Prevention Methods 191
12.2.3 Comprehensive Knowledge of HIV and AIDS Transmission 193
12.3 Knowledge of Prevention of Mother-to-Child Transmission of HIV 196
12.4 Accepting Attitudes toward those Living with HIV and AIDS 197
12.5 Attitudes toward Negotiating Safer Sex 199
12.6 Multiple Sexual Partners 201
12.7 Payment for Sex 202
12.8 Testing for HIV 203
12.9 Self-reporting of Sexually Transmitted Infections 206
12.10 Prevalence of Medical Injections 207
12.11 HIV and AIDS-related Knowledge and Behavior among Youth 208
12.11.1 Knowledge about HIV and AIDS and of Sources for Condoms 209
12.11.2 Age at First Sexual Intercourse among Youth 210
12.11.3 Premarital Sex 211
12.11.4 Multiple Sexual Partners among Youth 212
12.11.5 Age Mixing in Sexual Relationships among Women Age 15-19 213
12.11.6 Recent HIV Tests among Youth 214

CHAPTER 13 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES 215
13.1 Employment and Form of Earnings 216
13.2 Women's Control over Their Own Earnings and Relative Magnitude of Women's and Their Husbands' Earnings 218
13.3 Control over Husbands' Earnings 219
13.4 Women's and Men's Ownership of Selected Assets 222

13.5 Women's Participation in Decision-making 224
13.6 Women's Empowerment Indicators 227
13.7 Current Use of Contraception by Women's Status 229
13.8 Ideal Family Size and Unmet Need by Women's Status 230
13.9 Reproductive Health Care and Women's Empowerment 231
13.10 Infant and Child Mortality and Women's Empowerment 232

CHAPTER 14 DOMESTIC VIOLENCE 233
14.1 Measurement of Violence 234
14.1.1 Use of Valid Measures of Violence 234
14.1.2 Ethical Considerations in the 2011 NDHS 235
14.1.3 Subsample for the Violence Module 235
14.2 Experience of Physical Violence 236
14.3 Perpetrators of Physical Violence 237
14.4 Experience of Sexual Violence 237
14.5 Perpetrators of Sexual Violence 238
14.6 Experience of Different Forms of Violence 239
14.7 Forced at Sexual Initiation 239
14.8 Violence during Pregnancy 239
14.9 Marital Control by Husband 240
14.10 Forms of Spousal Violence 241
14.11 Spousal Violence by Background Characteristics 243
14.12 Violence by Spousal Characteristics and Women's Empowerment Indicators 244
14.13 Frequency of Spousal Violence 245
14.14 Onset of Spousal Violence 247
14.15 Physical Consequences of Spousal Violence 247
14.16 Violence by Women against Their Husbands 248
14.17 Help-seeking Behavior by Women Who Experience Violence 250

REFERENCES 253

APPENDIX A SAMPLE DESIGN AND IMPLEMENTATION 261
APPENDIX B ESTIMATES OF SAMPLING ERRORS 267
APPENDIX C DATA QUALITY TABLES 281
APPENDIX D PERSONS INVOLVED IN THE 2011 NEPAL DEMOGRAPHIC AND HEALTH SURVEY 287
APPENDIX E QUESTIONNAIRES 291

TABLES AND FIGURES

CHAPTER 1 INTRODUCTION

Table 1.1 Basic demographic indicators ... 3
Table 1.2 Results of the household and individual interviews ... 11

CHAPTER 2 HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

Table 2.1 Household drinking water ... 14
Table 2.2 Household sanitation facilities ... 15
Table 2.3 Hand washing ... 16
Table 2.4 Household characteristics ... 17
Table 2.5 Household possessions ... 18
Table 2.6 Wealth quintiles ... 20
Table 2.7 Household population by age, sex, and residence ... 21
Table 2.8 Migration status ... 22
Table 2.9.1 Migration status: Men ... 23
Table 2.9.2 Migration status: Women ... 24
Table 2.10 Household composition ... 25
Table 2.11 Birth registration of children under age five ... 26
Table 2.12 Children's living arrangements and orphanhood ... 27
Table 2.13.1 Educational attainment of the female household population ... 29
Table 2.13.2 Educational attainment of the male household population ... 30
Table 2.14.1 School attendance ratios: Primary school ... 31
Table 2.14.2 School attendance ratios: Secondary school ... 32
Table 2.15 Children enrolled in school-based pre-primary classes and Early Childhood Development centers ... 34
Table 2.16 Possession of mosquito nets ... 35
Table 2.17 Household food security ... 37
Table 2.18 Coping strategies of households with food insecurity ... 38
Table 2.19 Causes of household food insecurity ... 39

Figure 2.1 Population Pyramid ... 21
Figure 2.2 Age-specific Attendance Rates of the de facto Population 5 to 24 Years ... 33

CHAPTER 3 CHARACTERISTICS OF RESPONDENTS

Table 3.1 Background characteristics of respondents ... 42
Table 3.2 Spousal separation ... 44
Table 3.3.1 Educational attainment: Women ... 45
Table 3.3.2 Educational attainment: Men ... 46
Table 3.4.1 Literacy: Women ... 47
Table 3.4.2 Literacy: Men ... 48
Table 3.5.1 Exposure to mass media: Women ... 49
Table 3.5.2 Exposure to mass media: Men ... 50
Table 3.6.1 Exposure to specific health programs on radio and television: Women ... 51
Table 3.6.2 Exposure to specific health programs on radio and television: Men ... 52
Table 3.7.1 Preferred media source for health-related information: Women ... 53
Table 3.7.2 Preferred media source for health-related information: Men ... 54
Table 3.8.1 Employment status: Women ... 55
Table 3.8.2 Employment status: Men ... 57

Table 3.9.1 Occupation: Women ... 58
Table 3.9.2 Occupation: Men ... 59
Table 3.10.1 Type of employment: Women ... 60
Table 3.10.2 Type of employment: Men ... 61
Table 3.11.1 Use of tobacco: Women ... 62
Table 3.11.2 Use of tobacco: Men ... 63

Figure 3.1 Women's Employment Status in the Past 12 Months ... 56

CHAPTER 4 MARRIAGE AND SEXUAL ACTIVITY
Table 4.1 Current marital status ... 65
Table 4.2 Number of co-wives and wives ... 67
Table 4.3 Age at first marriage ... 68
Table 4.4 Median age at first marriage by background characteristics ... 69
Table 4.5 Age at first sexual intercourse ... 70
Table 4.6 Median age at first sexual intercourse by background characteristics ... 71
Table 4.7.1 Recent sexual activity: Women ... 72
Table 4.7.2 Recent sexual activity: Men ... 73

Figure 4.1 Trend in Proportion Never Married among Women and Men 15-24 Years ... 66

CHAPTER 5 FERTILITY
Table 5.1 Current fertility ... 76
Table 5.2 Fertility by background characteristics ... 77
Table 5.3.1 Trends in age-specific fertility rates ... 77
Table 5.3.2 Trends in fertility ... 78
Table 5.4 Children ever born and living ... 79
Table 5.5 Birth intervals ... 80
Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility ... 81
Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility ... 82
Table 5.8 Menopause ... 82
Table 5.9 Age at first birth ... 83
Table 5.10 Median age at first birth ... 83
Table 5.11 Teenage pregnancy and motherhood ... 84

Figure 5.1 Trends in Fertility ... 78

CHAPTER 6 FERTILITY PREFERENCES
Table 6.1 Fertility preferences by number of living children ... 86
Table 6.2.1 Desire to limit childbearing: Women ... 87
Table 6.2.2 Desire to limit childbearing: Men ... 87
Table 6.3 Ideal number of children by number of living children ... 88
Table 6.4 Mean ideal number of children by background characteristics ... 89
Table 6.5 Fertility planning status ... 90
Table 6.6 Wanted fertility rates ... 91

CHAPTER 7 FAMILY PLANNING
Table 7.1 Knowledge of contraceptive methods ... 94
Table 7.2 Current use of contraception by age ... 95
Table 7.3 Current use of contraception by background characteristics ... 96
Table 7.4 Trends in current use of contraceptive methods ... 97
Table 7.5 Timing of sterilization ... 98

Table 7.6 Source of modern contraception methods ... 99
Table 7.7 Use of social marketing brand pills and condoms ... 100
Table 7.8 Informed choice ... 101
Table 7.9 Twelve-month contraceptive discontinuation rates ... 102
Table 7.10 Reasons for discontinuation ... 103
Table 7.11 Knowledge of fertile period ... 103
Table 7.12 Need and demand for family planning among currently married women ... 104
Table 7.13 Future use of contraception ... 105
Table 7.14 Exposure to family planning messages ... 106
Table 7.15 Contact of nonusers with family planning providers ... 108
Table 7.16 Information on family planning methods and counseling ... 109
Table 7.17 Men's attitudes towards contraceptive use ... 110

Figure 7.1 Trends in Contraceptive Use among Currently Married Women ... 98

CHAPTER 8 INFANT AND CHILD MORTALITY
Table 8.1 Early childhood mortality rates ... 113
Table 8.2 Early childhood mortality rates by socioeconomic characteristics ... 115
Table 8.3 Early childhood mortality rates by demographic characteristics ... 116
Table 8.4 Perinatal mortality ... 117
Table 8.5 High-risk fertility behavior ... 118

Figure 8.1 Trends in Childhood Mortality, Nepal 1991-2010 ... 114

CHAPTER 9 MATERNAL HEALTH
Table 9.1 Antenatal care ... 120
Table 9.2 Number of antenatal care visits and timing of first visit ... 121
Table 9.3 Components of antenatal care ... 122
Table 9.4 Tetanus toxoid injections ... 124
Table 9.5 Place of delivery ... 125
Table 9.6 Reasons for not delivering in a health facility ... 126
Table 9.7 Assistance during delivery ... 127
Table 9.8 Care and support during delivery ... 129
Table 9.9 Birth preparedness ... 130
Table 9.10 Timing of first postnatal checkup ... 131
Table 9.11 Type of provider of first postnatal checkup for the mother ... 132
Table 9.12 Timing of first postnatal checkup for the newborn ... 133
Table 9.13 Type of provider of first postnatal checkup for the newborn ... 134
Table 9.14 Use of clean home delivery kits and other instruments to cut the umbilical cord ... 135
Table 9.15 Newborn care practices ... 136
Table 9.16 Knowledge that abortion is legal in Nepal ... 138
Table 9.17 Knowledge about places that provide safe abortions ... 139
Table 9.18 Pregnancy outcomes by background characteristics ... 140
Table 9.19 Main reason for the most recent abortion in the past five years ... 141
Table 9.20 Abortion services in the past five years ... 142
Table 9.21 Problems in accessing health care ... 144
Table 9.22 Awareness and practice of health services in government sector ... 145

CHAPTER 10 CHILD HEALTH
Table 10.1 Child's weight and size at birth ... 149
Table 10.2 Vaccinations by source of information ... 150
Table 10.3 Vaccinations by background characteristics ... 151

Table 10.4 Prevalence of symptoms of ARI ... 153
Table 10.5 Prevalence and treatment of fever ... 154
Table 10.6 Prevalence of diarrhea ... 156
Table 10.7 Diarrhea treatment ... 158
Table 10.8 Feeding practices during diarrhea ... 159
Table 10.9 Disposal of children's stools ... 161

Figure 10.1 Trends in Vaccination Coverage among Children 12-23 Months, Nepal 1996-2011 ... 152

CHAPTER 11 NUTRITION OF CHILDREN AND WOMEN
Table 11.1 Nutritional status of children ... 166
Table 11.2 Initial breastfeeding ... 170
Table 11.3 Breastfeeding status by age ... 172
Table 11.4 Median duration of breastfeeding ... 174
Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview ... 175
Table 11.6 Infant and young child feeding (IYCF) practices ... 176
Table 11.7 Prevalence of anemia in children ... 178
Table 11.8 Micronutrient intake among children ... 180
Table 11.9 Presence of adequately iodized salt in household ... 182
Table 11.10 Nutritional status of women ... 183
Table 11.11 Prevalence of anemia in women ... 185
Table 11.12 Micronutrient intake among mothers ... 187

Figure 11.1 Nutritional Status of Children by Age ... 167
Figure 11.2 Trends in Nutritional Status of Children under Five Years ... 169
Figure 11.3 Infant Feeding Practices by Age ... 172
Figure 11.4 IYCF Indicators on Breastfeeding Status ... 173

CHAPTER 12 HIV AND AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR
Table 12.1 Knowledge of AIDS ... 191
Table 12.2 Knowledge of HIV prevention methods ... 192
Table 12.3.1 Comprehensive knowledge about AIDS: Women ... 194
Table 12.3.2 Comprehensive knowledge about AIDS: Men ... 195
Table 12.4 Knowledge of prevention of mother-to-child transmission of HIV ... 196
Table 12.5.1 Accepting attitudes toward those living with HIV/AIDS: Women ... 198
Table 12.5.2 Accepting attitudes toward those living with HIV/AIDS: Men ... 199
Table 12.6 Attitudes toward negotiating safer sexual relations with husband ... 200
Table 12.7 Multiple sexual partners ... 201
Table 12.8 Payment for sexual intercourse and condom use at last paid sexual intercourse ... 203
Table 12.9.1 Coverage of prior HIV testing: Women ... 204
Table 12.9.2 Coverage of prior HIV testing: Men ... 205
Table 12.10 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms ... 206
Table 12.11 Prevalence of medical injections ... 208
Table 12.12 Comprehensive knowledge about AIDS and of a source of condoms among youth ... 209
Table 12.13 Age at first sexual intercourse among youth ... 211
Table 12.14 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth ... 212
Table 12.15 Multiple sexual partners in the past 12 months among young men ... 213
Table 12.16 Age mixing in sexual relationships among women age 15-19 ... 213
Table 12.17 Recent HIV tests among youth ... 214

Figure 12.1 Women and Men Seeking Advice or Treatment for STIs ... 207

CHAPTER 13 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES
Table 13.1 Employment and cash earnings of currently married women and men 216
Table 13.2 Reasons for women not being employed in the past 12 months 217
Table 13.3.1 Control over women's cash earnings and relative magnitude of women's cash earnings: Women 219
Table 13.3.2 Control over men's cash earnings 220
Table 13.4 Woman's control over their earnings and over those of their husbands 221
Table 13.5.1 Ownership of assets: Women 223
Table 13.5.2 Ownership of assets: Men 224
Table 13.6 Participation in decision-making 225
Table 13.7.1 Women's participation in decision-making by background characteristics 226
Table 13.7.2 Men's participation in decision-making by background characteristics 227
Table 13.8 Indicators of women's empowerment 229
Table 13.9 Current use of contraception by women's empowerment 230
Table 13.10 Women's empowerment and ideal number of children and unmet need for family planning 230
Table 13.11 Reproductive health care by women's empowerment 231
Table 13.12 Early childhood mortality rates by indicators of women's empowerment 232

Figure 13.1 Percent Distribution of Currently Married Women with their Score on Each of the Two Women's Empowerment Indices 228

CHAPTER 14 DOMESTIC VIOLENCE
Table 14.1 Experience of physical violence 236
Table 14.2 Persons committing physical violence 237
Table 14.3 Experience of sexual violence 238
Table 14.4 Persons committing sexual violence 238
Table 14.5 Experience of different forms of violence 239
Table 14.6 Forced sexual initiation 239
Table 14.7 Violence during pregnancy 240
Table 14.8 Marital control exercised by husbands 241
Table 14.9 Forms of spousal violence 242
Table 14.10 Spousal violence by background characteristics 244
Table 14.11 Spousal violence by husband's characteristics and women's empowerment indicators 245
Table 14.12 Frequency of spousal violence among those who report violence 246
Table 14.13 Onset of marital violence 247
Table 14.14 Injuries to women due to spousal violence 248
Table 14.15 Violence by women against their spouse 249
Table 14.16 Help seeking to stop violence 250
Table 14.17 Sources from where help was sought 251

Figure 14.1 Specific Forms of Physical and Sexual Violence Committed by Husbands 243

APPENDIX A SAMPLE DESIGN AND IMPLEMENTATION
Table A.1 Enumeration areas 262
Table A.2 Population 262
Table A.3 Sample allocation of clusters and households 263
Table A.4 Sample allocation of expected number of completed interviews 263
Table A.5 Sample implementation: Women 264
Table A.6 Sample implementation: Men 265

APPENDIX B ESTIMATES OF SAMPLING ERRORS

Table B.1 List of selected variables for sampling errors, Nepal, 2011 269
Table B.2 Sampling errors for national sample, Nepal 2011 270
Table B.3 Sampling errors for urban sample, Nepal 2011 271
Table B.4 Sampling errors for rural sample, Nepal 2011 272
Table B.5 Sampling errors for Mountain region, Nepal 2011 273
Table B.6 Sampling errors for Hill region, Nepal 2011 274
Table B.7 Sampling errors for Terai region, Nepal 2011 275
Table B.8 Sampling errors for Eastern region, Nepal 2011 276
Table B.9 Sampling errors for Central region, Nepal 2011 277
Table B.10 Sampling errors for Western region, Nepal 2011 278
Table B.11 Sampling errors for Mid-western region, Nepal 2011 279
Table B.12 Sampling errors for Far-western region, Nepal 2011 280

APPENDIX C DATA QUALITY TABLES

Table C.1 Household age distribution 281
Table C.2.1 Age distribution of eligible and interviewed women 282
Table C.2.2 Age distribution of eligible and interviewed men 282
Table C.3 Completeness of reporting 283
Table C.4 Births by calendar years 283
Table C.5 Reporting of age at death in days 284
Table C.6 Reporting of age at death in months 285
Table C.7 Nutritional status of children based on NCHS/CDC/WHO International Reference Population 286

FOREWORD

The 2011 Nepal Demographic and Health Survey is the fourth nationally representative comprehensive survey conducted as part of the worldwide Demographic and Health Surveys (DHS) project in the country. The survey was implemented by New ERA under the aegis of the Population Division, Ministry of Health and Population. Technical support for this survey was provided by ICF International with financial support from the United States Agency for International Development (USAID) through its mission in Nepal.

The primary objective of the 2011 NDHS is to provide up-to-date and reliable data on different issues related to population and health, which provides guidance in planning, implementing, monitoring, and evaluating health programs in Nepal. The long term objective of the survey is to strengthen the technical capacity of the local institutions to plan, conduct, process and analyze data from complex national population and health surveys. The survey includes topics on fertility levels and determinants, family planning, fertility preferences, childhood mortality, children and women's nutritional status, the utilization of maternal and child health services, knowledge of HIV/AIDS and STIs, women's empowerment and for the first time, information on women facing different types of domestic violence. The survey also reports on the anemia status of women age 15-49 and children age 6-59 months.

In addition to providing national estimates, the survey report also provides disaggregated data at the level of various domains such as ecological region, development regions and for urban and rural areas. This being the fourth survey of its kind, there is considerable trend information on reproductive and health care over the past 15 years. Moreover, the 2011 NDHS is comparable to similar surveys conducted in other countries and therefore, affords an international comparison. The 2011 NDHS also adds to the vast and growing international database on demographic and health-related variables.

The 2011 NDHS collected demographic and health information from a nationally representative sample of 10,826 households, which yielded completed interviews with 12,674 women age 15-49 in all selected households and with 4, 121 men age 15-49 in every second household.

This survey is the concerted effort of various individuals and institutions, and it is with great pleasure that I acknowledge the work that has gone into producing this useful document. The participation and cooperation that was extended by the members of the Technical Advisory Committee in the different phases of the survey is greatly appreciated.

I would like to extend my appreciation to USAID/Nepal for providing financial support for the survey. I would also like to acknowledge ICF International for its technical assistance at all stages of the survey. My sincere thanks go to the New ERA study team for their generous effort in carrying out the survey work. I also would like to thank the Population Division of the Ministry of Health and Population for its effort and dedication in the completion of the 2011 NDHS.

Praveen Mishra
Secretary
Ministry of Health and Population

ACKNOWLEDGMENTS

The 2011 Nepal Demographic and Health Survey (NDHS) was conducted under the aegis of the Population Division, Ministry of Health and Population of the Government of Nepal. The United States Agency for International Development (USAID) provided financial support through its mission in Nepal while technical assistance was provided by ICF International. The survey was implemented by New ERA, a local research firm with extensive experience in conducting such surveys in the past.

We express our deep sense of appreciation to the technical experts in the different fields of population and health for their valuable input in the various phases of the survey including the finalization of the questionnaires, training of field staff, monitoring the data collection, reviewing the draft tables and providing valuable inputs towards finalizing the report. Our sincere gratitude goes to all the members of Technical Advisory Committee for their time, support and valuable input. We would like to extend or sincere gratitude to Dr. Sudha Sharma, Ex-secretary, Ministry of Health and Population for her guidance and valuable input. Our sincere thanks go to Mr. Surya Prasad Acharya and Mr. Krishna Prasad Lamsal for their support during the different phases of the survey as chiefs of the Population Division, Ministry of Health and Population.

We would like to express our heartfelt gratitude to the USAID mission in Nepal. We acknowledge the technical input and support provided by Ms. Anne M. Peniston, Director, Office of Health and Family Planning, Ms. Shanda Steimer, Director, Office of Health and Family Planning, Mr. Han Kang, Deputy Director, Office of Health and Family Planning, and Mr. Deepak Paudel, Senior MNCH Program Management Specialist, Office of Health and Family Planning.

Our deep sense of gratitude goes to Dr. Pav Govindasamy, Regional Coordinator for Anglophone Africa and Asia, ICF International for her technical support. We would like to thank Dr. Alfredo Aliaga, Sampling Expert for designing the sample for the survey. Our sincere thanks go to Mr. Albert Themme, Data Processing Specialist for his invaluable input, guidance, and untiring support in making the use of tablet computers materialize in the Nepal DHS for the first time. Similarly, we extend our gratitude to Mr. Alexander Izmukhambetov, Data Processing Specialist and other ICF International staff for their valuable contribution.

Special thanks goes to the core staff of New ERA, Ms. Anjushree Pradhan, Project Director; Mr. Yogendra Prasai, Technical Advisor; Mr. Kshitiz Shrestha and Ms. Jyoti Manandhar, Research Officers; Mr. Sachin Shrestha, Senior Research Assistant; Mr. Rajendra Lal Singh Dangol, Senior Data Processing Specialist and Ms. Sarita Vaidya, Data Processing Officer; Mr. Gehendra Man Pradhan and Mr. Babu Raja Dangol, Data Supervisors; Mr. Sanu Raja Shakya and Ms. Geeta Shrestha Amatya, Word Processing Staff, and other staff of New ERA for managing technical, administrative and logistical needs of the survey. Our special thanks go to the field coordinators, the quality control staff, field supervisors and enumerators for their tireless effort in making the fieldwork successful. We are also grateful to Mr. Megha Raj Dhakal, Under-Secretary, Mr. Naresh Khatiwada, Demographer/Statistical Officer and Ms. Lila K.C., Section Officer, Population Study and Research Section, and other staff at the Ministry of Health and Population for their active support. Similarly, we would like to extend our gratitude to the authors for their valuable contribution to the report.

We greatly acknowledge the support we received from various institutions in implementing the survey. We would especially like to thank the local level agencies including the District Health Offices, Health-Posts, Sub-health Posts, District Development Committees and the Village Development Committees for their support throughout the survey period. The FCHVs require special mention here, whose support has been highly appreciated. We extend our deepest gratitude to all the respondents for their time in responding to the survey.

Sidhartha Man Tuladhar
Executive Director
New ERA

Padam Raj Bhatta
Chief, Population Division
Ministry of Health and Population

TECHNICAL ADVISORY COMMITTEE AND TECHNICAL WORKING COMMITTEE

2011 NEPAL DHS TECHNICAL ADVISORY COMMITTEE

Secretary (Population), Ministry of Health and Population	Chairperson
Secretary, Ministry of Health and Population	Member
Dr. Ram Hari Aryal, Secretary, Ministry of Science and Technology	Member
Dr. Bal Gopal Baidya, Member, National Population Committee	Member
Dr. Gajananda Agrawal, Member, National Population Committee	Member
Dr. Ram Sharan Pathak, Member, National Population Committee	Member
Dr. Chandrakala Bhadra, Member, National Population Committee	Member
Dr. Prabha K Hamal, Member, National Population Committee	Member
Mr. Yogendra Bahadur Gurung, Member, National Population Committee	Member
Director General, Department of Health Sciences	Member
Director General, Central Bureau of Statistics	Member
Chief, PPICD, Ministry of Health and Population,	Member
Chief, PHA, Monitoring and Evaluation Division, Ministry of Health and Population	Member
Chief, Curative Service Division, Ministry of Health and Population	Member
Chief, Administrative Division, Ministry of Health and Population	Member
Chief, HR and Financial Resource Management Division, Ministry of Health and Population	Member
Director, family Health Division, Department of Health Sciences	Member
Director, Child Health Division, Department of Health Sciences	Member
Director, NCASC, Ministry of Health and Population	Member
Director, NHIECC, Ministry of Health and Population	Member
Chairperson, National Health Research Council	Member
Chief, Social Division, National Planning Commission	Member
Director General, Family Planning Association	Member
Representative, USAID	Member
Representative, UNFPA	Member
Dr. Pav Govindasamy, ICF International	Member
Head of Department, Central Department of Population Studies	Member
Executive Director, New ERA	Member
Chief, Population Division, Ministry of Health and Population	Member-Secretary

2011 NEPAL DHS TECHNICAL WORKING COMMITTEE

Joint Secretary/Chief, Population Division, Ministry of Health and Population	Chairperson
Dr. Bal Krishna Suvedi, PPICD, Ministry of Health and Population	Member
Dr. Megha Raj Dhakal, Under Secretary, Population Study and Research Section, MOHP	Member
Mr. Kabi Raj Khanal, Under Secretary, Ministry of Health and Population	Member
Dr. Babu Ram Marasini, Public Health Administrator, Ministry of Health and Population	Member
Mr. Raj Kumar Pokharel, Public Health Administrator, CHD, Department of Health Services	Member
Mr. Naresh Khatiwada, Statistical Officer/Demographer, Ministry of Health and Population	Member
Mr. Anil Thapa, Demographer, Ministry of Health and Population	Member
Mr. Badri Bahadur Khadka, NHIECC	Member
Chief, Demographic Section, FHD, Department of Health Services	Member
Mr. Pawan Kumar Ghimire, Chief, HMIS, Department of Health Services	Member
Mr. Nebin Lal Shrestha, Director, Central Bureau of Statistics	Member
Mr. Jhabindra Prasad Pandey, Demographer. Family Health Division	Member
Dr. Laxmi Bilash Acharya, FHI	Member
Dr. Yagya Bahadur Karki, Demographer	Member
Dr. Prakash Dev Panta, Family Health International 360	Member
Dr. Pushpa Kamal Subedi, Asst. Professor, Central Department of Population Studies, T.U.	Member
Mr. Ajit Singh Pradhan, Demographer, Nepal Health Sector Support Program	Member
Mr. Bharat Ban, Nepal Family Health Program	Member
Representative, National Center for AIDS and STD Control	Member
Representative, Nepal Health Research Council	Member
Representative, New ERA	Member
Chief, Population Study and Research Section, Population Division	Member-Secretary

CONTRIBUTORS TO THE REPORT

AUTHORS

Mr. Padam Raj Bhatta, Population Division, Ministry of Health and Population
Mr. Surya Prasad Acharya, Ministry of Health and Population
Mr. Upendra Adhikari, Ministry of Women and Social Welfare
Dr. Megha Raj Dhakal, Population Division, Ministry of Health and Population
Mr. Naresh Khatiwada, Population Division, Ministry of Health and Population
Mr. Anil Thapa, Population Division, Ministry of Health and Population
Ms. Lila Kumari K.C., Population Division, Ministry of Health and Population
Mr. Raj Kumar Pokhrel, Child Health Division, Department of Health Services
Mr. Mukti Nath Khanal, Family Health Division, Department of Health Services
Mr. Paban Ghimire, Management Division, Department of Health Services
Mr. Ramesh Adhikari, District Health Office, Kaski
Dr. Purusotam Raj Shedain, Child Health Division, Department of Health Services
Mr. Parshu Ram Shrestha, Child Health Division, Department of Health Services
Mr. Dilli Raman Adhikari, National Centre for AIDS and STD Control, Department of Health Services
Mr. Jhabindra Prasad Pandey, Ministry of Health and Population
Mr. Kshitiz Shrestha, New ERA
Ms. Jyoti Manandhar, New ERA
Dr. Pav Govindasamy, ICF International
Ms. Anjushree Pradhan, ICF International

RESOURCE PERSONS

Mr. Gauri Pradhan, Human Rights Commission
Dr. Sudha Sharma, Ministry of Health and Population
Dr. Ram Hari Aryal, Secretary, Ministry of Science and Technology
Dr. Bal Krishna Suvedi, Ministry of Health and Population
Dr. Chandrakala Bhadra, Member, National Population Committee
Dr. Ram Sharan Pathak, Member, National Population Committee
Mr. Yogendra Bahadur Gurung, Member, National Population Committee
Dr. Y.V. Pradhan, Director, Department of Health Services
Mr. Bed Prasad Bhattarai, Human Rights Commission
Dr. Naresh Pratap K.C., Department of Health Services, Ministry of Health and Population
Dr. Shyam Raj Uprety, Child Health Division, Department of Health Services
Dr. Ramesh Kharel, National Center for AIDS and STD Control
Dr. B.R. Marasini, Ministry of Health and Population
Dr. Kedar Baral (PAHS)
Dr. R.K. Adhikari, KIST Medical College
Dr. Prakash Dev Pant, Family Health International 360
Dr. Suresh Tiwari, Nepal Health Sector Support Program
Mr. Ajit Singh Pradhan, Nepal Health Sector Support Program
Mr. Ashoke Shrestha, Nepal Family Health Program
Dr. Rajendra Bhadra, Nepal Family Health Program
Mr. Bharat Ban, Nepal Family Health Program
Mr. Dirgha Raj Shrestha, Nepal Family Health Program
Mr. Deepak Paudel (USAID)
Dr. Amit Bhandari, DFID
Ms. Iva Schildbach (GIZ)
Mr. Manav Bhattarai, World Bank
Mr. Satish Raj Pandey, Family Health International 360
Mr. Shailesh Neupane, Valley Research Group
Mr. Shital Bhandari (PAHS)
Dr. Sudhir Khanal, UNICEF
Mr. Sunil Acharya, Central Department of Population Studies, Tribhuvan University
Ms. Pooja Pandey, Helen Keller International
Mr. Yogendra Prasai, New ERA

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Millennium Development Goal Indicators

Nepal, 2011

Indicator	Sex: Male	Sex: Female	Total
1. Eradicate extreme poverty and hunger			
1.8 Prevalence of underweight children under five years of age[1]	29.6	28.0	28.8
2. Achieve universal primary education			
2.1 Net enrollment ratio in primary education[2]	94.6	89.0	91.9
2.3 Literacy rate of 15-24 year olds[3]	94.6[a]	82.7	88.6[b]
3. Promote gender equality and empower women			
3.1a Ratio of girls to boys in primary education[4]	na	na	0.9
3.1b Ratio of girls to boys in secondary education[4]	na	na	1.0
3.1c Ratio of girls to boys in tertiary education[4]	na	na	0.8
4. Reduce child mortality			
4.1 Under-five mortality rate (per 1,000 live births)[5]	63	62	54
4.2 Infant mortality rate (per 1,000 live births)[5]	54	52	46
4.3 Proportion of 1 year-old children immunized against measles[6]	89.7	86.3	88.0
5. Improve maternal health			
5.2 Proportion of births attended by skilled health personnel[7]	na	na	36.0
5.3 Contraceptive prevalence rate[8]	na	49.7	na
5.4 Adolescent birth rate[9]	na	81.0	na
5.5a Antenatal care coverage: at least 1 visit by skilled health professional	na	58.3	na
5.5b Antenatal care coverage: at least 4 visits by any provider	na	50.1	na
5.6 Unmet need for family planning	na	27.0	na
6. Combat HIV/AIDS, malaria and other diseases			
6.2 Condom use at last high-risk sex: youth 15-24 years[10]	65.8[a]	na	na
6.3 Percentage of population 15-24 years with comprehensive knowledge of AIDS[11]	33.9[a]	25.8	29.8[b]
	Urban	**Rural**	**Total**
7. Ensure environmental sustainability			
7.8 Percentage of population using an improved drinking water source[12]	93.5	87.8	88.6
7.9 Percentage of population with access to improved sanitation[13]	58.1	36.7	39.5

na = Not applicable.

[1] Proportion of children age 0-59 months who are below -2 standard deviations from the median of the WHO Child Growth Standards in weight-for-age.

[2] The rate is based on reported attendance, not enrollment, in primary education among primary school age children (6-10 year-olds). The rate also includes children of primary school age attended in secondary education. This is proxy for MDG indicator 2.1, net enrollment ratio.

[3] Refers to respondents who attended secondary school or higher or who could read a whole sentence or part of a sentence.

[4] Based on reported net attendance, not gross enrollment, among 6-10 year-olds for primary, 11-15 year-olds for secondary and 16-20 year-olds for tertiary education.

[5] Expressed in terms of deaths per 1,000 live births. Mortality by sex refers to a 10-year reference period preceding the survey. Mortality rates for males and females combined refer to the 5-year period preceding the survey.

[6] Among children age 12-23 months vaccinated at any time before the survey.

[7] Among births in the 5-year period preceding the survey.

[8] Percentage of currently married women age 15-49, using any method of contraception.

[9] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19

[10] High-risk sex refers to sexual intercourse with a non-marital, non-cohabiting partner. Expressed as a percentage of men and women age 15-24 who had high-risk sex in the past 12 months. Information for female suppressed as only few women had high-risk sex.

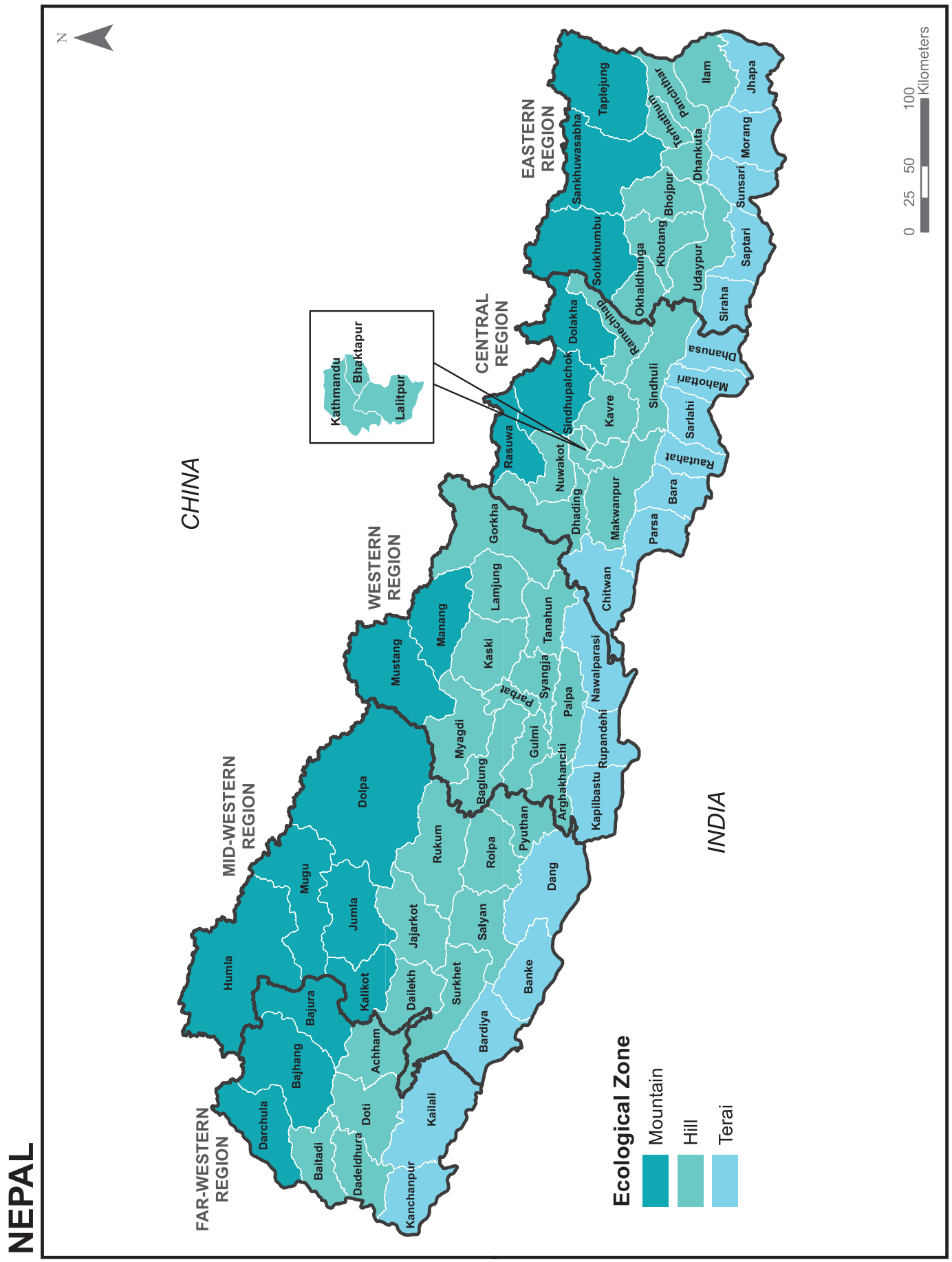
[11] Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus: AIDS can be transmitted by mosquito bites; a person can become infected by sharing food with someone who has AIDS.

[12] Percentage of de-jure population whose main source of drinking water are: a household connection (piped), public standpipe, tubewell or borehole, protected well or spring, rainwater collection, or bottled water.

[13] Percentage of de-jure population with access to flush toilet, ventilated improved pit latrine, pit latrine with a slab, or composting toilet and does not share this facility with other households.

[a] Restricted to men in sub-sample of households selected for the male interview

[b] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females


NEPAL
N
CHINA
INDIA
FAR-WESTERN REGION
MID-WESTERN REGION
WESTERN REGION
CENTRAL REGION
EASTERN REGION
Kathmandu
Bhaktapur
Lalitpur
Darchula
Baitadi
Dadeldhura
Bajhang
Bajura
Humla
Doti
Achham
Kailali
Kanchanpur
Kalikot
Jumla
Mugu
Dolpa
Jajarkot
Dailekh
Surkhet
Bardiya
Banke
Rukum
Salyan
Rolpa
Dang
Pyuthan
Baglung
Myagdi
Mustang
Manang
Gorkha
Lamjung
Kaski
Parbat
Syangja
Tanahun
Palpa
Arghakhanchi
Gulmi
Rasuwa
Nuwakot
Dhading
Kapilbastu
Rupandehi
Nawalparasi
Chitwan
Makwanpur
Sindhupalchok
Kavre
Dolakha
Ramechhap
Sindhuli
Solukhumbu
Okhaldhunga
Khotang
Sankhuwasabha
Taplejung
Terhathum
Panchthar
Bhojpur
Ilam
Dhankuta
Jhapa
Morang
Sunsari
Saptari
Udaypur
Siraha
Dhanusa
Mahottari
Sarlahi
Rautahat
Bara
Parsa
Ecological Zone
Mountain
Hill
Terai
0 25 50 100 Kilometers

INTRODUCTION 1

1.1 HISTORY, GEOGRAPHY, AND ECONOMY

1.1.1 History

The history of Nepal goes back thousands of years, with early dynasties of Ahirs and Gopalas and Kirant kings ruling the country. It appears that the Kirant people were one of the first to settle in Nepal; they are said to have ruled the country for about 2,500 years. Subsequent dynasties of Licchavi and Thakuri kings ruled the country before the Malla period began in the 12th century. The Malla era is considered to be the golden age of Nepal, and Malla kings were famous for their contribution to art and culture. In 1765 A.D., King Prithvi Narayan Shah—the first Shah king of Nepal—embarked on his mission to unify the country, which had previously been divided into small independent kingdoms. After several battles and sieges, he managed to unify the Kathmandu Valley and surrounding territories three years later in 1768. However, factionalism inside the royal family led to the emergence of the Rana lineage, founded by military leader Jung Bahadur Rana, who assumed power by killing hundreds of military personnel and administrators loyal to Shah rulers in 1846 (Thingo and von der Heide, 1997).

Backed by newly emerging pro-democracy movements and political parties, King Tribhuwan Shah ended the century-old system of rule by hereditary Rana premiers and instituted a cabinet system of government in 1951. Reforms in 1990 established a multiparty democracy within the framework of a constitutional monarchy. In early 1996, the Nepal Communist Party (Maoist) launched a movement that capitalized on the growing dissatisfaction among the general population with the lack of reforms expected from a democratically elected government. The constant conflict between the Maoists and the elected government resulted in the displacement of the population. Growing numbers of people began migrating out of their usual places of residence to urban centers and neighboring countries to escape the conflict and to search for employment.

Citing dissatisfaction with the government's lack of progress in addressing the Maoist insurgency, King Gyanendra Bir Bikram Shah dissolved the government, declared a state of emergency, imprisoned party leaders, and assumed power in February 2005. The mass movement of April 2006 in Nepal restored parliament and the democratic process and initiated a peace movement that called for an end to the 10-year-long armed conflict. After nearly three weeks of mass protests organized by the seven-party opposition and the Maoists, the king allowed parliament to reconvene on 8 April 2006. A comprehensive peace agreement was signed between an alliance of the seven major political parties and the Nepal Communist Party (Maoist) on 21 November 2006. An interim constitution was drafted, and the restored parliament dissolved to pave the way for an interim legislature and interim government. The Nepal Communist Party (Maoist) joined the democratic competition, and constituent assembly elections were held in April 2008 to devise a constitution to manage the root causes of the conflicts afflicting the nation.

After the dethroning of King Gyanendra Bir Bikram Shah and the obliteration of the monarchy in Nepal, the ruling seven-party alliance announced substantive structural reforms such as the declaration of the country as secular and federal, civilian control of the Nepal Army, nationalization of royal property, and empowerment of the prime minister as head of state (Dahal, 2008).

1.1.2 Geography

The total land area of Nepal is 147,181 square kilometers, with India to the east, south, and west and China to the north. It is a land-locked country occupying an area from 26º 22' to 30º 27' north latitude and 80º 4' to 88º 12' east longitude; elevations range from 90 meters to 8,848 meters. Nepal is rectangular in shape and stretches 885 kilometers in length (east to west) and 193 kilometers in width (north to south). According to the

preliminary results of the 2011 Population Census, the population of Nepal stands at 26.6 million (Central Bureau of Statistics, 2011a).

Topographically, Nepal is divided into three distinct ecological zones: mountain, hill, and *terai* (or plains). The mountain zone, which accounts for 35 percent of the total land area, ranges in altitude from 4,877 meters to 8,848 meters above sea level and covers a land area of 51,817 square kilometers. Because of the harsh terrain, transportation and communication facilities in this zone are very limited, and only about 7 percent of the total population lives here.

In contrast, the hill ecological zone, which ranges in altitude from 610 meters to 4,876 meters above sea level, is densely populated. About 43 percent of the total population lives in the hill zone, which covers an area of 61,345 square kilometers and occupies 42 percent of the total land area. The population distribution in the hills varies, with a fairly dense population in the valleys but notably lower population numbers above 2,000 meters (6,562 feet) and very low numbers above 2,500 meters (8,202 feet), where snow occasionally falls in the winter. This zone includes the Kathmandu Valley, the country's most fertile and urbanized area. Although the terrain is also rugged in this zone, because of the higher concentration of people, transportation and communication facilities are much more developed here than in the mountains.

The terai zone in the southern part of the country can be regarded as an extension of the relatively flat Gangetic plains of alluvial soil. This region has a subtropical to tropical climate. The outermost range of foothills, the Siwalik or Churia range, crests at 700 to 1,000 meters (2,297 to 3,281 feet) and marks the limit of the Gangetic plains; broad, low valleys called the inner terai lie north of these foothills. The terai consists of dense forest areas, national parks, wildlife reserves, and conservation areas. This area, which covers 34,019 square kilometers, is the most fertile part of the country. While it constitutes only 23 percent of the total land area in Nepal, 50 percent of the population lives here (Central Bureau of Statistics, 2011a). Because of its relatively flat terrain, transportation and communication facilities are more developed in this zone than in the other two zones of the country, and this has attracted newly emerging industries.

The climatic conditions vary substantially by altitude. There are five climatic zones, broadly corresponding to altitude. The tropical and subtropical zones lie below 1,200 meters, the temperate zone 1,200 to 2,400 meters, the cold zone 2,400 to 3,600 meters, the subarctic zone 3,600 to 4,400 meters, and the arctic zone above 4,400 meters. In the terai, temperatures can go up to 44º Celsius in the summer and fall to 1º Celsius in the winter. The corresponding temperatures for the hill and mountain areas are 43º Celsius and 29º Celsius, respectively, in the summer and -1º Celsius and far below 0º Celsius, respectively, in the winter. The annual mean rainfall in the country is around 1,500 millimeters (Central Bureau of Statistics, 2006a).

For administrative purposes, Nepal is divided into five development regions: Eastern, Central, Western, Mid-western, and Far-western. Similarly, the country is divided into 14 zones and 75 administrative districts. Districts are further divided into smaller units, called village development committees (VDCs) and municipalities. The VDCs are rural areas, whereas municipalities are urban. Currently, there are 3,915 VDCs and 58 municipalities. Each VDC is composed of 9 wards, and the number of wards in each municipality ranges from 9 to 35. Kathmandu is the capital city as well as the principal urban center of Nepal (Central Bureau of Statistics, 2006b).

The 2001 census listed 103 diverse ethnic/caste groups, each with its own distinct language and culture (Central Bureau of Statistics, 2003). The major groups are as follows: Chhetri, Brahmins, Magar, Tharu, Tamang, and Newar.

The 2001 census also identified about 92 mother tongues. Most of these languages originated from two major groups: the Indo-Europeans, who constitute about 79 percent of the population, and the Sino-Tibetans, who constitute about 18 percent of the population. Nepali is the official language of the country and is the mother tongue of about half of the population. However, it is used and understood by most people in the country. The other two major languages are Maithili and Bhojpuri, spoken by about 12 percent and 8 percent of

the population, respectively. According to the 2001 census, the majority of Nepalese are Hindus; there are also substantial numbers of Buddhists, Muslims, and Kirants (Central Bureau of Statistics, 2003).

1.1.3 Economy

Nepal has considerable scope for exploiting its resources in areas such as hydropower and tourism, but a lack of political will, weak implementation of state policies, and the government's failure to maintain law and order have substantially curbed the growth of the economic sector. Although the country has attracted the interest of foreign investors in recent years, lack of security and unnecessary interference by workers and trade unions are continuously diminishing any such prospects. Similarly, the country's small economy and its technological backwardness, remoteness, and susceptibility to natural disasters also restrict the prospects of foreign trade.

The preliminary estimate of per capita gross domestic product (GDP) at current prices stands at Nepalese Rupees 41,851 for 2009-2010. As measured by GDP, the economic growth of the country was 3.4 percent in 2009-2010 against the target of 4.5 percent, due to the slow growth in the nonagricultural sector. Nearly one-fourth of the population lives below the poverty line according to the 2010-2011 Nepal Living Standard Survey (Central Bureau of Statistics, 2011b). According to the Nepal Living Standard Survey 2010-2011, only 2 percent of the population in Nepal is unemployed. Agriculture is the major occupation, with 76 percent of households involved in agricultural activities. Remittances have become one of the foremost sources of income in Nepal, with nearly 56 percent of households receiving some sort of remittance (Central Bureau of Statistics, 2011c).

1.2 POPULATION

Population censuses have been carried out in Nepal since 1911 at decennial intervals. However, detailed information about the size and structure of the population has been available only since the 1952/1954 census. Table 1.1 provides a summary of the basic demographic indicators for Nepal from the census data for 1971, 1981, 1991, and 2001 and the recent preliminary findings from the 2011 census. According to the preliminary 2011 census findings, the population of the country stands at 26.6 million, with an increase of 3.5 million in the last 10 years. The population has more than doubled in the last 40 years. The population grew at a rapid rate between 1971 and 1981 from 2.1 percent to 2.6 percent but has since slowed to just over 2 percent in 1991 and 1.4 percent in 2011. The population density of Nepal is estimated to be 181 per square kilometer.

Table 1.1 Basic demographic indicators

Selected demographic indicators for Nepal, 1971-2011

Indicator	1971 census	1981 census	1991 census	2001 census	2011 census (preliminary)
Population (millions)	11.6	15.0	18.5	23.2	26.6
Intercensal growth rate (percentage)	2.1	2.6	2.1	2.2	1.4
Density (pop./km^2)	79	102	126	157	181
Percent urban	4.0	6.4	9.2	13.9	17.0
Life expectancy (years)					
Male	42.0	50.9	55.0	60.1	u
Female	40.0	48.1	53.5	60.7	u

Source: Central Bureau of Statistics, 2003:3, 383; Ministry of Population and Environment and Central Bureau of Statistics, 2003:8; Central Bureau of Statistics, 2011a

u = No information

The Kathmandu district has the highest population density (4,408) and Manang (3) the lowest. The decennial population growth has been highest in Kathmandu (61 percent) and lowest in Manang (-31 percent) (the overall level in Nepal is 15 percent). Currently, 4.5 million people (17 percent) reside in urban areas. The largest percentage of the population is in the Central development region (36 percent) and the smallest in the Far-western region (10 percent). The sex ratio (number of males per 100 females) is estimated at 94.4 in the current census, as compared to 99.8 in the previous census in 2001. The average household size has decreased from 5.4 in 2001 to 4.7 in 2011 (Central Bureau of Statistics, 2011a).

1.3 POPULATION AND HEALTH POLICIES AND PROGRAMS

In the Third Development Plan (1965-1970), family planning was a major component of planned development activities, and the Nepal Family Planning and Maternal and Child Health (FP/MCH) Project was subsequently launched under the Ministry of Health (National Planning Council, 1965). Before that, family planning activities were undertaken by the Family Planning Association of Nepal (FPAN), a nongovernmental organization established in 1959 to create awareness about the need for and importance of family planning.

While the Fourth Development Plan (1970-1975) targeted the provision of family planning services to 15 percent of married couples by the end of the plan period (National Planning Commission, 1970), the Fifth Development Plan (1975-1980) initiated the expansion of family planning services through outreach workers, and serious attempts were made to reduce the birth rate by direct and indirect means. A population policy coordinating board was established in 1975 under the National Planning Commission (NPC) to coordinate the government's multisectorial activities in population and reproductive health. The board was upgraded in 1978 to become the National Commission on Population (National Planning Commission, 1975).

From the Fifth Development Plan (1975-1980) until the end of the Seventh Development Plan (1985-1990), population issues were addressed from both policy and programmatic points of view. This included launching population-related programs in reproductive health, agriculture, forestry, urbanization, manpower and employment, education, and women's development, as well as community development programs (National Planning Commission, 1985). In 1990, the National Commission on Population was dissolved, and its role was given to the Population Division of the NPC. The Eighth Development Plan (1992-1997) continued with the integrated development approach taken in earlier plans (National Planning Commission, 1992).

The Ninth Development Plan (1997-2002) aimed to reduce population growth through social awareness and expansion of education and family planning programs. The long-term objective of the plan was to lower fertility to replacement level in the subsequent 20 years (National Planning Commission, 1997). The primary objectives of population management in the Tenth Development Plan (2002-2007) were to encourage a small family norm, promote the development of an educated and healthy population, and discourage the out-migration of skilled labor (National Planning Commission, 2002). Similarly, the Second Long Term Health Plan (1997-2017) was formulated to improve the health status of the population; particularly vulnerable groups whose health needs often are not met, including women and children, the poor, and underprivileged and marginalized groups. The plan would address disparities in health status, assuring equitable access to quality health care services with full community participation and gender sensitivity.

In 2001, the Nepal Family Health Program (NFHP), funded by the United States Agency for International Development (USAID), was implemented in partnership with the government of Nepal under the leadership of the Ministry of Health and Population (MOHP). The program ran from 2001 to 2006 and focused on reducing fertility and protecting family health through increased use of quality family planning services and selected maternal and child health services. NFHP emphasized household- and community-level services by strengthening health service delivery systems. To maximize the long-term impact, technical assistance and activities were planned and implemented in close collaboration with the MOHP. Similarly, NFHP II (2007-2012) aims to increase access to health services for all Nepalese, particularly the rural poor, by improving public sector services, community-based family planning services, and maternal, newborn, and child health services in a manner that builds local capacity and engages stakeholders (Johns Hopkins University Center for Communication Programs, 2011; USAID/Nepal, 2010).

The Nepal Health Sector Program Implementation Plan (NHSP-IP 2004-2009) was launched by the Ministry of Health and Population to improve the health status of the Nepalese population through increased utilization of essential health services; another goal was to increase the coverage and raise the quality of essential health care services, with a special emphasis on improved access for poor and vulnerable groups through an efficient sector-wide health management system developed with the provision of adequate financial resources (Ministry of Health and Population, 2011a). A further major aim was to achieve the health sector Millennium Development Goals (MDGs) in Nepal through improved health outcomes for the poor and those

living in remote areas and a consequent reduction in poverty. The program included a number of new actions as part of the Agenda for Reform of the Health Sector.

Similarly, NHSP-IP II (2010-2015) represents a continuation and further refinement of earlier policies and plans that were based on the implementation of cost-effective, evidence-based health interventions. A major goal is to sustain and build on a program delivering excellent results. NHSP-IP I did not have a strong focus on gender and social exclusion issues in the initial design. These issues came into greater prominence during the implementation of NHSP-IP II, particularly with the extension of free services. NHSP-IP II is designed to focus from the start on improving the health of poor and marginalized groups. NHSP-IP II also aims to reconsider how best to achieve improved efficiency and accountability in order to sustain government and external development partner (EDP) support and make the best use of limited resources. Furthermore, the plan has set out to meet specific targets with respect to improving key maternal and child health indicators such as maternal mortality ratio (MMR); total fertility rate (TFR); neonatal, infant, and under-five mortality rates; contraceptive prevalence rate; and percentage of underweight children (Ministry of Health and Population, 2010a).

The three-year interim development plan (2007/2008-2010/2011), drafted after the historic people's movement in 2006, accepted the global principle of health as a fundamental right. Among others, the plan set out to meet specific objectives such as increasing the percentage of family planning users, increasing the percentage of women receiving maternity services from health workers, and reducing the TFR, MMR, and infant and child mortality rates. The subsequent three-year interim development plan (2010/2011-2012/2013) has aimed to evaluate achievements against the set targets and continue with the specific objectives set in the earlier plan.

Recently, the Population Perspective Plan (PPP) 2010-2031 was formulated based on a multidisciplinary approach in order to integrate population aspects with relevant economic and social sectors. It also provides a thematic focus on three aspects: poverty reduction, gender mainstreaming, and social inclusion. Among other objectives, the plan aims to help prioritize specific sectoral program areas related to population that bear on poverty alleviation and sustainable development. The plan also attempts to address commitments that Nepal had made in endorsing plans of action related to population issues in various international forums, particularly the 1994 International Conference on Population Development and the 2000-2015 MDGs (Ministry of Health and Population, 2010b).

Furthermore, the PPP aims to provide guidance in the formulation of population policies that can be implemented with consideration of population as a crucial development variable. The plan also provides a basis for effective institutional arrangements for the coordination, implementation, and monitoring of population programs.

1.4 OBJECTIVES OF THE SURVEY

The principal objective of the 2011 Nepal Demographic and Health Survey (NDHS) is to provide current and reliable data on fertility and family planning, child mortality, children's nutritional status, utilization of maternal and child health services, domestic violence, and knowledge of HIV/AIDS. The 2011 NDHS also provides population-based information on the prevalence of anemia among women age 15-49 and children age 6-59 months. The specific objectives of the survey are to:

- collect data at the national level that will allow the calculation of key demographic rates
- analyze the direct and indirect factors that determine fertility levels and trends of fertility
- measure the level of contraceptive knowledge among women and men by method and use of contraception among women by urban-rural residence and region

- collect high-quality data on family health, including immunization coverage among children, prevalence and treatment of diarrhea and other diseases among children under five, and maternity care indicators such as antenatal visits, assistance at delivery, and postnatal care
- collect data on infant and child mortality
- collect data on child feeding practices, including breastfeeding, and anthropometric measurements to use in assessing the nutritional status of women and children
- collect data on knowledge and attitudes of women and men about sexually transmitted infections and HIV/AIDS and evaluate patterns of recent behavior regarding condom use
- conduct hemoglobin testing of women age 15-49 and children age 6-59 months in the households selected for the survey to provide information on the prevalence of anemia among women of reproductive age and young children
- collect information to assess the situation of domestic violence against women

Data from the 2011 NDHS survey allow for comparison of information gathered over a period of time and add to the vast and growing international database on demographic and health-related variables. Information from the survey is essential for informed policy decisions and for planning, monitoring, and evaluation of health programs in general, and reproductive health programs in particular, at both the national and district levels. A long-term objective of the survey is to strengthen the technical capacity of local organizations to plan, conduct, process, and analyze data from complex national population and health surveys.

Moreover, the 2011 NDHS is comparable to similar surveys conducted in other developing countries and therefore affords national and international comparisons. The first Demographic and Health Survey (DHS) in Nepal was the 1996 Nepal Family Health Survey (NFHS), conducted as part of the worldwide DHS program; subsequently, surveys have been conducted every five years, in 2001, 2006, and now in 2011. Wherever possible, the 2011 NDHS data are compared with data from the earlier DHS surveys in Nepal, which also sampled women age 15-49. Men age 15-49 were also interviewed in the 2011 NDHS to provide comparable data for male respondents over the last 10 years.

1.5 Organization of the Survey

The 2011 NDHS is the fourth nationally representative comprehensive survey conducted as part of the worldwide DHS project in the country. It was carried out under the aegis of the Ministry of Health and Population. The survey was implemented by New ERA, a private research firm in Nepal that also conducted the 1996 NFHS and the 2001 and 2006 NDHS. ICF International provided technical assistance through its MEASURE DHS project. The survey was funded by the United States Agency for International Development through its mission in Nepal.

A technical advisory committee was formed under the Secretary of the Ministry of Health and Population to be responsible for coordination, oversight, advice, and decision-making on all major aspects of the survey. A technical working committee was also formed under the chairmanship of the chief of the MOHP, Population Division. Both committees included key members from different divisions of the ministry, the National Population Committee, external development partners, and other concerned stakeholders. The committee members provided their technical input throughout the various stages of drafting and finalizing the questionnaires, participated in training and field supervision, and provided feedback in finalizing the report.

1.6 Sample Design

The primary focus of the 2011 NDHS was to provide estimates of key population and health indicators, including fertility and mortality rates, for the country as a whole and for urban and rural areas separately. In

addition, the sample was designed to provide estimates of most key variables for the 13 eco-development regions.

1.6.1 Sampling Frame

Nepal is divided into 75 districts, which are further divided into smaller VDCs and municipalities. The VDCs and municipalities, in turn, are further divided into wards. The larger wards in the urban areas are divided into subwards. An enumeration area (EA) is defined as a ward in rural areas and a subward in urban areas. Each EA is classified as urban or rural. As the upcoming population census was scheduled for June 2011, the 2011 NDHS used the list of EAs with population and household information developed by the Central Bureau of Statistics for the 2001 Population Census. The long gap between the 2001 census and the fielding of the 2011 NDHS necessitated an updating of the 2001 sampling frame to take into account not only population growth but also mass internal and external migration due to the 10-year political conflict in the country. To obtain an updated list, a partial updating of the 2001 census frame was carried out by conducting a quick count of dwelling units in EAs five times more than the sample required for each of the 13 domains. The results of the quick count survey served as the actual frame for the 2011 NDHS sample design.

1.6.2 Domains

The country is broadly divided into three horizontal ecological zones, namely mountain, hill, and terai. Vertically, the country is divided into five development regions. The cross section of these zones and regions results in 15 eco-development regions, which are referred to in the 2011 NDHS as subregions or domains. Due to the small population size in the mountain regions, the Western, Mid-western, and Far-western mountain regions are combined into one domain, yielding a total of 13 domains. In order to provide an adequate sample to calculate most of the key indicators at an acceptable level of precision, each domain had a minimum of about 600 households.

Stratification was achieved by separating each of the 13 domains into urban and rural areas. The 2011 NDHS used the same urban-rural stratification as in the 2001 census frame. In total, 25 sampling strata were created. There are no urban areas in the Western, Mid-western, and Far-western mountain regions.

The numbers of wards and subwards in each of the 13 domains are not allocated proportional to their population due to the need to provide estimates with acceptable levels of statistical precision for each domain and for urban and rural domains of the country as a whole. The vast majority of the population in Nepal resides in the rural areas. In order to provide national urban estimates, urban areas of the country were oversampled.

1.6.3 Sample Selection

Samples were selected independently in each stratum through a two-stage selection process. In the first stage, EAs were selected using a probability-proportional-to-size strategy. In order to achieve the target sample size in each domain, the ratio of urban EAs to rural EAs in each domain was roughly 1 to 2, resulting in 95 urban and 194 rural EAs (a total of 289 EAs).

Complete household listing and mapping was carried out in all selected EAs (clusters). In the second stage, 35 households in each urban EA and 40 households in each rural EA were randomly selected. Due to the nonproportional allocation of the sample to the different domains and to oversampling of urban areas in each domain, sampling weights are required for any analysis using the 2011 NDHS data to ensure the actual representativeness of the sample at the national level as well as at the domain levels. Since the 2011 NDHS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage, taking into account nonproportionality in the allocation process for domains and urban-rural strata.

1.7 QUESTIONNAIRES

Three questionnaires were administered in the 2011 NDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire (Appendix E). These questionnaires were adapted from the standard DHS6 core questionnaires to reflect the population and health issues relevant to Nepal at a series of meetings with various stakeholders from government ministries and agencies, nongovernmental organizations, EDPs, and international donors. The final draft of each questionnaire was discussed at a questionnaire design workshop organized by the MOHP, Population Division on 22 April 2010 in Kathmandu. These questionnaires were then translated from English into the three main local languages—Nepali, Maithali, and Bhojpuri—and back translated into English. Questionnaires were finalized after the pretest, which was held from 30 September to 4 November 2010, with a one-week break in October for the Dasain holiday.

The Household Questionnaire was used to list all of the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. For children under age 18, the survival status of the parents was determined. The Household Questionnaire was used to identify women and men who were eligible for the individual interview and women who were eligible for the interview focusing on domestic violence. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, ownership of mosquito nets, and household food security. The results of salt testing for iodine content, height and weight measurements, and anemia testing were also recorded in the Household Questionnaire.

The Woman's Questionnaire was used to collect information from women age 15-49. Women were asked questions on the following topics:

- background characteristics (education, residential history, media exposure, etc.)
- pregnancy history and childhood mortality
- knowledge and use of family planning methods
- fertility preferences
- antenatal, delivery, and postnatal care
- breastfeeding and infant feeding practices
- vaccinations and childhood illnesses
- marriage and sexual activity
- work characteristics and husband's background characteristics
- awareness and behavior regarding AIDS and other sexually transmitted infections
- domestic violence

The Man's Questionnaire was administered to all men age 15-49 living in every second household in the 2011 NDHS. The Man's Questionnaire collected much of the same information as the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health, nutrition, or domestic violence.

1.8 HEMOGLOBIN TESTING

In the 2011 NDHS, anemia testing was conducted in every second household (i.e., in households where male interviews were conducted). In such households, all women age 15-49 and children age 6-59 months were tested for anemia. The protocol for hemoglobin testing was approved by the Nepal Health Research Council and the ICF Macro Institutional Review Board in Calverton, Maryland, USA.

Selected interviewers were trained to conduct this procedure. Respondents (and their parent or guardian in the case of unmarried minors) were asked for their consent to participate in the anemia testing. The interviewers explained the purpose of the test, informed prospective subjects and/or their caretakers that the results would be made available as soon as the test was completed, and requested permission for the test to be

carried out. Levels of anemia were classified as severe, moderate, or mild according to criteria developed by the World Health Organization (DeMaeyer et al., 1989).

To measure the level of hemoglobin, capillary blood was taken in the field from a finger using sterile, one-time-use lancets that allowed for a relatively painless puncture. The concentration of hemoglobin in the blood was measured using the HemoCue system. Before the blood was taken, the finger was wiped with an alcohol prep swab and allowed to air-dry. Then the palm side of the end of the finger was punctured with a sterile, non-reusable, self-retractable lancet. A drop of blood was collected with a HemoCue microcuvette and placed in a HemoCue photometer, where the results were displayed. For children age 6 to 11 months who were particularly undernourished and bony, a heel puncture was made to draw a drop of blood. The results were recorded in the Household Questionnaire, as well as on a brochure given to each woman, parent, or responsible adult explaining what the results meant. Women or children whose results indicated severe anemia were provided with a card referring them to the nearest health facility.

1.9 LISTING, PRETEST, TRAINING, AND FIELDWORK

1.9.1 Listing

From the sampling frame, a total of 289 clusters were selected throughout the 13 subregions. A listing operation was conducted from 27 September to 14 December 2010 by 26 teams of two members each, with one member working as a lister and the other as a mapper. Altogether, 52 listers and mappers were recruited from all regions to do the listing of the households. Training was provided using standard DHS manuals and guidelines modified for Nepal that described the listing procedures in detail. Training included classroom demonstrations and field practice, and instructions were given on the use of Global Positioning System (GPS) units to obtain location coordinates for selected clusters.

1.9.2 Pretest

Prior to the start of the fieldwork, the questionnaires were pretested in Nepali, Bhojpuri, and Maithali to make sure that the questions were clear and could be understood by the respondents. One of the important components of the pretest was to test the entry program on tablet personal computers (PCs), as 2011 marked the first time the NDHS used tablet PCs to collect data from the field. The data file transfer process using the Internet File Streaming System (IFSS), through which data from the field could be transferred to the main office via the Internet, was also tested.

In order to conduct the pretest, 12 interviewers were recruited to interview in the three local languages. Training for the pretest was held at the New ERA office. The pilot survey was conducted (as mentioned) from 30 September to 4 November 2010 in three selected sites. The areas selected for the pretest were Kathmandu (for the Nepali language), the Parsa district (for the Bhojpuri language), and the Dhanusha district (for the Maithili language). Both rural and urban households were selected for the pretest in all three districts.

Based on the findings of the pretest, the Household Questionnaire, Woman's Questionnaire, and Man's Questionnaire were further refined in all three languages. Similarly, necessary revisions in the computer program files were made based on the suggestions and feedback obtained in the pretest.

1.9.3 Training of Field Staff

A stringent recruitment process was carried out in which candidates had to complete a written examination, a computer aptitude test, and an oral interview to qualify for training. A total of 96 persons were trained to serve as fieldwork supervisors, interviewers, quality control staff, and reserves. The main training took place in Kathmandu from 15 December 2010 to 16 January 2011.

Training consisted of two components: training on paper questionnaires and training on the use of tablet PCs. The New ERA research team led the three-week training on paper-based questionnaires and biomarkers, while MEASURE DHS staff led the two-week training on tablet PC use.

The training included theoretical and practical sessions and presentations, practical demonstrations, practice interviewing in small groups, and several days of field practice. The participants were also trained in measuring women and children's height and weight and in conducting anemia testing. Special classes on several topics were organized during the training sessions, including Nepal's health delivery system, family planning, maternal health, abortion, child health, nutrition, women's empowerment, and domestic violence. These classes were led by experts from the different divisions of the Ministry of Health and Population. During the training sessions, several rounds of mock interviews were also conducted so that the interviewers had ample opportunities to understand the questionnaire and become accustomed with the new technology of conducting interviews with tablet PCs before they started the real fieldwork.

1.9.4 Fieldwork

Data collection was carried out by 16 field teams, each consisting of three female interviewers, one male interviewer, and a male supervisor. Teams were initially deployed around Kathmandu on 23 January 2011 to enable intense supervision and technical backstopping. Each team completed one cluster and electronically sent the data to the central office via the Internet. A review session was organized to share the experiences of the teams. The core team provided necessary feedback to the field teams.

Field teams traveled to their respective designated clusters on 2 February 2011, and the fieldwork was completed on 14 June 2011. Fieldwork supervision was done by six quality control teams, each consisting of one male and one female member. Additionally, two field coordinators monitored overall data quality. Close contact between the New ERA central office and the teams was maintained through field visits by New ERA senior staff, members of the technical advisory and working committees, staff of the Ministry of Health and Population, and staff of USAID/Nepal. Regular communication was maintained through cell phones.

Two review sessions were held to share field issues and refill supplies. The first was held after one month of fieldwork, on 3-5 March 2011, and the second was held on 21 April 2011. These sessions were helpful in updating progress, providing feedback to the teams based on field check tables and field observations, and discussing data inconsistencies and problems faced by the teams.

1.10 Data Processing

The 2011 NDHS used ASUS Eee T101MT tablet PCs with data entry programs developed in CSPro. Code division multiple access (CDMA) wireless technology via Internet File Streaming System (IFSS) was used to transfer data from the field to the central office in Kathmandu. The IFSS package was developed by MEASURE DHS and tested for the first time in Nepal.

The data were sent to the central office at New ERA by the teams once they had checked and closed each EA file. This was mostly done before the team left the EA. In the central office, the data were edited by a senior data supervisor who had been specially trained for this task. The concurrent processing of the data was an advantage because field check tables to monitor various data quality parameters could be generated almost instantly and sent to the teams through the field coordinators, the quality control teams, and the core study team members. This allowed the field teams to receive immediate feedback and improve their performance. The data entry and editing phase of the survey was complete by the end of June 2011.

1.11 Response Rates

Table 1.2 shows household and individual response rates for the 2011 NDHS. A total of 11,353 households were selected, out of which 10,888 were found to be occupied during data collection. Interviews were completed for 10,826 of these existing households, yielding a response rate of 99 percent.

In the selected households, 12,918 women were identified as eligible for the individual interview. Interviews were completed for 12,674 women, resulting in a response rate of 98 percent. Of the 4,323 eligible men identified in the selected subsample of households, 4,121 were successfully interviewed, yielding a 95 percent response rate. Response rates were higher in rural than urban areas, especially for eligible men.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Nepal 2011

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	3,331	8,022	11,353
Households occupied	3,182	7,706	10,888
Households interviewed	3,148	7,678	10,826
Household response rate[1]	98.9	99.6	99.4
Interviews with women age 15-49			
Number of eligible women	3,822	9,096	12,918
Number of eligible women interviewed	3,701	8,973	12,674
Eligible women response rate[2]	96.8	98.6	98.1
Interviews with men age 15-49			
Number of eligible men	1,451	2,872	4,323
Number of eligible men interviewed	1,351	2,770	4,121
Eligible men response rate[2]	93.1	96.4	95.3

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 2

Key Findings:

- The vast majority of households in Nepal (89 percent) have access to an improved source of drinking water.
- Thirty-eight percent of households have an improved toilet facility that is not shared with other households.
- Seventy-six percent of households have electricity.
- Forty percent of households are exposed daily to secondhand smoke.
- A large proportion of the Nepalese population (37 percent) is under age 15.
- Twenty-eight percent of households are female-headed.
- Fifty-seven percent of households have at least one person who has migrated at some time in the past 10 years.
- Only one in two households in Nepal (49 percent) is food secure and has access to food year round.

This chapter provides an overview of demographic and socioeconomic characteristics of the household population, including information on housing facilities and characteristics, household assets, wealth status, education, and food security; these data serve as a basis for understanding the socioeconomic status of households. In addition, information is provided on migration, which plays a vital role in demographic dimensions, especially within the context of Nepal. Finally, the chapter presents information on birth registration, children's living arrangements and orphanhood, and children's educational attainment, helping provide an understanding of the general social environment in which children live.

In the 2011 NDHS, a household is defined as a person or group of related and unrelated persons who usually live together in the same dwelling unit(s) or in connected premises, who acknowledge one adult member as the head of the household, and who have common cooking and eating arrangements.

Information is collected from all usual residents of a selected household (de jure population) as well as persons who had stayed in the selected household the night before the interview (de facto population). The difference between these two populations is very small, and all tables in this report refer to the de facto population unless otherwise specified, to maintain comparability with other DHS reports.

2.1 HOUSEHOLD CHARACTERISTICS

Access to basic utilities, sources of drinking water and water treatment practices, access to sanitation facilities, housing structure and crowdedness of dwelling spaces, and type of fuel used for cooking are physical characteristics of a household that are used to assess the general well-being and socioeconomic status of household members. Millennium Development Goal 7 (MDG 7), which focuses on environmental sustainability, is measured according to the percentage of the population using solid fuels, the percentage with sustainable access to an improved water source, and the percentage with access to improved sanitation (National Planning Commission [NPC], 2010a).

This section provides information from the 2011 NDHS on household drinking water, household sanitation facilities, hand-washing practices, housing characteristics, and possession of basic amenities and utilities.

2.1.1 Water and Sanitation

The basic determinants of better health, such as access to safe water, and sanitation, are still in a critical state in Nepal. Poor access to safe drinking water and sanitation facilities and poor hygiene are associated with

skin diseases, acute respiratory infection (ARI), and diarrheal diseases, the leading preventable diseases. ARI and diarrheal diseases remain the leading causes of child deaths in Nepal. Among the top 10 causes of morbidity observed in outpatient visits in the country's health institutions are gastritis, intestinal worm infestations, ARI/lower respiratory tract infections, headaches/migraines, upper respiratory tract infections, impetigo and noninfectious diarrhea, presumed noninfectious diarrhea, and amoebic dysentery (Ministry of Health and Population [MOHP], 2011a).

Table 2.1 presents the percent distribution of households and the de jure population, according to urban or rural setting, by source of drinking water, time taken to obtain drinking water, regularity of water source, and water treatment practices adopted by households.

Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Nepal 2011

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source						
Piped into dwelling/yard/plot	42.6	19.0	22.4	41.0	17.5	20.6
Public tap/standpipe	12.6	26.5	24.5	12.1	25.4	23.6
Tube well or borehole	31.0	40.2	38.9	33.6	43.0	41.7
Protected well	3.3	1.7	1.9	3.7	1.5	1.8
Protected spring	0.1	0.2	0.2	0.1	0.2	0.2
Rain water	0.0	0.0	0.0	0.0	0.1	0.0
Bottled water	3.7	0.4	0.9	2.9	0.3	0.6
Non-improved source						
Unprotected well	2.2	2.1	2.1	2.5	2.1	2.2
Unprotected spring	0.2	1.1	1.0	0.2	1.1	1.0
Tanker truck/cart with drum	1.8	0.5	0.7	1.5	0.4	0.6
Surface water	2.2	8.1	7.3	2.1	8.5	7.7
Other source	0.2	0.0	0.0	0.2	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	93.4	88.1	88.9	93.5	87.8	88.6
Time to obtain drinking water (round trip)						
Water on premises	79.1	53.9	57.5	79.2	55.0	58.2
Less than 30 minutes	16.9	38.4	35.3	17.0	37.3	34.7
30 minutes or longer	3.8	7.6	7.1	3.8	7.6	7.1
Don't know/missing	0.1	0.0	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Use of water source (regularity)						
All year	93.5	94.3	94.2	93.8	94.5	94.4
Part of the year	6.5	5.6	5.8	6.2	5.4	5.5
Total	100.0	100.0	100.0	100.0	99.9	100.0
Water treatment prior to drinking[1]						
Boiled	20.9	6.5	8.6	20.5	5.5	7.5
Bleach/chlorine added	4.0	1.0	1.4	4.0	1.0	1.4
Strained through cloth	1.4	1.4	1.4	1.4	1.3	1.3
Ceramic, sand, or other filter	34.3	6.3	10.3	33.2	5.3	8.9
Solar disinfection	1.4	0.3	0.4	1.2	0.2	0.3
Other	0.3	0.2	0.2	0.4	0.2	0.2
No treatment	54.1	86.9	82.2	55.5	88.6	84.2
Percentage using an appropriate treatment method[2]	45.8	12.9	17.6	44.3	11.2	15.6
Number	1,546	9,280	10,826	6,338	41,785	48,123

[1] Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.
[2] Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

Most households in Nepal (89 percent) obtain drinking water from an improved source, while 11 percent still rely on non-improved sources. There has been some improvement in access to an improved water source since 2006, when 82 percent of the households used an improved source of drinking water (MOHP, New ERA, and Macro International, 2007). Households in urban areas have greater access to an improved source of drinking water than households in rural areas (93 percent versus 88 percent), but the urban-rural gap has narrowed in the last five years. The most common source of drinking water in urban areas is water piped into the

dwelling/yard/plot, with more than two-fifths of households having access to this source. In contrast, a tube well or borehole is the most common source of drinking water in rural areas, used by two-fifths of households. Fifty-eight percent of households have a source of drinking water within their premises, compared to 46 percent five years ago.

Thirty-five percent of households spend less than 30 minutes on gathering water, while about 7 percent of households spend 30 minutes or longer. Accessing drinking water takes longer in rural areas than urban areas, with 8 percent of households taking 30 minutes or more to obtain water. There has been little change in the past five years in the time taken to access drinking water. The vast majority of households are able to access drinking water from their main source all year (94 percent), with little urban-rural difference.

The majority of households (82 percent) do not treat drinking water, and rural households are particularly likely not to do so (87 percent, compared to 54 percent of urban households). Forty-six percent of households in urban areas treat drinking water, compared to 13 percent in rural areas. Overall, a ceramic, sand, or other filter is the most common treatment method (10 percent), followed by boiling water prior to drinking (9 percent).

Table 2.2 presents information on household sanitation facilities by type of toilet/latrine. Nearly two in five households (38 percent) have an improved (not shared) toilet facility; 19 percent use a facility that would be considered improved if it were not shared with other households. Facilities that are shared are not considered to be as hygienic as those that are not shared. About two in five households use a non-improved toilet facility (43 percent). Thirty-six percent of households still use a bush or open field for defecation, but this is an improvement over 2006, when one in two households had no toilet facility (MOHP, New ERA, and Macro International, 2007). Rural households are more likely than urban households not to have a toilet facility (40 percent versus 9 percent).

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Nepal 2011

	Households			Population		
Type of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	52.5	35.8	38.2	58.1	36.7	39.5
Flush/pour flush to piped sewer system	15.9	1.4	3.5	18.0	1.3	3.5
Flush/pour flush to septic tank	32.0	23.7	24.9	35.0	23.9	25.4
Flush/pour flush to pit latrine	2.1	3.3	3.1	2.3	3.4	3.3
Ventilated improved pit (VIP) latrine	0.4	0.6	0.6	0.4	0.6	0.6
Pit latrine with slab	2.1	6.6	6.0	2.4	7.3	6.7
Composting toilet	0.0	0.2	0.2	0.0	0.2	0.2
Shared facility[1]	36.7	15.9	18.9	29.5	12.6	14.9
Flush/pour flush to piped sewer system	11.4	1.7	3.1	8.4	1.2	2.2
Flush/pour flush to septic tank	22.6	10.0	11.8	18.7	7.7	9.2
Flush/pour flush to pit latrine	1.2	1.3	1.3	1.0	1.1	1.1
Ventilated improved pit (VIP) latrine	0.3	0.3	0.3	0.3	0.3	0.3
Pit latrine with slab	1.2	2.6	2.4	1.1	2.3	2.1
Non-improved facility	10.8	48.3	42.9	12.4	50.6	45.6
Flush/pour flush not to sewer/septic tank/pit latrine	0.4	0.3	0.3	0.4	0.2	0.3
Pit latrine without slab/open pit	1.6	8.0	7.1	1.7	7.7	6.9
No facility/bush/field	8.7	39.9	35.5	10.3	42.7	38.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,546	9,280	10,826	6,338	41,785	48,123

Note: Total includes three households using bucket under non-improved facility not shown separately.
[1] Facilities that would be considered improved if they were not shared by two or more households

Hand washing, which provides protection against communicable diseases, is promoted by the government of Nepal and included in the framework of the Nepal Health Sector Program II (MOHP, 2010a).

Table 2.3 provides information on designated places for hand washing in households and the use of water and cleansing agents for washing hands according to place of residence (urban, rural), ecological region, and wealth quintile.

Interviewers were instructed to observe the place where household members usually washed their hands. They looked for regularity of water supply and observed whether households had cleansing agents near the place of hand washing. Such observations were made in almost all selected households.

About half of households (48 percent) had soap and water at the place where household members washed their hands, 16 percent had water and other cleansing agents (ash, mud, sand, etc.), 17 percent had water only, and 2 percent had soap but no water. Overall, 14 percent of households did not have water or any cleansing agent. In general, these households did not have a fixed designated place for hand washing.

Table 2.3 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap, and other cleansing agents, Nepal 2011

Background characteristic	Percentage of households where place for washing hands was observed	Number of households	Among households where place for hand washing was observed, households that had:							Number of households with place for hand washing observed
			Soap and water[1]	Water and cleansing agent[2] other than soap only	Water only	Soap but no water[3]	Cleansing agent other than soap only[2]	No water, no soap, no other cleansing agent	Total	
Residence										
Urban	99.4	1,546	75.6	6.3	10.8	1.6	0.8	4.8	100.0	1,536
Rural	99.8	9,280	43.2	17.4	18.1	1.6	4.3	15.4	100.0	9,258
Ecological zone										
Mountain	99.9	761	27.1	19.3	15.2	2.0	6.7	29.6	100.0	760
Hill	99.6	4,563	44.9	15.1	14.9	2.4	5.9	16.8	100.0	4,545
Terai	99.8	5,502	53.1	15.9	19.1	0.9	1.7	9.3	100.0	5,489
Wealth quintile										
Lowest	99.9	2,029	10.0	21.5	20.1	1.9	10.2	36.3	100.0	2,027
Second	99.8	2,168	23.4	25.8	25.2	1.6	5.8	18.2	100.0	2,163
Middle	99.7	2,068	41.2	22.6	21.6	2.0	2.7	9.9	100.0	2,062
Fourth	99.8	2,185	68.4	9.8	13.5	1.3	1.2	5.9	100.0	2,181
Highest	99.3	2,377	89.4	1.4	6.2	1.4	0.0	1.6	100.0	2,361
Total	99.7	10,826	47.8	15.8	17.0	1.6	3.8	13.9	100.0	10,793

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] Includes households with soap only, as well as those with soap and another cleansing agent

Seventy-six percent of the households in urban areas had soap and water, compared to 43 percent of rural households. More than half of households (53 percent) in the terai had soap and water, compared to 45 percent of households in the hill zone and 27 percent of households in the mountain zone. Thirty percent of the households in the mountain region did not have water or any cleansing agents for hand washing. Soap and water was very common (89 percent) among households in the highest wealth quintile but much less so in the lowest wealth quintile (10 percent)[1]. Thirty-six percent of households in the lowest quintile had a designated place for hand washing but did not have water and cleansing agents.

2.1.2 Housing Characteristics

Housing characteristics and household assets can be used as a measure of the socioeconomic status of household members. Cooking practices and cooking fuels also impact the health of family members and the environment. For example, use of biomass fuels exposes household members to indoor pollution, which has a direct bearing on their health and surroundings.

Table 2.4 presents information on the availability of electricity, type of flooring material, number of rooms for sleeping, type of fuel used for cooking, and place where cooking is done. The table shows that 76 percent of households in Nepal have access to electricity. This is a marked improvement from the 2006 NDHS, which showed that only 51 percent of households had access to electricity. Access to electricity has increased sharply in rural areas in the last five years, with 73 percent of rural households having electricity in 2011 as compared to 43 percent in 2006. This increase can be partially attributed to the rural electrification programs implemented in recent years, including decentralized small hydropower plants, micro-hydropower plants, and

[1] Refer to Section 2.2 for details on the wealth index.

solar energy and biomass sources (ITECO, 2011; Rai, 2010). Urban electricity availability has also been on the rise, with 97 percent of urban households having access to electricity in 2011, compared to 90 percent in 2006.

Earth and sand are the most common flooring materials used in Nepalese households (66 percent), and these materials are predominantly used in rural areas (73 percent). The use of cement has increased in the past five years from 11 percent to 22 percent, with increases seen in both urban and rural areas. Urban households remain more likely to use cement (42 percent) than rural households (18 percent). Eight percent of households use carpet as flooring material.

The number of rooms used for sleeping provides an indication of the extent of crowding in households. Overcrowding increases the risk of contracting infectious diseases such as acute respiratory infections and skin diseases, which particularly affect children and the elderly population. The proportion of households using one room for sleeping has decreased from 42 percent to 33 percent in the last five years.

The presence and extent of indoor pollution are dependent on cooking practices, places used for cooking, and types of fuel used. According to the 2011 NDHS, 71 percent of households cook inside the house, while 20 percent cook in a separate building and 8 percent cook outdoors. The percentage of households that cook within the dwelling unit is higher in urban areas (79 percent) than in rural areas (70 percent). About one in five households in rural areas cooks in a separate building.

Coal, lignite, charcoal, and wood are the fuels most commonly used for cooking, reported by 66 percent of households. Use of these fuels is more common in rural areas (73 percent) than in urban areas (28 percent). On the other hand, use of liquid petroleum gas, natural gas, and biogas is much more common in urban (68 percent) than rural (16 percent) areas. Use of gas for cooking has increased significantly in the past five years in both urban and rural households. Use of solid fuel for cooking has declined from 83 percent in 2006 to 75 percent in 2011, primarily due to a decline in rural areas. More than 8 in 10 rural households use solid fuel for cooking, compared with 3 in 10 households in urban areas.

A major concern for the government of Nepal is the effect of secondhand smoke (SHS) on the health of children and neonates. The purpose of the Tobacco Related Products (Control and Regulation) Act of 2011 is to control tobacco and tobacco-related product use

Table 2.4 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Nepal 2011

Housing characteristic	Residence		
	Urban	Rural	Total
Electricity			
Yes	97.0	72.9	76.3
No	3.0	27.1	23.7
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	20.0	73.3	65.7
Dung	0.3	0.5	0.4
Wood/planks	0.6	1.9	1.7
Parquet or polished wood	1.2	0.3	0.4
Vinyl or asphalt strips	5.3	1.1	1.7
Ceramic tiles	0.9	0.2	0.3
Cement	42.0	18.3	21.7
Carpet	29.5	4.4	8.0
Other	0.2	0.1	0.1
Total	100.0	100.0	100.0
Rooms used for sleeping			
One	36.3	32.8	33.3
Two	32.6	36.2	35.7
Three or more	31.0	30.9	30.9
Missing	0.1	0.2	0.2
Total	100.0	100.0	100.0
Place for cooking			
In the house	79.0	70.1	71.4
In a separate building	14.5	20.6	19.7
Outdoors	5.7	8.5	8.1
Other	0.1	0.0	0.0
No food cooked in household	0.8	0.7	0.7
Total	100.0	100.0	100.0
Cooking fuel			
Electricity	0.2	0.1	0.1
LPG, natural gas, biogas	67.6	16.2	23.5
Kerosene	2.0	0.3	0.5
Coal, lignite, charcoal, wood	28.1	72.6	66.2
Agricultural crop, straw, shrubs, grass	0.3	4.7	4.1
Animal dung	1.0	5.4	4.8
No food cooked in household	0.8	0.7	0.7
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	29.3	82.7	75.1
Frequency of smoking in the home			
Daily	26.2	41.9	39.6
Weekly	4.1	5.3	5.1
Monthly	3.0	3.8	3.7
Less than monthly	6.4	7.5	7.4
Never	60.3	41.5	44.2
Total	100.0	100.0	100.0
Number	1,546	9,280	10,826

[1] Includes coal/lignite, charcoal, wood/straw/shrubs/grass, agricultural crops, and animal dung
LPG = Liquefied petroleum gas

and distribution (Nepal Law Commission, 2011). Information on smoking was collected in the 2011 NDHS to assess the percentage of households exposed to SHS, which is a risk factor for children and adults who do not smoke. Pregnant women who are exposed to SHS have a higher risk of giving birth to a low birth weight baby (Windham et al., 1999). Also, children who are exposed to SHS are at a higher risk of respiratory and ear infections and poor lung development (U.S. Department of Health and Human Services, 2006). Table 2.4 provides information on household exposure to SHS according to frequency of smoking, used here as a proxy for level of SHS exposure. Forty percent of households are exposed daily to SHS, and rural households (42 percent) are more likely to be exposed than urban households (26 percent).

2.1.3 Household Possessions

Possession of durable consumer goods is another useful indicator of household socioeconomic status. The possession and use of household durable goods have multiple effects and implications. For instance, having access to a radio or television exposes household members to updated daily events, information, and educational materials. Similarly, a refrigerator prolongs food storage and keeps food fresh and hygienic. A means of transportation allows greater access to services away from the local area and enhances social and economic activities. The 2011 NDHS collected information on possession of durable commodities, means of transportation, and ownership of agricultural land and farm animals.

Table 2.5 shows that radios, televisions, and mobile telephones are very common information and communication devices possessed by most households. Possession of mobile phones has sharply increased from 6 percent in 2006 to 75 percent in 2011. More than 9 in 10 households in urban areas and 7 in 10 households in rural areas possess mobile phones. Half of households have a radio, and a similar proportion have a television. Urban households are slightly more likely to possess a radio (54 percent) than rural households (50 percent). Seventy-six percent of urban households and 42 percent of rural households possess a television. Possession of a radio has decreased from 61 percent to 50 percent in the last five years, while ownership of a television has increased from 28 percent to 47 percent. A refrigerator is available in 11 percent of households, with urban households more than three times as likely (29 percent) as rural households (8 percent) to own one. Ninety-one percent of households in the country possess a bed. Households possessing computers have increased from 2 percent in 2006 to 8 percent in 2011, with a marked increase in urban areas (from 8 percent to 24 percent).

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals by residence, Nepal 2011

	Residence		
Possession	Urban	Rural	Total
Household effects			
Radio	53.6	49.8	50.3
Television	76.2	42.0	46.9
Mobile telephone	91.6	71.9	74.7
Non-mobile telephone	25.7	6.8	9.5
Refrigerator	29.3	7.5	10.6
Table	79.8	48.5	53.0
Chair	71.7	42.8	46.9
Bed	97.9	90.2	91.3
Sofa	33.4	10.4	13.7
Cupboard	66.5	38.5	42.5
Computer	23.8	4.9	7.6
Clock	69.0	39.5	43.7
Fan	65.9	33.0	37.7
Dhiki	15.7	38.8	35.5
Means of transport			
Bicycle/rickshaw	42.1	39.3	39.7
Animal-drawn cart	1.2	3.2	3.0
Motorcycle/scooter	27.8	8.0	10.9
Car/truck/tempo	6.0	1.7	2.3
Ownership of agricultural land	45.1	71.3	67.6
Ownership of farm animals[1]	29.7	78.4	71.4
Number	1,546	9,280	10,826

[1] Buffalo, milk cows, bulls, horses, donkeys, mules, goats, sheep, chickens, ducks, pigs, or yaks

Bicycles and rickshaws continue to be the most common means of transportation in Nepal; two in five households own a bicycle or rickshaw, with little difference between rural and urban households. Ownership of a motorcycle is much more common in urban areas (28 percent) than in rural areas (8 percent).

Nepal is predominantly agricultural, with a large proportion of the population engaged in this sector. NDHS data indicate that 68 percent of households own agricultural land, with rural households more likely to own land (71 percent) than urban households (45 percent). Seventy-one percent of households in the country possess farm animals. Almost 80 percent of rural households own farm animals, as compared with 30 percent of urban households.

2.2 SOCIOECONOMIC STATUS INDEX

The wealth index used in this survey is a measure that has been used in many DHS and other country-level surveys to indicate inequalities in household characteristics, in the use of health and other services, and in health outcomes (Rutstein et al., 2000). It serves as an indicator of level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The index was constructed using household asset data via a principal components analysis.

In its current form, which takes better account of urban-rural differences in scores and indicators of wealth, the wealth index is created in three steps. In the first step, a subset of indicators common to urban and rural areas is used to create wealth scores for households in both areas. Categorical variables to be used are transformed into separate dichotomous (0-1) indicators. These indicators and those that are continuous are then examined using a principal components analysis to produce a common factor score for each household. In the second step, separate factor scores are produced for households in urban and rural areas using area-specific indicators. The third step combines the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting area-specific scores through a regression on the common factor scores. This three-step procedure permits greater adaptability of the wealth index in both urban and rural areas. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index is computed, national-level wealth quintiles (from lowest to highest) are obtained by assigning the household score to each de jure household member, ranking each person in the population by his or her score, and then dividing the ranking into five equal categories, each comprising 20 percent of the population.

Table 2.6 presents distributions across the five wealth quintiles by residence, ecological region, development region, and subregion. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed according to geographic area.

An overwhelming majority of urban residents (62 percent) are from the richest quintile, while a much lower proportion of rural residents (14 percent) fall in the same category. Rural households are almost equally distributed in the lowest, second, and middle wealth quintiles (around 22 percent each). Among the three ecological zones, the population in the terai (23 percent) is more likely to fall in the highest wealth quintile than the population living in the hill zone (20 percent). Less than 1 percent of the population in the mountain zone (0.5 percent) is in the highest wealth quintile. Within the hill zone, 49 percent of households in the Central hill subregion (which includes the Kathmandu Valley) are in the wealthiest quintile. On the other hand, the Western mountain subregion has the highest proportion of the population in the lowest wealth quintile (60 percent). Among the development regions, the Central, Western, and Eastern regions have large population segments in the highest wealth quintile. Relatively smaller proportions of households in the Mid-western (10 percent) and Far-western (8 percent) regions fall in the highest quintile.

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and Gini coefficient, according to residence and region, Nepal 2011

Residence/region	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	3.1	3.3	7.8	23.6	62.3	100.0	6,338	0.12
Rural	22.6	22.5	21.8	19.5	13.6	100.0	41,785	0.22
Ecological zone								
Mountain	41.4	30.7	19.8	7.7	0.5	100.0	3,358	0.18
Hill	31.9	21.1	14.6	12.5	19.9	100.0	19,501	0.28
Terai	8.0	17.8	24.2	27.4	22.7	100.0	25,264	0.21
Development region								
Eastern	16.2	18.9	20.3	23.8	20.9	100.0	11,481	0.21
Central	13.7	18.8	20.7	20.7	26.1	100.0	16,011	0.24
Western	14.8	21.4	20.9	22.0	21.0	100.0	9,895	0.22
Mid-western	41.5	20.1	16.3	12.1	10.0	100.0	5,911	0.24
Far-western	34.5	23.7	19.5	14.3	7.9	100.0	4,826	0.20
Subregion								
Eastern mountain	37.1	28.5	23.4	10.0	1.0	100.0	904	0.17
Central mountain	18.9	41.3	29.3	9.9	0.6	100.0	1,021	0.10
Western mountain	60.1	24.5	10.7	4.7	0.1	100.0	1,433	0.17
Eastern hill	34.4	27.9	19.5	14.0	4.2	100.0	3,703	0.18
Central hill	19.8	13.2	5.0	12.8	49.2	100.0	5,679	0.23
Western hill	23.3	26.2	22.9	14.9	12.7	100.0	5,757	0.24
Mid-western hill	55.8	17.4	10.7	9.2	6.9	100.0	2,648	0.25
Far-western hill	58.6	21.0	13.9	6.0	0.5	100.0	1,714	0.14
Eastern terai	3.6	12.7	20.3	30.9	32.4	100.0	6,874	0.18
Central terai	9.4	19.7	29.3	26.8	14.8	100.0	9,310	0.20
Western terai	2.8	14.8	18.1	31.9	32.4	100.0	4,138	0.20
Mid-western terai	21.1	20.7	23.8	18.3	16.1	100.0	2,519	0.22
Far-western terai	10.1	26.4	26.0	22.0	15.3	100.0	2,422	0.19
Total	20.0	20.0	20.0	20.0	20.0	100.0	48,123	0.24

Table 2.6 also includes information on the Gini coefficient, which indicates the level of concentration of wealth (0 being an equal distribution and 1 a totally unequal distribution). This ratio is expressed as a proportion between 0 and 1. Wealth inequality, as measured by the Gini coefficient, is higher in rural than urban areas. Inequality in wealth is highest in the hill region, the Central and Mid-western development regions, and the Mid-western hill subregion.

2.3 HOUSEHOLD POPULATION BY AGE AND SEX

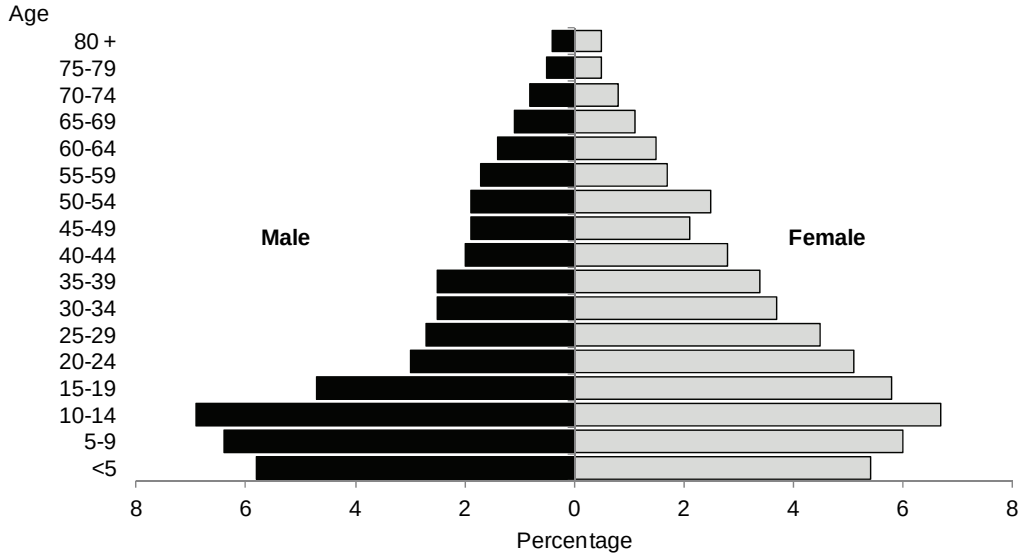
Table 2.7 shows the distribution of the de facto household population by age and sex according to urban and rural residence. The 2011 NDHS enumerated a total of 47,570 persons (25,667 females and 21,903 males). A large proportion of the Nepalese population (37 percent) is under age 15 (Figure 2.1), although this proportion has declined from 41 percent in 2006. Eleven percent of the population is under five years, a decrease since 2006 indicating a declining trend in fertility. Persons age 65 and over account for about 6 percent of the total population, an increase from 4 percent in 2006. There is a smaller proportion of children under five in urban than rural areas, suggesting that recent declines in fertility are more evident in urban than rural areas and that the transition to lower fertility began with the urban population. The concentration of the population is high in the 10-14 age group, creating pressure for schooling and adolescent care.

Table 2.7 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Nepal 2011

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	8.2	8.0	8.1	13.3	10.4	11.7	12.6	10.1	11.2
5-9	11.8	9.6	10.7	14.2	11.4	12.7	13.8	11.2	12.4
10-14	11.8	10.9	11.3	15.4	12.6	13.9	14.9	12.4	13.6
15-19	11.8	11.5	11.6	9.9	10.7	10.3	10.1	10.8	10.5
20-24	9.6	10.6	10.1	6.1	9.3	7.9	6.6	9.5	8.2
25-29	7.9	10.3	9.1	5.4	8.0	6.8	5.8	8.3	7.1
30-34	7.7	8.5	8.1	4.9	6.6	5.8	5.3	6.8	6.1
35-39	6.8	6.9	6.8	5.2	6.1	5.7	5.4	6.2	5.9
40-44	5.4	5.5	5.5	4.2	5.0	4.7	4.4	5.1	4.8
45-49	4.4	4.1	4.2	4.1	3.8	3.9	4.2	3.8	4.0
50-54	4.2	4.2	4.2	4.2	4.6	4.4	4.2	4.6	4.4
55-59	3.5	2.8	3.1	3.8	3.2	3.5	3.7	3.2	3.4
60-64	2.3	2.3	2.3	3.1	2.8	3.0	3.0	2.8	2.9
65-69	1.6	1.7	1.7	2.4	2.0	2.2	2.3	2.0	2.1
70-74	1.3	1.2	1.3	1.7	1.5	1.6	1.7	1.4	1.5
75-79	0.7	1.0	0.9	1.2	1.0	1.1	1.1	1.0	1.0
80+	0.9	1.0	1.0	0.8	1.0	0.9	0.9	1.0	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,028	3,250	6,278	18,875	22,417	41,292	21,903	25,667	47,570

Figure 2.1 **Population Pyramid**



The overall sex ratio (the number of males per 100 females) is 85, less than the sex ratio in the 2006 NDHS (89) and the 2011 census (94). It is, however, consistent with the results of the 2010-2011 Nepal Living Standard Survey (NLSS), which indicated that the sex ratio is 86 (Central Bureau of Statistics, 2011c). The sex ratio is lowest in the 20-29 age group, indicating a low proportion of the male population in that group. The sex ratio also differs by residence. Urban areas have a higher sex ratio (93) than rural areas (84). The significantly low proportion of the male population in rural areas could be attributed to greater out-migration, especially movement among those in the working age group to urban areas.

2.4 MIGRATION STATUS

The 2011 NDHS collected information on migration among individuals who lived in the interviewed households in the past 10 years but have since moved away. Migrants are people who either move from their place of birth to another area or frequently change their residence. Migration may be seasonal, temporary, semipermanent, or permanent depending on the duration of and reasons for migration within a defined geographical area (KC, 2003). Migration brings significant demographic dynamics to a society and carries socioeconomic implications for both the origin and destination. Culture and customs, opportunities for education and employment, and geographic hardships are among the major causes of migration.

The 2011 NDHS collected information on former household residents who migrated elsewhere in the 10 years prior to the survey. Information was collected by sex, age, date of migration, cause of migration, and destination. These data provide information on period migration and lifetime migration. Period migration simply indicates the mobility patterns of internal migrants five years before the survey in terms of where they were living then. Lifetime migration, on the other hand, indicates a permanent shift in place of residence since more than five years prior to the survey.

Fifty-seven percent of households reported that at least one person had migrated away from the household at some time in the past 10 years. Among households that reported migration of former residents, on average about two persons were likely to have migrated.

Table 2.8 provides a brief overview of the background characteristics of the migrant population. Two-thirds migrate at the age of 24 or younger. Twenty-two percent of men migrate at age 20-24, whereas women are most likely to migrate at an earlier age (15-19 years), primarily due to marriage. Overall, 74 percent of males migrate before age 30, while almost 84 percent of females migrate before age 25.

Men migrate mostly for work (72 percent), while women primarily migrate due to marriage (54 percent). Another common reason for migrating is educational pursuits, with 17 percent of men and 14 percent of women citing this as a reason. Women also tend to migrate due to family reasons, such as accompanying their spouse or accompanying their children who move to urban areas for education.

The vast majority of migrants are from rural areas and from the hill and terai regions. Nearly half of migrants come from the Central and Eastern terai and the Western hill region.

Table 2.8 Migration status

Percent distribution of men and women who migrated in the 10 years before the survey by selected background characteristics, Nepal 2011

Background characteristic	Men	Women	Total
Age at migration			
<15	16.3	20.2	18.0
15-19	19.5	35.5	26.2
20-24	22.4	28.1	24.8
25-29	15.4	8.4	12.4
30-34	10.4	3.4	7.4
35-39	7.8	1.7	5.2
40-44	4.2	0.8	2.8
45-49	1.9	0.6	1.4
50+	2.1	1.2	1.8
Total	100.0	100.0	100.0
Reason for migration			
Work	72.3	9.1	45.6
Study	17.2	14.0	15.8
Marriage	0.3	54.4	23.2
Family reasons	9.4	21.9	14.7
Security	0.1	0.1	0.1
Other	0.7	0.5	0.6
Don't know	0.1	0.1	0.1
Total	100.0	100.0	100.0
Residence			
Urban	9.2	10.2	9.6
Rural	90.8	89.8	90.4
Total	100.0	100.0	100.0
Ecological zone			
Mountain	7.4	7.1	7.3
Hill	42.8	44.9	43.7
Terai	49.8	48.0	49.0
Total	100.0	100.0	100.0
Development region			
Eastern	25.8	26.2	26.0
Central	29.8	31.0	30.3
Western	24.5	24.9	24.7
Mid-western	9.8	9.5	9.7
Far-western	10.0	8.5	9.4
Total	100.0	100.0	100.0
Subregion			
Eastern mountain	2.0	2.0	2.0
Central mountain	3.1	3.0	3.1
Western mountain	2.2	2.1	2.2
Eastern hill	8.9	9.5	9.2
Central hill	9.0	11.1	9.9
Western hill	16.4	17.1	16.7
Mid-western hill	5.2	4.4	4.9
Far-western hill	3.3	2.7	3.0
Eastern terai	14.9	14.6	14.8
Central terai	17.6	16.9	17.3
Western terai	8.1	7.8	8.0
Mid-western terai	3.7	3.9	3.7
Far-western terai	5.5	4.8	5.2
Total	100.0	100.0	100.0
Wealth quintile			
Lowest	18.1	17.0	17.6
Second	22.9	22.5	22.7
Middle	21.3	20.9	21.1
Fourth	20.3	20.4	20.4
Highest	17.3	19.2	18.1
Total	100.0	100.0	100.0
Number of men and women who migrated in the past 10 years	6,829	5,002	11,831

Table 2.9.1 shows information for male migrants. An assessment of time since migration shows that the majority of male migrants (85 percent) moved out within the five years prior to the survey, indicating a high proportion of period migration. Fifteen percent of migrants migrated more than five years before the survey.

Migration within Nepal is high, with almost half of migrants moving within the country. The most popular out-of-country destination for Nepalese migrants is India, to which 20 percent of all male migrants relocate. One-third of male migrants move to countries other than India, with the most popular destinations being countries in the Middle East and Malaysia. Among men migrating for work, the majority migrated within the last five years, indicating a recent outflux of labor migration. Those migrating for work are most likely to go to countries other than India (44 percent). A quarter of such men migrate to India, while 32 percent move internally within Nepal.

Table 2.9.1 Migration status: Men

Percentage of male migrants by years since migration and percent distribution of male migrants by destination, according to background characteristics and reason for migration, Nepal 2011

Background characteristic	Time since migration			Destination				Number of male migrants
	<1 year	<5 years[1]	5+ years	Within Nepal	India	Other countries	Total	
Age at migration								
<15	30.8	80.1	19.9	81.0	18.0	1.0	100.0	1,115
15-19	31.4	81.9	18.1	60.8	22.6	16.5	100.0	1,330
20-24	36.5	84.6	15.4	37.2	17.6	45.1	100.0	1,527
25-29	40.3	87.3	12.7	32.1	18.4	49.0	100.0	1,049
30-34	38.6	89.4	10.6	24.5	17.6	57.8	100.0	708
35-39	47.9	90.9	9.1	25.9	20.9	53.2	100.0	532
40-44	39.0	86.2	13.8	36.6	18.8	44.4	100.0	289
45-49	50.3	93.9	6.1	37.4	31.2	31.4	100.0	132
50+	55.8	88.9	11.1	51.9	38.9	8.7	100.0	146
Reason for migration								
Work	40.1	86.8	13.2	31.8	24.0	44.2	100.0	4,936
Study	27.8	82.8	17.2	86.2	4.7	9.0	100.0	1,172
Family reasons	32.1	78.5	21.5	80.8	16.9	2.2	100.0	642
Other	23.1	67.9	32.1	79.5	7.7	8.9	100.0	78
Residence								
Urban	35.6	84.6	15.4	45.0	15.1	39.7	100.0	627
Rural	37.2	85.1	14.9	46.4	20.3	33.2	100.0	6,202
Ecological zone								
Mountain	37.9	82.5	17.5	65.9	13.3	20.4	100.0	504
Hill	32.6	81.6	18.4	50.4	17.3	32.2	100.0	2,926
Terai	40.7	88.5	11.5	39.8	22.9	37.2	100.0	3,399
Development region								
Eastern	35.5	87.6	12.4	42.3	11.4	46.1	100.0	1,764
Central	38.1	87.1	12.9	52.7	12.5	34.6	100.0	2,033
Western	31.4	80.8	19.2	43.1	18.3	38.6	100.0	1,676
Mid-western	41.7	81.8	18.2	52.0	31.4	16.5	100.0	670
Far-western	46.8	86.7	13.3	39.4	55.4	5.2	100.0	686
Subregion								
Eastern mountain	31.5	84.2	15.8	53.6	3.1	42.1	100.0	139
Central mountain	36.2	77.2	22.8	72.8	7.3	19.9	100.0	214
Western mountain	46.1	88.5	11.5	67.5	31.2	1.4	100.0	151
Eastern hill	32.7	87.2	12.8	49.2	7.3	43.6	100.0	607
Central hill	35.3	83.3	16.7	59.9	5.5	34.3	100.0	617
Western hill	26.6	77.5	22.5	49.7	14.5	35.8	100.0	1,122
Mid-western hill	40.0	81.0	19.0	47.8	36.3	15.7	100.0	354
Far-western hill	43.4	83.3	16.7	35.7	60.4	3.9	100.0	226
Eastern terai	37.8	88.2	11.8	36.7	15.1	48.2	100.0	1,018
Central terai	39.9	90.7	9.3	45.4	17.0	37.3	100.0	1,202
Western terai	41.1	87.5	12.5	29.8	25.9	44.3	100.0	553
Mid-western terai	46.8	82.5	17.5	53.6	24.8	21.6	100.0	251
Far-western terai	46.6	87.4	12.6	35.5	57.7	6.8	100.0	375
Wealth quintile								
Lowest	38.8	85.6	14.4	44.3	32.9	22.6	100.0	1,237
Second	40.5	86.5	13.5	49.9	24.0	25.8	100.0	1,565
Middle	38.8	83.3	16.7	45.4	18.2	36.4	100.0	1,453
Fourth	35.2	85.3	14.7	45.7	14.2	40.1	100.0	1,390
Highest	30.6	84.6	15.4	45.2	9.1	45.6	100.0	1,185
Total	37.0	85.1	14.9	46.3	19.8	33.8	100.0	6,829

Note: Total includes six men with missing information on destination not shown separately.
[1] Includes those who migrated since less than a year prior to the survey

A higher proportion of urban than rural migrants go to other countries (40 percent versus 33 percent). Migrants from the terai are most likely to migrate to India and other countries, while those from the mountain (66 percent) and hill (50 percent) zones are more likely to migrate within the country. The majority of male migrants from the Far-western region move to India (55 percent), and very few go to other countries. On the other hand, the largest proportion of male migrants from the Eastern region go to countries other than India (46 percent). Men from the highest wealth quintile are more likely to migrate to other countries (46 percent) than those from the lowest wealth quintile (23 percent).

Table 2.9.2 shows the migration status of women. One in four women had migrated within one year, 72 percent within five 5 years, and 28 percent five or more years prior to the survey. Eighty-six percent of women who migrated moved within Nepal. Eight percent migrated to India and very few to other countries. About one-third of women who migrated for work moved to countries other than India. Women were less likely to migrate to other countries for non-work-related reasons. Women in the Far-western terai were more likely to migrate to India, primarily due to cross-border marriage practices. India was the second common destination for women migrants from the lowest wealth quintile, while those in the highest wealth quintile were more likely to migrate to other countries.

Table 2.9.2 Migration status: Women

Percentage of female migrants by years since migration and percent distribution of female migrants by destination, according to background characteristics and reason for migration, Nepal 2011

Background characteristic	Time since migration			Destination			Total	Number of female migrants
	<1 year	<5 years[1]	5+ years	Within Nepal	India	Other countries		
Age at migration								
<15	24.5	71.9	28.1	87.9	10.8	1.1	100.0	1,011
15-19	18.8	66.4	33.6	91.3	6.9	1.8	100.0	1,775
20-24	24.0	73.1	26.9	88.4	6.2	5.5	100.0	1,405
25-29	28.2	76.5	23.5	72.0	11.8	16.2	100.0	418
30-34	36.0	83.6	16.4	70.5	10.8	17.6	100.0	170
35-39	41.1	89.3	10.7	60.8	14.3	24.9	100.0	87
40-44	(30.4)	(72.4)	(27.6)	(56.8)	(20.5)	(22.8)	100.0	41
45-49	(49.5)	(77.4)	(22.6)	(63.8)	(17.9)	(18.3)	100.0	31
50+	40.7	86.6	13.4	84.4	5.3	10.4	100.0	62
Reason for migration								
Work	35.1	89.8	10.2	56.8	7.7	35.1	100.0	455
Study	35.7	86.3	13.7	88.8	3.6	7.5	100.0	699
Marriage	14.2	61.6	38.4	93.6	6.0	0.4	100.0	2,719
Family reasons	34.2	79.2	20.8	79.3	17.7	3.0	100.0	1,095
Other	(47.1)	(82.4)	(17.6)	(85.3)	(2.9)	(11.8)	100.0	34
Residence								
Urban	25.9	76.3	23.7	77.2	11.0	11.9	100.0	508
Rural	23.5	71.1	28.9	87.5	8.0	4.4	100.0	4,494
Ecological zone								
Mountain	31.1	72.5	27.5	91.3	4.4	4.3	100.0	357
Hill	21.5	70.2	29.8	91.2	4.0	4.7	100.0	2,246
Terai	24.7	72.8	27.2	81.2	13.0	5.8	100.0	2,399
Development region								
Eastern	23.5	71.4	28.6	85.2	8.6	6.1	100.0	1,310
Central	27.4	74.1	25.9	87.2	6.0	6.8	100.0	1,549
Western	17.6	68.0	32.0	88.7	6.1	5.0	100.0	1,247
Mid-western	25.9	70.5	29.5	88.2	10.0	1.8	100.0	473
Far-western	27.1	74.7	25.3	78.7	20.4	1.0	100.0	423
Subregion								
Eastern mountain	27.2	70.0	30.0	98.4	0.0	1.6	100.0	102
Central mountain	32.5	73.1	26.9	86.9	3.7	9.4	100.0	148
Western mountain	33.0	74.2	25.8	90.4	9.6	0.0	100.0	107
Eastern hill	20.4	71.3	28.7	92.9	2.6	4.2	100.0	476
Central hill	28.6	74.9	25.1	89.0	2.3	8.7	100.0	557
Western hill	15.9	67.4	32.6	92.8	2.7	4.3	100.0	857
Mid-western hill	25.3	69.3	30.7	91.6	8.4	0.0	100.0	222
Far-western hill	25.5	65.8	34.2	83.0	16.8	0.2	100.0	133
Eastern terai	24.9	71.7	28.3	78.3	13.8	8.0	100.0	732
Central terai	25.6	73.8	26.2	86.0	9.0	5.0	100.0	844
Western terai	21.4	69.3	30.7	79.8	13.7	6.6	100.0	390
Mid-western terai	23.9	70.7	29.3	83.9	11.6	4.5	100.0	193
Far-western terai	27.1	79.9	20.1	73.6	24.8	1.6	100.0	241
Wealth quintile								
Lowest	22.9	70.9	29.1	87.6	10.3	2.1	100.0	851
Second	24.1	71.7	28.3	88.2	8.8	2.7	100.0	1,126
Middle	22.2	69.0	31.0	89.6	6.7	3.7	100.0	1,043
Fourth	26.0	73.7	26.3	87.3	6.5	6.2	100.0	1,022
Highest	23.4	72.6	27.4	78.7	9.8	11.5	100.0	960
Total	23.7	71.6	28.4	86.4	8.3	5.2	100.0	5,002

Note: Total includes five women with missing information on destination not shown separately. Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes those who migrated since less than a year prior to the survey.

2.5 HOUSEHOLD COMPOSITION

Information on household composition is critical for understanding family size, household headship, and orphanhood and for implementing meaningful population-based policies and programs. Household composition is also a determinant of better health status and well-being.

Table 2.10 presents information on household composition. The majority (72 percent) of households are headed by men, although the proportion of female-headed households has risen from 23 percent in 2006 to 28 percent in 2011, with the rise more marked in rural than urban areas. This could be attributed in part to the sizeable out-migration of the male population from rural areas. The average household size is 4.4 persons, as compared with 4.9 in 2006; household sizes are larger in rural (4.5) than urban (4.1) areas. This decrease in overall household size is consistent with findings from the 2011 census (Central Bureau of Statistics, 2011a).

Table 2.10 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18 years, according to residence, Nepal 2011

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	76.2	71.0	71.8
Female	23.8	29.0	28.2
Total	100.0	100.0	100.0
Number of usual members			
0	0.1	0.0	0.0
1	7.0	4.5	4.9
2	13.2	13.6	13.6
3	20.9	16.6	17.2
4	24.1	20.3	20.8
5	14.4	16.9	16.5
6	9.6	12.6	12.2
7	5.0	7.1	6.8
8	2.5	3.9	3.7
9+	3.2	4.5	4.3
Total	100.0	100.0	100.0
Mean size of households	4.1	4.5	4.4
Percentage of households with orphans and foster children under age 18			
Foster children[1]	13.7	10.8	11.2
Double orphans	0.4	0.4	0.4
Single orphans[2]	4.7	5.6	5.5
Foster and/or orphan children	16.4	14.3	14.6
Number of households	1,546	9,280	10,826

Note: Table is based on de jure household members (i.e., usual residents).
[1] Foster children are those under age 18 living in households with neither their mother nor their father present.
[2] Includes children with one dead parent and an unknown survival status of the other parent

The 2011 NDHS also collected information on the presence in households of foster children and orphans. Foster children are children under age 18 living in households with neither their mother nor their father present; orphans are children with one (single orphans) or both parents (double orphans) dead. Foster children and orphans are of concern because they may be at increased risk of neglect or exploitation with their mothers or fathers not present to assist them. There is little difference in the distribution of orphans by rural and urban areas. Eleven percent of households have foster children, and more urban than rural households have foster children (14 percent and 11 percent, respectively). Single orphans are present in 6 percent of households, whereas double orphans are present in less than 1 percent of households.

2.6 BIRTH REGISTRATION

Although Nepal has a legal and administrative structure stipulating official registration of births according to standard procedures, few births are registered officially. The practice of formally registering births is not widely adhered to in the country, even though the registration system was implemented 30 years ago and enforced with the Birth, Death and Other Personal Events (Registration) Act of 1976 (Nepal Law Commission, 2006). Table 2.11 presents the percentage of the de jure population under five years whose births are registered with the civil authorities, according to background characteristics. Birth registration information was solicited for children age 0-4. More than two in five (42 percent) children have their births registered. Thirty-eight percent of children under age five have a birth certificate. Although the Three-Year Development Plan (2010-2013) aims at registering the births of 90 percent of children under age five by 2013, this target is far from being met. The reason is a weak birth registration system coupled with the difficulties encountered in registering births with lack of staff in local registration offices (NPC, 2011).

Table 2.11 Birth registration of children under age five

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Nepal 2011

Background characteristic	Children whose births are registered			Number of children
	Percentage who had a birth certificate	Percentage who did not have a birth certificate	Percentage registered	
Age				
<2	26.2	2.4	28.6	2,023
2-4	45.0	5.8	50.8	3,247
Sex				
Male	38.8	5.2	44.0	2,716
Female	36.7	3.7	40.4	2,554
Residence				
Urban	38.1	6.1	44.2	498
Rural	37.7	4.3	42.1	4,772
Ecological zone				
Mountain	40.9	5.0	45.9	412
Hill	32.3	4.8	37.1	2,083
Terai	41.4	4.2	45.6	2,775
Development region				
Eastern	44.5	6.1	50.7	1,238
Central	34.3	3.7	38.0	1,663
Western	35.1	4.4	39.5	992
Mid-western	41.4	3.8	45.2	783
Far-western	33.1	4.3	37.3	593
Subregion				
Eastern mountain	29.3	3.9	33.2	97
Central mountain	33.4	6.2	39.6	98
Western mountain	49.4	5.0	54.4	217
Eastern hill	37.6	5.7	43.4	405
Central hill	31.7	5.0	36.7	471
Western hill	33.3	4.2	37.5	592
Mid-western hill	27.2	3.6	30.7	372
Far-western hill	29.9	5.9	35.8	243
Eastern terai	50.4	6.6	57.0	736
Central terai	35.5	3.0	38.5	1,095
Western terai	37.7	4.7	42.4	400
Mid-western terai	45.4	4.3	49.8	295
Far-western terai	42.4	1.5	43.9	249
Wealth quintile				
Lowest	31.2	4.5	35.6	1,360
Second	37.8	4.2	41.9	1,163
Middle	39.4	3.7	43.1	1,111
Fourth	38.3	5.2	43.5	883
Highest	46.7	5.4	52.1	753
Total	37.8	4.5	42.3	5,269

Although the vital registration system of the government requires that a newborn be registered within 35 days of birth with the respective municipality or village development committee, Table 2.11 indicates that children under 2 are much less likely to be registered than children age 2-4 (29 percent and 51 percent, respectively). The registration of older children is primarily driven by the practice of asking parents to produce a child's birth certificate for school admission, although it is not legally required.

Table 2.11 shows that birth registration is higher among male (44 percent) than female (40 percent) children, higher in urban (44 percent) than rural (42 percent) areas, and higher in the mountain and terai (46 percent each) than in the hill zone (37 percent). The Eastern development region has a higher proportion of children with their births registered (51 percent) than the Far-western region (37 percent). Among the subregions, 57 percent of children from the Eastern terai and 54 percent from the Western mountain subregion are registered. Less than half of the children in the other subregions are registered. Children from the highest wealth quintile are more likely to have their births registered (52 percent) than children in the lowest quintile (36 percent). However, the lowest wealth quintile has seen an improvement since 2006, when only 22 percent of children from that quintile were registered.

2.7 CHILDREN'S LIVING ARRANGEMENTS, ORPHANHOOD, AND SCHOOL ATTENDANCE

The 2011 NDHS collected information on living arrangements of children and orphanhood. Living arrangements should be monitored together with the proportion of foster and orphan children because of their

significant effects on the comprehensive development of children. Table 2.12 shows the percent distribution of children under age 18 by living arrangements and survivorship of parents. The proportion of children in Nepal who are orphans and/or foster children is high and is a reflection of the political turmoil in the country over the past decade and the prevailing poverty in various parts of the country. About 61 percent of children less than age 15 and 60 percent of children less than age 18 live with both of their parents. Similarly, 4 percent of children less than age 15 and 6 percent of those less than age 18 are living away from their parents, even if both are alive. In the case of 4 percent of children less than age 15 and 5 percent of children less than age 18, one or both parents are dead.

Table 2.12 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Nepal 2011

		Living with mother but not with father		Living with father but not with mother		Not living with either parent								
Background characteristic	Living with both parents	Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother	Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
Age														
0-4	62.6	34.3	0.7	0.3	0.2	1.6	0.1	0.1	0.0	0.1	100.0	1.8	1.2	5,269
<2	65.2	34.0	0.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0	100.0	0.3	0.7	2,023
2-4	60.9	34.4	0.9	0.4	0.3	2.5	0.1	0.1	0.0	0.1	100.0	2.8	1.5	3,247
5-9	59.4	30.8	1.8	1.6	0.6	4.7	0.5	0.4	0.2	0.1	100.0	5.7	3.4	5,930
10-14	60.5	23.6	3.9	2.0	1.7	6.5	0.8	0.6	0.4	0.1	100.0	8.3	7.3	6,488
15-17	58.0	15.9	5.0	1.4	1.4	15.5	0.8	1.4	0.5	0.1	100.0	18.2	9.1	3,152
Sex														
Male	60.5	28.1	2.8	1.4	1.0	5.1	0.5	0.4	0.2	0.1	100.0	6.2	4.9	10,539
Female	60.1	26.3	2.6	1.4	0.9	7.2	0.6	0.6	0.3	0.1	100.0	8.6	5.0	10,300
Residence														
Urban	64.2	18.9	2.3	1.3	0.9	10.2	0.7	0.9	0.3	0.3	100.0	12.1	5.1	2,308
Rural	59.8	28.2	2.7	1.4	1.0	5.6	0.5	0.5	0.2	0.1	100.0	6.8	4.9	18,531
Ecological zone														
Mountain	65.7	22.1	2.9	1.3	1.0	5.4	0.6	0.5	0.4	0.0	100.0	6.9	5.5	1,565
Hill	59.7	27.9	2.9	1.1	1.0	6.1	0.5	0.5	0.3	0.1	100.0	7.3	5.1	8,337
Terai	60.0	27.3	2.4	1.6	0.9	6.2	0.6	0.6	0.2	0.1	100.0	7.6	4.7	10,938
Development region														
Eastern	58.9	26.4	2.5	1.7	1.2	7.9	0.5	0.7	0.2	0.0	100.0	9.3	5.1	4,900
Central	64.8	23.9	1.8	1.4	1.0	5.7	0.7	0.4	0.2	0.1	100.0	7.0	4.1	6,704
Western	54.2	34.6	2.9	1.4	0.5	5.2	0.4	0.5	0.3	0.1	100.0	6.4	4.6	4,121
Mid-western	63.7	23.5	3.8	1.1	1.2	5.5	0.5	0.6	0.2	0.0	100.0	6.7	6.2	2,822
Far-western	57.3	29.8	3.7	0.9	0.9	6.0	0.5	0.4	0.5	0.0	100.0	7.4	6.0	2,292
Subregion														
Eastern mountain	65.3	22.4	1.4	2.3	0.6	6.4	1.0	0.4	0.2	0.0	100.0	8.0	3.6	412
Central mountain	57.9	29.6	2.1	1.4	0.6	7.4	0.4	0.2	0.3	0.0	100.0	8.4	3.6	425
Western mountain	70.5	17.6	4.2	0.7	1.6	3.6	0.6	0.7	0.6	0.0	100.0	5.5	7.6	727
Eastern hill	62.4	23.3	3.1	1.6	1.1	7.2	0.6	0.5	0.1	0.1	100.0	8.5	5.4	1,625
Central hill	69.2	17.8	1.1	1.2	1.3	8.1	0.4	0.5	0.3	0.1	100.0	9.3	3.6	2,120
Western hill	52.0	37.0	3.5	0.8	0.5	4.9	0.4	0.4	0.3	0.1	100.0	6.1	5.2	2,391
Mid-western hill	57.0	31.0	3.0	1.1	1.1	5.5	0.6	0.5	0.1	0.1	100.0	6.7	5.3	1,336
Far-western hill	56.8	31.7	5.2	0.4	1.1	3.4	0.5	0.3	0.6	0.1	100.0	4.7	7.7	865
Eastern terai	55.9	28.7	2.4	1.6	1.4	8.5	0.4	0.9	0.2	0.0	100.0	9.9	5.2	2,863
Central terai	63.3	26.4	2.1	1.5	0.9	4.3	0.9	0.4	0.1	0.2	100.0	5.7	4.4	4,160
Western terai	57.1	31.3	2.1	2.2	0.5	5.7	0.4	0.6	0.2	0.0	100.0	6.8	3.8	1,730
Mid-western terai	66.4	19.4	4.6	1.4	0.9	6.0	0.4	0.6	0.3	0.0	100.0	7.2	6.8	1,109
Far-western terai	56.4	29.1	2.4	1.3	0.7	8.9	0.5	0.3	0.3	0.0	100.0	10.0	4.2	1,076
Wealth quintile														
Lowest	64.7	24.7	3.4	0.8	1.5	3.6	0.6	0.4	0.3	0.0	100.0	4.8	6.2	5,034
Second	60.0	28.9	3.2	1.1	1.1	4.6	0.3	0.5	0.2	0.0	100.0	5.6	5.4	4,429
Middle	59.0	29.5	2.7	1.0	0.8	5.4	0.9	0.3	0.2	0.1	100.0	6.8	5.0	4,149
Fourth	54.9	30.8	1.8	2.6	0.7	7.8	0.3	0.8	0.1	0.1	100.0	9.1	3.7	3,819
Highest	62.0	21.8	1.7	1.4	0.5	10.8	0.6	0.7	0.4	0.2	100.0	12.5	3.9	3,408
Total <15	60.7	29.2	2.2	1.4	0.9	4.4	0.5	0.4	0.2	0.1	100.0	5.5	4.2	17,687
Total <18	60.3	27.2	2.7	1.4	1.0	6.1	0.5	0.5	0.2	0.1	100.0	7.4	4.9	20,839

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead and one parent dead but missing information on survival status of the other parent.

A high proportion of children age 15-17 (18 percent) are not living with either parent, even when both parents are alive. This may be due to children moving to a relative's house to pursue further education or for purposes of seeking work.

Table 2.12 shows that the percentage of children not living with their parents increases with age. Rural children are more likely to live with either parent than urban children. The highest proportion of children not living with either parent is observed in the Eastern development region (9 percent), while the lowest proportion is found in the Western development region (6 percent).

2.8 EDUCATION OF HOUSEHOLD POPULATION

Studies have shown that education is one of the major socioeconomic factors that influence a person's behavior and attitude. In general, the higher the level of education of a woman, the more knowledgeable she is about the use of health facilities, family planning methods, and the health of her children. Inspired by the collective commitment expressed in the Dakar Framework for Action 2000, Nepal has already adopted the "Education for All" (EFA) strategy. To achieve this, a National Plan of Action (NPA, EFA 2001-2015) has been in place since 2001 (Department of Education, 2004). In order to meet MDG targets, Nepal is committed to ensuring that by 2015 all children, and in particular girls, children in difficult situations, and children from ethnic minority groups, have access to a complete, free, compulsory, and good-quality primary education (UNICEF, 2006).

To cope with the demand for education, the government of Nepal has opened investment in the education sector to private parties. Education is divided into two broad categories, primary and secondary (Department of Education, 2004). In addition, private parties have invested in opening up non-graded-level schools (e.g., nursery, lower kindergarten, and upper kindergarten), known as pre-primary schools. To gauge the spread of such schools in Nepal, the 2011 NDHS included questions on pre-primary school attendance. Secondary-level schooling includes lower secondary and upper secondary schools, where students can receive an education up to grade 10. More recently, the government has encouraged existing high schools to add two additional years of school (10+2) by affiliating with the Higher Secondary Education Council (on the recommendation of the District Health Education Office and the Department of Education). The goal of the Three Year Plan (2010-2013) of the government of Nepal is to provide free, essential, and quality basic-level education (grade 1 to 8) and expand equitable and participative access to quality education to the secondary level (grade 9 to 12) (NPC, 2010a). In order to promote job-oriented education, skill development schools with a vocational and technical focus have increased over the years in various parts of the country. The interim constitution of Nepal (2007) explicitly stipulated free education up to the secondary level in the public sector and provisioned for reservation and other promotional arrangements for children and women.

2.8.1 Educational Attainment of Household Population

Tables 2.13.1 and 2.13.2 show the percent distribution of the de facto female and male household population age 6 and above by level of education and background characteristics.

Table 2.13.1 shows that 41 percent of women have never been to school, 23 percent have an incomplete primary education, 6 percent have completed primary school but not continued on to the next level of schooling, 25 percent have some secondary education or have completed secondary school and have not continued on, and about 5 percent have more than a secondary school education. While 7 percent of girls age 10-14 had no education, 12 percent of girls age 6-9 had no education indicating that school enrollment is quite late among girls. A relatively low proportion of girls in the 6-9 age group have attended some primary education (88 percent), particularly with respect to the MDG target of 100 percent by 2015. The proportion of women with no education increases with age, indicating that older women are less likely to be educated than younger women.

Women in rural areas are far behind their urban counterparts with 44 percent having no education and median years of schooling is less than one, compared to urban women with 27 percent having no education and a median years of schooling completed of nearly five years. Forty-eight percent of women in the mountain zone have no education compared with 43 percent in the terai and 39 percent in the hill. Women in the

Table 2.13.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Nepal 2011

Background characteristic	No education[1]	Some primary[2]	Completed primary[3]	Some secondary	Completed secondary[4]	More than secondary	Total	Number	Median years completed
Age									
6-9	11.7	87.6	0.7	0.0	0.0	0.0	100.0	2,311	0.1
10-14	6.6	47.6	17.4	28.4	0.0	0.0	100.0	3,181	3.7
15-19	12.5	9.4	6.6	49.9	16.5	5.0	100.0	2,775	7.2
20-24	23.1	11.7	7.9	23.3	16.6	17.4	100.0	2,431	6.5
25-29	35.9	15.1	6.9	21.7	10.4	10.0	100.0	2,126	3.8
30-34	44.8	12.8	7.1	20.0	8.8	6.4	100.0	1,744	1.9
35-39	60.9	10.9	4.4	14.2	4.4	5.3	100.0	1,597	0.0
40-44	70.4	11.4	3.3	8.2	3.6	3.0	100.0	1,309	0.0
45-49	78.2	9.3	2.7	5.3	2.3	2.2	100.0	979	0.0
50-54	84.6	6.5	2.5	3.8	1.3	1.3	100.0	1,178	0.0
55-59	90.0	4.1	0.9	3.5	0.7	0.8	100.0	811	0.0
60-64	95.4	1.7	0.4	1.4	0.6	0.5	100.0	711	0.0
65+	96.8	1.7	0.2	1.0	0.1	0.2	100.0	1,376	0.0
Residence									
Urban	26.5	19.9	5.5	22.2	11.9	13.9	100.0	2,947	4.6
Rural	43.7	23.5	6.3	17.8	5.4	3.3	100.0	19,582	0.4
Ecological zone									
Mountain	47.8	25.5	5.7	15.8	3.7	1.5	100.0	1,539	0.0
Hill	38.5	22.5	7.0	19.7	6.2	6.0	100.0	9,143	1.8
Terai	42.8	23.0	5.6	17.7	6.6	4.1	100.0	11,847	0.5
Development region									
Eastern	35.1	25.7	5.7	21.1	8.2	4.1	100.0	5,441	2.1
Central	46.3	20.9	5.3	15.4	5.5	6.6	100.0	7,430	0.0
Western	37.9	20.9	8.2	22.0	6.7	4.3	100.0	4,752	2.2
Mid-western	43.2	25.9	6.1	17.0	4.9	2.9	100.0	2,633	0.5
Far-western	46.0	24.5	6.3	15.9	4.4	2.8	100.0	2,274	0.0
Subregion									
Eastern mountain	36.0	27.9	6.0	22.5	5.5	2.1	100.0	424	1.7
Central mountain	49.4	23.0	5.9	16.5	3.6	1.5	100.0	506	0.0
Western mountain	54.6	25.9	5.3	10.5	2.5	1.1	100.0	609	0.0
Eastern hill	37.4	25.0	7.4	21.7	5.9	2.4	100.0	1,759	1.8
Central hill	33.7	20.8	5.8	18.4	7.9	13.4	100.0	2,619	3.0
Western hill	39.4	20.9	8.1	21.8	6.3	3.4	100.0	2,806	2.1
Mid-western hill	41.7	24.8	6.9	17.9	4.8	3.9	100.0	1,172	0.7
Far-western hill	49.2	25.2	6.8	14.7	2.3	1.6	100.0	787	0.0
Eastern terai	33.7	25.8	4.8	20.6	9.8	5.3	100.0	3,257	2.3
Central terai	53.6	20.7	4.9	13.5	4.2	3.1	100.0	4,305	0.0
Western terai	35.6	20.8	8.4	22.2	7.3	5.5	100.0	1,945	2.5
Mid-western terai	41.7	26.8	5.4	18.0	5.5	2.6	100.0	1,159	1.1
Far-western terai	41.6	24.0	6.3	17.9	6.3	3.9	100.0	1,180	0.6
Wealth quintile									
Lowest	54.7	29.1	5.7	9.4	0.7	0.3	100.0	4,316	0.0
Second	51.7	23.8	6.4	15.2	2.4	0.4	100.0	4,488	0.0
Middle	45.9	22.7	5.7	19.3	4.7	1.6	100.0	4,486	0.0
Fourth	35.3	21.9	6.6	22.3	9.4	4.3	100.0	4,606	2.6
Highest	20.8	17.8	6.4	25.1	13.4	16.4	100.0	4,633	6.1
Total	41.4	23.0	6.2	18.4	6.2	4.7	100.0	22,529	1.0

[1] Includes those who have never attended school and those in Early Childhood Development (ECD) centers
[2] Includes those who have completed 0-4 years of school and those in school-based pre-primary classes
[3] Completed grade 5 at the primary level
[4] Completed grade 10 at the secondary level

Central and Far western regions have relatively lower levels of education than women in the other regions. Women in the Western mountain subregion are most likely to have no education (55 percent) while women in the Central hill and Eastern terai regions are least likely (34 percent). Overall the median number of years completed in Nepal is only one year among women.

Wealth exerts a positive influence on educational attainment. Women from the highest wealth quintile are more likely to be educated than others. Seventy-nine percent of women from the highest wealth quintile have attended school, and half have completed at least six years of schooling; only 45 percent of women in the lowest wealth quintile have some educational attainment.

Table 2.13.2 shows the educational attainment of the male household population. Eighty percent of males have attained some level of education. Thirty-nine percent have attained a primary education only, and 33 percent have some secondary education or have completed secondary schooling but did not continue on. Only 9 percent of males have attained more than a secondary-level education. The median number of years of schooling completed is almost 4. Ninety-four percent of males in the highest wealth quintile have attained any level of education, with a median of 8.1 years of schooling, as compared with only 68 percent of males in the lowest wealth quintile, with a median of 1.3 years.

Table 2.13.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Nepal 2011

Background characteristic	No education[1]	Some primary[2]	Completed primary[3]	Some secondary	Completed secondary[4]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	6.1	93.0	0.6	0.1	0.0	0.2	0.0	100.0	2,470	0.1
10-14	2.2	50.6	17.5	29.6	0.0	0.0	0.0	100.0	3,269	3.8
15-19	3.6	9.9	5.8	54.9	20.8	5.0	0.1	100.0	2,217	7.8
20-24	5.4	10.1	6.5	27.2	20.8	29.8	0.1	100.0	1,449	9.0
25-29	12.4	15.3	8.2	30.2	15.1	18.7	0.2	100.0	1,266	7.2
30-34	17.6	14.6	6.9	28.6	14.4	17.7	0.2	100.0	1,167	7.1
35-39	17.3	16.9	7.1	26.8	14.9	17.0	0.0	100.0	1,187	6.7
40-44	26.3	18.1	8.0	24.3	9.8	13.3	0.2	100.0	957	4.7
45-49	32.5	20.6	6.8	17.6	11.1	11.1	0.3	100.0	916	3.4
50-54	40.4	20.7	8.2	16.0	6.4	8.2	0.0	100.0	915	2.0
55-59	47.9	19.7	6.8	15.0	5.3	5.2	0.1	100.0	820	0.3
60-64	59.2	16.3	5.8	9.2	4.4	5.0	0.2	100.0	654	0.0
65+	76.5	8.5	2.4	6.5	3.6	2.2	0.4	100.0	1,303	0.0
Residence										
Urban	10.1	24.0	6.1	24.1	14.9	20.5	0.3	100.0	2,726	6.9
Rural	21.2	32.5	7.9	23.7	8.0	6.6	0.1	100.0	15,865	3.5
Ecological zone										
Mountain	22.7	34.2	8.2	24.2	6.2	4.5	0.1	100.0	1,255	3.0
Hill	17.3	30.6	8.2	24.5	9.0	10.3	0.1	100.0	7,477	4.3
Terai	20.9	31.4	7.1	23.2	9.3	7.9	0.1	100.0	9,859	3.6
Development region										
Eastern	16.9	31.7	7.6	25.6	10.7	7.4	0.1	100.0	4,451	4.2
Central	22.8	29.3	7.0	20.6	8.9	11.2	0.2	100.0	6,338	3.6
Western	17.1	31.5	8.1	26.4	8.8	8.0	0.2	100.0	3,781	4.2
Mid-western	22.0	32.8	7.9	23.5	7.7	6.1	0.0	100.0	2,224	3.3
Far-western	17.2	34.4	8.5	25.6	7.4	6.9	0.0	100.0	1,796	3.8
Subregion										
Eastern mountain	18.8	36.6	7.4	26.5	6.8	3.9	0.0	100.0	342	3.4
Central mountain	30.2	32.5	8.2	20.5	6.1	2.4	0.0	100.0	382	2.2
Western mountain	19.7	33.8	8.7	25.3	5.9	6.5	0.1	100.0	531	3.4
Eastern hill	20.0	33.5	8.8	25.9	7.7	4.1	0.1	100.0	1,386	3.5
Central hill	14.5	25.6	7.3	21.9	11.1	19.2	0.3	100.0	2,400	5.5
Western hill	18.3	30.1	8.5	26.5	8.8	7.8	0.0	100.0	2,131	4.2
Mid-western hill	20.1	35.5	8.2	21.8	8.1	6.3	0.0	100.0	943	3.3
Far-western hill	14.5	36.9	9.2	28.7	6.4	4.4	0.0	100.0	617	3.9
Eastern terai	15.1	30.2	7.0	25.3	12.7	9.6	0.1	100.0	2,723	4.7
Central terai	27.6	31.5	6.7	19.7	7.6	6.7	0.1	100.0	3,556	2.5
Western terai	15.7	33.3	7.6	26.2	8.8	8.2	0.3	100.0	1,650	4.1
Mid-western terai	24.3	30.3	7.2	24.4	7.8	6.1	0.0	100.0	999	3.4
Far-western terai	18.5	32.6	8.2	23.7	8.5	8.3	0.1	100.0	930	3.8
Wealth quintile										
Lowest	32.3	40.8	7.8	16.2	1.9	1.0	0.0	100.0	3,365	1.3
Second	28.0	36.5	9.5	20.6	3.5	1.8	0.1	100.0	3,570	2.2
Middle	21.3	32.4	8.1	26.5	7.9	3.8	0.1	100.0	3,693	3.5
Fourth	13.9	27.3	8.0	28.9	13.1	8.6	0.1	100.0	3,891	5.1
Highest	5.7	21.4	5.1	25.4	16.8	25.3	0.3	100.0	4,071	8.1
Total	19.6	31.3	7.6	23.8	9.0	8.6	0.1	100.0	18,591	3.9

[1] Includes those who have never attended school and those in Early Childhood Development (ECD) centers
[2] Includes those who have completed 0-4 years of school and those in school-based pre-primary classes
[3] Completed grade 5 at the primary level
[4] Completed grade 10 at the secondary level

Survey results show that about one in five men and about two in five women have never attended school. Additionally, twice as many females as males (12 percent versus 6 percent) age 6-9 have never been to school (in 2006, the corresponding proportions were 16 percent and 10 percent). The percentage of men and women with no education has declined since 2006, with improvements observed across all education categories. This decline is the result of various interventions by the government to enhance the overall quality of education and improve school enrollment (NPC, 2010a).

2.8.2 School Attendance Ratios

The net attendance ratio (NAR) indicates participation in primary schooling for the population age 6-10 and secondary schooling for the population age 11-15. The gross attendance ratio (GAR) measures participation at each level of schooling among those of any age from 5 to 24 years. The GAR is almost always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level. An NAR of 100 percent would indicate that all of those in the official age range for that level are attending at that level. The GAR can exceed 100 percent if there is significant overage or underage participation at a given level of schooling.

Tables 2.14.1 and 2.14.2 provide data on net attendance ratios and gross attendance ratios by sex and level of schooling. There has been a rise in the NAR at the primary level from 87 percent in 2006 to 89 percent in 2011, while at the secondary level it has increased from 47 percent to 59 percent over the same period. The rural primary school NAR has increased from 86 percent in 2006 to 89 percent in 2011, with a rise from 91 percent to 94 percent in urban areas over the same period. Among the subregions, the Central terai has the lowest NAR and GAR at the primary as well as at the secondary level.

Table 2.14.1 School attendance ratios: Primary school

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population at the primary level by sex and level of schooling, and the Gender Parity Index (GPI), according to background characteristics, Nepal 2011

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
Residence								
Urban	94.8	92.7	93.8	0.98	131.4	123.9	127.8	0.94
Rural	91.9	85.4	88.7	0.93	141.3	130.7	136.1	0.93
Ecological zone								
Mountain	93.5	93.0	93.2	0.99	135.3	132.7	134.0	0.98
Hill	92.1	89.2	90.7	0.97	135.8	133.2	134.5	0.98
Terai	92.1	83.0	87.7	0.90	143.9	127.0	135.8	0.88
Development region								
Eastern	94.0	89.1	91.6	0.95	142.0	129.9	135.9	0.91
Central	89.8	78.4	84.1	0.87	138.1	114.7	126.4	0.83
Western	91.5	90.1	90.9	0.98	140.7	142.9	141.7	1.02
Mid-western	93.4	91.1	92.3	0.98	141.3	138.6	140.0	0.98
Far-western	95.0	92.2	93.7	0.97	139.6	145.1	142.3	1.04
Subregion								
Eastern mountain	94.8	93.1	94.0	0.98	139.9	131.9	135.9	0.94
Central mountain	89.6	94.1	92.0	1.05	127.4	131.4	129.5	1.03
Western mountain	94.8	92.1	93.5	0.97	136.7	134.0	135.4	0.98
Eastern hill	92.6	88.6	90.5	0.96	136.7	127.3	131.7	0.93
Central hill	94.1	88.4	91.2	0.94	135.4	120.7	128.0	0.89
Western hill	89.1	91.2	90.1	1.02	132.3	145.6	138.6	1.10
Mid-western hill	92.7	87.3	90.2	0.94	139.3	138.4	138.9	0.99
Far-western hill	93.2	90.7	92.0	0.97	138.8	140.8	139.7	1.01
Eastern terai	94.6	88.8	91.8	0.94	145.1	131.2	138.4	0.90
Central terai	87.6	71.3	79.5	0.81	140.4	109.6	125.2	0.78
Western terai	94.3	88.4	91.8	0.94	150.5	139.1	145.7	0.92
Mid-western terai	94.2	94.4	94.3	1.00	148.5	143.5	145.9	0.97
Far-western terai	96.1	93.7	94.9	0.98	138.7	148.3	143.3	1.07
Wealth quintile								
Lowest	86.1	81.8	83.9	0.95	136.6	127.1	131.7	0.93
Second	90.9	81.8	86.5	0.90	139.4	130.3	135.0	0.93
Middle	93.3	88.2	91.0	0.95	144.7	139.0	142.1	0.96
Fourth	95.9	89.3	92.6	0.93	148.4	129.4	139.0	0.87
Highest	97.5	94.3	96.0	0.97	132.7	125.1	129.1	0.94
Total	92.2	86.3	89.3	0.94	140.1	129.9	135.1	0.93

[1] The NAR for primary school is the percentage of the primary school age (6-10 years) population that is attending primary school. By definition, the NAR cannot exceed 100 percent.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.
[3] The Gender Parity Index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males.

Over the past five years, the rise in the NAR and GAR at the secondary level for females has been noticeable, with the NAR increasing from 43 percent in 2006 to 58 percent in 2011 and the GAR increasing from 67 percent in 2006 to 87 percent in 2011. In addition to extensive educational programs, these increases can be credited to government interventions providing specific scholarship initiatives for girls, members of the Dalit ethnic group, children with various disabilities, children of martyrs, and other groups of needy children. The 2006 Scholarship Regulation provisioned for the inclusion in programs of the poor, women, and conflict-affected and disabled populations (Department of Education, 2006). “Welcome to school” programs and the “School Tiffin program” have been maintained over the past five years.

Table 2.14.2 School attendance ratios: Secondary school

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population at the secondary level by sex and level of schooling, and the Gender Parity Index (GPI), according to background characteristics, Nepal 2011

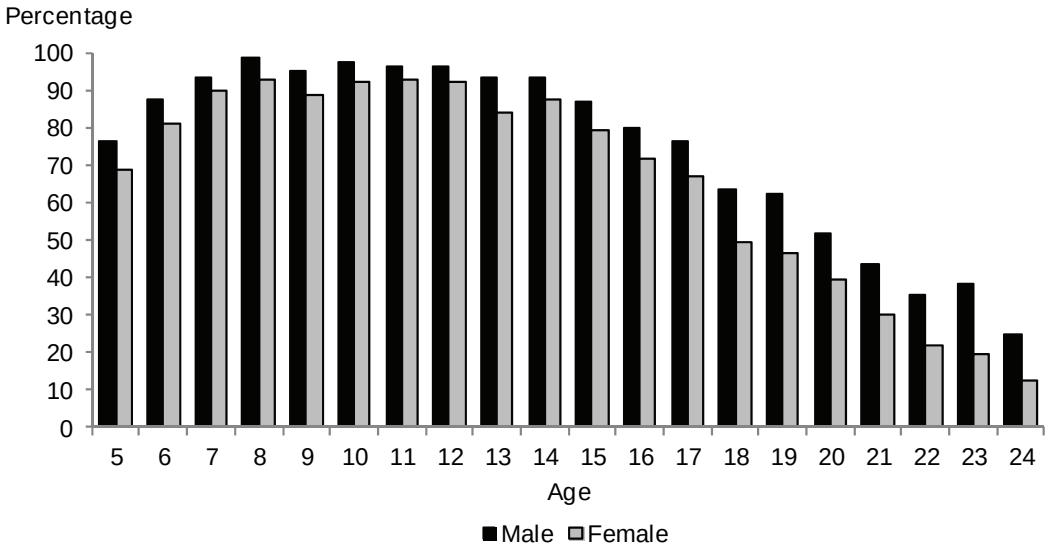
Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
Residence								
Urban	70.5	70.9	70.7	1.00	95.7	99.8	97.6	1.04
Rural	57.7	56.2	56.9	0.97	84.3	85.4	84.8	1.01
Ecological zone								
Mountain	67.3	60.9	64.1	0.91	104.8	94.4	99.5	0.90
Hill	65.9	66.0	66.0	1.00	92.1	97.7	94.9	1.06
Terai	52.9	50.8	51.8	0.96	78.0	77.4	77.7	0.99
Development region								
Eastern	60.8	60.1	60.5	0.99	87.0	92.6	89.8	1.06
Central	54.4	51.7	53.1	0.95	75.0	76.3	75.6	1.02
Western	62.3	64.4	63.4	1.03	89.5	93.6	91.5	1.05
Mid-western	59.3	60.5	59.9	1.02	94.2	90.6	92.4	0.96
Far-western	63.5	54.5	59.1	0.86	96.6	89.7	93.2	0.93
Subregion								
Eastern mountain	57.1	63.3	60.3	1.11	97.1	101.9	99.6	1.05
Central mountain	71.2	71.2	71.2	1.00	103.7	109.4	106.8	1.05
Western mountain	70.6	50.9	61.4	0.72	109.6	76.9	94.3	0.70
Eastern hill	64.4	68.3	66.3	1.06	93.9	117.7	105.4	1.25
Central hill	68.8	66.9	67.9	0.97	84.7	92.0	88.2	1.09
Western hill	67.0	67.6	67.3	1.01	95.6	97.4	96.6	1.02
Mid-western hill	58.7	64.2	61.7	1.09	90.7	90.4	90.5	1.00
Far-western hill	66.8	57.8	62.2	0.87	100.3	88.5	94.4	0.88
Eastern terai	59.2	55.1	57.2	0.93	81.7	77.4	79.6	0.95
Central terai	43.8	41.4	42.6	0.94	65.9	64.0	64.9	0.97
Western terai	56.2	59.7	57.9	1.06	81.5	88.1	84.7	1.08
Mid-western terai	56.0	56.9	56.5	1.02	88.5	90.9	89.6	1.03
Far-western terai	59.3	54.6	57.0	0.92	94.5	98.6	96.5	1.04
Wealth quintile								
Lowest	46.0	41.4	43.6	0.90	70.7	62.8	66.5	0.89
Second	52.3	47.5	49.8	0.91	82.4	78.6	80.4	0.95
Middle	59.3	58.5	58.9	0.99	88.3	91.1	89.7	1.03
Fourth	64.5	68.9	66.5	1.07	90.0	105.6	97.1	1.17
Highest	75.5	78.8	77.1	1.04	97.8	103.7	100.8	1.06
Total	59.2	57.8	58.5	0.98	85.6	86.9	86.3	1.02

[1] The NAR for secondary school is the percentage of the secondary school age (11-15 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent.
[2] The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.
[3] The Gender Parity Index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Tables 2.14.1 and 2.14.2 also show the Gender Parity Index (GPI), which represents the ratio of the NAR and GAR for females to the NAR and GAR for males. It is a more precise indicator of gender differences in the schooling system. A GPI less than one indicates that a smaller proportion of females than males attend school. The indexes for NAR and GAR at the primary and secondary levels are slightly less than one (0.9), indicating that the gender gap is very narrow. It is worth noting here that the gender gap in attendance has remained unchanged at the primary level but has narrowed over the past few years at the secondary level.

Figure 2.2 shows that females have a lower level of school attendance than males. Attendance is high up to age 8 for both males and females and then drops off gradually after age 14.

Figure 2.2 **Age-specific Attendance Rates of the de facto Population 5 to 24 Years**



2.8.3 Early Childhood Development Centers

In order to promote pre-primary education for children under five, the government has introduced Early Childhood Development (ECD) centers under Nepal's Preliminary Child Education regulations. Data collected nationally show that a total of 26,773 ECD centers and school-based pre-primary classes had been established up to the 2010 school year (NPC, 2010a). These school-based centers are mostly managed by the government, while other community-based ECD centers are mostly supported by nongovernmental organizations (NGOs). The 2011 NDHS collected information on the percentage of children age 3-4 enrolled in these centers.

Table 2.15 shows that nearly one-third of children age 3-4 are enrolled in school-based pre-primary classes or in ECD centers. School-based pre-primary classes are relatively more widespread; 23 percent of all children age 3-4 are enrolled in these classes, with only 7 percent of children enrolled in ECD centers. Overall, enrollment in pre-primary classes, including ECD centers, has increased from 23 percent in 2006 to 30 percent in 2011.

No significant differences in enrollment by gender were observed. Young children in urban areas are more likely to be enrolled in school-based pre-primary classes (43 percent) than are young children in rural areas (21 percent), while the proportion of children enrolled in ECD centers is slightly higher in rural than in urban areas (7 percent versus 5 percent). But it is interesting that enrollment of children from urban areas in school-based pre-primary classes has declined from 50 percent to 43 percent between 2006 and 2011, while enrollment of children in rural areas has increased from 13 percent to 21 percent during the same period. Children in the hill zone are more likely to be enrolled in pre-primary classes or ECD centers (32 percent) than those in the other ecological zones, with most children from the Western region (45 percent) and Western terai (46 percent) enrolled in early education. Children in the highest wealth quintile (61 percent) are significantly more likely to have access to early education than those in other households, especially those in the lowest quintile, where only 14 percent are enrolled in early education.

Table 2.15 Children enrolled in school-based pre-primary classes and Early Childhood Development centers

Percentage of de facto children age 3-4 enrolled in school-based pre-primary classes and Early Childhood Development centers according to background characteristics, Nepal 2011

Background characteristic	Percentage of children age 3-4			Number of children
	School-based pre-primary	Early Childhood Development centers	Total	
Sex				
Male	23.7	5.6	29.3	1,134
Female	23.0	8.0	31.0	1,048
Residence				
Urban	42.5	4.6	47.1	211
Rural	21.3	7.0	28.3	1,971
Ecological zone				
Mountain	12.0	17.0	29.0	169
Hill	22.5	9.4	31.9	860
Terai	25.7	3.3	29.0	1,153
Development region				
Eastern	24.1	4.0	28.1	527
Central	19.7	7.4	27.2	687
Western	37.1	7.8	44.9	393
Mid-western	15.3	8.0	23.3	322
Far-western	20.8	7.5	28.3	253
Subregion				
Eastern mountain	18.7	13.7	32.5	39
Central mountain	20.0	23.7	43.7	44
Western mountain	4.8	15.0	19.8	86
Eastern hill	14.3	6.1	20.3	183
Central hill	32.2	12.6	44.8	190
Western hill	35.6	8.7	44.3	228
Mid-western hill	8.4	9.0	17.3	157
Far-western hill	12.0	11.1	23.1	102
Eastern terai	30.6	1.5	32.1	305
Central terai	14.5	3.6	18.1	452
Western terai	39.1	6.5	45.6	165
Mid-western terai	27.8	1.7	29.5	118
Far-western terai	35.3	4.0	39.3	112
Wealth quintile				
Lowest	5.3	9.1	14.3	575
Second	15.3	6.2	21.5	489
Middle	20.6	7.6	28.2	436
Fourth	37.8	4.3	42.1	364
Highest	55.7	5.2	60.9	317
Total	23.4	6.8	30.1	2,182

2.9 POSSESSION OF MOSQUITO NETS

Since 1954, USAID has promoted malaria control programs through the Insect Borne Disease Control Program. The malaria eradication program, launched in 1958, reverted to a malaria control program in 1978. In 1993, the World Health Organization initiated the Global Malaria Control Strategy to focus on problem areas. Areas with a high incidence of malaria were identified, and 12 priority districts in the forest area, foothills, and inner terai were targeted for focused initiatives under the Roll Back Malaria strategy. Currently, malaria control activities are in place in 65 of the country's 75 districts (MOHP, 2011a). In addition to preparing for a malaria pre-elimination strategy, the MOHP has initiated visceral leishmaniasis (kala-azar) elimination programs.

An important strategy in the control of malaria and kala-azar is prevention through indoor residual spraying and use of long-lasting insecticide-treated bednets (LLINs). This strategy has been implemented through the promotion of personal protection measures, including the use of simple mosquito nets or LLINs. The MOHP has been distributing nets through various channels in affected areas, and it set a target of 80 percent of people in high-risk areas sleeping under LLINs by 2011 (MOHP, 2011a).

The 2011 NDHS collected information on the possession and number of mosquito nets in households. Table 2.16 shows that about 68 percent of households have mosquito nets (78 percent in urban areas and 66 percent in rural areas). Households in the terai (90 percent) are much more likely to possess mosquito nets than households in the hill (49 percent) and mountain (20 percent) zones. This is primarily because the terai is a high-

risk area for malaria transmission. Households in the Eastern region are more likely to possess nets than other households in the other regions. More than 90 percent of households in the Eastern terai, Western terai, and Far-western terai have mosquito nets. Among households with nets, 24 percent own one net, 55 percent own two or three nets, and 22 percent own at least four nets. Households in the fourth and highest wealth quintiles are more likely to possess mosquito nets (88 percent and 85 percent, respectively) than households in the other wealth quintiles. Households in the lowest wealth quintile are least likely to have nets (26 percent).

Table 2.16 Possession of mosquito nets

Percentage of households with mosquito nets, and among households with mosquito nets, the percent distribution by number of nets in the household, according to background characteristics, Nepal 2011

Background characteristic	Percentage of households with nets	Number of households	Number of nets in household				Number of households with nets
			1	2-3	4+	Total	
Residence							
Urban	77.9	1,546	23.5	55.7	20.8	100.0	1,205
Rural	66.1	9,280	23.7	54.6	21.7	100.0	6,137
Ecological zone							
Mountain	20.4	761	30.0	50.2	19.8	100.0	156
Hill	48.7	4,563	26.5	54.3	19.2	100.0	2,220
Terai	90.3	5,502	22.2	55.2	22.6	100.0	4,966
Development region							
Eastern	76.2	2,685	19.7	56.0	24.3	100.0	2,045
Central	69.7	3,627	27.6	55.3	17.1	100.0	2,529
Western	68.8	2,304	19.6	53.4	27.0	100.0	1,586
Mid-western	51.2	1,241	29.6	51.8	18.6	100.0	635
Far-western	56.3	969	25.2	55.7	19.1	100.0	546
Subregion							
Eastern mountain	30.0	206	24.1	50.4	25.5	100.0	62
Central mountain	25.6	266	30.1	51.0	19.0	100.0	68
Western mountain	8.9	289	44.0	48.0	8.0	100.0	26
Eastern hill	49.7	847	23.8	54.5	21.7	100.0	421
Central hill	52.2	1,386	29.1	55.4	15.5	100.0	724
Western hill	54.9	1,415	23.8	53.5	22.7	100.0	777
Mid-western hill	37.4	577	33.0	50.7	16.3	100.0	216
Far-western hill	24.3	339	25.8	60.6	13.6	100.0	82
Eastern terai	95.7	1,632	18.4	56.7	24.9	100.0	1,563
Central terai	88.0	1,975	26.9	55.4	17.7	100.0	1,737
Western terai	90.9	889	15.6	53.3	31.1	100.0	808
Mid-western terai	79.3	519	27.3	52.5	20.2	100.0	411
Far-western terai	91.7	487	24.6	55.0	20.4	100.0	446
Wealth quintile							
Lowest	26.1	2,029	45.3	49.9	4.9	100.0	530
Second	58.0	2,168	37.9	54.5	7.5	100.0	1,258
Middle	78.6	2,068	24.2	57.7	18.0	100.0	1,625
Fourth	87.9	2,185	15.8	56.7	27.6	100.0	1,921
Highest	84.5	2,377	16.1	52.2	31.7	100.0	2,008
Total	67.8	10,826	23.7	54.8	21.5	100.0	7,341

2.10 PREVALENCE AND CAUSES OF FOOD INSECURITY AND COPING STRATEGIES

Food security refers to the availability of food and one's access to it. A household is considered food-secure when its occupants do not live in hunger or fear of starvation (Hunt, 2009). In 1996, the World Food Summit defined food security as "the situation when all people at all times have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (Food and Agriculture Organization of the United Nations, 2002). Common to most definitions of food security are the elements of availability, access (physical and economic), utilization, and stability or sustainability. Food insecurity is rooted in poverty and leads to poor health, low productivity, low income, food shortage, and hunger (Khanal and Dahal, 2010).

The interim constitution (2006-2007) of Nepal recognized food security as a fundamental human right for all citizens, and this is reflected in the Three Year Interim Plan (2010-2013). With respect to MDG 1, Nepal aims to reduce the proportion of the population living below a minimum level of dietary energy consumption to 25 percent by 2015 (NPC, 2010a). In the absence of representative information on levels of household food insecurity, the 2011 NDHS provided a good opportunity to collect baseline data on food insecurity in Nepal.

The series of questions on food insecurity included in the 2011 NDHS was adopted from the Household Food Insecurity Access Scale indicators developed in USAID's Food and Nutrition Technical Assistance (FANTA) project. However, the questions were modified to be specific to Nepal, with seven of the nine generic questions included and the reference period for assessment extended to 12 months from one month to allow for seasonal variations. The food insecurity scale designed from this methodology provides information on a household's "access" to food, one of the three components of food insecurity—*Availability, Access* and *Utilization*.

Although the questions on food insecurity included in the Household Questionnaire were administered to the household head, they reflect food insecurity for the household as a unit. The questions, arranged in order of degree of severity and frequency of occurrence, capture the household's perception of food vulnerability or stress and behavioral responses to food insecurity. Based on responses to these questions, four food insecurity categories were created:

1. Food secure households: These households do not experience any food insecurity (access) conditions and rarely worry about such conditions.

2. Mildly food insecure households: These households worry about not having enough food sometimes or often, and/or are unable to eat preferred foods, and/or eat a more monotonous diet than desired and/or some foods considered undesirable but do so only rarely. They do not cut back on quantity or experience any of the three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating).

3. Moderately food insecure households: These households sacrifice quality more frequently, by eating a monotonous diet or undesirable foods sometimes or often, and/or have rarely or sometimes started to cut back on quantity by reducing the size of meals or number of meals. However, they do not experience any of the three most severe conditions.

4. Severely food insecure households: These households have cut back on meal size or number of meals often and/or have experienced any of the three most severe conditions (running out of food, going to bed hungry, or going a whole day and night without eating), even if only rarely. In other words, any household that has experienced one of these three conditions even once in the last 12 months is considered severely food insecure (Coates et al., 2007).

Table 2.17 shows that 49 percent of households in Nepal are food secure and have access to food year round. Twelve percent of households are mildly food insecure, 23 percent are moderately food insecure, and 16 percent are severely food insecure. Urban households are more food secure (67 percent) than rural households (46 percent). The proportion of food secure households is higher in the terai (52 percent), which includes the country's most fertile land areas, than in the hill (47 percent) and mountain (41 percent) zones. Households in the Eastern development region are most likely to be food secure (56 percent), while households in the Mid-western region tend to be least food secure (32 percent). The latter finding is consistent with the government's recent declaration of the hill districts of the Mid-western region (namely, Humla, Mugu, Kalikot, Rukum, Surkhet, and Jajarkot) as severely food insecure areas (The Himalayan, 2010). The 2011 NDHS indicates that 27 percent of the households in this region are severely food insecure and that 29 percent are moderately food insecure. Overall, two in three households in this region are food insecure at some level.

Table 2.17 Household food security

Percent distribution of households by level of food insecurity, according to background characteristics, Nepal 2011

Background characteristic	Food secure	Mildly food insecure	Moderately food insecure	Severely food insecure	Total	Number of households
Residence						
Urban	67.3	10.1	14.1	8.5	100.0	1,546
Rural	46.2	12.2	24.9	16.7	100.0	9,280
Ecological zone						
Mountain	40.5	18.2	26.1	15.1	100.0	761
Hill	47.2	12.3	28.7	11.8	100.0	4,563
Terai	52.1	10.7	18.6	18.6	100.0	5,502
Development region						
Eastern	55.9	11.1	19.0	13.9	100.0	2,685
Central	52.8	11.4	20.1	15.6	100.0	3,627
Western	51.4	11.3	27.1	10.1	100.0	2,304
Mid-western	31.9	12.5	28.5	27.1	100.0	1,241
Far-western	34.2	16.0	32.1	17.7	100.0	969
Subregion						
Eastern mountain	56.8	15.4	17.4	10.3	100.0	206
Central mountain	44.3	15.1	33.3	7.3	100.0	266
Western mountain	25.4	23.1	25.8	25.8	100.0	289
Eastern hill	49.6	14.4	25.3	10.7	100.0	847
Central hill	58.4	11.7	21.0	8.9	100.0	1,386
Western hill	46.6	11.6	34.5	7.2	100.0	1,415
Mid-western hill	28.9	11.4	30.8	29.0	100.0	577
Far-western hill	29.3	13.7	40.2	16.8	100.0	339
Eastern terai	59.1	8.9	16.0	16.0	100.0	1,632
Central terai	50.1	10.7	17.8	21.4	100.0	1,975
Western terai	59.1	10.9	15.3	14.7	100.0	889
Mid-western terai	39.8	13.5	26.1	20.6	100.0	519
Far-western terai	37.4	12.7	29.0	20.9	100.0	487
Wealth quintile						
Lowest	18.1	11.8	38.9	31.2	100.0	2,029
Second	32.6	13.6	29.2	24.7	100.0	2,168
Middle	46.3	14.0	25.4	14.2	100.0	2,068
Fourth	62.0	12.4	18.2	7.4	100.0	2,185
Highest	81.9	8.0	7.8	2.3	100.0	2,377
Total	49.2	11.9	23.4	15.5	100.0	10,826

Not surprisingly, households in the highest wealth quintile are much more likely to be food secure (82 percent) than households in the lowest wealth quintile (18 percent). A large proportion of households in the lowest wealth quintile fall in the moderately food insecure category (39 percent), and 31 percent fall in the severely food insecure category.

Among households that suffered from food insecurity, further questions were posed on coping strategies and causes. Table 2.18 provides information on strategies adopted by households to cope with food insecurity. Seven of 10 households with food insecurity took a loan to meet their food needs. Other coping strategies included consuming seeds that were meant for the next planting season (19 percent), selling livestock (31 percent), selling other household assets (9 percent), and working in short-term labor positions (4 percent). Households in rural areas were more likely to take loans (71 percent) than urban households (63 percent).

Households in the highest wealth quintile are least likely to take loans (54 percent), and households in the lowest wealth quintile are most likely to do so (76 percent). Households that are severely food insecure are more likely to take a loan (82 percent) than households that are moderately (67 percent) or mildly (61 percent) food insecure.

Table 2.18 Coping strategies of households with food insecurity

Among households with food insecurity, the percentage using various coping strategies according to background characteristics, Nepal 2011

Background characteristic	Took loan	Consumed seed	Sold livestock	Sold other household assets	Worked as labor	Number of food insecure households
Residence						
Urban	63.0	5.9	12.8	8.4	1.9	506
Rural	70.8	20.3	33.0	8.7	4.2	4,990
Ecological zone						
Mountain	73.1	28.1	40.7	8.0	10.8	453
Hill	72.4	23.1	37.3	7.2	4.0	2,409
Terai	67.5	13.7	23.9	10.2	2.7	2,634
Development region						
Eastern	72.3	13.0	41.3	10.5	1.6	1,184
Central	65.6	14.2	25.6	7.8	1.5	1,711
Western	66.3	13.6	25.9	4.7	6.1	1,119
Mid-western	72.0	36.7	35.5	13.9	11.0	845
Far-western	82.2	29.0	31.1	7.9	1.8	638
Subregion						
Eastern mountain	81.6	27.4	56.5	5.4	0.2	89
Central mountain	61.0	17.7	36.6	4.9	10.8	148
Western mountain	77.9	35.5	37.1	11.2	15.2	216
Eastern hill	74.9	17.6	55.6	8.1	0.0	427
Central hill	61.3	17.5	29.4	6.0	0.6	577
Western hill	66.8	14.0	29.8	4.3	5.5	755
Mid-western hill	87.7	49.0	47.7	14.2	12.1	410
Far-western hill	86.5	30.4	30.0	5.7	0.8	239
Eastern terai	69.4	8.1	30.1	12.7	2.9	668
Central terai	68.8	11.8	21.7	9.3	0.6	986
Western terai	65.3	12.8	17.8	5.5	7.3	364
Mid-western terai	51.7	18.6	22.8	12.9	3.3	312
Far-western terai	77.6	28.4	26.2	10.5	3.1	305
Wealth quintile						
Lowest	76.1	31.5	40.3	9.0	5.7	1,662
Second	73.3	17.3	32.4	8.3	4.3	1,462
Middle	70.2	13.6	29.4	10.0	3.9	1,110
Fourth	60.6	11.5	26.1	9.7	1.7	830
Highest	54.3	4.8	6.1	3.7	0.8	431
Degree of food insecurity						
Mildly food insecure	60.9	8.4	25.1	3.4	2.2	1,286
Moderately food insecure	67.1	17.4	32.6	7.0	3.6	2,531
Severely food insecure	81.8	29.6	33.7	15.4	5.9	1,679
Total	70.1	19.0	31.2	8.7	4.0	5,496

The 2011 NDHS also collected information on the causes of food insecurity. Table 2.19 describes the unexpected causes (drought, flood, landslide, crop failure) and temporary causes (financial problems) that were reported. Twenty-seven percent of households reported an unexpected natural disaster as a cause of their food insecurity, with 25 percent reporting a drought or crop failure. Two percent reported a flood or landslide as the major cause of their food insecurity. Financial problems were reported by 96 percent of the households facing food insecurity. Droughts and crop failures are more common in rural areas, the mountain zone, the Mid-western region, the Western mountain subregion, and households in the lowest wealth quintile. The relationship between household food insecurity and the nutritional status of children is analyzed in Chapter 11.

Table 2.19 Causes of household food insecurity

Among households with food insecurity, the percentage that experienced food insecurity due to various causes, according to background characteristics, Nepal 2011

Background characteristic	Drought/ crop failure	Flood/ landslide	Financial problems	Other causes	Number of food insecure households
Residence					
Urban	6.3	0.3	96.1	6.0	506
Rural	27.1	2.0	95.6	6.6	4,990
Ecological zone					
Mountain	56.4	5.1	95.1	11.8	453
Hill	31.7	2.0	95.4	8.7	2,409
Terai	13.9	1.2	96.0	3.7	2,634
Development region					
Eastern	29.1	1.3	95.3	7.3	1,184
Central	20.0	1.8	95.9	5.7	1,711
Western	10.5	0.5	98.7	6.9	1,119
Mid-western	45.8	2.5	91.5	8.8	845
Far-western	30.2	4.3	96.2	3.8	638
Subregion					
Eastern mountain	43.1	2.0	94.1	14.3	89
Central mountain	49.3	5.1	94.8	13.7	148
Western mountain	66.7	6.4	95.7	9.5	216
Eastern hill	52.4	1.1	93.9	9.8	427
Central hill	24.2	3.3	95.7	8.0	577
Western hill	10.3	0.8	99.0	8.4	755
Mid-western hill	60.4	2.2	89.3	13.2	410
Far-western hill	31.3	3.7	96.8	2.0	239
Eastern terai	12.4	1.4	96.4	4.8	668
Central terai	13.2	0.5	96.2	3.2	986
Western terai	11.0	0.0	98.0	3.8	364
Mid-western terai	16.8	0.0	93.9	0.8	312
Far-western terai	19.9	5.5	94.5	5.6	305
Wealth quintile					
Lowest	42.0	3.1	95.0	9.1	1,662
Second	22.8	1.4	97.2	5.5	1,462
Middle	20.1	1.8	95.5	5.0	1,110
Fourth	12.3	0.8	95.0	5.5	830
Highest	6.6	0.5	94.8	6.4	431
Degree of food insecurity					
Mildly food insecure	23.0	1.0	93.5	5.3	1,286
Moderately food insecure	25.4	1.9	95.9	6.4	2,531
Severely food insecure	26.6	2.4	97.0	7.8	1,679
Total	25.2	1.9	95.7	6.6	5,496

CHARACTERISTICS OF RESPONDENTS 3

Key Findings:

- Forty percent of women and 14 percent of men age 15-49 have no education. However, the percentage of women and men with at least some secondary education or higher has increased by 48 percent and 26 percent, respectively, in the last five years.
- Thirty-two percent of married women report that their husbands live away from home.
- Thirty-three percent of women and 20 percent of men are not exposed to any media source.
- Sixty percent of women were employed in the 12 months preceding the survey, with the majority (75 percent) employed in the agricultural sector.
- The majority (61 percent) of working women are not paid for their work. In contrast, most men (76 percent) earn cash or cash and in-kind payments.

The purpose of this chapter is to create a demographic and socioeconomic profile of individual female and male respondents. This information helps in the interpretation of findings presented later in the report and provides an indication of the representativeness of the survey. The chapter begins by describing basic background characteristics, including age, marital status, religion, ethnicity, and wealth status. It then provides more detailed information on education, media exposure, employment, and tobacco use.

In 2011, for the second time, the NDHS gathered information from all women and men irrespective of their marital status; earlier surveys had sampled only ever-married women and men. The discussion in this report is therefore with reference to all women and men. However, when comparing information with past surveys, the data have been rerun for ever-married women and men wherever possible to enable comparability between surveys.

Throughout this report, numbers in the tables reflect weighted numbers. Percentages based on 25 to 49 unweighted cases are shown in parentheses, and percentages based on fewer than 25 unweighted cases are suppressed and replaced with an asterisk, to caution readers when interpreting data that a percentage based on fewer than 50 cases may not be statistically reliable.[1]

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

A description of the basic characteristics of the 12,674 women and 4,121 men age 15-49 interviewed in the 2011 NDHS is presented in Table 3.1.

Relatively high proportions of both female and male respondents are in the younger age groups, with more than half of the respondents (56 percent of women and 54 percent of men) under age 30. In general, the proportion of women and men in each group declines as age increases, reflecting the comparatively young age structure of the population in Nepal as a result of past high fertility levels.

The vast majority of women and men are Hindu (84 percent), 9 percent are Buddhist, and 4 percent of women and 3 percent of men are Muslim. Two percent of women and men are Kirat, and another 2 percent are Christian.

[1] Parentheses are used if mortality rates are based on 250 to 499 children exposed to the risk of mortality in any of the component rates; mortality rates are suppressed if they are based on fewer than 250 children exposed to the risk of mortality in any of the component rates.

Hill Janajatis are the dominant ethnic group, with 25 percent of women and 24 percent of men belonging to this group. Nearly one-fifth (19 percent) of both women and men are hill Chhetris. Fourteen percent of women and 15 percent of men are hill Brahmins, 10 percent of women and 12 percent of men are terai Janajati, 10 percent of women and 9 percent of men are hill Dalit, and 8 percent of women and 9 percent of men are other terai caste. The rest of the ethnic groups represent less than 5 percent of the population.

More than one-fifth of women (21 percent) and more than one-third of men (35 percent) have never been married. The majority of women (76 percent) and men (64 percent) are currently married, with a very small percentage divorced or separated. The majority of respondents reside in rural areas, with only 14 percent of women and 17 percent of men residing in urban areas. More than half (54 percent) of the respondents live in the terai, two-fifths (40 percent) live in the hill zone, and 6 percent live in the mountain zone.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Nepal 2011

	Women			Men		
Background characteristic	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	21.7	2,753	2,790	23.7	978	1,009
20-24	18.1	2,297	2,281	16.6	685	693
25-29	16.6	2,101	2,129	14.1	581	567
30-34	13.7	1,734	1,697	12.1	499	492
35-39	12.3	1,557	1,561	13.1	542	533
40-44	10.1	1,285	1,266	10.6	438	458
45-49	7.5	947	950	9.7	399	369
Religion						
Hindu	84.2	10,672	10,829	84.2	3,472	3,486
Buddhist	8.8	1,112	1,058	8.6	354	352
Muslim	3.7	470	331	3.1	128	107
Kirat	1.5	195	215	2.1	86	92
Christian	1.7	220	236	1.9	77	80
Other	0.0	5	5	0.1	5	4
Ethnicity						
Hill Brahmin	14.2	1,805	1,798	14.5	597	618
Hill Chhetri	19.2	2,436	3,199	18.9	780	1,000
Terai Brahmin/Chhetri	1.2	156	169	1.3	54	55
Other Terai caste	7.9	1,003	730	9.0	372	303
Hill Dalit	9.6	1,214	1,402	8.6	352	381
Terai Dalit	4.4	559	306	3.9	163	96
Newar	4.3	541	532	4.8	196	180
Hill Janajati	24.9	3,154	2,986	23.5	968	906
Terai Janajati	10.4	1,313	1,198	12.1	497	463
Muslim	3.7	468	327	3.1	127	106
Other	0.2	25	27	0.3	14	13
Marital status						
Never married	21.4	2,708	2,837	34.8	1,433	1,444
Married[1]	75.8	9,608	9,460	63.7	2,626	2,628
Divorced/separated	0.8	100	109	0.9	39	32
Widowed	2.0	258	268	0.5	23	17
Residence						
Urban	14.4	1,819	3,701	17.4	717	1,351
Rural	85.6	10,855	8,973	82.6	3,404	2,770
Ecological zone						
Mountain	6.4	805	2,033	5.9	245	618
Hill	40.2	5,090	4,974	40.2	1,658	1,582
Terai	53.5	6,779	5,667	53.8	2,218	1,921
Development region						
Eastern	24.1	3,057	3,019	24.2	996	978
Central	33.4	4,236	3,009	35.1	1,448	1,002
Western	21.0	2,660	2,304	19.4	798	706
Mid-western	11.7	1,478	2,275	12.0	493	781
Far-western	9.8	1,242	2,067	9.3	385	654
Subregion						
Eastern mountain	1.8	229	737	1.6	66	223
Central mountain	2.0	258	669	1.7	69	177
Western mountain	2.5	319	627	2.7	110	218
Eastern hill	7.5	956	1,043	7.1	293	331
Central hill	12.3	1,563	1,132	15.0	616	423
Western hill	11.9	1,513	1,101	10.7	440	337
Mid-western hill	5.1	649	887	4.6	189	259
Far-western hill	3.2	409	811	2.9	120	232
Eastern terai	14.8	1,873	1,239	15.5	638	424
Central terai	19.1	2,415	1,208	18.5	763	402
Western terai	9.1	1,147	1,203	8.7	358	369
Mid-western terai	5.3	668	1,071	5.9	242	399
Far-western terai	5.3	676	946	5.3	217	327

Continued…

Table 3.1—*Continued*

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Education						
No education	39.8	5,045	4,876	13.8	567	498
Primary	17.4	2,209	2,149	19.7	814	815
Some secondary	24.4	3,088	3,172	34.9	1,437	1,431
SLC and above	18.4	2,331	2,476	31.6	1,303	1,377
Wealth quintile						
Lowest	16.7	2,120	2,446	14.8	610	711
Second	18.9	2,393	2,296	16.9	695	688
Middle	20.5	2,600	2,336	20.1	830	727
Fourth	21.5	2,722	2,516	22.3	920	861
Highest	22.4	2,839	3,080	25.9	1,066	1,134
Total 15-49	100.0	12,674	12,674	100.0	4,121	4,121

Note: Education categories refer to the highest level of education attended.
SLC = School Leaving Certificate
[1] Includes one woman and two men who are living together.

The distribution of respondents by development region shows that about one-third is from the Central region, nearly one-fourth from the Eastern region, and about one-fifth from the Western region. Twelve percent of the respondents live in the Mid-western region, and 10 percent of women and 9 percent of men are from the Far-western region. The subregional distribution shows the highest concentration of women and men in the Central terai (19 percent), followed by the Eastern terai (15 percent of women and 16 percent of men), Central hill (12 percent of women and 15 percent of men), and Western hill (12 percent of women and 11 percent of men) subregions. The proportion of women and men is less than 10 percent in each of the remaining subregions.

Education is one of the most influential factors affecting an individual's knowledge, attitudes, and behaviors in various facets of life. Educational attainment in Nepal is very low among women, who are much more disadvantaged than men. Forty percent of women do not have any formal education, as compared with 14 percent of men.

Seventeen percent of women and 20 percent of men have a primary-level education. Nearly one-fourth (24 percent) of women and more than one-third (35 percent) of men have some secondary education, and nearly one-fifth (18 percent) of women and one-third (32 percent) of men have completed their School Leaving Certificate (SLC) or gone on to higher levels of education.

3.1.1 Spousal Separation

The proportion of women whose spouses have been living away from home for a considerable period of time may have reproductive, demographic, and health implications. The 2011 NDHS collected detailed information on husbands living away from home.

Table 3.2 presents the percent distribution of currently married women age 15-49 whose husbands live away from home, according to selected background characteristics. Thirty-two percent of women reported that their husbands live away from home, 52 percent reported a spousal separation of less than seven months' duration, and 35 percent reported a separation lasting one or more years. Women under age 34 are more likely to have husbands living away from home than older women.

More rural women than urban women reported that their husbands live away from home (34 percent and 22 percent, respectively). Spousal separation is most prevalent in the Western development region (40 percent).

About one in two women in the Eastern region reported that their husband has been away for more than 12 months. This is especially true for women in the Eastern mountain region (57 percent). Women with no education are least likely to be separated from their husband for any length of time. Women with a primary education (37 percent) or some secondary education (36 percent) more often reported that their husbands live away from home. Women in the highest wealth quintile are least likely to report spousal separation.

Table 3.2 Spousal separation

Percentage of currently married women age 15-49 whose husbands live away from home, and among those whose husbands live away, percent distribution by duration away from home, according to background characteristics, Nepal 2011

Background characteristic	Husband is away	Number of women	Duration away from home					Number of women
			<7 months	7-11 months	12+ months	Don't know	Total	
Age								
15-19	37.3	792	63.7	18.3	17.8	0.2	100.0	295
20-24	42.7	1,761	54.2	15.3	30.5	0.0	100.0	752
25-29	38.3	1,914	50.2	11.9	37.7	0.2	100.0	732
30-34	32.6	1,659	50.6	12.3	37.1	0.0	100.0	540
35-39	29.1	1,461	45.8	10.2	44.0	0.0	100.0	425
40-44	20.0	1,190	44.3	10.0	45.7	0.0	100.0	238
45-49	11.4	832	57.5	4.9	37.6	0.0	100.0	95
Number of living children								
0	35.8	1,075	64.4	12.2	23.1	0.2	100.0	385
1-2	37.2	4,442	49.3	13.5	37.1	0.1	100.0	1,652
3-4	28.3	3,091	49.3	13.0	37.7	0.0	100.0	874
5+	16.6	999	58.7	6.2	35.1	0.0	100.0	166
Residence								
Urban	21.8	1,261	50.8	10.5	38.4	0.3	100.0	275
Rural	33.6	8,346	51.8	13.0	35.1	0.1	100.0	2,802
Ecological zone								
Mountain	27.2	630	59.4	9.8	30.8	0.0	100.0	172
Hill	32.2	3,784	53.1	11.9	34.9	0.2	100.0	1,217
Terai	32.5	5,193	50.0	13.8	36.2	0.0	100.0	1,689
Development region								
Eastern	32.5	2,293	37.5	12.1	50.3	0.0	100.0	745
Central	26.9	3,210	53.4	11.4	35.0	0.2	100.0	865
Western	39.7	2,031	50.2	14.7	34.9	0.1	100.0	807
Mid-western	29.7	1,149	68.4	11.5	20.1	0.0	100.0	341
Far-western	34.6	925	66.0	14.6	19.4	0.0	100.0	320
Subregion								
Eastern mountain	30.3	169	31.3	11.5	57.2	0.0	100.0	51
Central mountain	33.7	190	70.8	5.2	24.0	0.0	100.0	64
Western mountain	20.8	271	72.1	13.5	14.4	0.0	100.0	56
Eastern hill	30.9	702	38.1	13.2	48.7	0.0	100.0	217
Central hill	19.1	1,103	50.9	5.6	42.7	0.8	100.0	211
Western hill	41.8	1,164	52.9	13.6	33.3	0.1	100.0	487
Mid-western hill	36.6	510	66.7	12.7	20.6	0.0	100.0	187
Far-western hill	38.1	305	63.3	11.8	24.9	0.0	100.0	116
Eastern terai	33.5	1,421	38.0	11.7	50.3	0.0	100.0	477
Central terai	30.8	1,918	52.5	14.1	33.4	0.0	100.0	590
Western terai	36.9	867	46.1	16.4	37.4	0.1	100.0	320
Mid-western terai	27.8	499	70.0	10.2	19.8	0.0	100.0	139
Far-western terai	33.4	488	66.6	16.6	16.9	0.0	100.0	163
Education								
No education	28.3	4,580	51.1	13.0	36.0	0.0	100.0	1,297
Primary	37.2	1,844	51.2	11.2	37.6	0.0	100.0	686
Some secondary	36.0	1,833	48.1	14.7	37.2	0.0	100.0	661
SLC and above	32.1	1,350	59.9	11.9	27.7	0.6	100.0	433
Wealth quintile								
Lowest	31.0	1,664	52.7	13.8	33.5	0.0	100.0	516
Second	35.8	1,846	58.8	12.4	28.9	0.0	100.0	660
Middle	35.0	2,022	52.1	13.4	34.5	0.0	100.0	707
Fourth	34.4	2,052	46.4	12.9	40.8	0.0	100.0	706
Highest	24.1	2,023	48.3	11.3	39.9	0.5	100.0	488
Total 15-49	32.0	9,608	51.7	12.8	35.4	0.1	100.0	3,077

SLC = School Leaving Certificate

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Tables 3.3.1 and 3.3.2 show the distribution of respondents by educational attainment, according to background characteristics. Table 3.3.1 shows that two-fifths (40 percent) of women age 15-49 have never been to school, 12 percent have only some primary education, 6 percent have completed primary school, 24 percent have only some secondary education, 11 percent have completed secondary school, and 8 percent have a secondary education or higher. Older women and those who reside in rural areas are most likely to have no education. The urban-rural difference in level of education is pronounced for those who have completed secondary school or have more than a secondary education. For example, women in urban areas are more than twice as likely as those in rural areas to have a secondary education or more than a secondary education (38 percent and 15 percent, respectively).

Table 3.3.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Nepal 2011

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	17.1	11.0	6.6	38.2	16.7	10.3	100.0	7.0	5,050
15-19	11.9	10.2	6.4	49.7	17.1	4.7	100.0	7.2	2,753
20-24	23.4	12.0	6.8	24.5	16.3	17.1	100.0	6.4	2,297
25-29	36.3	15.3	6.0	21.7	10.3	10.5	100.0	3.7	2,101
30-34	46.9	14.2	5.3	19.1	8.6	6.0	100.0	1.2	1,734
35-39	60.3	10.6	5.0	14.2	4.5	5.3	100.0	0.0	1,557
40-44	70.5	11.3	3.5	7.8	3.7	3.3	100.0	0.0	1,285
45-49	80.5	8.4	2.5	5.3	1.6	1.6	100.0	0.0	947
Residence									
Urban	22.0	9.8	4.5	25.6	17.9	20.1	100.0	7.8	1,819
Rural	42.8	12.3	5.7	24.1	9.4	5.7	100.0	2.6	10,855
Ecological zone									
Mountain	52.0	12.7	4.6	21.0	6.7	3.0	100.0	0.0	805
Hill	35.5	12.3	6.2	25.6	10.3	10.0	100.0	4.4	5,090
Terai	41.6	11.6	5.1	23.8	11.3	6.7	100.0	3.2	6,779
Development region									
Eastern	31.0	14.2	4.5	29.2	14.6	6.5	100.0	5.1	3,057
Central	45.0	11.5	4.5	19.2	9.1	10.7	100.0	1.9	4,236
Western	32.3	11.4	8.1	29.0	11.4	7.7	100.0	4.8	2,660
Mid-western	47.8	11.8	4.8	22.6	8.0	5.0	100.0	1.0	1,478
Far-western	50.3	9.2	6.4	22.1	7.4	4.6	100.0	0.0	1,242
Subregion									
Eastern mountain	32.6	16.1	6.4	30.8	10.2	4.0	100.0	4.2	229
Central mountain	51.9	12.7	4.8	20.7	6.8	3.1	100.0	0.0	258
Western mountain	66.0	10.4	3.0	14.2	4.1	2.2	100.0	0.0	319
Eastern hill	32.2	15.2	5.9	32.2	9.8	4.6	100.0	4.4	956
Central hill	30.7	11.3	4.3	20.9	12.2	20.5	100.0	6.2	1,563
Western hill	32.0	12.6	8.8	29.3	11.2	6.1	100.0	4.6	1,513
Mid-western hill	45.4	11.9	5.7	22.6	8.1	6.4	100.0	2.1	649
Far-western hill	58.5	9.2	5.6	19.2	4.5	3.1	100.0	0.0	409
Eastern terai	30.3	13.4	3.6	27.4	17.6	7.7	100.0	5.6	1,873
Central terai	53.5	11.5	4.6	17.9	7.2	5.2	100.0	0.0	2,415
Western terai	32.7	9.8	7.2	28.6	11.7	9.8	100.0	5.0	1,147
Mid-western terai	45.1	11.7	4.8	25.3	8.8	4.3	100.0	2.4	668
Far-western terai	42.2	9.3	7.3	25.2	10.0	5.9	100.0	3.6	676
Wealth quintile									
Lowest	63.9	14.3	5.4	14.5	1.3	0.7	100.0	0.0	2,120
Second	54.6	12.3	6.5	21.7	4.2	0.8	100.0	0.0	2,393
Middle	44.8	14.0	5.9	24.9	7.6	2.8	100.0	1.7	2,600
Fourth	30.7	12.7	5.3	28.8	15.5	7.0	100.0	5.3	2,722
Highest	13.6	7.3	4.5	29.3	21.0	24.3	100.0	8.6	2,839
Total	39.8	11.9	5.5	24.4	10.6	7.8	100.0	3.5	12,674

[1] Completed grade 5 at the primary level
[2] Completed grade 10 at the secondary level

Respondents of the hill zone are more likely than those in the mountain and terai zones to have more than a secondary-level education. One in two women in the Far-western region has no education, compared with one in three women in the Eastern region. Among the subregions, two-thirds of women living in the Western mountain subregion have no education, compared with less than one in three women living in the Eastern terai.

Respondents' educational attainment is directly related to their economic status. An examination of education by wealth quintile indicates that women in the highest wealth quintile are most likely to have a secondary education or higher. For example, 45 percent of women in the highest wealth quintile have completed secondary school or have more than a secondary education, compared with just 2 percent of women in the lowest wealth quintile.

Nationally, women have completed a median of 3.5 years of school. Urban women have completed a median of 7.8 years, as compared with 2.6 years among rural women. Median number of years of schooling completed is highest among women from the Eastern region (5.1) and lowest among women in the Far-western region (0.0). There is a notable difference in median number of years completed by wealth quintile (8.6 in the highest quintile versus 0.0 in the lower two quintiles).

A similar educational attainment pattern is found among men (Table 3.3.2). However, men are more educated than women in all categories. Nationally, 14 percent of men age 15-49 have no education, and the same proportion have only some primary education. Thirty-five percent of men have only some secondary schooling, and 32 percent have a secondary education or higher. Men age 45-49 are more likely to have no education (31 percent) than men age 15-24 (4 percent). Men from urban areas have higher levels of educational attainment than their rural counterparts. Six percent of urban men have no formal education, compared with 15 percent of their rural counterparts. More than half (52 percent) of men in urban areas have a secondary education or higher, compared with slightly more than one-fourth (28 percent) in rural areas. Overall, men age 15-49 have completed a median of 7.4 years of schooling. Median years of schooling completed increases with wealth, from 3.3 years among men in the lowest quintile to 9.5 years among men in the highest quintile.

Table 3.3.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Nepal 2011

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	4.3	7.5	4.9	44.3	22.5	16.5	100.0	8.3	1,663
15-19	4.0	6.7	4.8	55.3	22.6	6.6	100.0	8.0	978
20-24	4.8	8.6	5.2	28.6	22.4	30.5	100.0	9.1	685
25-29	13.4	16.1	6.6	34.6	14.3	15.0	100.0	6.9	581
30-34	21.1	15.1	7.1	29.9	11.1	15.8	100.0	6.5	499
35-39	18.0	15.8	6.7	29.8	13.2	16.5	100.0	6.8	542
40-44	21.3	22.5	7.0	26.1	10.0	13.2	100.0	4.9	438
45-49	30.5	23.1	5.5	18.7	10.8	11.5	100.0	3.3	399
Residence									
Urban	6.0	10.3	4.6	27.6	22.1	29.5	100.0	9.1	717
Rural	15.4	14.6	6.2	36.4	15.1	12.4	100.0	7.0	3,404
Ecological zone									
Mountain	14.8	18.6	9.0	35.8	13.0	8.7	100.0	6.5	245
Hill	9.8	15.0	5.8	35.0	16.5	18.0	100.0	7.8	1,658
Terai	16.6	12.4	5.7	34.7	16.5	14.1	100.0	7.1	2,218
Development region									
Eastern	8.6	13.4	5.8	39.2	19.8	13.2	100.0	7.8	996
Central	17.4	13.6	5.9	29.7	14.5	18.9	100.0	6.9	1,448
Western	10.6	14.1	5.9	36.9	17.3	15.3	100.0	7.8	798
Mid-western	19.4	14.6	7.2	33.1	13.9	11.8	100.0	6.8	493
Far-western	12.8	14.1	4.8	41.2	14.8	12.2	100.0	7.2	385
Subregion									
Eastern mountain	8.6	15.8	7.7	47.7	12.3	8.0	100.0	6.8	66
Central mountain	15.0	26.8	8.6	31.8	11.9	5.9	100.0	4.9	69
Western mountain	18.3	15.1	10.1	31.2	14.2	11.0	100.0	6.6	110
Eastern hill	8.2	14.5	7.5	45.2	16.4	8.2	100.0	7.6	293
Central hill	9.5	12.9	4.7	27.7	17.5	27.7	100.0	8.4	616
Western hill	8.4	17.6	5.6	36.5	17.2	14.8	100.0	7.7	440
Mid-western hill	17.8	15.1	7.4	31.9	13.9	13.8	100.0	7.1	189
Far-western hill	7.3	17.8	5.3	46.5	13.3	9.7	100.0	7.1	120
Eastern terai	8.8	12.7	4.8	35.6	22.1	16.0	100.0	8.0	638
Central terai	24.0	12.9	6.6	31.0	12.4	13.0	100.0	5.8	763
Western terai	13.2	9.9	6.3	37.4	17.4	15.8	100.0	8.1	358
Mid-western terai	20.7	14.8	5.8	33.9	14.1	10.7	100.0	6.6	242
Far-western terai	15.0	11.1	3.9	41.2	15.4	13.4	100.0	7.3	217
Wealth quintile									
Lowest	32.1	23.8	7.4	30.0	4.7	2.0	100.0	3.3	610
Second	21.4	19.2	8.9	37.2	8.5	4.9	100.0	5.1	695
Middle	17.6	15.9	7.4	40.1	12.4	6.5	100.0	6.3	830
Fourth	6.1	11.4	5.1	39.3	23.1	15.0	100.0	8.0	920
Highest	1.9	5.1	2.8	28.2	25.1	36.9	100.0	9.5	1,066
Total 15-49	13.8	13.8	5.9	34.9	16.3	15.3	100.0	7.4	4,121

[1] Completed grade 5 at the primary level
[2] Completed grade 10 at the secondary level

The percentage of women who completed some secondary education or had a secondary education or higher increased by 48 percent from 29 percent in 2006 to 43 percent in 2011. A smaller increase (26 percent) was seen among men, from 53 percent in 2006 to 67 percent in 2011.

3.3 LITERACY

The ability to read and write empowers women and men. Literacy statistics are important for policymakers and program managers to gauge the health and nutrition status and overall well-being of the population. In the 2011 NDHS, literacy was determined by respondents' ability to read all or part of a simple sentence. During data collection, interviewers carried a set of cards on which simple sentences were printed in three of the country's major languages (Nepali, Maithili, and Bhojpuri) for testing a respondent's reading ability. Those who had never been to school and those who had only a primary education were asked to read the cards in the language they were most familiar with. Those with a secondary education or higher were assumed to be literate.

Table 3.4.1 indicates that two-thirds of women in Nepal (67 percent) are literate, which represents an increase from the 2006 figure of 55 percent. The level of literacy is much higher among women age 15-19 than among women in other age groups. This suggests that younger women have had more opportunity for learning than older women. Literacy varies by place of residence. Eighty-three percent of women residing in urban areas are literate, compared with 64 percent of rural women. Literacy is higher among women living in the hill zone (73 percent) than women living in the mountain and terai zones (58 percent and 63 percent, respectively).

Table 3.4.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nepal 2011

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Total	Percentage literate[1]	Number of women
Age								
15-24	65.3	12.7	4.7	17.3	0.0	100.0	82.7	5,050
15-19	71.5	10.8	3.6	14.1	0.0	100.0	85.9	2,753
20-24	57.8	15.0	6.0	21.2	0.0	100.0	78.8	2,297
25-29	42.4	18.5	8.3	30.6	0.1	100.0	69.3	2,101
30-34	33.6	19.9	9.9	36.6	0.0	100.0	63.4	1,734
35-39	24.1	18.4	11.1	46.4	0.0	100.0	53.6	1,557
40-44	14.8	16.4	11.1	57.7	0.0	100.0	42.2	1,285
45-49	8.6	14.5	13.0	63.8	0.0	100.0	36.2	947
Residence								
Urban	63.7	12.5	6.6	17.1	0.2	100.0	82.8	1,819
Rural	39.2	16.4	8.3	36.0	0.0	100.0	64.0	10,855
Ecological zone								
Mountain	30.7	17.7	9.5	42.1	0.0	100.0	57.9	805
Hill	46.0	19.1	8.1	26.8	0.1	100.0	73.2	5,090
Terai	41.8	13.2	7.8	37.2	0.0	100.0	62.8	6,779
Development region								
Eastern	50.3	15.0	6.6	28.1	0.0	100.0	71.9	3,057
Central	39.0	13.2	7.4	40.3	0.1	100.0	59.6	4,236
Western	48.1	20.0	8.9	23.0	0.0	100.0	77.0	2,660
Mid-western	35.6	18.5	8.1	37.8	0.0	100.0	62.2	1,478
Far-western	34.2	14.9	12.1	38.8	0.1	100.0	61.2	1,242
Subregion								
Eastern mountain	45.0	22.6	8.1	24.3	0.0	100.0	75.7	229
Central mountain	30.6	22.7	8.6	38.2	0.0	100.0	61.8	258
Western mountain	20.6	10.0	11.3	58.1	0.0	100.0	41.9	319
Eastern hill	46.7	20.9	6.2	26.3	0.0	100.0	73.7	956
Central hill	53.7	15.3	7.1	23.8	0.1	100.0	76.1	1,563
Western hill	46.6	23.6	8.8	21.1	0.0	100.0	78.9	1,513
Mid-western hill	37.1	19.3	7.5	36.2	0.0	100.0	63.8	649
Far-western hill	26.7	12.5	15.3	45.3	0.2	100.0	54.5	409
Eastern terai	52.8	11.0	6.7	29.5	0.0	100.0	70.5	1,873
Central terai	30.3	10.9	7.5	51.3	0.0	100.0	48.7	2,415
Western terai	50.2	15.2	9.0	25.6	0.0	100.0	74.4	1,147
Mid-western terai	38.5	19.7	8.1	33.7	0.0	100.0	66.3	668
Far-western terai	41.1	17.5	10.2	31.2	0.0	100.0	68.8	676
Wealth quintile								
Lowest	16.4	17.6	10.1	55.8	0.0	100.0	44.1	2,120
Second	26.7	18.4	7.8	47.1	0.0	100.0	52.9	2,393
Middle	35.3	16.5	9.1	39.1	0.0	100.0	60.9	2,600
Fourth	51.4	16.6	8.5	23.5	0.0	100.0	76.5	2,722
Highest	74.6	11.1	5.3	8.9	0.1	100.0	91.0	2,839
Total	42.8	15.8	8.1	33.3	0.0	100.0	66.7	12,674

[1] Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

Regional and subregional differences are notable, with literacy being highest among women in the Western region (77 percent) and lowest in the Central region (60 percent). The percentage of literate women is highest in the Western hill subregion (79 percent) and lowest in the Western mountain subregion (42 percent). There is also a significant difference in literacy by household wealth, with the literacy rate ranging from 44 percent among women in the lowest wealth quintile to 91 percent among women in the highest quintile. This reaffirms the positive association between economic status and literacy.

Men are more likely to be literate than women (Table 3.4.2). Eighty-seven percent of Nepalese men age 15-49 are literate, an increase from 81 percent in 2006. The pattern of male literacy is similar to that of females. However, there are marked differences between men and women across age groups. Seventy-seven percent of men age 45-49 are literate, compared with 36 percent of women in the same age group. The gap in urban-rural literacy among men is smaller than that among women, suggesting that men in rural areas are better able to access learning than women. Men in the Eastern, Western, and Far-western development regions are more likely to be literate than those in the other development regions.

Table 3.4.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nepal 2011

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/ visually impaired	Total	Percentage literate[1]	Number of men
Age								
15-24	83.3	8.1	3.2	5.4	0.0	100.0	94.6	1,663
15-19	84.5	6.9	2.9	5.6	0.0	100.0	94.4	978
20-24	81.5	9.8	3.6	5.1	0.0	100.0	94.9	685
25-29	63.9	16.7	7.1	12.2	0.1	100.0	87.7	581
30-34	56.7	17.4	4.4	21.5	0.0	100.0	78.5	499
35-39	59.5	14.8	8.5	17.2	0.0	100.0	82.8	542
40-44	49.2	25.3	6.9	18.6	0.0	100.0	81.4	438
45-49	40.9	27.7	7.8	23.1	0.5	100.0	76.5	399
Residence								
Urban	79.2	11.1	4.9	4.8	0.1	100.0	95.1	717
Rural	63.8	15.9	5.6	14.7	0.1	100.0	85.3	3,404
Ecological zone								
Mountain	57.6	20.7	8.2	13.5	0.0	100.0	86.5	245
Hill	69.4	17.3	6.0	7.3	0.0	100.0	92.7	1,658
Terai	65.3	12.8	4.7	17.1	0.1	100.0	82.8	2,218
Development region								
Eastern	72.1	13.4	5.3	9.2	0.0	100.0	90.8	996
Central	63.1	14.9	4.5	17.4	0.0	100.0	82.6	1,448
Western	69.4	15.4	6.1	9.1	0.0	100.0	90.9	798
Mid-western	58.8	18.0	7.3	15.7	0.2	100.0	84.1	493
Far-western	68.2	15.4	5.4	10.7	0.3	100.0	89.0	385
Subregion								
Eastern mountain	67.9	20.8	5.1	6.2	0.0	100.0	93.8	66
Central mountain	49.5	28.0	10.4	12.0	0.0	100.0	88.0	69
Western mountain	56.4	16.1	8.7	18.8	0.0	100.0	81.2	110
Eastern hill	69.8	17.9	5.9	6.4	0.0	100.0	93.6	293
Central hill	72.9	15.7	4.3	7.0	0.0	100.0	93.0	616
Western hill	68.4	18.5	6.9	6.1	0.0	100.0	93.9	440
Mid-western hill	59.7	18.5	8.7	13.1	0.0	100.0	86.9	189
Far-western hill	69.6	16.9	6.5	7.0	0.0	100.0	93.0	120
Eastern terai	73.7	10.5	5.0	10.8	0.0	100.0	89.2	638
Central terai	56.5	13.1	4.2	26.2	0.1	100.0	73.7	763
Western terai	70.7	11.4	5.2	12.7	0.0	100.0	87.3	358
Mid-western terai	58.8	17.9	6.4	16.6	0.3	100.0	83.0	242
Far-western terai	70.0	14.7	3.4	11.4	0.6	100.0	88.0	217
Wealth quintile								
Lowest	36.8	25.7	9.7	27.8	0.0	100.0	72.2	610
Second	50.5	22.1	5.4	21.8	0.1	100.0	78.1	695
Middle	59.0	17.7	7.1	16.0	0.2	100.0	83.8	830
Fourth	77.4	10.9	4.3	7.4	0.0	100.0	92.6	920
Highest	90.3	5.8	2.7	1.2	0.0	100.0	98.8	1,066
Total 15-49	66.5	15.0	5.4	13.0	0.1	100.0	87.0	4,121

[1] Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence

3.4 ACCESS TO MASS MEDIA

In the 2011 NDHS, exposure to media was assessed by asking respondents whether they listened to a radio, watched television, or read newspapers or magazines at least once a week. This information is useful for program managers and planners in determining which media may be more effective for disseminating health-related information to targeted audiences.

Media exposure in Nepal is higher among men than women. Seven percent of women and 20 percent of men are exposed to all three media at least once a week (Table 3.5.1 and Table 3.5.2). Forty-four percent of women and 59 percent of men listen to the radio at least once a week, and 47 percent of women and 55 percent of men watch television at least once a week.

Table 3.5.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Nepal 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	17.6	52.2	55.0	10.8	24.4	2,753
20-24	15.7	50.7	46.2	8.8	30.1	2,297
25-29	12.7	49.3	42.3	7.6	32.7	2,101
30-34	12.0	48.5	40.0	6.8	33.9	1,734
35-39	9.6	41.4	40.8	5.5	38.7	1,557
40-44	6.8	40.4	36.7	3.4	40.9	1,285
45-49	4.1	38.7	35.4	2.6	43.5	947
Residence						
Urban	35.1	79.7	46.5	20.4	12.8	1,819
Rural	8.8	42.0	43.8	5.2	36.3	10,855
Ecological zone						
Mountain	5.6	26.9	56.9	3.5	34.8	805
Hill	15.1	43.4	51.6	8.1	29.2	5,090
Terai	11.6	52.9	37.1	7.3	35.6	6,779
Development region						
Eastern	16.5	53.7	52.7	10.7	24.8	3,057
Central	16.2	50.2	38.4	9.0	35.1	4,236
Western	8.8	50.5	43.8	4.9	31.3	2,660
Mid-western	6.3	32.5	42.6	3.3	41.7	1,478
Far-western	6.4	33.6	45.9	3.6	39.0	1,242
Subregion						
Eastern mountain	5.6	26.7	65.2	2.5	28.5	229
Central mountain	10.1	40.3	64.0	7.1	26.4	258
Western mountain	1.9	16.3	45.3	1.3	46.3	319
Eastern hill	8.2	33.0	67.9	5.1	24.3	956
Central hill	33.9	64.5	48.1	17.1	17.4	1,563
Western hill	7.7	42.9	51.4	4.6	31.6	1,513
Mid-western hill	6.0	24.9	40.5	3.2	46.8	649
Far-western hill	1.4	18.4	45.7	1.0	49.1	409
Eastern terai	22.0	67.6	43.4	14.5	24.6	1,873
Central terai	5.4	41.9	29.4	4.0	47.5	2,415
Western terai	10.3	60.7	33.7	5.2	30.9	1,147
Mid-western terai	8.1	43.7	47.0	4.2	32.9	668
Far-western terai	10.1	46.8	43.2	5.4	33.8	676
Education						
No education	0.2	25.0	30.1	0.1	55.0	5,045
Primary	2.9	44.4	41.1	1.5	33.1	2,209
Some secondary	15.9	60.9	56.1	9.1	17.2	3,088
SLC and above	44.2	80.9	61.8	26.3	6.0	2,331
Wealth quintile						
Lowest	0.9	5.9	35.8	0.2	61.2	2,120
Second	2.2	17.4	43.6	1.2	49.9	2,393
Middle	3.8	41.6	45.4	2.4	36.2	2,600
Fourth	12.4	68.2	47.6	7.8	21.2	2,722
Highest	38.3	89.2	46.7	21.9	6.0	2,839
Total	12.6	47.4	44.2	7.4	33.0	12,674

SLC = School Leaving Certificate

Young women and men under age 25 are more likely to be exposed to the mass media than older women and men, presumably in part because of their higher level of education. There is a wide gap in exposure to mass media by place of residence. For example, the proportion of newspaper readers is significantly higher among urban women (35 percent) and men (60 percent) than among their rural counterparts (9 percent and 29

percent, respectively). Not surprisingly, media exposure is highly related to the educational level as well as economic status of respondents. While 26 percent of women and 41 percent of men with an SLC and higher level of education access all three media at least once a week, less than 1 percent of women and men with no education do so. Likewise, 22 percent of women and 39 percent of men from the highest wealth quintile access all three media at least once a week, while less than 1 percent of women and men from the lowest quintile do so. The reason for the lower level of exposure to media among poor respondents may be that they are less likely to own a radio or television and, therefore, less likely to be consistently exposed to these media sources.

Women and men residing in the Eastern region are more likely to be exposed to all three media on a weekly basis than those in the other regions. The proportion of newspaper readers is highest among women in the Central hill subregion (34 percent) and men in the Central hill and Eastern terai subregions (54 percent each). The proportion of television viewers is highest in the Eastern terai subregion for both women (68 percent) and men (78 percent).

Table 3.5.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Nepal 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	35.2	61.3	65.3	23.2	14.0	978
20-24	46.0	59.0	66.4	25.4	10.2	685
25-29	33.0	55.3	55.2	18.2	19.7	581
30-34	32.7	53.7	50.5	18.7	24.5	499
35-39	33.4	51.3	52.3	18.2	25.6	542
40-44	30.4	47.7	56.5	18.2	26.1	438
45-49	20.5	43.3	53.5	12.6	27.3	399
Residence						
Urban	60.3	77.6	55.8	33.3	8.4	717
Rural	28.7	49.8	59.0	17.3	21.9	3,404
Ecological zone						
Mountain	12.4	26.2	70.9	6.6	22.8	245
Hill	35.0	50.7	64.3	19.3	16.8	1,658
Terai	36.0	60.7	52.7	22.2	21.2	2,218
Development region						
Eastern	39.7	62.8	63.4	26.7	14.3	996
Central	37.6	58.4	56.4	21.2	19.5	1,448
Western	34.4	60.1	56.3	19.5	18.3	798
Mid-western	23.7	33.6	57.5	12.4	27.8	493
Far-western	20.2	35.1	59.0	10.1	25.0	385
Subregion						
Eastern mountain	13.0	29.4	73.9	5.7	21.0	66
Central mountain	17.1	38.7	73.8	12.0	18.6	69
Western mountain	9.2	16.5	67.4	3.7	26.6	110
Eastern hill	15.6	38.2	71.3	10.4	20.0	293
Central hill	53.9	65.6	59.4	28.5	11.5	616
Western hill	31.5	55.4	65.1	18.3	17.3	440
Mid-western hill	26.7	28.9	66.1	13.2	21.8	189
Far-western hill	10.6	22.4	66.7	6.6	26.6	120
Eastern terai	53.6	77.5	58.7	36.4	11.0	638
Central terai	26.2	54.5	52.4	16.1	26.0	763
Western terai	37.9	65.8	45.5	20.9	19.6	358
Mid-western terai	25.8	42.6	48.0	14.5	32.1	242
Far-western terai	27.2	45.2	53.1	12.9	24.6	217
Education						
No education	0.8	19.9	36.4	0.2	52.1	567
Primary	8.8	38.0	52.1	4.2	30.4	814
Some secondary	31.3	57.7	61.7	18.2	14.9	1,437
SLC and above	67.8	76.8	68.5	40.8	3.6	1,303
Wealth quintile						
Lowest	3.4	6.2	50.3	0.6	47.3	610
Second	10.3	23.3	60.8	4.8	33.0	695
Middle	24.0	51.6	61.6	14.2	19.7	830
Fourth	44.8	74.4	61.0	27.9	10.0	920
Highest	66.2	88.2	57.0	39.1	2.9	1,066
Total 15-49	34.2	54.7	58.5	20.1	19.5	4,121

SLC = School Leaving Certificate

3.4.1 Access to Specific Radio and Television Programs

Dissemination of population and health information through the electronic media, and especially through the radio, is not new in Nepal. The National Health Education, Information and Communication Center, USAID, UNICEF, and other organizations have launched several different radio and television programs to raise awareness, especially related to health issues. The 2011 NDHS collected information on exposure to several specific television and radio programs: *Jana swasthya radio karyakram, Janasankhaya chetanaka swore haru radio karyakram, Hamro swastha radio karyakram, Ama radio and Ama TV karyakram, Hamro swastha TV karyakram, Jeevan chakra TV karyakram, Thorai bhaya pugi sari TV karyakram, Sathi sanga manka kura,* and *Jeevan Jyoti radio Karyakram.* Tables 3.6.1 and 3.6.2 show the percentages of men and women who have heard or seen such programs in the past few months preceding the survey.

Table 3.6.1 Exposure to specific health programs on radio and television: Women

Percentage of women age 15-49 who have heard or seen specific health programs on the radio and television, according to background characteristics, Nepal 2011

Background characteristic	*Jana swasthya radio karyakram*	*Janasankhya chetanaka swore haru radio karyakram*	*Hamro swastha radio karyakram*	*Ama radio karyakram*	*Sathi sanga manka kura radio karyakram*	*Jeevan jyoti radio karyakram*	*Hamro swastha TV karyakram*	*Jeevan chakra TV karyakram*	*Thorai bhaye pugi sari TV karyakram*	*Ama TV karyakram*	Number of women
Age											
15-19	18.4	15.0	15.8	9.7	49.7	4.4	13.4	33.1	29.1	13.4	2,753
20-24	19.2	15.6	17.3	8.5	42.6	4.4	13.9	30.5	29.8	13.4	2,297
25-29	16.9	13.0	12.5	7.7	33.0	3.4	13.9	26.6	27.0	12.7	2,101
30-34	16.5	11.5	14.3	8.3	25.5	3.3	13.7	27.5	27.7	14.1	1,734
35-39	15.1	10.4	13.2	8.5	24.1	4.6	11.9	23.1	25.1	10.9	1,557
40-44	13.7	9.4	13.9	7.6	19.7	3.2	11.0	20.5	22.7	12.3	1,285
45-49	14.4	10.0	10.9	7.3	16.6	2.7	9.0	22.2	22.6	11.2	947
Residence											
Urban	18.5	14.7	13.6	6.7	34.6	4.8	20.0	36.1	39.0	20.6	1,819
Rural	16.6	12.4	14.6	8.7	33.5	3.7	11.7	26.0	25.1	11.5	10,855
Ecological zone											
Mountain	24.4	16.4	24.9	10.3	37.9	6.1	9.7	14.7	10.8	7.7	805
Hill	18.5	14.0	16.5	10.1	38.9	3.9	11.7	22.7	21.9	10.5	5,090
Terai	14.7	11.4	11.6	6.9	29.3	3.5	14.1	32.6	32.9	15.1	6,779
Development region											
Eastern	18.0	14.6	16.3	7.6	41.9	5.1	16.6	33.1	34.0	15.6	3,057
Central	12.9	10.4	10.8	5.1	25.7	3.1	12.5	26.9	27.8	12.2	4,236
Western	17.9	13.0	14.3	11.4	37.1	3.2	12.1	30.1	27.1	14.9	2,660
Mid-western	18.2	12.8	15.1	12.8	33.6	4.1	8.5	17.8	16.0	7.3	1,478
Far-western	23.4	15.8	21.8	10.2	33.5	4.4	11.6	21.0	20.3	10.0	1,242
Subregion											
Eastern mountain	32.0	19.5	29.5	9.4	55.3	6.8	10.3	12.2	11.1	6.8	229
Central mountain	20.8	19.0	20.7	9.5	39.7	7.2	12.9	21.2	16.9	11.8	258
Western mountain	21.9	12.1	25.0	11.5	23.9	4.8	6.7	11.3	5.7	4.9	319
Eastern hill	15.2	12.0	17.9	7.2	48.6	3.4	10.8	19.2	18.4	6.7	956
Central hill	19.0	15.7	14.3	6.8	35.9	4.8	17.6	34.5	36.5	18.2	1,563
Western hill	18.6	13.4	15.9	13.0	40.2	3.1	9.7	20.5	17.7	9.1	1,513
Mid-western hill	20.7	15.0	18.0	17.0	37.3	4.6	7.5	14.7	12.2	5.4	649
Far-western hill	20.4	13.1	22.1	8.3	25.3	3.8	5.1	6.6	4.6	3.8	409
Eastern terai	17.8	15.3	13.9	7.5	36.8	5.8	20.3	42.8	44.8	21.2	1,873
Central terai	8.2	6.1	7.4	3.5	17.7	1.6	9.2	22.7	23.3	8.5	2,415
Western terai	17.1	12.6	12.3	9.3	32.9	3.3	15.3	42.9	39.5	22.5	1,147
Mid-western terai	17.0	11.1	12.6	9.2	34.1	3.3	10.4	21.9	21.5	9.5	668
Far-western terai	23.4	18.0	18.2	11.0	39.1	4.7	16.1	32.6	33.8	15.1	676
Education											
No education	9.2	5.9	8.0	4.6	14.0	2.0	4.7	11.3	11.7	5.4	5,045
Primary	14.0	10.6	13.7	7.7	30.9	3.5	10.1	23.6	23.6	9.9	2,209
Some secondary	22.3	18.0	19.0	12.1	50.5	5.4	17.3	39.3	36.4	17.2	3,088
SLC and above	28.9	22.9	23.0	12.5	56.6	6.2	27.4	50.5	51.1	25.9	2,331
Wealth quintile											
Lowest	11.7	8.2	11.5	6.7	24.1	2.5	2.1	3.6	3.1	1.3	2,120
Second	15.0	10.5	13.9	7.7	31.4	3.1	4.7	9.8	9.3	3.5	2,393
Middle	15.1	11.3	13.9	8.1	31.7	2.8	8.9	21.4	20.9	9.2	2,600
Fourth	19.2	15.5	16.7	9.6	39.7	5.1	19.3	44.8	41.7	18.5	2,722
Highest	21.5	16.8	15.4	9.3	38.8	5.3	25.2	49.0	51.6	27.0	2,839
Total 15-49	16.9	12.8	14.4	8.4	33.7	3.9	12.9	27.5	27.1	12.8	12,674

SLC = School Leaving Certificate

Table 3.6.2 Exposure to specific health programs on radio and television: Men

Percentage of men age 15-49 who have heard or seen specific health programs on the radio and television, according to background characteristics, Nepal 2011

Background characteristic	*Jana swasthya radio karyakram*	*Janasankhya chetanaka swore haru radio karyakram*	*Hamro swastha radio karyakram*	*Ama radio karyakram*	*Sathi sanga manka kura radio karyakram*	*Jeevan jyoti radio karyakram*	*Hamro swastha TV karyakram*	*Jeevan chakra TV karyakram*	*Thorai bhaye pugi sari TV karyakram*	*Ama TV karyakram*	Number of men
Age											
15-19	28.4	20.9	21.5	14.7	58.5	5.3	17.5	40.5	34.3	21.0	978
20-24	31.5	21.5	26.6	11.6	60.1	8.0	20.6	35.3	38.9	20.1	685
25-29	25.0	15.8	18.4	8.9	44.9	6.7	15.5	26.0	29.9	13.2	581
30-34	27.2	20.9	16.7	11.2	37.5	7.9	19.9	28.5	29.2	15.4	499
35-39	31.5	21.0	19.3	14.2	33.2	8.6	24.7	28.0	33.6	20.6	542
40-44	31.3	20.7	22.4	16.0	30.2	7.3	17.0	20.3	26.3	13.9	438
45-49	26.8	21.3	27.8	13.3	30.6	4.6	19.5	24.2	30.6	18.9	399
Residence											
Urban	28.7	21.4	21.8	10.5	45.6	7.0	27.4	37.8	46.3	25.3	717
Rural	28.9	20.1	21.7	13.4	45.2	6.8	17.4	29.3	29.6	16.5	3,404
Ecological zone											
Mountain	36.8	23.0	31.3	18.4	47.6	10.0	11.9	14.5	11.3	7.0	245
Hill	32.3	21.4	24.7	15.5	52.7	6.7	17.5	27.7	31.4	19.7	1,658
Terai	25.4	19.2	18.4	10.3	39.4	6.6	21.2	34.9	35.7	18.1	2,218
Development region											
Eastern	27.5	22.0	19.5	9.8	49.3	8.8	19.9	35.4	36.9	16.2	996
Central	29.3	20.2	20.3	10.5	44.2	7.3	20.4	32.2	38.4	21.1	1,448
Western	26.9	18.1	20.8	15.9	46.0	4.0	21.2	32.5	31.7	24.5	798
Mid-western	33.2	17.8	28.8	19.6	44.2	7.5	15.5	21.1	17.9	8.9	493
Far-western	29.0	24.2	25.7	14.9	38.9	4.7	12.6	22.1	19.7	9.8	385
Subregion											
Eastern mountain	23.2	16.7	18.8	7.1	56.0	8.1	5.5	11.8	12.7	8.8	66
Central mountain	31.7	24.1	26.5	10.9	51.1	9.6	15.1	19.0	18.3	10.7	69
Western mountain	48.2	26.1	41.7	29.8	40.4	11.5	13.8	13.3	6.0	3.7	110
Eastern hill	33.4	23.8	21.8	9.4	62.3	11.2	14.0	23.8	29.9	12.7	293
Central hill	30.8	19.8	20.9	9.7	48.1	6.7	20.8	33.5	43.7	23.5	616
Western hill	31.0	23.5	26.6	21.9	56.5	3.6	21.1	31.2	30.3	26.8	440
Mid-western hill	39.8	17.5	38.1	28.8	52.2	8.2	11.3	17.2	12.9	10.5	189
Far-western hill	30.7	21.5	24.0	16.0	40.2	4.5	5.6	10.8	5.0	4.9	120
Eastern terai	25.3	21.7	18.6	10.2	42.6	7.9	24.1	43.2	42.6	18.6	638
Central terai	27.9	20.1	19.3	11.2	40.4	7.6	20.6	32.3	35.9	20.1	763
Western terai	21.8	11.5	13.7	8.6	33.0	4.6	21.4	34.1	33.3	21.6	358
Mid-western terai	25.5	18.4	18.4	10.1	39.2	5.6	18.7	25.7	25.1	9.3	242
Far-western terai	22.4	22.4	22.8	10.6	37.4	3.7	17.0	30.9	30.5	13.5	217
Education											
No education	16.8	10.4	13.7	8.5	18.9	4.5	3.0	6.6	6.5	2.4	567
Primary	21.6	16.2	18.2	10.3	31.3	5.8	10.1	19.1	20.9	9.3	814
Some secondary	28.4	20.9	23.7	13.1	52.4	8.4	19.0	34.0	33.1	17.5	1,437
SLC and above	39.1	26.6	25.4	16.2	57.6	6.8	31.9	45.0	50.4	30.9	1,303
Wealth quintile											
Lowest	25.2	16.6	20.4	12.2	33.5	7.1	2.7	4.2	4.1	2.6	610
Second	23.5	15.7	18.2	11.2	45.2	5.7	6.6	15.1	13.5	6.8	695
Middle	31.5	22.8	26.7	14.2	44.1	5.7	16.6	24.8	24.0	12.0	830
Fourth	32.9	23.2	25.4	16.4	52.8	10.1	27.3	48.4	50.3	25.8	920
Highest	28.8	21.0	17.8	10.3	46.5	5.5	31.6	45.6	52.5	32.3	1,066
Total 15-49	28.8	20.3	21.7	12.9	45.3	6.8	19.1	30.8	32.5	18.1	4,121

SLC = School Leaving Certificate

About one in three (34 percent) women and 45 percent of men age 15-49 listened to *Sathi sanga manka kura*, which is the most popular radio program among women and men in Nepal, especially the younger generation. There is minimal urban-rural variation in women and men listening to this program. The next most popular radio program among women and men is *Jana swasthya radio karyakram* (17 percent and 29 percent, respectively). Among the four TV programs, *Thorai bhaye pugi sari* and *Jeevan chakra* are the most popular. Young women and men are more likely to view television programs than older women and men.

Overall, urban women are slightly more likely than rural women to access both radio and television programs. Urban women more often listen to *Jana swastha radio karyakram* (19 percent versus 17 percent) and *Janasankhaya chetanaka swore haru radio karyakram* (15 percent versus 12 percent).

Not surprisingly, respondents' level of education and economic status are directly associated with their exposure to specific health programs. Respondents who are highly educated and come from the wealthiest households are more likely to have heard or seen these programs than their counterparts in the other education and wealth categories.

3.4.2 Preferred Media Source for Health-Related Programs

In 2011 the NDHS, for the first time, collected information on the media source preferred by women and men for receiving health-related information. This information, important for targeting health-related messages more effectively, is presented in Tables 3.7.1 and 3.7.2.

Table 3.7.1 Preferred media source for health-related information: Women

Percent distribution of women with preferred media source to receive health-related information, according to background characteristics, Nepal 2011

Background characteristic	Radio Nepal	FM station	Television	Newspaper/ magazine	Poster	Hoarding/ billboard	Other	Total	Number of women
Age									
15-19	13.6	39.3	40.9	4.2	0.8	0.1	1.0	100.0	2,753
20-24	15.0	36.8	44.1	2.4	0.5	0.3	0.8	100.0	2,297
25-29	14.1	35.0	46.2	2.3	1.0	0.1	1.1	100.0	2,101
30-34	14.6	35.3	46.7	1.5	0.7	0.0	1.2	100.0	1,734
35-39	15.2	34.6	45.7	1.5	1.4	0.0	1.5	100.0	1,557
40-44	14.8	32.2	48.3	0.7	1.5	0.0	2.2	100.0	1,285
45-49	17.8	31.0	46.0	0.3	2.5	0.2	2.1	100.0	947
Residence									
Urban	13.1	21.1	58.6	5.4	0.4	0.2	1.1	100.0	1,819
Rural	15.0	38.1	42.6	1.7	1.1	0.1	1.3	100.0	10,855
Ecological zone									
Mountain	18.1	41.9	35.6	1.3	2.1	0.0	1.0	100.0	805
Hill	18.8	35.9	40.2	2.8	1.0	0.1	1.1	100.0	5,090
Terai	11.2	34.8	49.5	1.9	1.0	0.1	1.5	100.0	6,779
Development region									
Eastern	12.1	36.7	46.1	2.7	1.2	0.3	0.8	100.0	3,057
Central	10.6	35.8	48.5	2.4	0.6	0.1	2.0	100.0	4,236
Western	9.4	36.2	50.3	2.1	0.8	0.0	1.3	100.0	2,660
Mid-western	26.0	35.8	33.4	1.2	2.4	0.1	1.1	100.0	1,478
Far-western	33.1	31.8	31.8	1.7	1.1	0.0	0.5	100.0	1,242
Subregion									
Eastern mountain	14.5	42.6	38.6	1.7	0.6	0.0	2.0	100.0	229
Central mountain	14.5	37.2	45.0	1.2	1.4	0.0	0.7	100.0	258
Western mountain	23.6	45.1	25.8	1.1	3.7	0.0	0.5	100.0	319
Eastern hill	13.1	48.7	34.0	3.0	0.3	0.0	0.8	100.0	956
Central hill	20.0	22.3	51.3	4.6	0.4	0.2	0.8	100.0	1,563
Western hill	8.9	42.6	44.2	1.8	1.1	0.0	1.5	100.0	1,513
Mid-western hill	35.4	34.5	24.2	0.7	3.5	0.1	1.6	100.0	649
Far-western hill	37.7	35.9	23.1	1.7	0.5	0.0	1.1	100.0	409
Eastern terai	11.3	29.8	53.3	2.7	1.7	0.4	0.7	100.0	1,873
Central terai	4.1	44.4	47.0	1.0	0.6	0.0	2.9	100.0	2,415
Western terai	10.1	27.7	58.3	2.5	0.4	0.0	1.0	100.0	1,147
Mid-western terai	17.3	36.9	43.0	1.7	0.4	0.1	0.6	100.0	668
Far-western terai	32.7	24.1	39.5	1.8	1.6	0.0	0.3	100.0	676
Education									
No education	15.9	38.1	41.6	0.1	1.8	0.0	2.4	100.0	5,045
Primary	13.5	35.8	47.3	1.6	0.8	0.2	0.7	100.0	2,209
Some secondary	13.6	36.4	45.5	3.6	0.4	0.1	0.5	100.0	3,088
SLC and above	14.6	29.7	49.0	5.5	0.4	0.3	0.7	100.0	2,331
Wealth quintile									
Lowest	28.3	41.2	24.5	1.2	2.4	0.0	2.1	100.0	2,120
Second	16.0	45.7	34.1	1.2	1.2	0.0	1.7	100.0	2,393
Middle	9.9	41.6	45.0	1.3	0.9	0.0	1.4	100.0	2,600
Fourth	10.7	32.7	53.1	1.7	0.7	0.2	0.8	100.0	2,722
Highest	11.6	20.6	61.2	5.2	0.3	0.3	0.8	100.0	2,839
Total 15-49	14.7	35.7	44.9	2.2	1.0	0.1	1.3	100.0	12,674

Note: Total includes three women who prefer brochures/leaflets and six women who prefer flipcharts who are not shown separately.
SLC = School Leaving Certificate

Among the different types of electronic and print media, television is the most preferred source of information among women and men. Forty-five percent of women and 43 percent of men prefer television, while only 15 percent of women and men prefer Radio Nepal, a government-supported radio channel. Approximately one-third of women and men prefer FM radio stations for receiving health-related messages. While the preference for print media is negligible among women, 7 percent of men prefer newspapers and magazines over other sources.

Table 3.7.2 Preferred media source for health-related information: Men

Percent distribution of men with preferred media source to receive health-related information, according to background characteristics, Nepal 2011

Background characteristic	Radio Nepal	FM station	Television	Newspaper/ magazine	Poster	Hoarding/ billboard	Other	Total	Number of men
Age									
15-19	12.0	33.2	46.0	6.3	0.3	0.3	2.0	100.0	978
20-24	15.7	32.5	40.2	10.3	0.1	0.1	1.1	100.0	685
25-29	16.7	33.8	41.1	7.2	0.5	0.1	0.5	100.0	581
30-34	12.9	34.7	44.5	7.4	0.0	0.0	0.4	100.0	499
35-39	14.6	31.8	45.3	7.3	0.5	0.0	0.4	100.0	542
40-44	19.4	31.6	42.1	6.1	0.2	0.4	0.2	100.0	438
45-49	18.1	35.2	41.2	3.9	0.8	0.0	0.4	100.0	399
Residence									
Urban	12.4	18.1	56.8	10.8	0.2	0.1	1.4	100.0	717
Rural	15.7	36.4	40.3	6.3	0.3	0.1	0.8	100.0	3,404
Ecological zone									
Mountain	21.3	43.4	31.2	2.9	0.2	0.0	0.8	100.0	245
Hill	13.9	36.0	41.4	7.1	0.2	0.3	1.0	100.0	1,658
Terai	15.3	30.0	45.8	7.6	0.4	0.0	0.9	100.0	2,218
Development region									
Eastern	10.9	33.7	44.6	9.4	0.6	0.2	0.6	100.0	996
Central	12.9	33.3	44.7	8.0	0.2	0.0	0.8	100.0	1,448
Western	10.8	30.6	51.9	5.6	0.0	0.2	0.9	100.0	798
Mid-western	30.9	34.8	28.7	4.3	0.2	0.2	0.9	100.0	493
Far-western	23.0	34.9	34.1	4.6	0.8	0.3	2.3	100.0	385
Subregion									
Eastern mountain	6.7	57.8	31.4	3.0	0.0	0.0	1.2	100.0	66
Central mountain	19.4	28.7	44.8	5.4	0.8	0.0	0.2	100.0	69
Western mountain	31.2	44.0	22.5	1.4	0.0	0.0	0.9	100.0	110
Eastern hill	7.7	55.2	30.4	5.9	0.3	0.3	0.0	100.0	293
Central hill	11.4	24.6	51.0	11.5	0.0	0.0	1.4	100.0	616
Western hill	11.7	36.0	46.8	4.4	0.0	0.4	0.6	100.0	440
Mid-western hill	30.6	37.0	26.6	3.6	0.0	0.4	1.7	100.0	189
Far-western hill	23.6	45.9	23.2	2.7	2.2	1.0	1.5	100.0	120
Eastern terai	12.8	21.4	52.5	11.6	0.8	0.1	0.8	100.0	638
Central terai	13.6	40.7	39.7	5.4	0.3	0.0	0.3	100.0	763
Western terai	9.7	23.8	58.2	7.2	0.0	0.0	1.1	100.0	358
Mid-western terai	31.2	32.3	30.4	5.4	0.3	0.0	0.3	100.0	242
Far-western terai	20.5	25.1	44.4	6.8	0.2	0.0	3.0	100.0	217
Education									
No education	18.0	53.6	26.3	0.5	1.2	0.0	0.4	100.0	567
Primary	17.1	38.5	41.7	2.4	0.1	0.1	0.1	100.0	814
Some secondary	14.2	33.4	45.1	6.3	0.2	0.2	0.6	100.0	1,437
SLC and above	13.6	20.8	49.4	13.9	0.3	0.1	1.9	100.0	1,303
Wealth quintile									
Lowest	21.2	55.4	18.8	3.3	0.6	0.0	0.6	100.0	610
Second	16.4	47.9	30.0	4.1	0.7	0.3	0.5	100.0	695
Middle	15.5	39.5	38.7	5.1	0.2	0.1	1.0	100.0	830
Fourth	14.9	24.6	51.4	8.0	0.3	0.2	0.6	100.0	920
Highest	10.7	13.4	62.1	12.0	0.1	0.1	1.5	100.0	1,066
Total 15-49	15.1	33.2	43.2	7.1	0.3	0.1	0.9	100.0	4,121

Note: Total includes two men who prefer brochures/leaflets who are not shown separately.
SLC = School Leaving Certificate

Television and FM radio stations are popular in all age groups of women and men, while Radio Nepal is most popular among women age 45-49. Women in the terai, Western region, and Central terai subregion are less likely to prefer Radio Nepal than women in other areas.

Education and income status are directly related to the preferred media source for health-related information. Women and men with no education and those in the lowest wealth quintile are more likely to prefer Radio Nepal than those with an SLC and higher level of education and those in the highest wealth quintile.

3.5 EMPLOYMENT

3.5.1 Employment Status

The 2011 NDHS asked respondents a number of questions regarding their employment status, including whether they were working in the seven days preceding the survey and, if not, whether they had worked in the 12 months before the survey. The results for women and men are presented in Tables 3.8.1 and 3.8.2. At the time of the survey, 60 percent of women were currently employed and 15 percent were not employed but had worked sometime during the past 12 months (Figure 3.1).

Table 3.8.1 Employment status: Women

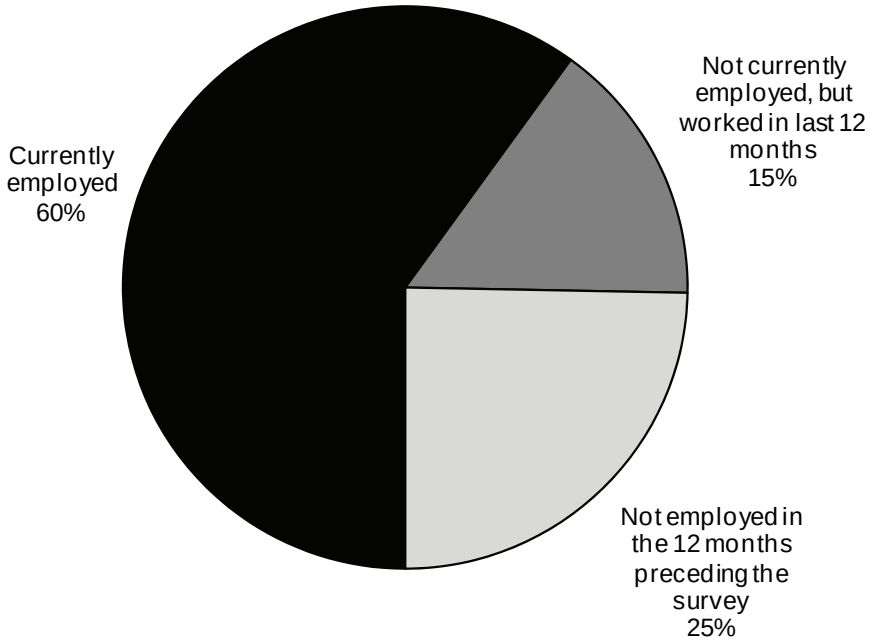
Percent distribution of women age 15-49 by employment status, according to background characteristics, Nepal 2011

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15-19	48.4	16.4	35.1	100.0	2,753
20-24	52.4	17.2	30.3	100.0	2,297
25-29	59.4	14.6	25.9	100.0	2,101
30-34	65.4	15.3	19.4	100.0	1,734
35-39	71.0	13.4	15.6	100.0	1,557
40-44	71.4	13.9	14.7	100.0	1,285
45-49	70.2	14.1	15.7	100.0	947
Marital status					
Never married	53.6	14.6	31.8	100.0	2,708
Married	61.0	15.8	23.2	100.0	9,608
Divorced/separated/widowed	83.7	6.9	9.4	100.0	358
Number of living children					
0	52.2	16.3	31.5	100.0	3,823
1-2	58.9	13.9	27.3	100.0	4,591
3-4	67.3	16.2	16.6	100.0	3,207
5+	71.5	15.4	13.1	100.0	1,053
Residence					
Urban	45.3	11.9	42.8	100.0	1,819
Rural	62.5	15.9	21.6	100.0	10,855
Ecological zone					
Mountain	88.8	6.6	4.5	100.0	805
Hill	74.7	9.7	15.6	100.0	5,090
Terai	45.6	20.6	33.8	100.0	6,779
Development region					
Eastern	59.2	14.0	26.8	100.0	3,057
Central	50.8	17.5	31.8	100.0	4,236
Western	64.1	13.9	22.0	100.0	2,660
Mid-western	68.6	14.5	16.9	100.0	1,478
Far-western	74.7	15.2	10.1	100.0	1,242
Subregion					
Eastern mountain	89.9	4.5	5.7	100.0	229
Central mountain	90.8	5.3	3.8	100.0	258
Western mountain	86.4	9.3	4.3	100.0	319
Eastern hill	78.6	14.3	7.1	100.0	956
Central hill	64.3	8.6	27.1	100.0	1,563
Western hill	78.1	9.3	12.5	100.0	1,513
Mid-western hill	75.9	8.4	15.7	100.0	649
Far-western hill	90.7	6.1	3.2	100.0	409
Eastern terai	45.6	15.0	39.4	100.0	1,873
Central terai	37.7	24.5	37.8	100.0	2,415
Western terai	45.6	20.0	34.5	100.0	1,147
Mid-western terai	58.1	20.9	21.0	100.0	668
Far-western terai	61.3	22.8	15.9	100.0	676
Education					
No education	65.2	16.9	17.8	100.0	5,045
Primary	63.9	14.7	21.4	100.0	2,209
Some secondary	55.9	15.3	28.7	100.0	3,088
SLC and above	50.4	12.4	37.1	100.0	2,331
Wealth quintile					
Lowest	79.5	14.6	5.9	100.0	2,120
Second	70.5	16.1	13.4	100.0	2,393
Middle	60.3	18.4	21.4	100.0	2,600
Fourth	52.6	17.0	30.4	100.0	2,722
Highest	43.5	10.8	45.7	100.0	2,839
Total	60.0	15.3	24.7	100.0	12,674

[1] "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.
SLC = School Leaving Certificate

The proportion of women currently employed increases with age. Current employment is lowest among women age 15-19 (48 percent) and highest among those age 35-49 (70 percent or higher). Women who are divorced, separated, or widowed are more likely to be currently employed than other women (84 percent versus 61 percent or lower). Women who have five or more children are more likely to be employed (72 percent) than those with no children (52 percent).

Figure 3.1 **Women's Employment Status in the Past 12 Months**



Notable variations are seen in the proportion of women currently employed by place of residence and region. Rural women are more likely to be currently employed than urban women (63 percent versus 45 percent). Women in the mountain zone are more likely to be economically active than women residing in the other ecological zones. Women in the Far-western, Mid-western, and Western regions are more likely to be currently employed (75 percent, 69 percent, and 64 percent, respectively) than those living in the Eastern and Central regions (59 percent and 51 percent, respectively).

The proportion of women currently employed decreases with level of education. For example, 65 percent of women with no education are currently employed, compared with 50 percent of women with an SLC or higher level of education. Women living in the poorest households are much more likely to be employed (80 percent) than women in the wealthiest households (44 percent). This could partly be due to the economic needs of poorer households that drive women to seek employment.

The proportion currently employed is higher among men than women (Table 3.8.2). The percentage of currently employed men rises with age, from 46 percent among men age 15-19 to 92 percent among men age 45-49. Ever-married men, those living in the mountain zone, those residing in the Eastern mountain and Eastern hill subregions, those with little or no education, and those living in the poorest households are more likely to be employed than their counterparts. Twenty-five percent of women and 13 percent of men were not employed during the 12 months preceding the survey.

Table 3.8.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Nepal 2011

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed[1]	Not currently employed			
Age					
15-19	46.0	15.2	38.8	100.0	978
20-24	75.5	11.2	13.3	100.0	685
25-29	88.9	7.5	3.6	100.0	581
30-34	89.6	8.1	2.3	100.0	499
35-39	90.9	7.8	1.4	100.0	542
40-44	91.7	7.0	1.3	100.0	438
45-49	92.3	4.9	2.9	100.0	399
Marital status					
Never married	53.1	13.7	33.1	100.0	1,433
Married	90.8	7.4	1.8	100.0	2,626
Divorced/separated/widowed	(75.1)	(16.0)	(8.9)	100.0	62
Number of living children					
0	58.4	13.5	28.0	100.0	1,755
1-2	90.9	6.7	2.4	100.0	1,232
3-4	92.3	7.3	0.5	100.0	836
5+	92.4	6.8	0.8	100.0	298
Residence					
Urban	76.1	6.2	17.7	100.0	717
Rural	77.8	10.5	11.8	100.0	3,404
Ecological zone					
Mountain	83.4	13.4	3.2	100.0	245
Hill	78.2	10.4	11.4	100.0	1,658
Terai	76.3	8.8	14.9	100.0	2,218
Development region					
Eastern	80.7	9.1	10.2	100.0	996
Central	80.5	6.9	12.5	100.0	1,448
Western	72.8	8.8	18.4	100.0	798
Mid-western	68.5	21.1	10.4	100.0	493
Far-western	78.7	9.2	12.1	100.0	385
Subregion					
Eastern mountain	92.3	5.9	1.8	100.0	66
Central mountain	86.6	7.4	6.0	100.0	69
Western mountain	76.1	21.6	2.3	100.0	110
Eastern hill	91.9	5.0	3.1	100.0	293
Central hill	80.2	6.6	13.2	100.0	616
Western hill	73.2	9.1	17.7	100.0	440
Mid-western hill	57.3	33.8	8.9	100.0	189
Far-western hill	85.7	11.5	2.9	100.0	120
Eastern terai	74.4	11.2	14.4	100.0	638
Central terai	80.3	7.2	12.5	100.0	763
Western terai	72.3	8.5	19.2	100.0	358
Mid-western terai	79.5	6.8	13.6	100.0	242
Far-western terai	70.6	10.0	19.4	100.0	217
Education					
No education	90.2	8.7	1.1	100.0	567
Primary	90.9	6.1	3.0	100.0	814
Some secondary	71.0	10.9	18.2	100.0	1,437
SLC and above	70.7	11.2	18.1	100.0	1,303
Wealth quintile					
Lowest	83.4	12.7	3.9	100.0	610
Second	81.8	8.8	9.4	100.0	695
Middle	80.2	9.9	9.9	100.0	830
Fourth	73.8	10.0	16.2	100.0	920
Highest	72.3	8.3	19.4	100.0	1,066
Total 15-49	77.5	9.7	12.8	100.0	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.
SLC = School Leaving Certificate

3.5.2 Occupation

Respondents who were currently employed or had worked in the 12 months preceding the survey were asked to specify their occupation. The results are presented in Table 3.9.1 and Table 3.9.2, which show data on employed women and men, respectively, by occupation according to background characteristics.

Table 3.9.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nepal 2011

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other/ missing	Total	Number of women
Age									
15-19	2.5	1.0	7.0	4.1	2.2	83.0	0.2	100.0	1,786
20-24	7.9	2.1	11.2	5.5	3.1	70.0	0.2	100.0	1,600
25-29	6.5	1.2	14.7	6.3	2.5	68.5	0.3	100.0	1,556
30-34	3.5	1.0	15.2	5.9	3.1	71.0	0.3	100.0	1,398
35-39	4.4	1.5	13.7	3.7	3.0	73.8	0.1	100.0	1,314
40-44	2.2	0.4	14.1	2.4	2.4	78.4	0.0	100.0	1,096
45-49	1.4	0.3	9.4	1.2	2.1	85.4	0.1	100.0	798
Marital status									
Never married	7.6	1.7	10.2	6.1	2.3	71.6	0.4	100.0	1,846
Married	3.6	0.9	12.2	4.2	2.7	76.3	0.1	100.0	7,378
Divorced/separated/widowed	2.5	2.4	20.3	2.7	3.4	67.8	0.9	100.0	324
Number of living children									
0	7.4	1.7	10.8	6.3	2.2	71.2	0.4	100.0	2,619
1-2	5.7	1.5	16.4	5.3	3.0	67.8	0.2	100.0	3,339
3-4	1.0	0.4	10.1	3.1	2.7	82.6	0.0	100.0	2,675
5+	0.0	0.3	5.8	0.4	2.3	91.0	0.1	100.0	915
Residence									
Urban	12.0	4.2	33.2	10.1	5.9	33.6	1.0	100.0	1,041
Rural	3.4	0.8	9.5	3.8	2.3	80.2	0.1	100.0	8,508
Ecological zone									
Mountain	2.7	0.5	6.5	1.2	0.9	88.2	0.0	100.0	769
Hill	5.3	1.3	11.0	4.3	1.7	76.0	0.3	100.0	4,294
Terai	3.7	1.0	14.1	5.2	3.8	72.0	0.1	100.0	4,485
Development region									
Eastern	4.2	1.0	15.9	5.6	2.2	70.9	0.1	100.0	2,239
Central	5.8	1.8	13.1	6.5	2.6	69.7	0.6	100.0	2,891
Western	4.1	0.7	11.2	3.2	2.3	78.4	0.0	100.0	2,075
Mid-western	2.7	0.9	9.8	1.8	3.1	81.7	0.0	100.0	1,228
Far-western	3.1	0.7	5.8	2.3	3.8	84.2	0.1	100.0	1,116
Subregion									
Eastern mountain	2.7	0.3	10.2	0.8	0.3	85.5	0.2	100.0	216
Central mountain	3.2	0.6	3.5	2.5	0.2	90.1	0.0	100.0	248
Western mountain	2.2	0.7	6.3	0.3	1.8	88.7	0.0	100.0	305
Eastern hill	3.5	0.3	7.7	2.5	0.8	85.2	0.0	100.0	888
Central hill	10.7	3.5	21.3	11.0	2.6	49.8	1.1	100.0	1,140
Western hill	3.5	0.5	8.0	2.0	1.7	84.4	0.0	100.0	1,323
Mid-western hill	3.7	1.3	9.3	1.7	1.7	82.4	0.0	100.0	547
Far-western hill	1.5	0.2	1.6	0.7	1.5	94.5	0.0	100.0	396
Eastern terai	5.0	1.6	23.5	9.1	3.7	57.0	0.1	100.0	1,135
Central terai	2.4	0.7	8.5	3.7	3.0	81.3	0.2	100.0	1,503
Western terai	5.1	1.2	17.0	5.2	3.4	68.0	0.1	100.0	752
Mid-western terai	1.9	0.5	10.2	2.3	4.9	80.1	0.0	100.0	528
Far-western terai	4.3	1.0	9.5	4.1	6.0	74.8	0.2	100.0	568
Education									
No education	0.1	0.3	6.6	2.4	3.0	87.3	0.2	100.0	4,146
Primary	0.2	0.9	11.3	6.4	4.1	77.0	0.1	100.0	1,736
Some secondary	1.2	0.6	14.5	7.0	2.0	74.5	0.2	100.0	2,201
SLC and above	25.9	4.5	24.8	4.3	0.7	39.3	0.4	100.0	1,465
Wealth quintile									
Lowest	0.5	0.2	0.9	0.5	2.0	95.8	0.0	100.0	1,993
Second	1.1	0.3	2.7	1.9	3.3	90.7	0.1	100.0	2,073
Middle	2.1	0.5	6.1	3.7	3.2	84.3	0.1	100.0	2,045
Fourth	5.0	1.3	17.2	7.4	2.8	65.9	0.3	100.0	1,895
Highest	15.8	3.9	40.8	10.6	1.7	26.7	0.6	100.0	1,542
Total	4.3	1.1	12.1	4.5	2.6	75.1	0.2	100.0	9,548

SLC = School Leaving Certificate

In Nepal, the agricultural sector remains the main employer, with 75 percent of women and 35 percent of men engaged in agricultural occupations. These figures are lower than those in the 2006 NDHS, when 86 percent of women and 52 percent of men were employed in agricultural occupations. The survey indicates that 7 percent of employed women are manual workers (skilled and unskilled), while 4 percent are in professional, technical, and managerial fields. Sales and services is an emerging sector, with more than one-tenth (12 percent) of women and more than one-fifth (22 percent) of men engaged in this sector. This is an increase since 2006, when 7 percent of women and 13 percent of men were involved in the sales and service sector.

Type of occupation varies greatly by gender. As women are less likely than men to be highly educated or to have attended vocational or technical schools, their employment in the professional, technical, and managerial sector is somewhat lower than men's (4 percent compared with 8 percent). Twenty-eight percent of men age 15-49 do manual work (skilled and unskilled), while only 7 percent of women work in this field. Men are also more likely than women to be engaged in clerical work (6 percent versus 1 percent).

Table 3.9.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nepal 2011

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other/ missing	Total	Number of men
Age									
15-19	3.0	4.6	14.2	14.9	11.3	49.1	2.9	100.0	598
20-24	9.8	9.4	27.1	15.1	9.3	27.7	1.5	100.0	594
25-29	6.2	5.5	23.7	21.5	12.3	30.6	0.3	100.0	560
30-34	9.1	6.4	27.4	19.6	11.1	26.3	0.1	100.0	488
35-39	6.8	5.1	26.7	20.7	9.3	31.2	0.1	100.0	534
40-44	9.5	3.7	20.0	18.3	11.2	37.3	0.0	100.0	432
45-49	11.3	6.9	15.4	13.7	7.1	45.6	0.0	100.0	387
Marital status									
Never married	7.9	6.4	22.3	14.6	10.1	36.2	2.4	100.0	958
Married	7.7	5.9	22.6	18.9	10.1	34.6	0.2	100.0	2,579
Divorced/separated/widowed	(3.5)	(3.1)	(9.1)	(19.2)	(24.3)	(40.8)	(0.0)	100.0	56
Number of living children									
0	7.4	6.5	22.8	14.9	10.1	36.2	2.0	100.0	1,263
1-2	10.7	5.7	26.4	18.2	11.2	27.5	0.2	100.0	1,202
3-4	5.6	6.4	19.4	21.2	8.7	38.6	0.0	100.0	832
5+	2.8	3.7	11.4	18.2	12.1	51.9	0.0	100.0	296
Residence									
Urban	14.4	9.8	35.5	19.5	9.3	10.2	1.3	100.0	590
Rural	6.4	5.2	19.7	17.4	10.5	40.0	0.7	100.0	3,003
Ecological zone									
Mountain	6.3	3.7	12.0	8.4	10.4	58.9	0.3	100.0	237
Hill	9.6	6.2	20.7	16.7	7.6	38.6	0.7	100.0	1,469
Terai	6.4	6.1	24.8	19.8	12.5	29.4	1.0	100.0	1,887
Development region									
Eastern	7.9	4.8	26.4	16.2	7.4	35.1	2.1	100.0	895
Central	7.7	8.1	22.8	18.4	11.9	30.5	0.6	100.0	1,267
Western	9.3	5.4	23.4	20.5	11.1	30.0	0.2	100.0	652
Mid-western	5.7	3.2	18.3	16.7	13.5	42.6	0.0	100.0	442
Far-western	6.7	6.1	12.6	15.4	6.6	52.5	0.1	100.0	338
Subregion									
Eastern mountain	6.8	4.1	8.7	5.8	7.9	65.5	1.2	100.0	65
Central mountain	8.5	5.6	14.1	7.9	12.9	51.0	0.0	100.0	65
Western mountain	4.7	2.3	12.7	10.3	10.3	59.6	0.0	100.0	107
Eastern hill	4.2	0.7	21.4	12.1	3.5	56.1	2.0	100.0	284
Central hill	14.2	11.8	25.8	17.1	8.9	21.5	0.8	100.0	535
Western hill	8.4	4.1	18.1	22.3	6.5	40.6	0.0	100.0	362
Mid-western hill	8.7	1.9	17.4	14.2	12.2	45.6	0.0	100.0	172
Far-western hill	6.2	6.7	8.8	12.0	7.7	58.5	0.0	100.0	117
Eastern terai	10.0	7.0	31.1	19.6	9.4	20.7	2.2	100.0	546
Central terai	2.4	5.3	21.2	20.5	14.2	35.7	0.6	100.0	667
Western terai	10.5	7.1	30.1	18.1	16.8	16.8	0.5	100.0	290
Mid-western terai	4.7	5.1	20.2	20.5	13.6	35.9	0.0	100.0	209
Far-western terai	6.1	5.9	15.6	19.3	7.1	45.8	0.1	100.0	175
Education									
No education	0.5	5.7	6.7	19.0	22.5	45.7	0.0	100.0	561
Primary	0.6	5.8	12.3	25.7	13.6	41.5	0.6	100.0	789
Some secondary	2.6	5.1	23.5	19.7	9.0	39.4	0.9	100.0	1,176
SLC and above	22.4	7.3	36.6	9.2	3.1	20.2	1.3	100.0	1,068
Wealth quintile									
Lowest	0.9	1.4	4.1	14.1	14.9	64.6	0.1	100.0	586
Second	3.7	5.5	7.6	15.5	13.5	54.1	0.1	100.0	629
Middle	3.2	5.2	17.1	25.3	12.3	35.7	1.2	100.0	748
Fourth	7.6	6.8	27.2	22.2	9.7	25.6	1.0	100.0	771
Highest	19.3	9.4	45.6	11.5	3.8	9.2	1.2	100.0	859
Total 15-49	7.7	6.0	22.3	17.8	10.3	35.1	0.8	100.0	3,593

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

The relationship between occupation and age is mixed. One notable finding is that relatively high percentages of women age 25-29 and 30-34 (15 percent) and men age 20-24, 30-34, and 35-39 (27 percent each) are employed in sales and services. In addition, 8 percent of women age 20-24 are employed in professional, technical, and managerial positions, indicating a gradual shift in occupation among the younger generation.

Residence has a significant effect on type of occupation. As expected, a high proportion of respondents in rural areas—80 percent of employed women and 40 percent of employed men—are engaged in agricultural work. Urban women and men (33 percent and 36 percent, respectively) are more likely to be engaged in sales and services than in other occupations.

Women in the mountain zone and those in the Far-western region are more likely to be involved in agriculture (88 percent and 84 percent, respectively). However, since 2006 employment in agriculture has

declined by 6 percent and 12 percent in these regions, respectively, with a shift to other occupations. A similar pattern is observed among men. The lowest proportion of women engaged in the agricultural sector live in the Central hill subregion, and the lowest proportion of men in this sector live in the Western terai region.

There is a positive relationship between women's education and their involvement in sales and services. For example, one-fourth of women with an SLC and higher level of education are involved in this sector, as compared with 15 percent of women or less in the other education categories. A similar pattern is found among men. This is probably because both women and men with no education have few employment opportunities except in the agricultural sector, in contrast to educated women and men, who find it easier to obtain employment in the nonagricultural sector. Almost all employed women (96 percent) in the lowest wealth quintile work in agriculture, whereas only 27 percent of women in the highest wealth quintile do so. Agricultural work is also less common among men with an SLC or higher and men in the highest wealth quintile.

There has been an increase since 2006 in the proportion of individuals involved in the nonagricultural sector, from 14 percent to 25 percent among women and from 48 percent to 64 percent among men. This is partly due to urbanization and partly due to greater opportunities in the nonagricultural sector.

3.5.3 Earnings, Employers, and Continuity of Employment

Tables 3.10.1 and 3.10.2 show the percent distribution of women and men by type of earnings and employment characteristics. These tables also present data on whether respondents are involved in agricultural or nonagricultural occupations.

More than three-quarters (76 percent) of women engaged in agricultural work are unpaid, and women working in this sector are most likely to be employed by family members. Ten percent of women employed in the agricultural sector are paid in-kind only. Women are more likely to be paid in cash if they are employed in the nonagricultural sector: 80 percent of women employed in this sector are paid in cash, compared with 13 percent of women who are employed in agriculture (including cash and in-kind).

Table 3.10.1 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Nepal 2011

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	5.9	80.0	24.3
Cash and in-kind	7.3	3.4	6.3
In-kind only	10.4	0.7	8.0
Not paid	76.4	15.9	61.4
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	82.8	26.0	68.7
Employed by nonfamily member	14.6	42.4	21.5
Self-employed	2.6	31.6	9.8
Total	100.0	100.0	100.0
Continuity of employment			
All year	45.8	77.8	53.8
Seasonal	47.4	8.6	37.7
Occasional	6.8	13.5	8.5
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	7,172	2,375	9,548

Note: Total includes one woman with missing information on type of employment who is not shown separately.

Table 3.10.2 Type of employment: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Nepal 2011

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	11.7	92.0	63.8
Cash and in-kind	27.4	4.5	12.6
In-kind only	18.2	0.4	6.7
Not paid	42.7	3.0	17.0
Total	100.0	100.0	100.0
Continuity of employment			
All year	40.6	76.4	63.9
Seasonal	51.2	16.4	28.6
Occasional	8.2	7.2	7.5
Total	100.0	100.0	100.0
Number of men employed during the last 12 months	1,262	2,331	3,593

Overall, 61 percent of employed women are not paid at all, while 31 percent earn cash or cash and in-kind payment for their work. In contrast, 17 percent of employed men are unpaid (Table 3.10.2). Forty-three percent of men who work in agriculture are unpaid, as compared with 3 percent who work in the nonagricultural sector.

Sixty-nine percent of women work for a family member and 10 percent are self-employed. Twenty-two percent of employed women work for someone outside the family. More than four in five women employed in the agricultural sector are working for a family member, compared with 26 percent of women employed in the nonagricultural sector. The proportion of women employed by someone outside the family is higher among those working in the nonagricultural sector than among those in the agricultural sector (42 percent versus 15 percent). Only 3 percent of employed women working in the agricultural sector are self-employed, compared with 32 percent in the nonagricultural sector.

3.6 USE OF TOBACCO

Smoking and other forms of tobacco use can cause a wide variety of diseases and can lead to death. Smoking is a risk factor for cardiovascular disease, lung cancer, and other forms of cancer, and it contributes to the severity of pneumonia, emphysema, and chronic bronchitis symptoms. Also, secondhand smoke may adversely affect the health of children and aggravate childhood illnesses.

In the 2011 NDHS, women and men age 15-49 were asked whether they currently smoked cigarettes and, if so, how many cigarettes they had smoked in the past 24 hours. Those who reported not currently smoking cigarettes were asked whether they use any other forms of tobacco, such as a pipe, chewing tobacco, or snuff. Tables 3.11.1 and 3.11.2 show the percentage of women and men who smoke cigarettes or use other tobacco products according to background characteristics. Table 3.11.2 also shows the percent distribution of male cigarette smokers by number of cigarettes smoked in the preceding 24 hours.

Table 3.11.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke cigarettes or a pipe or use other tobacco products, according to background characteristics and maternity status, Nepal 2011

Background characteristic	Uses tobacco			Does not use tobacco	Number of women
	Cigarettes	Pipe	Other tobacco		
Age					
15-19	0.5	0.0	0.7	98.7	2,753
20-24	1.9	0.3	1.7	96.5	2,297
25-29	5.7	0.4	5.5	89.7	2,101
30-34	9.4	1.1	6.8	85.1	1,734
35-39	15.5	1.2	9.9	77.3	1,557
40-44	22.2	1.4	13.6	68.3	1,285
45-49	24.9	1.9	15.1	64.6	947
Maternity status					
Pregnant	5.0	0.9	4.1	91.6	621
Breastfeeding (not pregnant)	6.8	0.9	6.2	88.1	2,859
Neither	9.6	0.6	6.1	85.9	9,193
Residence					
Urban	4.6	0.1	2.7	93.3	1,819
Rural	9.4	0.8	6.6	85.6	10,855
Ecological zone					
Mountain	18.2	4.1	7.1	76.1	805
Hill	11.0	0.8	7.8	83.4	5,090
Terai	5.9	0.2	4.5	90.4	6,779
Development region					
Eastern	5.0	0.0	9.3	87.2	3,057
Central	9.4	0.4	4.0	88.0	4,236
Western	7.2	0.1	5.9	88.2	2,660
Mid-western	15.6	4.5	6.6	79.6	1,478
Far-western	10.5	0.4	4.4	86.4	1,242
Subregion					
Eastern mountain	7.7	0.0	9.4	85.7	229
Central mountain	22.0	2.4	9.8	75.0	258
Western mountain	22.8	8.3	3.3	70.0	319
Eastern hill	7.4	0.0	18.3	77.7	956
Central hill	11.9	0.3	3.2	86.6	1,563
Western hill	8.8	0.1	6.2	86.1	1,513
Mid-western hill	17.5	5.2	10.9	77.0	649
Far-western hill	13.7	0.1	1.8	84.5	409
Eastern terai	3.4	0.0	4.7	92.2	1,873
Central terai	6.5	0.2	3.9	90.3	2,415
Western terai	5.1	0.0	5.5	90.9	1,147
Mid-western terai	11.2	0.9	3.7	86.0	668
Far-western terai	6.6	0.7	5.7	89.8	676
Education					
No education	17.9	1.7	10.8	74.5	5,045
Primary	7.1	0.1	6.8	86.9	2,209
Some secondary	1.4	0.0	2.0	96.7	3,088
SLC and above	0.1	0.0	0.2	99.6	2,331
Wealth quintile					
Lowest	20.1	3.0	14.4	69.6	2,120
Second	11.6	0.6	7.5	83.1	2,393
Middle	7.0	0.4	5.0	88.8	2,600
Fourth	5.2	0.0	4.0	91.5	2,722
Highest	2.7	0.0	1.4	96.0	2,839
Total	8.7	0.7	6.0	86.7	12,674

SLC = School Leaving Certificate

Table 3.11.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or a pipe or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in preceding 24 hours, according to background characteristics, Nepal 2011

Background characteristic	Uses tobacco			Does not use tobacco	Number of men	Percent distribution of men who smoke cigarettes by number of cigarettes smoked in the last 24 hours					Total	Number of cigarette smokers
	Cigarettes	Pipe	Other tobacco			0	1-2	3-5	6-9	10+		
Age												
15-19	13.1	0.1	11.0	80.2	978	11.3	33.6	25.6	16.9	12.5	100.0	128
20-24	26.5	0.3	28.8	56.2	685	8.4	32.7	26.6	9.7	22.5	100.0	182
25-29	36.4	0.3	50.1	35.7	581	10.2	30.3	29.5	10.7	19.3	100.0	212
30-34	32.0	0.6	50.6	35.8	499	8.5	24.7	30.2	12.2	24.4	100.0	160
35-39	33.0	0.7	55.3	31.5	542	12.7	19.2	30.0	8.2	29.9	100.0	178
40-44	42.5	0.9	51.5	30.8	438	7.6	17.9	26.9	20.0	27.7	100.0	186
45-49	46.0	0.9	47.5	30.1	399	4.9	19.0	29.9	13.1	33.2	100.0	184
Residence												
Urban	25.0	0.0	30.3	55.7	717	8.8	26.6	31.0	12.8	20.7	100.0	180
Rural	30.8	0.5	39.6	46.4	3,404	9.0	24.8	28.1	12.8	25.3	100.0	1,049
Ecological zone												
Mountain	40.4	4.6	28.1	46.6	245	5.3	10.9	25.1	11.6	47.2	100.0	99
Hill	29.1	0.4	31.3	51.7	1,658	5.3	19.1	28.4	17.8	29.4	100.0	482
Terai	29.2	0.0	44.0	45.5	2,218	12.3	31.7	29.1	9.3	17.6	100.0	648
Development region												
Eastern	29.5	0.2	38.5	48.3	996	11.1	21.5	33.4	11.5	22.5	100.0	294
Central	32.0	0.0	36.9	46.4	1,448	10.7	28.0	22.4	14.2	24.7	100.0	463
Western	23.4	0.0	39.1	50.8	798	9.9	24.0	29.0	18.9	18.2	100.0	187
Mid-western	34.8	2.9	37.6	46.3	493	1.4	21.7	33.1	10.0	33.8	100.0	171
Far-western	29.6	0.5	38.3	50.2	385	6.6	29.5	33.1	4.5	26.3	100.0	114
Subregion												
Eastern mountain	30.5	1.0	27.3	54.0	66	14.2	17.6	26.5	15.9	25.8	100.0	20
Central mountain	35.1	0.6	28.3	48.0	69	3.4	6.8	13.6	19.5	56.7	100.0	24
Western mountain	49.5	9.2	28.4	41.3	110	2.8	10.2	29.6	6.5	50.9	100.0	54
Eastern hill	31.0	0.3	36.1	46.9	293	6.6	22.1	31.6	15.8	23.9	100.0	91
Central hill	33.3	0.0	21.5	56.0	616	5.5	14.8	26.3	19.3	34.0	100.0	205
Western hill	21.8	0.0	37.3	51.0	440	6.1	22.4	28.0	19.9	23.5	100.0	96
Mid-western hill	29.2	3.0	37.1	48.9	189	1.5	18.5	35.6	14.7	29.8	100.0	55
Far-western hill	29.2	0.5	38.8	48.7	120	5.1	28.5	21.2	12.5	32.7	100.0	35
Eastern terai	28.7	0.0	40.7	48.4	638	13.0	21.7	35.0	8.9	21.4	100.0	183
Central terai	30.6	0.0	50.2	38.5	763	15.9	41.8	19.8	9.2	13.3	100.0	234
Western terai	25.4	0.0	41.2	50.6	358	13.9	25.6	30.0	17.9	12.6	100.0	91
Mid-western terai	35.9	0.1	40.1	45.7	242	1.9	29.9	31.0	6.9	30.2	100.0	87
Far-western terai	24.7	0.0	40.5	52.9	217	7.7	35.6	45.2	0.5	11.0	100.0	54
Education												
No education	50.4	1.0	60.8	19.9	567	7.5	29.1	24.2	11.7	27.6	100.0	286
Primary	40.4	0.7	52.3	30.5	814	4.6	18.1	32.4	16.3	28.7	100.0	329
Some secondary	26.4	0.4	34.1	54.5	1,437	12.4	25.2	29.4	11.5	21.5	100.0	379
SLC and above	18.1	0.2	23.3	64.1	1,303	11.5	30.0	27.0	11.2	20.3	100.0	236
Wealth quintile												
Lowest	39.0	2.2	45.6	35.3	610	2.2	21.7	25.9	16.1	34.2	100.0	238
Second	34.2	0.6	41.8	44.0	695	8.7	19.6	31.9	15.0	24.8	100.0	237
Middle	32.8	0.2	47.8	40.7	830	13.3	29.7	26.0	10.6	20.4	100.0	272
Fourth	25.0	0.0	34.4	54.1	920	8.9	30.1	32.8	8.9	19.3	100.0	230
Highest	23.7	0.0	26.3	58.5	1,066	11.2	24.0	26.5	13.6	24.8	100.0	252
Total 15-49	29.8	0.5	37.9	48.1	4,121	9.0	25.1	28.5	12.8	24.6	100.0	1,229

SLC = School Leaving Certificate

Tobacco use is more common among Nepalese men than women (52 percent compared with 13 percent). Thirty percent of men smoke cigarettes, while 38 percent consume other forms of tobacco. The other forms of tobacco include smokeless tobacco, mainly the chewing tobacco locally known as *khaini*, *gutcha*, or *zarda*. Among women, 9 percent smoke cigarettes and 6 percent consume other forms of tobacco. Among men, use of tobacco is more common among older men, those living in rural areas, those with no education, and those in the lowest wealth quintile. A similar pattern is observed among women. Five percent of pregnant women and 7 percent of breastfeeding women smoke cigarettes. Additionally, 4 percent of pregnant women and 6 percent of breastfeeding women consume other forms of tobacco.

Men and women living in the mountain zone are more likely to smoke cigarettes than those in the hill or terai zone. Regional variations are notable, with smoking among men being highest in the Mid-western region (35 percent) and lowest in the Western region (23 percent). Regional and subregional variations are also common among women. For example, nearly one-fourth (23 percent) of women in the Western mountain subregion smoke cigarettes, compared with about 3 percent in the Eastern terai subregion.

Among men who smoke cigarettes, 9 percent had not smoked a cigarette in the last 24 hours, 25 percent had smoked 1-2 cigarettes, 29 percent had smoked 3-5 cigarettes, 13 percent had smoked 6-9 cigarettes, and 25 percent had smoked 10 or more cigarettes. Among women who smoke, 24 percent had smoked more than 10 cigarettes in the 24 hours before the survey (data not shown).

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings:

- There is clear evidence of a rising age at marriage among women and men in Nepal.
- The percentage of never-married women and men has increased in the past 10 years. Among women age 15-19, this proportion has grown from 60 percent in 2001 to 71 percent in 2011; among men in the same age group, it has increased from 89 percent to 93 percent.
- The percentage of women married by age 15 declines from 24 percent among those age 45-49 to 5 percent among those age 15-19. A similar trend is seen among men.
- Nepalese men marry four years later than women. The median age at first marriage among women age 25-49 is 17.5 years, and the median age among men is 21.6 years.
- Nepalese women generally initiate sexual intercourse at the time of their first marriage. In contrast, men initiate intercourse a year earlier than their first marriage.

This chapter discusses the principal factors other than contraception that affect women's chances of becoming pregnant. These factors include marriage and sexual activity. Marriage signals the onset of exposure to the risk of pregnancy for most women, and thus it is an important fertility indicator. In the context of the 2011 NDHS, marriage also includes living with partners in a consensual but informal union. In addition, this chapter includes information on more direct measures of the beginning of exposure to pregnancy and level of exposure, for example, age at first sexual intercourse and frequency of recent sexual intercourse.

4.1 CURRENT MARITAL STATUS

Table 4.1 shows current marital status by age and sex. Seventy-six percent of women and 64 percent of men age 15-49 are currently married. A higher proportion of men (35 percent) than women (21 percent) have never been married. In combination, divorce, separation, and widowhood are almost twice as high among women as among men (3 percent and less than 2 percent, respectively).

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Nepal 2011

Age	Marital status					Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Divorced	Separated	Widowed			
				WOMEN				
15-19	71.0	28.8	0.0	0.2	0.0	100.0	28.8	2,753
20-24	22.6	76.6	0.1	0.3	0.2	100.0	76.6	2,297
25-29	7.0	91.1	0.2	0.6	1.2	100.0	91.1	2,101
30-34	2.0	95.7	0.1	0.6	1.6	100.0	95.7	1,734
35-39	1.4	93.8	0.1	1.0	3.6	100.0	93.8	1,557
40-44	1.2	92.6	0.1	1.0	5.0	100.0	92.6	1,285
45-49	1.3	87.9	0.2	2.3	8.3	100.0	87.9	947
Total 15-49	21.4	75.8	0.1	0.7	2.0	100.0	75.8	12,674
				MEN				
15-19	92.9	6.9	0.0	0.2	0.0	100.0	6.9	978
20-24	54.4	44.7	0.2	0.7	0.0	100.0	44.7	685
25-29	17.3	81.0	0.4	1.1	0.2	100.0	81.0	581
30-34	6.4	91.9	1.5	0.0	0.1	100.0	91.9	499
35-39	2.4	95.3	0.3	0.9	1.1	100.0	95.3	542
40-44	1.4	96.6	0.6	0.2	1.2	100.0	96.6	438
45-49	0.2	96.3	0.0	1.1	2.4	100.0	96.3	399
Total 15-49	34.8	63.7	0.4	0.6	0.5	100.0	63.7	4,121

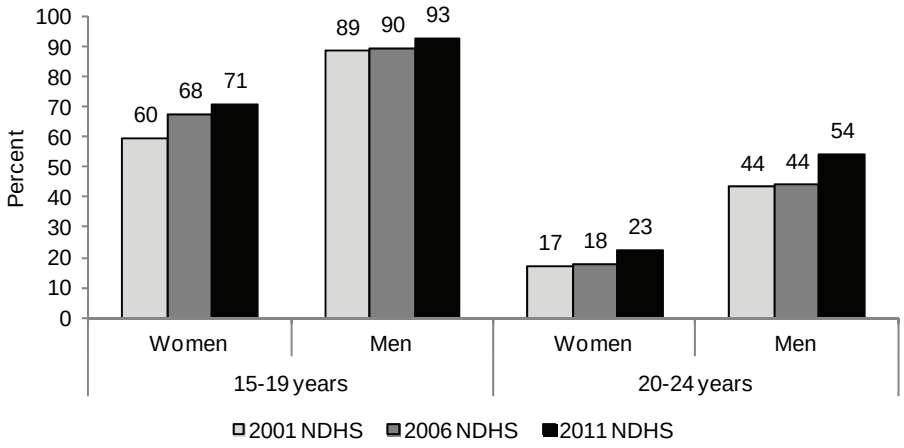
The results further show that more teenage girls age 15-19 (29 percent) are in formal marriage than teenage boys (7 percent). The proportion of married women increases rapidly from 29 percent among women age 15-19 to 77 percent among those age 20-24 and more than 90 percent among women age 25-44. A slightly

lower percentage of women age 45-49 are in a union, primarily due to widowhood at older ages. Among men, the percentage married also rapidly increases from 7 percent in the youngest age group to 45 percent among those age 20-24 and 81 percent among those age 25-29; marriage is nearly universal among those age 30 and above.

The proportion never married decreases sharply with age for both women and men. Among women, the proportion decreases from 71 percent in the 15-19 age group to less than 2 percent among those age 35 or above; among men, it decreases from 93 percent in the 15-19 age group to less than 2 percent in the 40-49 age group.

The proportion never married has increased gradually over time, from 18 percent in 2001 to 21 percent in 2011 among women and from 32 percent in 2001 to 35 percent in 2011 among men. Figure 4.1 shows the trend in proportion never married for women and men age 15-19 and 20-24. Among women age 15-19 the proportion never married increased from 60 percent in 2001 to 71 percent in 2011 and for men it increased from 89 percent to 93 percent. A similar trend can be seen for women and men in the 20-24 age group.

Figure 4.1 **Trend in Proportion Never Married among Women and Men 15-24 Years**



4.2 POLYGYNY

Marital unions are predominantly of two types, those that are monogamous and those that are polygynous. The distinction has social significance and probable fertility implications, although the association between union type and fertility is complex and not well understood. Polygyny, the practice of having more than one wife, has connotations for the frequency of sexual intercourse and thus may have an effect on fertility. The extent of polygyny was measured in the 2011 NDHS by asking all currently married female respondents whether their husband or partner had other wives (co-wives) and, if so, how many. Currently married men were also asked whether they had one or more wives or partners with whom they were living.

Table 4.2 shows the percent distribution of currently married women with co-wives and the percentage of currently married men with two or more wives. The data show that the majority of Nepalese women and men are in monogamous unions. Four percent of married women and 2 percent of married men are in polygynous unions. At least 6 percent of women age 35 or above report that they have co-wives. In contrast, less than 1 percent of men age 20-39 report having more than one wife, with this percentage rising to 2 percent among men age 40-44 and 5 percent among men age 45-49.

Polygyny is more practiced in the hill zone, with 5 percent of women and 2 percent of men reporting being in a polygynous union. Polygyny is highest in the Eastern hill subregion (6 percent of women and 3 percent of men). Education is negatively associated with polygyny, with the proportion of women in a

polygynous union decreasing from 6 percent among those with no education to 1 percent among those with a School Leaving Certificate (SLC) or above. There are no notable differences among men by education.

Although the proportion of currently married women in a polygynous union declined between 1996 and 2001 (from 6 percent to 4 percent), there has been little change in the last decade. The proportion of currently married men who have more than one wife also has changed only minimally during the past 10 years.

Table 4.2 Number of co-wives and wives

Percentage of currently married women age 15-49 with co-wives and percentage of currently married men age 15-49 with two or more wives, according to background characteristics, Nepal 2011

	Women		Men	
Background characteristic	Percentage with co-wives	Number of women	Percentage with 2+ wives	Number of men
Age				
15-19	1.1	792	0.0	67
20-24	2.3	1,761	0.9	306
25-29	3.0	1,914	0.6	471
30-34	3.3	1,659	0.9	459
35-39	6.0	1,461	0.6	516
40-44	6.5	1,190	2.4	423
45-49	6.6	832	5.2	384
Residence				
Urban	3.6	1,261	1.4	425
Rural	4.0	8,346	1.7	2,201
Ecological zone				
Mountain	3.9	630	0.5	179
Hill	4.7	3,784	2.2	1,057
Terai	3.4	5,193	1.4	1,390
Development region				
Eastern	3.6	2,293	0.9	607
Central	4.0	3,210	2.3	950
Western	4.2	2,031	1.8	482
Mid-western	4.5	1,149	1.3	340
Far-western	3.8	925	1.2	247
Subregion				
Eastern mountain	3.1	169	0.8	42
Central mountain	4.1	190	0.0	50
Western mountain	4.3	271	0.6	87
Eastern hill	6.3	702	2.8	191
Central hill	4.8	1,103	2.3	385
Western hill	4.7	1,164	1.9	270
Mid-western hill	3.8	510	1.4	133
Far-western hill	2.6	305	2.3	77
Eastern terai	2.2	1,421	0.0	374
Central terai	3.5	1,918	2.4	515
Western terai	3.6	867	1.7	211
Mid-western terai	5.3	499	1.4	157
Far-western terai	4.4	488	0.9	133
Education				
No education	5.5	4,580	1.4	504
Primary	3.5	1,844	1.9	640
Some secondary	2.9	1,833	2.1	799
SLC and above	0.9	1,350	1.1	684
Wealth quintile				
Lowest	4.6	1,664	0.9	439
Second	3.8	1,846	1.7	452
Middle	4.6	2,022	1.5	569
Fourth	3.8	2,052	2.5	541
Highest	3.2	2,023	1.6	626
Total	4.0	9,608	1.7	2,626

SLC = School Leaving Certificate

4.3 AGE AT FIRST MARRIAGE

Whether or not the start of marriage coincides with the initiation of sexual intercourse, and thus the beginning of exposure to the risk of pregnancy, it is an important social and demographic indicator and, in most societies, represents the point in a person's life when childbearing first becomes acceptable. Duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry early, on average, are more likely to have their first child at a young age and give birth to more children overall, contributing to higher fertility.

Table 4.3 shows the percentage of women and men who have married by specific ages, according to current age. Age at first marriage is defined as the age at which the respondent began living with her or his first spouse/partner. Marriage occurs relatively early in Nepal; among women age 25-49, 55 percent were married by age 18, and 74 percent were married by age 20. The median age at first marriage among women age 25-49 is 17.5 years. The proportion of women married by age 15 declines from 24 percent among those age 45-49 to 5 percent among those age 15-19 indicating clear evidence of a rising age at first marriage.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Nepal 2011

	Percentage first married by exact age:					Percentage never	Number of	Median age at first
Current age	15	18	20	22	25	married	respondents	marriage
				WOMEN				
15-19	5.0	na	na	na	na	71.0	2,753	a
20-24	10.1	40.7	59.8	na	na	22.6	2,297	18.9
25-29	15.3	50.9	69.2	80.4	89.7	7.0	2,101	17.9
30-34	16.6	55.1	73.5	84.7	93.0	2.0	1,734	17.6
35-39	18.7	56.5	74.4	86.4	95.4	1.4	1,557	17.4
40-44	19.5	59.4	78.1	87.4	95.5	1.2	1,285	17.2
45-49	23.5	58.7	76.7	87.2	95.0	1.3	947	17.2
20-49	16.2	52.0	70.5	na	na	7.6	9,921	17.8
25-49	18.0	55.4	73.7	84.6	93.2	3.1	7,624	17.5
				MEN				
15-19	0.0	na	na	na	na	92.9	978	a
20-24	0.0	11.1	23.7	na	na	54.4	685	a
25-29	0.0	17.1	33.8	49.5	70.3	17.3	581	22.1
30-34	0.0	19.5	37.7	50.5	66.9	6.4	499	21.9
35-39	0.0	16.7	36.3	53.2	73.4	2.4	542	21.6
40-44	0.0	20.5	39.2	56.6	76.8	1.4	438	21.0
45-49	0.1	23.0	37.5	55.2	79.7	0.2	399	21.3
20-49	0.0	17.3	33.9	na	na	16.7	3,143	a
25-49	0.0	19.1	36.7	52.7	73.0	6.2	2,458	21.6

Note: Age at first marriage is defined as the age at which the respondent began living with her/his first spouse or partner.
na = Not applicable due to censoring
a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Men in Nepal marry more than four years later than women. The median age at first marriage among men age 25-49 is 21.6 years. Thirty-four percent of men age 25-29 were married by age 20, compared with 69 percent of women in the same age group. Only 11 percent of men age 20-24 were married by age 18, as compared with 41 percent of women in the same age group. By age 25, 80 percent of men age 45-49 are married, compared with 95 percent of women.

4.4 MEDIAN AGE AT FIRST MARRIAGE

Table 4.4 shows the median age at first marriage for women age 20-49, women age 25-49, and men age 25-49 according to background characteristics.

Urban women age 25-49 marry one year later than rural women, and women from the hill zone marry about one year later than women from the terai and mountain zones. Similarly, there is a two-year difference in median age at marriage between women age 25-49 living in the Eastern development region (18.7 years) and women living in the Far-western region (16.6 years). There is a three-year difference in median age at first marriage between women age 25-49 living in the Central terai (16.1 years) and women living in the Eastern hill subregion (19.3 years). A positive association is seen between median age at first marriage and level of education. Women with an SLC and higher education marry five years later than those with no education (21.8 years and 16.6 years, respectively). In addition, women from the highest wealth quintile marry about two years later than those from the other quintiles. Education and wealth clearly are delaying factors for age at first marriage.

A similar pattern is seen among men age 25-49. Urban men marry two years later than rural men. Men from the hill zone marry one year later than men from the terai and mountain zones. Men in the Eastern region marry nearly three years later than men in the Far-western and Mid-western regions. Median age at first marriage among men living in the Far-western hill subregion is three years earlier than among men in the Central hill subregion.

Education and wealth quintile have the same association on age at first marriage for men as for women.

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-49, according to background characteristics, Nepal 2011

Background characteristic	Women age: 20-49	Women age: 25-49	Men age 25-49
Residence			
Urban	19.0	18.5	23.6
Rural	17.7	17.4	21.2
Ecological zone			
Mountain	17.5	17.4	21.0
Hill	18.4	18.0	22.2
Terai	17.5	17.2	21.3
Development region			
Eastern	18.9	18.7	22.6
Central	17.4	17.0	22.0
Western	17.9	17.7	21.7
Mid-western	17.2	17.1	20.2
Far-western	17.0	16.6	20.1
Subregion			
Eastern mountain	19.1	19.2	22.3
Central mountain	17.7	17.4	20.3
Western mountain	16.4	16.3	20.6
Eastern hill	19.5	19.3	22.3
Central hill	19.4	18.8	23.2
Western hill	18.0	17.8	22.4
Mid-western hill	17.0	16.9	20.3
Far-western hill	16.7	16.5	19.9
Eastern terai	18.6	18.3	22.8
Central terai	16.5	16.1	21.0
Western terai	17.9	17.5	21.0
Mid-western terai	17.5	17.3	20.1
Far-western terai	17.4	16.9	20.1
Education			
No education	16.6	16.6	20.1
Primary	17.4	17.3	20.5
Some secondary	18.5	18.5	21.1
SLC and above	a	21.8	a
Wealth quintile			
Lowest	17.0	17.0	20.4
Second	17.2	17.1	20.3
Middle	17.2	17.0	20.3
Fourth	17.9	17.5	21.9
Highest	19.7	19.1	24.6
Total	17.8	17.5	21.6

Note: Age at first marriage is defined as the age at which the respondent began living with her or his first spouse or partner.
a = Omitted because less than 50 percent of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group
SLC = School Leaving Certificate

There has been a marked increase in median age at marriage among women age 20-49 over the last 15 years, from 16.4 years in 1996 to 17.8 years in 2011. In case of men age 25-49, the median age at marriage increased over the last 5 years, from 20.2 years in 2006 to 21.6 years in 2011. This is another clear indication of a continuing shift to later marriage in Nepal for both men and women.

4.5 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is often used as a proxy for the onset of women's exposure to the risk of pregnancy. However, because some women are sexually active before marriage, the age at which women initiate sexual intercourse more precisely marks the beginning of their exposure to pregnancy. Table 4.5 shows the percentage of women and men who had first sexual intercourse by specific ages and the median age at first intercourse, irrespective of marital status. This information allows an assessment of the age at which women and men start having sexual intercourse and its trend across age cohorts.

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Nepal 2011

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had sexual intercourse	Number	Median age at first sexual intercourse
				WOMEN				
15-19	4.6	na	na	na	na	71.0	2,753	a
20-24	9.9	40.4	58.7	na	na	22.6	2,297	19.0
25-29	14.7	49.4	67.5	79.2	88.0	7.0	2,101	18.1
30-34	14.4	53.0	71.8	82.7	91.1	2.0	1,734	17.7
35-39	17.0	55.4	73.1	84.8	93.6	1.5	1,557	17.5
40-44	17.1	57.0	75.7	84.7	92.3	1.3	1,285	17.4
45-49	21.1	57.4	75.8	85.8	93.9	1.3	947	17.4
20-49	14.8	50.6	68.9	na	na	7.6	9,921	17.9
25-49	16.3	53.7	72.0	na	na	3.1	7,624	17.7
15-24	7.0	na	na	na	na	49.0	5,050	a
				MEN				
15-19	3.7	na	na	na	na	79.3	978	a
20-24	2.2	22.2	43.6	na	na	32.4	685	a
25-29	2.1	25.0	44.5	62.0	81.2	9.2	581	20.6
30-34	3.0	27.0	49.4	60.7	76.4	2.9	499	20.1
35-39	2.2	24.2	45.0	58.7	76.4	2.0	542	20.7
40-44	2.5	25.8	44.1	62.1	77.2	1.4	438	20.6
45-49	1.5	24.0	41.9	58.2	79.5	0.1	399	20.8
20-49	2.2	24.6	44.8	na	na	9.8	3,143	a
25-49	2.3	25.2	45.1	na	na	3.5	2,458	20.5
15-24	3.1	na	na	na	na	59.9	1,663	a

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Sixteen percent of women age 25-49 had first sexual intercourse by age 15, 54 percent by age 18, and 72 percent by age 20. The median age at first intercourse among women age 25-49 (17.7 years) is only marginally higher than the median age at marriage (17.5 years), suggesting that Nepalese women in general initiate sexual intercourse at the time of their first marriage, with few exceptions.

The median age at first sexual intercourse among men age 25-49 (20.5 years) is three years higher than among women in the same group (17.7 years), mostly because men tend to marry later than women. Two percent of men age 25-49 had first sexual intercourse by age 15, 25 percent by age 18, and 45 percent by age 20, much later than among women age 25-49. The median age at first sexual intercourse among men age 25-49 is one year earlier than the median age at marriage, suggesting premarital sexual intercourse among men. Furthermore, the data show that 3 percent of women and 4 percent of men age 25-49 have never had sexual intercourse. It is noteworthy that half of women and three-fifths of men age 15-24 have not had sexual intercourse.

4.6 MEDIAN AGE AT FIRST SEXUAL INTERCOURSE

Table 4.6 shows median age at first sexual intercourse among women and men age 25-49 by background characteristics. The variation in the median age at first sexual intercourse among women according to background characteristics is nearly identical to the variation in the median age at first marriage, and therefore it is not discussed separately here.

For the most part, differences in the median age at first sexual intercourse among men age 25-49 by background characteristics are similar to those discussed for median age at first marriage. However, it is worth noting that the differences in median age at sexual intercourse by development region and subregion are substantial. Men in the Mid-western region (19.0 years) commence sexual intercourse 2.7 years earlier than men in the Eastern region (21.7 years), two years earlier than men in the Central region (20.9 years) and one year earlier than men in the Western (20.2 years) and Far-western (19.9 years) regions. Men residing in the Western mountain subregion (19.2 years) initiate sexual intercourse three years earlier than men in the Eastern mountain (21.9 years) and Central hill (22.1 years) subregions. Men with an SLC or higher education initiate sexual intercourse about four years later than men with no education (23.2 years and 19.4 years, respectively). Similarly, men from the highest wealth quintile (22.8 years) initiate sexual intercourse about three years later than men from the lowest and second quintiles (19.6 years each).

Table 4.6 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 25-49, according to background characteristics, Nepal 2011

Background characteristic	Women age: 20-49	Women age: 25-49	Men age 25-49
Residence			
Urban	19.1	18.6	22.5
Rural	17.8	17.5	20.2
Ecological zone			
Mountain	17.6	17.5	20.1
Hill	18.5	18.2	21.0
Terai	17.6	17.3	20.3
Development region			
Eastern	19.0	18.9	21.7
Central	17.6	17.2	20.9
Western	18.0	17.8	20.2
Mid-western	17.4	17.3	19.0
Far-western	17.1	16.7	19.9
Subregion			
Eastern mountain	19.2	19.2	21.9
Central mountain	17.9	17.7	19.6
Western mountain	16.6	16.5	19.2
Eastern hill	19.5	19.3	21.4
Central hill	19.6	19.1	22.1
Western hill	18.1	17.9	20.7
Mid-western hill	17.2	17.1	19.2
Far-western hill	16.8	16.6	19.9
Eastern terai	18.7	18.6	21.9
Central terai	16.6	16.2	20.1
Western terai	17.9	17.6	19.6
Mid-western terai	17.7	17.5	18.8
Far-western terai	17.5	17.0	19.9
Education			
No education	16.7	16.7	19.4
Primary	17.5	17.5	19.7
Some secondary	18.6	18.6	20.1
SLC and above	a	21.8	23.2
Wealth quintile			
Lowest	17.2	17.1	19.6
Second	17.4	17.2	19.6
Middle	17.4	17.1	19.3
Fourth	18.1	17.7	20.9
Highest	19.8	19.3	22.8
Total	17.9	17.7	20.5

a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group
SLC = School Leaving Certificate

4.7 RECENT SEXUAL ACTIVITY

In the absence of contraception, the possibility of pregnancy is related to the frequency of sexual intercourse. Thus, information on intercourse is important for refining measurement of exposure to pregnancy. All women and men were asked how long ago their last sexual contact occurred. Tables 4.7.1 and 4.7.2 show the percent distribution of women and men age 15-49 by the timing of their last sexual intercourse, according to background characteristics.

Table 4.7.1 shows that half of women age 15-49 were sexually active during the four weeks preceding the survey. Eighteen percent had been sexually active in the 12 months preceding the survey, but not in the past month, and 12 percent had not been sexually active for one or more years. One in every five women (21 percent) has never had sexual intercourse. The percentage of women age 15-19 who reported never having had sexual intercourse increased from 68 percent in the 2006 NDHS to 71 percent in the 2011 NDHS.

The proportion of women who were sexually active in the four weeks preceding the survey increases with age; from 18 percent at age 15-19 to 68 percent by age 40-44, and then decreases to 59 percent at age 45-49. The majority of women age 15-19 have never had sexual intercourse, which is not surprising. Also as expected, practically all never-married women have never had sexual intercourse (99 percent). About two-thirds (65 percent) of women who are currently in a union were sexually active in the four weeks preceding the survey. Women married for less than 15 years were less likely to be sexually active in the four weeks preceding the survey than women married for longer periods. Women who have been married more than once were much more likely than women married just once to be sexually active in the four weeks preceding the survey.

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Nepal 2011

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of women
Age						
15-19	17.7	9.2	2.2	71.0	100.0	2,753
20-24	43.8	22.7	10.9	22.6	100.0	2,297
25-29	56.5	22.2	14.4	7.0	100.0	2,101
30-34	63.7	21.2	13.1	2.0	100.0	1,734
35-39	64.7	16.9	17.0	1.5	100.0	1,557
40-44	67.5	15.8	15.4	1.3	100.0	1,285
45-49	59.4	20.6	18.6	1.3	100.0	947
Marital status						
Never married	0.4	0.1	0.2	99.3	100.0	2,708
Married	64.6	23.4	11.9	0.1	100.0	9,608
Divorced/separated/widowed	0.3	6.5	92.3	0.9	100.0	358
Marital duration[2]						
0-4 years	60.3	29.6	9.5	0.6	100.0	1,975
5-9 years	59.9	25.4	14.6	0.0	100.0	1,722
10-14 years	60.3	24.8	14.9	0.0	100.0	1,593
15-19 years	69.4	19.1	11.5	0.0	100.0	1,423
20-24 years	70.0	16.7	13.3	0.0	100.0	1,144
25+ years	69.8	20.4	9.7	0.0	100.0	1,301
Married more than once	73.3	21.6	5.2	0.0	100.0	451
Residence						
Urban	49.4	14.7	8.5	27.4	100.0	1,819
Rural	49.0	18.4	12.2	20.3	100.0	10,855
Ecological zone						
Mountain	55.3	16.4	9.6	18.7	100.0	805
Hill	47.1	17.8	12.6	22.5	100.0	5,090
Terai	49.8	18.1	11.2	20.8	100.0	6,779
Development region						
Eastern	46.6	15.9	14.9	22.5	100.0	3,057
Central	53.1	16.1	9.0	21.7	100.0	4,236
Western	43.8	20.8	14.9	20.5	100.0	2,660
Mid-western	53.5	19.0	8.5	19.1	100.0	1,478
Far-western	47.5	21.6	9.4	21.6	100.0	1,242
Subregion						
Eastern mountain	46.1	14.8	15.1	24.1	100.0	229
Central mountain	49.4	18.0	8.6	24.0	100.0	258
Western mountain	66.7	16.3	6.5	10.5	100.0	319
Eastern hill	44.6	16.4	15.2	23.8	100.0	956
Central hill	53.7	10.7	8.7	26.8	100.0	1,563
Western hill	41.6	23.0	16.2	19.2	100.0	1,513
Mid-western hill	49.8	21.7	10.1	18.5	100.0	649
Far-western hill	44.1	23.4	11.7	20.8	100.0	409
Eastern terai	47.6	15.8	14.8	21.7	100.0	1,873
Central terai	53.1	19.4	9.3	18.2	100.0	2,415
Western terai	46.7	17.8	13.2	22.3	100.0	1,147
Mid-western terai	53.0	17.1	7.9	21.9	100.0	668
Far-western terai	45.9	21.6	8.1	24.3	100.0	676
Education						
No education	60.2	20.4	14.7	4.7	100.0	5,045
Primary	50.6	21.3	13.9	14.2	100.0	2,209
Some secondary	37.2	14.2	9.4	39.2	100.0	3,088
SLC and above	39.3	14.1	6.0	40.6	100.0	2,331
Wealth quintile						
Lowest	50.4	19.1	12.3	18.1	100.0	2,120
Second	48.6	20.1	11.2	20.0	100.0	2,393
Middle	48.5	20.1	12.0	19.5	100.0	2,600
Fourth	46.6	17.6	13.9	21.9	100.0	2,722
Highest	51.4	13.4	9.1	26.1	100.0	2,839
Total	49.1	17.9	11.7	21.4	100.0	12,674

[1] Excludes women who had sexual intercourse within the last four weeks
[2] Excludes women who are not currently married
SLC = School Leaving Certificate

The results show that there is no noticeable variation in sexual activity within the last four weeks preceding the survey by urban-rural residence. Recent sexual activity is relatively lower among women who live in the hill zone (47 percent) than women who live in the terai (50 percent) and mountain (55 percent) zones. Forty-four percent of women living in the Western region had recent sexual intercourse, compared with 54 percent in the Mid-western region and 53 percent in the Central region. Recent sexual intercourse is highest in the Western mountain subregion (67 percent) and lowest in the Western hill subregion (42 percent). Women

with no education (60 percent) are more likely to have been sexually active in the past four weeks than those with a primary education (51 percent). Women with some secondary education and an SLC and higher education are least likely to have been sexually active in the past four weeks (37 percent and 39 percent, respectively).

More than half (57 percent) of men age 15-49 were sexually active in the four weeks preceding the survey, 12 percent were sexually active in the past year but not in the past four weeks, and 5 percent had not been sexually active for one or more years (Table 4.7.2). One in four men had never had sexual intercourse.

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Nepal 2011

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year[1]	One or more years			
Age						
15-19	7.8	8.0	5.0	79.3	100.0	978
20-24	43.3	17.3	7.0	32.4	100.0	685
25-29	72.5	13.7	4.5	9.2	100.0	581
30-34	84.1	9.1	3.9	2.9	100.0	499
35-39	87.5	7.5	3.0	2.0	100.0	542
40-44	83.6	11.8	3.2	1.4	100.0	438
45-49	78.4	15.5	6.0	0.1	100.0	399
Marital status						
Never married	3.7	12.4	8.4	75.4	100.0	1,433
Married	87.9	10.6	1.5	0.0	100.0	2,626
Divorced/separated/widowed	(8.3)	(30.6)	(61.0)	(0.0)	100.0	62
Marital duration[2]						
0-4 years	85.8	13.2	0.9	0.1	100.0	536
5-9 years	89.1	10.4	0.5	0.0	100.0	460
10-14 years	92.3	7.3	0.4	0.0	100.0	407
15-19 years	87.6	9.6	2.8	0.0	100.0	391
20-24 years	88.3	8.7	2.9	0.0	100.0	328
25+ years	84.4	15.3	0.4	0.0	100.0	261
Married more than once	86.3	10.0	3.7	0.0	100.0	243
Residence						
Urban	51.3	13.8	4.1	30.8	100.0	717
Rural	58.7	11.1	4.9	25.3	100.0	3,404
Ecological zone						
Mountain	67.0	9.7	2.6	20.7	100.0	245
Hill	56.7	12.8	4.3	26.2	100.0	1,658
Terai	56.9	10.8	5.4	26.9	100.0	2,218
Development region						
Eastern	52.3	13.9	4.7	29.1	100.0	996
Central	57.9	12.6	5.2	24.3	100.0	1,448
Western	56.8	9.9	4.6	28.7	100.0	798
Mid-western	64.9	9.4	4.8	20.9	100.0	493
Far-western	60.8	7.6	3.8	27.9	100.0	385
Subregion						
Eastern mountain	56.9	12.4	1.7	29.0	100.0	66
Central mountain	64.1	10.9	3.2	21.7	100.0	69
Western mountain	74.8	7.3	2.8	15.1	100.0	110
Eastern hill	54.9	13.7	5.0	26.3	100.0	293
Central hill	52.8	17.2	3.9	26.1	100.0	616
Western hill	57.3	9.8	4.6	28.4	100.0	440
Mid-western hill	67.3	9.1	4.7	18.9	100.0	189
Far-western hill	62.7	4.8	2.7	29.8	100.0	120
Eastern terai	50.6	14.2	4.9	30.3	100.0	638
Central terai	61.5	9.0	6.4	23.1	100.0	763
Western terai	56.1	10.0	4.6	29.2	100.0	358
Mid-western terai	60.6	9.6	5.2	24.6	100.0	242
Far-western terai	56.4	9.8	4.8	29.0	100.0	217
Education						
No education	77.5	12.1	5.0	5.3	100.0	567
Primary	69.6	12.3	4.2	13.9	100.0	814
Some secondary	49.8	10.1	4.4	35.7	100.0	1,437
SLC and above	49.5	12.4	5.5	32.7	100.0	1,303
Wealth quintile						
Lowest	63.6	10.3	4.9	21.2	100.0	610
Second	60.2	11.2	3.4	25.2	100.0	695
Middle	63.5	9.7	4.2	22.6	100.0	830
Fourth	49.0	13.9	7.7	29.4	100.0	920
Highest	54.6	11.9	3.6	29.9	100.0	1,066
Total 15-49	57.4	11.5	4.8	26.2	100.0	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes men who had sexual intercourse within the last four weeks
[2] Excludes men who are not currently married
SLC = School Leaving Certificate

Men in urban areas (51 percent), those in the hill zone and terai (57 percent each), those in the Eastern development region (52 percent), and those in the Eastern terai subregion (51 percent) were less likely to have been sexually active in the four weeks prior to the survey than their counterparts in the other areas. Men with some secondary education and SLC and higher level of education (50 percent each) and men in the fourth wealth quintile (49 percent) also reported less sexual activity in the four weeks prior to the interview than their counterparts.

A comparison of data from the 2001, 2006, and 2011 NDHS for currently married women shows gradual decreases in the percentage of women sexually active in the four weeks preceding the survey, from 71 percent in 2001 to 70 percent in 2006 and 65 percent in 2011. However, married men show the reverse pattern, with an increase from 82 percent in 2001 to 88 percent in 2006 and in 2011.

The 2011 NDHS data show that 4 percent of never-married men were sexually active in the four weeks preceding the survey, as compared with less than 1 percent of never-married women. Overall, one in four never-married men had ever had sexual intercourse, compared with one percent of never-married women.

FERTILITY 5

Key Findings:

- The total fertility rate for the three years preceding the survey is 2.6 births per woman, with rural women having about one child more than urban women.
- Fertility has decreased from 4.6 births per woman in 1996 to 2.6 births per woman in 2011, a two-child decline in the past 15 years.
- Childbearing begins early in Nepal, with almost one quarter of women giving birth by age 18 and nearly half by age 20.
- Seventeen percent of adolescent women age 15-19 are already mothers or pregnant with their first child. In the last five years, teenage pregnancy has fallen by 10 percent.
- Half of births occur within three years of a previous birth, with 21 percent occurring within 24 months.

A major objective of the 2011 NDHS was to examine fertility levels, trends, and differentials in Nepal. This is important in view of the government's policy to reduce the total fertility rate to replacement level by the end of 2017 through empowerment of women and poverty alleviation (National Planning Commission, 2007). Fertility is one of the three principal components of population dynamics that determine the size, structure, and composition of the population in any country. This chapter focuses on a number of fertility indicators including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women begin childbearing. Birth intervals are important because short intervals are associated with high childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

To generate data on fertility, a pregnancy history was collected from each woman interviewed in the 2011 NDHS. Women were asked to report on the total number of sons and daughters to whom they had given birth in their lifetime. To ensure that all information was reported, women were asked separately about children still living at home, those living elsewhere, and those who had died. The sex, date of birth, and survival status of each child were obtained, and age at death for dead children was recorded. In addition to information on live births, the pregnancy history section incorporated questions on all pregnancies that did not end in a live birth, including information on the month and year the pregnancy ended, the duration of the pregnancy, and whether something was done deliberately to end the pregnancy.

5.1 CURRENT FERTILITY

Measures of current fertility are presented in Table 5.1 for the three-year period preceding the survey, corresponding to the calendar period 2008-2010. A three-year period was chosen for calculating these rates to provide the most current information while also allowing the rates to be calculated for a sufficient number of cases so as not to compromise the statistical precision of the estimate. Age-specific fertility rates (ASFRs), expressed as the number of births per thousand women in a specified age group, show the age pattern of fertility. Numerators for ASFRs are calculated by identifying live births that occurred in the three-year period preceding the survey classified according to the age of the mother (in five-year age groups) at the time of the child's birth. The denominators of the rates represent the number of woman-years lived by the survey respondents in each of the five-year age groups during the specified period. The total fertility rate (TFR) is the number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years (15-49 years). The general fertility rate (GFR) is the number of live births occurring during a specified period per 1,000 women age 15-44.The crude birth rate (CBR) is the number of live births per 1,000 population during a specified period.

Table 5.1 shows current fertility in Nepal at the national level and by urban-rural residence. The TFR for the three years preceding the 2011 NDHS is 2.6 births per woman. Fertility is considerably higher in rural areas (2.8 births per woman) than in urban areas (1.6 births per woman), where fertility is below replacement level. As the ASFRs show, the pattern of higher rural fertility is prevalent in all age groups. The urban-rural difference in fertility is most pronounced for women in the 35-39 age group (16 births per 1,000 women in urban areas versus 39 births per 1,000 women in rural areas).

The overall age pattern of fertility, as reflected in the ASFRs, indicates that childbearing begins early. Fertility is low among adolescents, increases to a peak of 187 births per 1,000 among women age 20-24, and declines thereafter.

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Nepal 2011

	Residence		
Age group	Urban	Rural	Total
15-19	42	87	81
20-24	135	197	187
25-29	82	134	126
30-34	38	78	71
35-39	16	39	36
40-44	0	16	14
45-49	2	5	5
TFR (15-49)	1.6	2.8	2.6
GFR	60	102	96
CBR	16.6	25.5	24.3

Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.
TFR: Total fertility rate expressed per woman
GFR: General fertility rate expressed per 1,000 women age 15-44
CBR: Crude birth rate expressed per 1,000 population

5.2 FERTILITY DIFFERENTIALS

This section examines the association between a woman's background characteristics and her fertility. Table 5.2 presents differentials in TFRs, the percentage of women 15-49 who are currently pregnant, and the mean number of children ever born to women age 40-49 by urban-rural residence, ecological zone, development region, education, and wealth quintile. There are considerable differentials in fertility among ecological zones, with fertility ranging from a low of 2.5 births per woman in the terai to a high of 3.4 births per woman in the mountain zone. The TFR ranges from 2.5 births per woman in the Eastern, Central, and Western regions to 3.2 births per woman in the Mid-western region. Level of fertility is inversely related to women's educational attainment, decreasing rapidly from 3.7 births among women with no education to 1.7 births among women with a School Leaving Certificate (SLC) or above. Fertility is also associated with wealth quintile. Women in the lowest wealth quintile have an average of 4.1 births, nearly three times as many as women in the highest quintile (1.5 births).

Table 5.2 also presents a crude assessment of trends in the various subgroups by comparing current fertility with a measure of completed fertility: the mean number of children ever born to women age 40-49. The mean number of children ever born to older women who are nearing the end of their reproductive period is an indicator of average completed fertility of women who began childbearing during the three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born to women 40-49 are expected to be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born among women age 40-49. The comparison suggests that fertility has fallen by nearly two births during the past 15 years, from 4.3 births per woman to 2.6 births per woman. Fertility has declined in both urban and rural areas, in all regions, at all educational levels, and for all wealth quintiles. The difference between current and completed fertility is highest in the Far-western region (2.1 births), in urban areas (1.7 births), and among women in the fourth wealth quintile (1.8 births).

The percentage of women who reported being pregnant at the time of the survey is also presented in Table 5.2. This percentage may be underreported since women may not be aware of a pregnancy, especially at the early stages, and some women who are early in their pregnancy may not want to reveal that they are pregnant. Five percent of women were pregnant at the time of the survey. Rural women are slightly more likely to be pregnant than urban women. Regionally, the proportion of women who are currently pregnant is highest in the Mid-western region and lowest in the Western region. The proportion of women currently pregnant varies by education, but the pattern is mixed. The percentage currently pregnant ranges from a low of 4 percent among women in the highest wealth quintile to a high of 6 percent among women in the lowest wealth quintile.

Table 5.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Nepal 2011

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	1.6	4.0	3.3
Rural	2.8	5.1	4.4
Ecological zone			
Mountain	3.4	5.7	4.8
Hill	2.6	4.7	4.2
Terai	2.5	5.0	4.2
Development region			
Eastern	2.5	5.5	4.0
Central	2.5	5.1	4.2
Western	2.5	3.5	4.0
Mid-western	3.2[a]	6.5	5.0
Far-western	2.8	4.0	4.9
Education			
No education	3.7	4.5	4.6
Primary	2.7[a]	5.2	4.0
Some secondary	2.1[b]	4.6	2.9
SLC and above	1.7[b]	5.8	2.2
Wealth quintile			
Lowest	4.1	6.1	5.5
Second	3.1	5.0	4.7
Middle	2.7	5.4	4.3
Fourth	2.1	4.5	3.9
Highest	1.5	3.9	3.0
Total	2.6	4.9	4.3

Note: Total fertility rates are for the period 1-36 months prior to the interview.
SLC = School Leaving Certificate
[a] One or more of the components of age-specific fertility rates are based on 125-249 woman-years of exposure.
[b] One or more of the components of age-specific fertility rates are based on fewer than 125 woman-years of exposure.

5.3 FERTILITY TRENDS

In addition to the comparison of current and completed fertility, trends in fertility can be assessed in two other ways. First, fertility trends can be investigated using retrospective data on pregnancy histories collected in the 2011 NDHS. Second, the TFR from the 2011 NDHS can be compared with estimates obtained in earlier surveys.

Trends in fertility over time can be examined by comparing age-specific fertility rates from the 2011 NDHS for successive five-year periods preceding the survey, as presented in Table 5.3.1. Because women age 50 or above were not interviewed in the survey, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 35-39 for the period 15-19 years before the survey because these women would have been over age 50 at the time of the survey and therefore not eligible to be interviewed. Nonetheless, the results in Table 5.3.1 show that fertility has dropped substantially among all age groups over the past two decades. The decline is steepest among the cohort age 30-34, with a 50 percent decline between the period 10-14 years before the survey and the period 0-4 years before the survey.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Nepal 2011

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	87	122	127	132
20-24	194	218	278	278
25-29	128	164	208	244
30-34	71	89	142	[172]
35-39	38	60	[95]	
40-44	19	[27]		
45-49	[5]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

Table 5.3.2 Trends in fertility

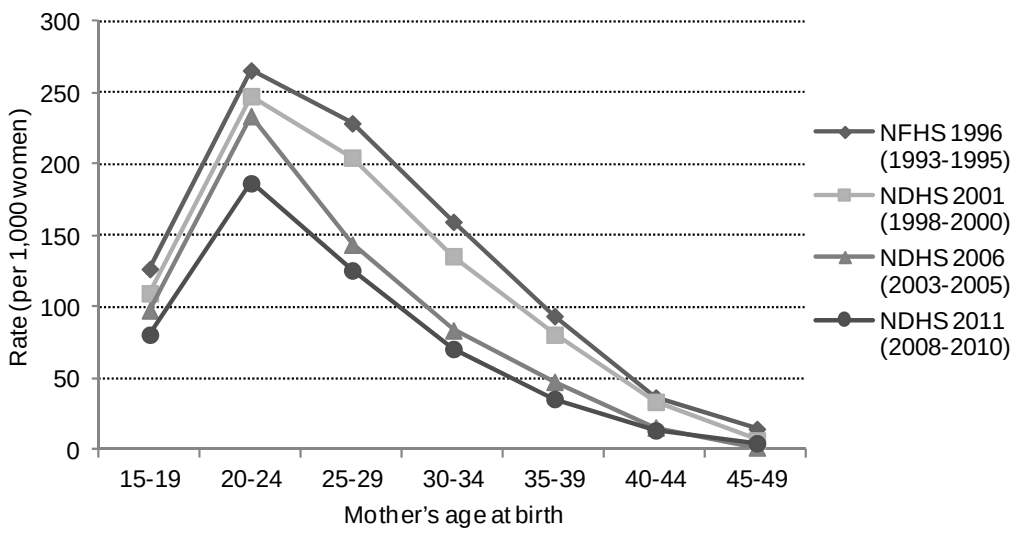
Age-specific and total fertility rates (TFRs), Nepal 1996, 2001, 2006, and 2011

Age group	NFHS 1996[a] (1993-1995)	NDHS 2001[b] (1998-2000)	NDHS 2006[c] (2003-2005)	NDHS 2011 (2008-2010)
15-19	127	110	98	81
20-24	266	248	234	187
25-29	229	205	144	126
30-34	160	136	84	71
35-39	94	81	48	36
40.44	37	34	16	14
45-49	15	7	2	5
TFR	4.6	4.1	3.1	2.6

Note: Age-specific fertility rates are per 1,000 women. Rates refer to the three-year period prior to each survey.
[a] Pradhan et al., 1997:37
[b] Ministry of Health, New ERA, and ORC Macro, 2002:58
[c] Ministry of Health and Population, New ERA, and Macro International Inc., 2007:63

Table 5.3.2 and Figure 5.1 compare fertility trends from estimates obtained in the 1996, 2001, and 2006 NDHS with information gathered in the 2011 NDHS. Fertility declined from 4.6 births per woman in the 1996 NFHS to 2.6 births per woman in the 2011 NDHS—a drop of two births per woman in the past 15 years. The decline in fertility is most pronounced in the five years between 2001 and 2006 (a one-child decline). Fertility has declined in every age group over the past 15 years, with largest decline seen among women 25-34 years. But over the past 5 years the largest decline is observed among women 20-24 years. Many factors may have contributed to this precipitous decline in Nepal, including improved communication and greater access to modern methods of contraception. Extended spousal separations due to migrants seeking work in foreign countries, especially the Gulf countries and other Southeast Asian countries, may be another reason for the fertility decline (see Table 3.2). A decline in the ideal number of children, increasing age at marriage, and increasing use of safe abortion services are other factors that could potentially affect fertility. These are discussed in greater detail in later chapters of this report.

Figure 5.1 **Trends in Fertility**



5.4 CHILDREN EVER BORN AND LIVING

Data on the number of children ever born reflect the accumulation of births over the past 30 years and therefore have limited relevance to current fertility levels, particularly when the country has experienced a decline in fertility. Moreover, the data are subject to recall error, which is typically greater for older than younger women. Nevertheless, information on children ever born (or parity) is useful in looking at a number of issues. Parity data show how average family size varies across age groups. The percentage of currently married women in their 40s who have never had children also provides an indicator of the level of primary infertility or the inability to bear children. Comparisons of differences in the mean number of children ever born and surviving reflect the cumulative effects of mortality levels during the period in which women have been bearing children.

Table 5.4 shows the percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of children living. Eighty-eight percent of women age 15-19 have never given birth. This proportion declines to 12 percent among women age 25-29 and to 5 percent or less among women age 30 or above, indicating that childbearing among Nepalese women is nearly universal. On average, Nepalese women nearing the end of their reproductive years have attained a parity of 4.6 children. This is two children more than the total fertility rate. The same pattern is replicated for currently married women, except that the mean number of children ever born is higher among currently married women (2.7 children) than among all women (2.1 children). The difference between all women and currently married women in mean number of children ever born is due to the substantial proportion of young and unmarried women in the former category who exhibit lower fertility.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Nepal 2011

	Number of children ever born													Mean number of children ever born	Mean number of living children
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women		
ALL WOMEN															
15-19	87.9	10.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,753	0.14	0.13
20-24	39.1	31.3	21.0	7.2	1.3	0.1	0.0	0.0	0.0	0.0	0.0	100.0	2,297	1.01	0.94
25-29	11.8	20.9	33.9	20.8	8.8	3.0	0.6	0.2	0.0	0.0	0.0	100.0	2,101	2.06	1.93
30-34	5.0	7.9	34.2	26.4	14.7	7.5	3.3	0.8	0.2	0.0	0.0	100.0	1,734	2.79	2.58
35-39	2.5	4.2	23.7	26.2	19.3	11.6	5.6	3.7	2.1	0.7	0.3	100.0	1,557	3.52	3.19
40-44	3.1	2.9	14.3	23.8	21.9	13.8	9.2	5.7	2.5	1.6	1.2	100.0	1,285	4.02	3.52
45-49	4.2	2.0	12.2	16.5	19.4	13.3	10.0	11.8	5.0	3.8	1.8	100.0	947	4.57	3.91
Total	29.8	13.4	19.7	15.2	9.7	5.4	2.9	2.1	0.9	0.5	0.3	100.0	12,674	2.12	1.91
CURRENTLY MARRIED WOMEN															
15-19	57.9	36.1	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	792	0.48	0.45
20-24	21.0	40.5	27.3	9.3	1.7	0.2	0.0	0.0	0.0	0.0	0.0	100.0	1,761	1.31	1.22
25-29	5.0	22.3	36.4	22.6	9.5	3.3	0.6	0.2	0.0	0.0	0.0	100.0	1,914	2.23	2.08
30-34	2.9	7.5	35.1	27.0	15.2	7.7	3.4	0.9	0.2	0.0	0.0	100.0	1,659	2.87	2.66
35-39	0.8	3.9	23.8	27.3	20.1	11.5	5.7	3.9	2.3	0.6	0.3	100.0	1,461	3.58	3.25
40-44	1.7	2.4	14.3	24.2	22.1	14.4	9.4	6.1	2.4	1.7	1.3	100.0	1,190	4.11	3.61
45-49	2.5	1.7	11.9	16.7	19.7	13.4	10.6	11.9	5.2	4.3	2.0	100.0	832	4.71	4.02
Total	10.7	17.2	25.2	19.5	12.3	6.7	3.7	2.6	1.1	0.7	0.4	100.0	9,608	2.68	2.42

As expected, the mean number of children ever born and the mean number of children surviving rise with increasing age of women. A comparison of the mean number of children ever born with the mean number of living children reveals the experience of child loss among Nepalese women. By the end of their reproductive years (age 45-49), women in Nepal have given birth to an average of 4.6 children, with 3.9 surviving.

Voluntary childlessness is uncommon in Nepal. Currently married women with no children are likely to be those who are sterile or unable to bear children. The level of childlessness among married women at the end of their reproductive period can be used as an indicator of the level of primary sterility. In Nepal, primary sterility among older currently married women is 3 percent.

5.5 BIRTH INTERVALS

Birth interval is the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Studies have shown that short birth intervals are associated with increased risk of death for mother and baby, particularly when the birth interval is less than 24 months.

Table 5.5 shows the percent distribution of non-first births in the five years preceding the survey by number of months since the preceding birth, according to background characteristics. The median birth interval in Nepal is 36.2 months, an increase from 31.8 months in 2001. Median number of months since a preceding birth increases significantly with age, from 33.3 months among mothers age 20-29 to 46.8 months among mothers age 40-49. There is no marked difference in the length of the median birth interval by birth order or sex of the preceding birth.

Studies have shown that the death of a preceding child leads to a shorter birth interval than when the preceding child survived. The median birth interval is almost 11 months shorter among births in which the

previous sibling is dead than among births in which the previous sibling is alive (26.2 months and 36.9 months, respectively). This difference in birth intervals may be due to the desire of parents to replace a dead child as well as the loss of the fertility-delaying effects of breastfeeding.

According to the 2011 NDHS data, birth intervals are slightly longer in urban (40.3 months) than in rural (35.9 months) areas. There are no marked differences in median birth intervals by ecological zones. The median birth interval is longest in the Western region (43.3 months) and shortest in the Far-western region (33.2 months). Birth intervals are longer in the Western terai and Western hill subregions than in the other subregions. Birth interval increases with education from 35.1 months among women with no education to 42.2 months among women with an SLC or above. Similarly, birth interval increases with wealth. The birth interval for the highest wealth quintile is nearly 4 years (46.2 months), whereas for all other quintiles it is 37.2 months or less.

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Nepal 2011

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	(30.7)	(36.0)	(25.1)	(6.0)	(2.3)	(0.0)	100.0	45	(22.1)
20-29	8.2	16.6	31.0	23.0	10.3	10.9	100.0	2,134	33.3
30-39	5.4	8.8	25.4	17.2	12.0	31.2	100.0	1,148	43.0
40-49	4.2	4.9	22.9	21.0	12.1	35.0	100.0	224	46.8
Sex of preceding birth									
Male	7.0	13.3	27.8	19.9	12.6	19.4	100.0	1,676	36.8
Female	7.6	13.8	29.3	21.6	9.3	18.4	100.0	1,875	35.6
Survival of preceding birth									
Living	5.7	13.3	29.0	21.3	11.1	19.5	100.0	3,263	36.9
Dead	25.2	16.6	23.2	15.2	8.3	11.5	100.0	288	26.2
Birth order									
2-3	7.2	13.7	27.4	20.9	11.3	19.4	100.0	2,361	36.8
4-6	7.4	13.9	29.7	21.2	8.8	18.9	100.0	947	35.5
7+	7.5	11.5	35.1	18.3	14.2	13.5	100.0	243	33.7
Residence									
Urban	6.5	11.4	23.5	17.6	13.1	27.9	100.0	290	40.3
Rural	7.4	13.8	29.0	21.1	10.6	18.1	100.0	3,262	35.9
Ecological zone									
Mountain	8.3	13.9	33.1	20.9	9.3	14.4	100.0	311	34.2
Hill	6.7	12.3	30.7	19.0	11.0	20.4	100.0	1,424	36.2
Terai	7.7	14.5	26.1	22.2	11.0	18.5	100.0	1,816	36.8
Development region									
Eastern	8.5	14.3	24.1	22.5	12.1	18.5	100.0	790	37.0
Central	9.0	14.4	29.4	20.5	8.1	18.6	100.0	1,133	34.5
Western	5.4	10.3	23.7	19.5	13.5	27.6	100.0	625	43.3
Mid-western	4.7	12.2	34.0	20.4	12.6	16.0	100.0	570	35.6
Far-western	6.8	16.9	34.3	21.0	9.5	11.6	100.0	433	33.2
Subregion									
Eastern mountain	10.6	8.4	27.0	20.4	11.1	22.6	100.0	69	38.6
Central mountain	8.5	11.0	29.2	20.3	9.8	21.2	100.0	68	36.5
Western mountain	7.3	17.3	37.1	21.3	8.5	8.5	100.0	174	32.1
Eastern hill	8.9	11.9	25.9	24.2	12.4	16.8	100.0	279	37.6
Central hill	7.1	11.5	29.8	19.9	7.6	24.1	100.0	304	36.5
Western hill	5.4	10.0	26.5	17.4	12.2	28.5	100.0	381	43.1
Mid-western hill	5.0	14.2	36.5	16.8	12.5	15.0	100.0	276	33.3
Far-western hill	7.4	16.3	39.3	16.7	9.4	10.9	100.0	184	32.1
Eastern terai	8.0	16.7	22.5	21.8	12.1	18.9	100.0	443	36.7
Central terai	9.8	15.8	29.3	20.8	8.2	16.1	100.0	762	33.5
Western terai	5.5	10.7	19.4	22.7	15.6	26.2	100.0	243	44.1
Mid-western terai	3.8	9.8	27.0	24.5	14.0	21.0	100.0	198	39.4
Far-western terai	5.0	14.2	30.1	25.9	10.9	13.9	100.0	171	36.3
Education									
No education	7.2	15.2	29.4	21.1	9.6	17.5	100.0	2,074	35.1
Primary	7.6	12.1	30.6	19.9	10.4	19.3	100.0	698	35.8
Some secondary	9.2	10.6	24.4	18.6	15.5	21.8	100.0	501	39.0
SLC and above	4.3	10.8	24.5	24.9	12.6	23.0	100.0	279	42.2
Wealth quintile									
Lowest	7.1	14.9	35.2	19.8	8.8	14.2	100.0	1,099	33.2
Second	6.5	15.2	27.8	21.6	10.9	18.0	100.0	830	36.3
Middle	9.4	12.8	25.5	20.6	11.2	20.6	100.0	703	37.2
Fourth	7.4	12.3	26.3	23.2	10.5	20.3	100.0	523	37.2
Highest	5.7	9.8	20.1	19.3	16.2	28.8	100.0	396	46.2
Total	7.3	13.6	28.6	20.8	10.9	18.9	100.0	3,551	36.2

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

5.6 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhea is the interval between the birth of a child and the resumption of menstruation, a period during which the risk of pregnancy is much reduced. Postpartum protection from conception depends upon the intensity and duration of breastfeeding. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. A woman is considered insusceptible if she is not exposed to the risk of pregnancy, either because she is amenorrheic or because she is abstaining from sexual intercourse following a birth. In the 2011 NDHS, information was obtained about the duration of amenorrhea and the duration of sexual abstinence following childbirth for births in the three years preceding the survey.

Table 5.6 shows that Nepalese women are amenorrheic for a median of 6.6 months, abstain for a median of 3.0 months, and are insusceptible to pregnancy for a median of 8.2 months. In general, the proportion of women who are amenorrheic or abstaining decreases with increasing months after delivery. The proportion of women who are amenorrheic drops from 98 percent in the first two months after birth to 22 percent at 12-13 months and less than 1 percent at 22 months or later. The majority of Nepalese women (86 percent) are still abstaining in the first two months following birth. A comparison of data from earlier surveys indicates that the median duration of postpartum amenorrhea, a proximate determinant of fertility, declined from 10.3 months in 1996 to 9.3 months in 2006 and then to 6.6 months in 2011.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Nepal 2011

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
< 2	98.1	86.4	99.7	136
2-3	84.8	47.7	90.2	209
4-5	61.0	39.1	71.5	202
6-7	50.0	22.7	58.2	183
8-9	40.2	15.8	46.6	188
10-11	28.9	14.2	38.0	139
12-13	21.8	12.9	31.7	181
14-15	10.9	10.1	20.8	164
16-17	10.0	12.9	20.3	204
18-19	6.1	3.7	9.0	174
20-21	2.3	9.9	11.6	172
22-23	0.6	11.4	12.1	138
24-25	0.7	6.3	6.9	163
26-27	0.0	3.9	3.9	185
28-29	0.9	2.9	3.8	202
30-31	0.4	4.5	4.9	189
32-33	0.0	3.7	3.7	189
34-35	0.7	1.7	2.4	145
Total	23.4	16.9	29.9	3,163
Median	6.6	3.0	8.2	na
Mean	8.6	6.5	11.0	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.7 shows the median duration of postpartum amenorrhea, abstinence, and insusceptibility by background characteristics. The duration of postpartum insusceptibility is substantially longer among women age 30-49 than among women age 15-29 and among rural than urban women. Also, postpartum insusceptibility is longer among women residing in the mountain zone than women in the other zones. Women in the Mid-western region have the longest median postpartum insusceptibility. Women with no education have longer duration of postpartum insusceptibility than women with SLC and higher level of education (10.7 months versus 5.7 months). Women in the lowest wealth quintile are insusceptible almost three times longer than women in the highest wealth quintile (12.1 months versus 4.7 months).

Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	6.3	2.8	7.8
30-49	9.5	3.9	10.4
Residence			
Urban	6.0	4.1	7.1
Rural	6.7	2.9	8.3
Ecological zone			
Mountain	8.6	2.3	10.1
Hill	7.1	3.2	9.4
Terai	6.2	3.0	7.4
Development region			
Eastern	5.8	3.7	7.7
Central	5.7	2.5	6.8
Western	6.8	3.5	9.2
Mid-western	9.9	2.6	10.6
Far-western	8.7	2.6	10.0
Education			
No education	9.8	2.9	10.7
Primary	7.8	3.1	8.6
Some secondary	5.5	3.2	6.6
SLC and above	4.7	2.9	5.7
Wealth quintile			
Lowest	10.8	3.4	12.1
Second	8.1	2.8	8.4
Middle	5.7	2.1	8.0
Fourth	6.0	4.8	7.0
Highest	4.0	2.9	4.7
Total	6.6	3.0	8.2

Note: Medians are based on the status at the time of the survey (current status).
SLC = School Leaving Certificate
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

5.7 MENOPAUSE

The risk of becoming pregnant declines with age. The term infecundity refers to a process rather than a well-defined event, and although the onset of infecundity is difficult to determine for an individual woman, there are ways of estimating it for a group of women. Table 5.8 presents data on menopause, an indicator of decreasing exposure to the risk of pregnancy (infecundity) for women age 30 or above.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, by age, Nepal 2011

Age	Percentage menopausal[1]	Number of women
30-34	4.7	1,734
35-39	7.4	1,557
40-41	10.2	541
42-43	16.1	521
44-45	19.5	469
46-47	30.8	372
48-49	50.0	329
Total	12.8	5,523

[1] Percentage of all women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey

In the 2011 NDHS, women were considered menopausal if they were neither pregnant nor postpartum amenorrheic and had not had a menstrual period for at least six months preceding the survey. The proportion of women who were menopausal increased with age, from 5 percent among women age 30-34 to 50 percent among women age 48-49. Overall, 13 percent of women age 30-49 were menopausal, a decline from 16 percent in 2006. The proportion of currently married women age 48-49 who were menopausal increased between 2001 and 2006 (from 56 percent to 64 percent) before declining to 50 percent in 2011.

5.8 AGE AT FIRST BIRTH

The onset of childbearing at an early age has a major effect on the health of both mother and child. It also lengthens the reproductive period, thereby increasing the level of fertility. Table 5.9 shows the median age at first birth and the percentage of women who gave birth by exact ages, according to current age. The median age at first birth is 20.1 years for the youngest cohort of women (age 25-29) for whom a median age can be

computed. Almost one-quarter of Nepalese women (23 percent) have given birth before reaching age 18, while about half (48 percent) have given birth by age 20. The median age at first birth is about 20 years across all age cohorts, indicating virtually no change in age at first birth over time.

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Nepal 2011

	Percentage who gave birth by exact age					Percentage who have never given	Number of	Median age
Current age	15	18	20	22	25	birth	women	at first birth
15-19	0.3	na	na	na	na	87.9	2,753	a
20-24	1.4	19.4	39.1	na	na	39.1	2,297	a
25-29	2.1	25.1	49.5	66.3	83.2	11.8	2,101	20.1
30-34	2.1	23.1	47.6	69.6	85.8	5.0	1,734	20.2
35-39	2.5	23.4	49.5	69.2	87.3	2.5	1,557	20.0
40-44	2.4	20.7	46.3	68.5	86.3	3.1	1,285	20.3
45-49	1.8	18.8	41.8	65.7	84.6	4.2	947	20.7
20-49	2.0	22.0	45.6	na	na	13.6	9,921	a
25-49	2.2	22.8	47.6	68.0	85.3	5.9	7,624	20.2

na = Not applicable due to censoring
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 5.10 shows that the median age at first birth is slightly higher in urban areas than in rural areas. Likewise, median age at first birth is slightly higher in the hill zone than in the other ecological zones. Median age at first birth is highest in the Eastern region (21.1 years) and lowest in the Far-western region (19.5 years). Women living in the Far-western terai subregion have the lowest median age at first birth (19.3 years). Median age at first birth increases with education, with the impact of education more obvious among women with an SLC or higher education. Women with a primary education or no education give birth to their first child four years earlier than women who have an SLC or higher education.

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49 years, according to background characteristics, Nepal 2011

Background characteristic	Women age 25-49
Residence	
Urban	20.7
Rural	20.1
Ecological zone	
Mountain	20.4
Hill	20.6
Terai	19.9
Development region	
Eastern	21.1
Central	20.0
Western	20.1
Mid-western	19.7
Far-western	19.5
Subregion	
Eastern mountain	21.3
Central mountain	20.2
Western mountain	19.9
Eastern hill	21.5
Central hill	21.0
Western hill	20.3
Mid-western hill	19.8
Far-western hill	19.8
Eastern terai	20.8
Central terai	19.5
Western terai	19.9
Mid-western terai	19.6
Far-western terai	19.3
Education	
No education	19.7
Primary	19.7
Some secondary	20.5
SLC and above	23.7
Wealth quintile	
Lowest	20.0
Second	20.0
Middle	19.8
Fourth	20.0
Highest	21.2
Total	20.2

SLC = School Leaving Certificate

5.9 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy and motherhood is a major social and health issue in Nepal. Early teenage pregnancy can cause severe health problems for both the mother and child. Moreover, an early start to childbearing greatly reduces women's educational and employment opportunities and is associated with higher levels of fertility.

Table 5.11 shows that 17 percent of women age 15-19 have already had a birth or are pregnant with their first child. The percentage of women who have begun childbearing increases rapidly with age, from 1 percent among women age 15 to 39 percent among women age 19. Teenage pregnancy is twice as high in rural areas as in urban areas. Teenage childbearing is lowest in the hill zone (16 percent) and highest in the terai (18 percent); however, teenage pregnancy in the terai zone has declined markedly, from 26 percent in 2001. Not surprisingly, early childbearing is inversely related to educational level. For example, teenagers with no education are about four times more likely to have begun childbearing than those with SLC and higher education (32 percent and 8 percent, respectively). The percentage of teenagers who have begun childbearing is highest (22 percent) in the middle wealth quintile and lowest in the wealthiest households (7 percent). At the national level, the proportion of teenage pregnancies has declined by about 10 percent in the last five years.

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Nepal 2011

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.1	0.8	0.9	550
16	2.1	2.8	4.9	531
17	6.3	4.2	10.5	574
18	19.9	8.5	28.4	558
19	32.3	6.5	38.8	540
Residence				
Urban	6.1	3.2	9.3	367
Rural	13.0	4.8	17.8	2,386
Ecological zone				
Mountain	12.6	4.6	17.1	182
Hill	10.5	5.0	15.5	1,086
Terai	13.2	4.3	17.5	1,485
Development region				
Eastern	11.3	4.6	15.9	672
Central	12.3	4.7	16.9	896
Western	12.3	3.9	16.2	573
Mid-western	13.7	6.5	20.2	333
Far-western	11.3	3.3	14.5	279
Subregion				
Eastern mountain	11.5	2.5	14.0	54
Central mountain	9.4	1.3	10.7	63
Western mountain	16.5	9.4	26.0	65
Eastern hill	9.5	5.5	15.0	224
Central hill	8.5	4.6	13.0	305
Western hill	12.6	5.2	17.8	324
Mid-western hill	10.5	5.9	16.3	140
Far-western hill	12.0	3.2	15.2	93
Eastern terai	12.3	4.4	16.6	394
Central terai	14.8	5.1	19.9	528
Western terai	11.9	2.2	14.1	248
Mid-western terai	15.7	5.6	21.3	159
Far-western terai	10.1	3.0	13.1	156
Education				
No education	24.1	7.5	31.6	327
Primary	20.4	7.4	27.8	456
Some secondary	9.5	3.8	13.2	1,368
SLC and above	5.3	2.7	8.0	602
Wealth quintile				
Lowest	12.6	5.8	18.4	492
Second	15.7	5.0	20.6	574
Middle	15.6	6.5	22.1	597
Fourth	10.5	3.9	14.4	588
Highest	5.3	1.3	6.7	502
Total	12.1	4.6	16.7	2,753

SLC = School Leaving Certificate

FERTILITY PREFERENCES 6

Key Findings:

- About three-quarters of currently married women age 15-49 and two-thirds of men want no more children or are sterilized.
- The desire to stop childbearing among married women has increased in the past 15 years, from 59 percent in 1996 to 73 percent in 2011.
- Women and men report an ideal family size of about two children. The mean ideal number of children among currently married women has declined by nearly one child in the last 15 years, from 2.9 children in 1996 to 2.2 children in 2011.
- Overall, Nepalese women have about one child more than their ideal number. This implies that the total fertility rate of 2.6 children per woman is 44 percent higher than it would be if unwanted births were avoided.

Information on fertility preferences is used to assess future fertility patterns and potential demand for contraception. Such data are also useful in constructing measures of unwanted or mistimed births.

6.1 DESIRE FOR MORE CHILDREN

Information about the desire for more children is important for understanding future reproductive behavior. The provision of adequate and accessible family planning services is dependent on the availability of such information. In the 2011 NDHS, currently married women (whether pregnant or not) and men were asked about their intentions to have another child and, if they had such intentions, how soon they wanted the child. The same question was phrased differently in the case of pregnant women or men whose wife or wives (or girlfriends) were pregnant at the time of the interview to ensure the wantedness of subsequent children after completion of the current pregnancy. Sterilized women and men were considered to want no more children, and therefore they were not asked questions about their desire for more children.

Table 6.1 shows that 8 percent of women and 10 percent of men want to have another child soon (within two years), while 14 percent of women and 17 percent of men want another child two or more years later. Half of women and three-fifths of men do not want any more children, and 23 percent of women and 9 percent of men have already been sterilized (includes both female and male sterilization).

The desire to limit childbearing (including by undergoing sterilization) increases with the number of living children, from 5 percent among women with no children to 94 percent among women with six or more children. Two percent of women with no children have been sterilized. A comparison of data from the 2006 and 2011 NDHS shows a slight increase in the proportion of currently married women who want no more children or have been sterilized, from 71 percent in 2006 to 73 percent in 2011. This is a 24 percent increase from 59 percent in 1996.

The desire to limit childbearing among married men increases from 2 percent among those with no children to 93 percent among those with six or more children. The proportion of currently married men (15-49) who want no more children or have been sterilized has decreased slightly from 70 percent in 2006 to 69 percent in 2011.

Women are more likely to want to limit childbearing at lower parities than men. For example, 33 percent of women with one child desire to stop childbearing or have been sterilized, compared with 25 percent of men with one child. Similarly, 88 percent of women with two children desire to stop childbearing or have been sterilized, compared with 83 percent of men with two children.

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Nepal 2011

Desire for children	Number of living children 0	1	2	3	4	5	6+	Total 15-49
				WOMEN[1]				
Have another soon[2]	48.7	14.3	3.4	2.2	0.7	0.2	0.7	8.4
Have another later[3]	39.0	44.8	5.1	2.0	0.6	0.7	0.0	14.0
Have another, undecided when	1.9	2.2	0.8	0.5	0.0	0.5	0.5	1.0
Undecided	3.0	5.2	1.7	0.8	0.6	0.3	0.0	2.0
Want no more	2.7	31.0	65.7	50.8	56.3	64.1	73.0	49.7
Sterilized[4]	1.8	1.5	22.3	41.7	39.4	31.2	20.7	23.0
Declared infecund	3.0	1.0	1.1	2.0	2.4	3.1	5.1	1.9
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	802	1,878	2,759	1,996	1,155	531	487	9,608
				MEN[5]				
Have another soon[2]	57.0	17.1	4.4	1.5	2.2	0.9	0.7	10.1
Have another later[3]	32.5	49.8	11.1	4.2	2.4	1.2	2.3	17.1
Have another, undecided when	0.2	0.9	0.0	0.0	0.0	0.0	0.0	0.2
Undecided	5.4	6.8	1.7	0.9	1.2	0.4	0.0	2.6
Want no more	1.7	24.3	72.8	76.8	79.4	86.1	83.2	60.2
Sterilized[4]	0.0	0.2	9.7	16.6	13.7	10.6	9.6	8.9
Declared infecund	2.8	1.0	0.2	0.0	1.1	0.8	4.2	0.9
Missing	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	219	522	737	537	310	133	168	2,626

[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization
[5] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Fertility preference relates closely to number of living children. Almost half of women (49 percent) with no living children want to have a child soon, as compared with 1 percent of women with six or more children. Among men without children, 57 percent want to have a child soon, compared with less than 1 percent of men with six or more children. The more children a woman has, the less likely she is to want another child.

6.2 DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

Tables 6.2.1 and 6.2.2 provide information on differences in potential demand for fertility control by background characteristics. At parities less than four, urban women are more likely to want to limit childbearing than rural women. However, at higher parities (four or more children), rural women are more likely to want to limit childbearing than urban women. Women in the mountain and hill zones (75 and 76 percent, respectively) are more likely to want to limit childbearing than women in the terai (70 percent). Women in the Western development region are more likely to want to limit childbearing than those in the other development regions (76 percent compared with 74 percent or lower). However, women in the Far-western development region with fewer than four living children have less desire to limit childbearing than women of the same parity in other development regions.

Men in the mountain zone are more likely to want to limit childbearing than men in the hill and terai zones. Differences among men in the desire to limit childbearing by development region are relatively small.

Overall, women and men with no education have a greater desire to limit childbearing than those with higher levels of education. However, among women and men with less than four children, those who have higher levels of education are more likely to want to limit childbearing than those with lower levels of education. A similar pattern is seen among women and men according to wealth quintile.

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Nepal 2011

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	5.6	37.4	91.8	95.3	94.8	89.6	77.3	72.7
Rural	4.3	31.6	87.2	92.2	95.8	95.8	94.4	72.7
Ecological zone								
Mountain	5.7	29.1	88.4	93.6	96.1	94.8	94.6	74.9
Hill	4.2	36.0	92.4	96.5	96.4	97.2	96.8	75.8
Terai	4.6	30.1	84.8	89.8	95.1	93.7	90.5	70.2
Development region								
Eastern	4.5	30.2	86.4	93.4	97.5	98.5	98.1	69.7
Central	4.5	34.8	85.6	89.9	95.5	95.0	87.8	72.6
Western	7.2	38.0	93.9	96.9	94.9	94.1	96.4	76.1
Mid-western	1.8	27.6	88.7	92.0	94.3	92.0	95.0	72.2
Far-western	1.2	23.5	86.3	90.3	95.8	97.5	98.1	73.9
Education								
No education	5.9	27.2	82.3	90.4	95.3	95.0	93.3	81.2
Primary	3.0	31.4	89.8	93.0	96.7	98.3	(97.4)	72.7
Some secondary	5.2	32.8	91.1	98.9	96.8	*	*	63.3
SLC and above	3.7	37.0	93.8	99.8	(99.4)	*	*	56.9
Wealth quintile								
Lowest	1.2	22.7	84.6	91.2	93.6	96.6	96.6	75.8
Second	1.3	29.1	82.9	91.5	97.2	95.0	94.8	72.4
Middle	3.6	23.5	82.2	91.4	93.6	97.7	88.4	69.1
Fourth	5.6	38.5	90.9	93.6	98.1	91.7	(89.2)	73.0
Highest	8.7	40.6	94.0	95.5	97.1	(95.3)	*	73.8
Total	4.5	32.4	88.0	92.5	95.7	95.3	93.7	72.7

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] The number of living children includes the current pregnancy

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Nepal 2011

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	3.7	27.6	88.0	96.8	97.7	*	*	66.6
Rural	1.3	23.6	81.1	92.9	92.5	96.8	93.2	69.6
Ecological zone								
Mountain	(0.0)	12.8	83.5	96.9	96.0	(100.0)	(100.0)	73.2
Hill	1.1	24.3	88.7	94.9	93.8	93.6	92.0	70.2
Terai	2.4	25.8	77.5	91.9	92.3	(99.1)	92.1	67.7
Development region								
Eastern	(5.9)	28.7	83.5	94.6	89.7	(94.2)	(89.5)	67.7
Central	0.0	26.2	79.1	94.8	91.4	*	(94.1)	67.8
Western	(2.7)	19.0	90.7	93.8	(97.9)	*	*	71.4
Mid-western	(0.0)	16.5	76.7	91.6	96.5	(94.0)	(100.0)	71.1
Far-western	(0.0)	24.9	85.4	88.3	(92.3)	(94.0)	*	70.3
Education								
No education	*	(5.8)	67.8	94.4	92.0	97.8	96.3	77.4
Primary	(1.1)	27.6	75.7	93.3	93.6	94.4	91.6	72.8
Some secondary	0.0	26.0	83.1	90.3	91.3	(97.5)	*	66.3
SLC and above	3.3	25.2	93.9	97.1	(98.7)	*	*	62.8
Wealth quintile								
Lowest	(0.0)	5.6	75.6	91.0	87.9	93.2	94.2	71.9
Second	(1.1)	10.9	76.1	90.4	97.2	(97.2)	(97.0)	68.3
Middle	(0.0)	21.7	74.8	92.3	90.2	*	(100.0)	66.8
Fourth	(2.0)	37.0	79.9	95.9	92.8	*	*	66.7
Highest	4.3	29.0	93.7	96.8	100.0	*	*	71.8
Total 15-49	1.7	24.5	82.5	93.4	93.1	96.7	92.8	69.1

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

6.3 IDEAL FAMILY SIZE

The discussion of fertility preferences earlier in this chapter focused on respondents' current childbearing preferences. These preferences are influenced by the number of children a respondent already has. The 2011 NDHS asked women and men age 15-49 about the total number of children they would like to have in their lifetime if they could choose the exact number to have at the time they had no children. Even though this question is based on a hypothetical situation, it provides two measures. First, for women and men who have not yet started a family, the data provide an idea of future fertility. Second, for older and high-parity women, the excess of past fertility over the ideal family size provides a measure of unwanted fertility. Table 6.3 shows that almost all women and men were able to provide a numeric response to the question asked to assess ideal family size.

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Nepal 2011

	Number of living children							
Ideal number of children	0	1	2	3	4	5	6+	Total
				WOMEN[1]				
0	2.9	0.4	0.3	0.3	0.0	0.1	0.2	1.0
1	21.6	26.2	10.0	3.8	0.7	2.3	0.7	13.1
2	66.8	64.0	77.3	57.2	52.1	38.7	28.3	63.0
3	7.4	7.8	10.2	33.7	33.1	43.1	41.5	17.8
4	0.8	1.2	1.4	4.0	13.0	13.2	22.5	4.1
5	0.1	0.1	0.3	0.5	0.7	2.0	0.9	0.4
6+	0.0	0.0	0.1	0.1	0.2	0.1	4.7	0.3
Non-numeric responses	0.4	0.3	0.2	0.3	0.2	0.4	1.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,550	1,934	2,851	2,068	1,199	557	515	12,674
Mean ideal number children for:[2]								
All women	1.8	1.8	2.0	2.4	2.6	2.7	3.1	2.1
Number of women	3,537	1,928	2,845	2,061	1,196	555	508	12,630
Currently married women	1.9	1.8	2.0	2.4	2.6	2.7	3.1	2.2
Number of currently married women	802	1,872	2,754	1,988	1,153	529	481	9,579
				MEN[3]				
0	1.0	0.0	0.1	0.0	0.3	0.0	0.0	0.5
1	9.4	14.3	7.5	3.4	1.5	1.4	0.0	7.6
2	73.1	67.7	72.8	53.8	48.3	40.5	33.5	65.2
3	13.3	14.9	17.2	36.1	33.7	38.3	44.2	20.9
4	2.4	2.2	2.2	5.6	15.9	16.7	20.9	5.0
5	0.5	0.3	0.2	1.1	0.2	3.1	0.8	0.6
6+	0.2	0.7	0.0	0.0	0.0	0.0	0.7	0.2
Non-numeric responses	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,664	534	756	548	315	135	169	4,121
Mean ideal number children for:[2]								
All men	2.1	2.1	2.1	2.5	2.6	2.8	3.0	2.3
Number of men	1,662	534	756	548	315	135	169	4,119
Currently married men	2.2	2.1	2.1	2.5	2.6	2.8	3.0	2.3
Number of currently married men	219	522	737	537	310	133	168	2,626

[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Both women and men in Nepal prefer a small family size, with only marginal differences between them (2.1 children for women and 2.3 children for men). Nearly two-thirds of women and men want to have two children, while 13 percent of women and 8 percent of men want to have only one child. Eighteen percent of women and 21 percent of men prefer a three-child family. The proportion of women and men who want four or more children is small (5 percent of women and 6 percent of men want to have four children).

There has been a decline in the mean ideal number of children among currently married women over the last five years, from 2.4 children in 2006 to 2.2 in 2011. This finding could also explain the declining total fertility rate in Nepal.

Table 6.3 shows that the mean ideal number of children increases with the number of living children among both women and men, from two children among respondents with no children to three children among respondents with six or more children. This positive association between actual and ideal number of children is due to two factors. First, to the extent that women are able to implement their fertility desires, women who want smaller families will tend to achieve smaller families. Second, some women may have difficulty admitting their desire for fewer children if they could begin childbearing again and may in fact report their actual number as their preferred number. Despite this tendency to rationalize, the data provide evidence of unwanted fertility, with the vast majority of women with six or more children reporting an ideal family size of fewer than six children.

Table 6.4 shows that the mean ideal number of children increases with age for both women and men, ranging from 1.9 children among women age 15-19 to 2.6 among women age 45-49 and from 2.2 among men age 15-19 to 2.6 among men age 45-49. The ideal number of children for women and men is slightly lower in urban than rural areas. Differences in mean ideal number of children by ecological zone and development region are small.

Table 6.4 Mean ideal number of children by background characteristics

Mean ideal number of children for all women and men age 15-49 by background characteristics, Nepal 2011

	Women		Men	
Background characteristic	Mean	Number of women[1]	Mean	Number of men[2]
Age				
15-19	1.9	2,749	2.2	975
20-24	1.9	2,291	2.1	685
25-29	2.1	2,090	2.1	581
30-34	2.2	1,731	2.3	499
35-39	2.3	1,555	2.4	542
40-44	2.5	1,275	2.4	438
45-49	2.6	940	2.6	399
Residence				
Urban	1.9	1,811	2.0	716
Rural	2.2	10,819	2.3	3,402
Ecological zone				
Mountain	2.2	805	2.4	245
Hill	2.0	5,064	2.2	1,658
Terai	2.2	6,761	2.3	2,215
Development region				
Eastern	2.1	3,054	2.2	996
Central	2.2	4,209	2.2	1,448
Western	2.0	2,654	2.3	796
Mid-western	2.2	1,473	2.3	493
Far-western	2.2	1,240	2.2	385
Subregion				
Eastern mountain	2.1	228	2.3	66
Central mountain	2.0	258	2.4	69
Western mountain	2.4	319	2.4	110
Eastern hill	2.1	954	2.3	293
Central hill	1.9	1,547	2.0	616
Western hill	2.0	1,508	2.3	440
Mid-western hill	2.2	646	2.4	189
Far-western hill	2.3	409	2.3	120
Eastern terai	2.1	1,872	2.2	638
Central terai	2.4	2,404	2.4	763
Western terai	2.0	1,146	2.3	356
Mid-western terai	2.1	666	2.2	242
Far-western terai	2.0	673	2.1	217
Education				
No education	2.5	5,024	2.8	567
Primary	2.1	2,203	2.4	813
Some secondary	1.9	3,079	2.2	1,436
SLC and above	1.7	2,323	2.0	1,303
Wealth quintile				
Lowest	2.4	2,111	2.5	610
Second	2.3	2,388	2.4	695
Middle	2.2	2,592	2.3	830
Fourth	2.0	2,710	2.2	919
Highest	1.9	2,829	2.0	1,064
Total	2.1	12,630	2.3	4,119

SLC = School Leaving Certificate
[1] Number of women who gave a numeric response
[2] Number of men who gave a numeric response

The mean ideal number of children varies inversely with the respondent's level of education and wealth quintile. Among women, it ranges from 1.7 children for those with an SLC or higher to 2.5 children for those with no education. Among men, it ranges from two children for those with an SLC or higher to 2.8 children for those with no education. Similarly, it ranges from 1.9 children for women and two children for men in the highest wealth quintile to 2.4 children for women and 2.5 children for men in the lowest quintile.

6.4 FERTILITY PLANNING

Information collected in the 2011 NDHS can also be used to estimate levels of unwanted fertility. This information provides some insight into the degree to which couples are able to control fertility. Women age 15-49 were asked a series of questions about each child born to them in the preceding five years, as well as any current pregnancy, to determine whether the birth or pregnancy was wanted then (planned), wanted later (mistimed), or not wanted at all (unplanned) at the time of conception. In assessing these results, it is important to recognize that women may declare a previously unwanted birth or current pregnancy as wanted, and this rationalization results in an underestimate of the true extent of unwanted births.

Table 6.5 shows that three in four births in the five years preceding the survey were planned, 12 percent were mistimed, and 13 percent were unwanted. The proportion of wanted births decreases and the proportion of unwanted births increases with increasing birth order. Eighty-four percent of first-order births are wanted, and 43 percent of fourth- and higher-order births are unwanted. The proportion of mistimed births is high (16-17 percent) for first- and second-order births and then declines with birth order.

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Nepal 2011

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	83.8	16.1	0.2	100.0	2,097
2	79.2	17.4	3.4	100.0	1,629
3	74.3	7.8	17.9	100.0	990
4+	53.1	3.5	43.4	100.0	1,297
Mother's age at birth					
<20	75.2	23.1	1.7	100.0	1,242
20-24	80.7	13.4	5.9	100.0	2,343
25-29	76.2	7.5	16.3	100.0	1,368
30-34	62.9	5.0	32.1	100.0	651
35-39	50.3	2.5	47.2	100.0	289
40-44	44.5	0.0	55.5	100.0	108
45-49	*	*	*	100.0	12
Total	74.4	12.4	13.3	100.0	6,013

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

The proportion of planned births is highest (81 percent) among mothers in the 20-24 age group. The percentage of planned births has increased from 69 percent in the 2006 NDHS to 74 percent in the 2011 NDHS. Mistimed births are more common among younger mothers (under age 30) than among older mothers (above age 30). The percentage of unwanted births increases with mother's age at birth, rising from 2 percent among mothers below age 20 to 56 percent among mothers age 40-44 years.

6.5 WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It is calculated in the same manner as the total fertility rate but excluding unwanted births from the numerator. A birth is considered wanted if the number of living children at the time of conception is less than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. This measure also may be an underestimate to the extent that women may not report an ideal family size lower than their actual family size.

The total wanted fertility rates in Table 6.6 represent the levels of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been avoided. Overall, Nepalese women have 0.8 children more than their ideal number of 1.8 children. This implies that the total fertility rate (TFR) is 44 percent higher than it would be if unwanted births were avoided.

The gap between wanted and observed fertility rates is higher among women who live in rural areas (one child) than among women who live in urban areas (0.4 children). Similarly, the gap is higher among women residing in the mountain zone (1.4 children) than women residing in the hill (one child) and terai (0.7 children) zones.

The difference between wanted and observed total fertility rates varies from 0.7 children per woman in the Eastern development region to one child per woman in the Far-western development region. The gap between wanted and observed total fertility rates decreases with increasing education. Women with no education have 1.2 children more than they want, compared to 0.2 children among women with at least an SLC. There is an inverse relationship between wanted fertility rate and wealth quintile. The gap between wanted and actual fertility rates ranges from 0.3 children among women in the highest wealth quintile to two children among women in the lowest wealth quintile. There has been a steady decline in the desired number of children among Nepalese women, from 2.5 children in 2001 to two in 2006 and 1.8 in 2011. The gap between wanted and actual fertility rates has narrowed over the years, from 1.1 children in 2006 to 0.8 children in 2011.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.2	1.6
Rural	1.8	2.8
Ecological zone		
Mountain	2.0	3.4
Hill	1.6	2.6
Terai	1.8	2.5
Development region		
Eastern	1.8	2.5
Central	1.7	2.5
Western	1.7	2.5
Mid-western	1.8	3.2[a]
Far-western	1.8	2.8
Education		
No education	2.5	3.7
Primary	1.9	2.7[a]
Some secondary	1.6	2.1[b]
SLC and above	1.5	1.7[b]
Wealth quintile		
Lowest	2.1	4.1
Second	2.0	3.1
Middle	2.0	2.7
Fourth	1.6	2.1
Highest	1.2	1.5
Total	1.8	2.6

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.
SLC = School Leaving Certificate
[a] One or more of the components of age-specific fertility rates are based on 125-249 woman-years of exposure.
[b] One or more of the components of age-specific fertility rates are based on fewer than 125 woman-years of exposure.

FAMILY PLANNING 7

Key Findings:

- Knowledge of contraception is universal in Nepal.
- One in two currently married women is using a method of contraception, with most women using a modern method (43 percent).
- The three most popular modern methods used by married women are female sterilization (15 percent), injectables (9 percent), and male sterilization (8 percent).
- Use of modern methods has increased by 66 percent in the past 15 years. However, there has been little change in the last five years.
- The government sector remains the major provider of contraceptive methods, catering to more than two in three users (69 percent).
- Overall, 51 percent of contraceptive users discontinued using a method within 12 months of starting its use. Twenty-six percent of episodes of discontinuation occurred because the woman's husband was away.
- Twenty-seven percent of currently married women have an unmet need for family planning services, with 10 percent having an unmet need for spacing and 17 percent having an unmet need for limiting.

Family planning continues to be a priority for the government of Nepal and is highlighted in the current three-year interim development plan (2010-2012) (National Planning Commission, 2010b). It is also considered as an essential component of Nepal Health Sector Program Implementation Plan 2010-2015 (NHSP IP-II). The objectives of the National Family Planning Program include gradually reducing the population growth rate through the promotion of a small family norm to the population in general and the rural population more specifically, working toward satisfying the demand for family planning services, providing high-quality services, and reducing unmet need. Despite the high importance placed on family planning activities in national policies, strategies and plans, lack of funds and inadequate attention to family planning in recent years has meant that progress towards targets has stalled. In light of this, the Family Health Division is taking a leadership role to revitalize the family planning program in Nepal. The National Family Planning Program also seeks to expand and sustain quality family planning services throughout the health service network, including hospitals, primary health care (PHC) centers, health posts (HP), sub-health posts (SHP), primary health care outreach clinics (PHC/ORC), and mobile voluntary surgical contraception (VSC) camps (Ministry of Health and Population [MOHP], 2009). To this end, the Family Health Division (FHD) has initiated satellite clinics in all 75 districts. The Female Community Health Volunteers play an important role in providing information and distributing condoms and resupply of pills. In addition, the private sector and nongovernmental organizations (NGOs) have been encouraged to play a more effective role in the National Family Planning Program (National Planning Commission, 2002).

This chapter presents information on knowledge of various contraceptive methods and discusses past and current prevalence. For users of periodic abstinence (rhythm method), knowledge of the ovulatory cycle is examined; for those relying on sterilization, the timing of the procedure is assessed. Also discussed are the source of modern contraceptive methods, informed choice, discontinuation rates and reasons for discontinuation, unmet need for family planning, nonuse of contraception, and intention to use contraceptive methods in the future. In addition, information is provided on exposure to family planning messages through the media and contact with family planning providers. These topics are of practical use to policymakers in formulating efficient and effective family planning strategies and policies. Although the main focus of this chapter is on women, results from the male survey are also presented because men play an important role in the realization of reproductive goals. Wherever possible, comparisons are made with findings from previous surveys in order to evaluate trends in family planning in Nepal over time.

7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Knowledge of contraceptive methods is an important precursor to their use. The ability to recognize a family planning method when it is described is a simple test of a respondent's knowledge but not necessarily an indication of the extent of her or his knowledge. The 2011 NDHS collected information on knowledge of contraception by asking respondents whether or not they have heard about eight modern methods (female and male sterilization, the pill, intrauterine devices [IUDs], injectables, implants, male condoms, and emergency contraception) and two traditional methods (rhythm method and withdrawal). Respondents were also asked whether they knew about any other methods in addition to those listed.

Table 7.1 shows that knowledge of at least one contraceptive method is nearly universal in Nepal among both women and men. Modern methods are more widely known than traditional methods; almost all women know of a modern method, while 67 percent know of a traditional method. Female sterilization (99 percent), injectables (98 percent), male sterilization (95 percent), the pill (93 percent), and condoms (98 percent) are the most commonly known modern methods among women, with a slightly smaller percentage mentioning IUDs (83 percent). Emergency contraception is known by a relatively smaller percentage of women (29 percent). The extent of and patterns in knowledge of a modern method of family planning among currently married and never-married women are similar except that never-married women are slightly less knowledgeable than currently married women about contraceptive methods other than emergency contraception.

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and never-married respondents age 15-49 who know any contraceptive method, by specific method, and mean number of methods known, Nepal 2011

	Women			Men		
Method	All women	Currently married women	Never-married women	All men	Currently married men	Never-married men
Any method	99.9	100.0	99.8	99.7	99.8	99.6
Any modern method	99.9	100.0	99.8	99.7	99.8	99.6
Female sterilization	98.9	99.4	97.0	96.2	97.9	93.0
Male sterilization	94.6	96.0	89.4	94.5	96.5	90.7
Pill	93.0	94.6	87.4	84.9	86.9	81.4
IUD	83.2	84.3	79.6	74.6	76.6	72.1
Injectables	98.4	99.0	96.0	93.7	95.5	90.5
Implants	89.6	92.5	79.6	71.8	76.3	64.3
Condom	97.6	98.2	95.7	99.1	98.9	99.6
Emergency contraception	28.8	26.2	38.8	38.7	35.3	45.8
Any traditional method	67.4	72.5	49.9	74.6	77.4	70.1
Rhythm	46.1	48.1	39.6	56.4	61.0	48.7
Withdrawal	57.8	64.4	34.9	67.9	70.6	63.5
Other	0.7	0.6	1.2	1.3	0.8	2.3
Mean number of methods known by respondents 15-49	7.9	8.0	7.4	7.8	8.0	7.5
Number of respondents	12,674	9,608	2,708	4,121	2,626	1,433

With respect to traditional methods, withdrawal and the rhythm method are known by 58 and 46 percent of all women, respectively. Overall, women know 7.9 contraceptive methods on average, while men know 7.8 methods.

Because knowledge of at least one method of contraception is nearly universal, there are few differences in knowledge by background characteristics (data not shown). The high level of knowledge could be attributed to the successful dissemination of family planning messages through the mass media.

7.2 CURRENT USE OF CONTRACEPTION

This section presents information on the prevalence of current contraceptive use among women age 15-49 at the time of the survey. Level of current use is the most widely employed and valuable measure of the success of family planning programs. The contraceptive prevalence rate (CPR) is usually defined as the percentage of currently married women who are currently using a method of contraception.

Table 7.2 shows the percent distribution by age of all women and currently married women who are currently using specific family planning methods. Fifty percent of currently married women are using a method of family planning, including 43 percent who are using a modern method and 7 percent who are using a traditional method.

Contraceptive use varies by age. Use is lower among younger women (because they are in the early stage of family building) and older women (some of whom are no longer fecund) than among those at intermediate ages. Female sterilization is the most widely used modern method (15 percent) among currently married women. Half as many currently married women report the use of male sterilization (8 percent), while injectables are used by 9 percent of women. The CPR increases from 18 percent among women age 15-19 to 68 percent among women age 40-44 and declines thereafter.

Table 7.2 Current use of contraception by age

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Nepal 2011

			Modern method								Traditional method					
Age	Any method	Any modern method	Female sterili-zation	Male sterili-zation	Pill	IUD	Inject-ables	Implants	Condom	Any tradi-tional method	Rhythm	With-drawal	Other	Not currently using	Total	Number of women
ALL WOMEN																
15-19	5.1	4.2	0.0	0.0	0.8	0.0	1.4	0.0	1.9	0.9	0.3	0.7	0.0	94.9	100.0	2,753
20-24	22.8	18.4	2.8	0.6	2.9	0.9	6.5	0.6	4.1	4.4	0.7	3.7	0.0	77.2	100.0	2,297
25-29	42.3	36.4	10.8	3.7	4.9	1.6	9.0	1.1	5.2	5.9	0.7	5.2	0.0	57.7	100.0	2,101
30-34	57.2	50.2	18.0	9.1	5.3	1.3	10.7	1.5	4.3	7.1	0.8	6.2	0.0	42.8	100.0	1,734
35-39	64.4	57.3	23.4	12.4	4.2	1.8	10.2	2.0	3.2	7.0	1.3	5.7	0.1	35.6	100.0	1,557
40-44	63.9	56.3	25.9	14.5	2.7	1.1	8.8	1.0	2.2	7.6	1.7	5.8	0.1	36.1	100.0	1,285
45-49	49.3	44.2	21.6	13.9	1.5	0.5	5.0	0.6	1.1	5.1	1.9	3.1	0.1	50.7	100.0	947
Total	38.2	33.2	11.9	6.0	3.2	1.0	7.0	0.9	3.3	5.0	0.9	4.1	0.0	61.8	100.0	12,674
CURRENTLY MARRIED WOMEN																
15-19	17.6	14.4	0.0	0.0	3.0	0.0	4.9	0.1	6.5	3.1	0.9	2.2	0.0	82.4	100.0	792
20-24	29.5	23.8	3.6	0.8	3.7	1.2	8.5	0.7	5.2	5.8	0.9	4.9	0.0	70.5	100.0	1,761
25-29	46.3	39.8	11.8	4.0	5.4	1.8	9.9	1.2	5.7	6.5	0.7	5.7	0.0	53.7	100.0	1,914
30-34	59.6	52.2	18.7	9.5	5.5	1.3	11.1	1.6	4.5	7.4	0.8	6.5	0.0	40.4	100.0	1,659
35-39	67.4	59.9	23.8	13.2	4.5	1.9	10.9	2.1	3.5	7.5	1.4	6.1	0.1	32.6	100.0	1,461
40-44	68.1	59.9	27.1	15.6	3.0	1.2	9.5	1.1	2.3	8.2	1.8	6.3	0.1	31.9	100.0	1,190
45-49	53.7	48.0	22.9	15.1	1.7	0.6	5.7	0.7	1.3	5.8	2.1	3.5	0.1	46.3	100.0	832
Total	49.7	43.2	15.2	7.8	4.1	1.3	9.2	1.2	4.3	6.5	1.1	5.4	0.0	50.3	100.0	9,608

Note: If more than one method is used, only the most effective method is considered in this tabulation. Total includes one woman who uses a modern method not listed.

One of the Millennium Development Goals (MDGs) for Nepal is to increase the CPR to 67 percent by 2015. The results of the 2011 NDHS show that modern contraceptive use has not increased in the past five years. There could be various underlying causes behind the stagnation, such as the legalization of abortion; out-migration of people of reproductive age for employment, leading to spousal separation; and increased use of traditional methods. However, such possibilities can be validated only after further analysis on this topic.

7.3 CURRENT USE OF CONTRACEPTION BY BACKGROUND CHARACTERISTICS

Analyzing current use of contraception by background characteristics is important because it helps identify subgroups of the population to target for family planning services. Table 7.3 presents the percent distribution of currently married women by their use of family planning methods, according to background characteristics. This table allows a comparison of levels of current contraceptive use across major population groups and an examination of differences in use in the various subgroups.

There is a direct association between use of family planning methods and the number of children women have, except in the case of women with five or more children. Only 12 percent of women with no living children use contraception; the percentage increases to 47 percent among women with one or two children and 65 percent among women with three or four children before declining to 54 percent among women with five or more children. Use of female sterilization is highest among women with three or four living children (29 percent), with a decline to 18 percent among women with five or more children. Use of injectables rises with parity, from less than 1 percent of women with no children to 13 percent of women with five or more children. Injectables are popular because they are more easily accessible, with supplies available at most health facilities (MOHP, 2009). Moreover, the expansion of the Sangini Franchising Network, which franchises injectable contraceptives through a network of pharmacies under a local brand name (*Sangini-Tin Mahine Sui*) in all 75

districts, has increased rural women's access to injectables (Nepal CRS Company, 2011). These injectable contraceptives work for a relatively longer duration, they are convenient to use, and their use can be kept private.

There is a direct relationship between contraceptive use by a woman and the presence or absence of her husband. Use of any method is almost three times higher among women whose husbands are living with them (62 percent) than among women whose husbands do not live with them (23 percent). A similar pattern is seen in use of modern methods (53 percent and 23 percent, respectively).

Table 7.3 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Nepal 2011

			Modern method							Any	Traditional method					
Background characteristic	Any method	Any modern method	Female sterili-zation	Male sterili-zation	Pill	IUD	Inject-ables	Implants	Condom	tradi-tional method	Rhythm	With-drawal	Other	Not currently using	Total	Number of women
Number of living children																
0	12.2	9.0	0.0	1.3	1.3	0.0	0.6	0.0	5.7	3.3	0.4	2.9	0.0	87.8	100.0	1,075
1-2	46.8	38.8	8.7	5.7	5.3	1.6	10.1	0.9	6.3	8.0	1.1	6.9	0.0	53.2	100.0	4,442
3-4	65.4	60.0	28.9	12.7	3.7	1.0	9.7	1.7	2.1	5.5	1.3	4.1	0.1	34.6	100.0	3,091
5+	54.1	47.4	17.8	9.0	3.1	2.0	12.8	1.8	1.1	6.7	1.8	4.7	0.2	45.9	100.0	999
Living arrangements																
Husband and wife live together	62.1	52.9	16.7	9.3	5.7	1.6	12.1	1.4	6.1	9.2	1.6	7.5	0.1	37.9	100.0	6,530
Husband lives away	23.4	22.5	12.0	4.6	0.9	0.6	2.9	0.8	0.7	1.0	0.2	0.8	0.0	76.6	100.0	3,077
Residence																
Urban	59.6	49.8	13.5	6.8	6.1	1.9	10.4	1.7	9.4	9.8	1.7	7.9	0.1	40.4	100.0	1,261
Rural	48.2	42.1	15.4	8.0	3.8	1.2	9.0	1.1	3.6	6.0	1.1	5.0	0.0	51.8	100.0	8,346
Ecological zone																
Mountain	48.3	43.1	3.0	17.1	3.0	2.4	12.3	2.4	3.0	5.3	1.5	3.8	0.0	51.7	100.0	630
Hill	48.2	40.6	7.1	10.6	4.1	1.2	10.6	1.8	5.0	7.6	1.3	6.2	0.1	51.8	100.0	3,784
Terai	51.0	45.0	22.5	4.7	4.3	1.2	7.8	0.6	4.0	5.9	1.0	4.9	0.0	49.0	100.0	5,193
Development region																
Eastern	46.4	36.2	10.9	2.9	5.8	0.5	12.0	0.7	3.4	10.2	2.3	7.8	0.1	53.6	100.0	2,293
Central	54.7	49.9	20.4	9.4	3.4	2.1	9.0	1.6	4.0	4.8	1.1	3.7	0.1	45.3	100.0	3,210
Western	46.1	38.7	13.5	9.8	3.9	1.2	5.8	0.7	3.9	7.4	0.8	6.6	0.0	53.9	100.0	2,031
Mid-western	46.9	42.8	11.5	9.8	3.1	1.4	9.3	2.4	5.4	4.0	0.6	3.4	0.0	53.1	100.0	1,149
Far-western	51.9	47.1	16.0	8.0	4.5	0.7	10.1	0.4	7.5	4.8	0.2	4.7	0.0	48.1	100.0	925
Subregion																
Eastern mountain	44.4	34.8	0.7	8.4	4.0	1.0	17.5	1.1	2.1	9.6	4.2	5.4	0.0	55.6	100.0	169
Central mountain	59.4	54.2	6.8	20.3	3.0	6.1	12.3	3.9	1.8	5.2	1.3	3.9	0.0	40.6	100.0	190
Western mountain	43.1	40.4	1.7	20.2	2.2	0.7	9.0	2.1	4.5	2.6	0.0	2.6	0.0	56.9	100.0	271
Eastern hill	42.8	32.0	3.3	4.0	5.1	0.9	14.6	1.1	3.0	10.7	2.5	8.0	0.3	57.2	100.0	702
Central hill	62.2	54.2	8.0	10.3	6.5	2.2	15.9	3.7	7.6	8.0	2.2	5.7	0.1	37.8	100.0	1,103
Western hill	42.9	35.2	8.6	14.0	2.7	0.9	4.9	0.6	3.5	7.7	0.4	7.3	0.0	57.1	100.0	1,164
Mid-western hill	41.6	37.7	7.1	12.6	2.2	0.7	7.3	2.4	5.3	3.9	0.8	3.1	0.0	58.4	100.0	510
Far-western hill	41.2	36.1	7.4	10.6	2.0	0.6	9.1	0.6	5.9	5.1	0.0	5.1	0.0	58.8	100.0	305
Eastern terai	48.4	38.4	15.8	1.7	6.3	0.3	10.0	0.5	3.8	10.0	1.9	8.0	0.0	51.6	100.0	1,421
Central terai	50.0	47.0	28.9	7.7	1.7	1.6	4.7	0.2	2.1	2.9	0.4	2.5	0.0	50.0	100.0	1,918
Western terai	50.3	43.4	20.0	4.3	5.4	1.5	6.9	0.7	4.6	6.9	1.2	5.8	0.0	49.7	100.0	867
Mid-western terai	54.2	49.3	19.0	3.8	4.0	2.1	11.8	2.2	6.4	4.9	0.7	4.2	0.0	45.8	100.0	499
Far-western terai	60.1	55.1	25.0	3.1	6.9	0.8	10.6	0.1	8.6	4.9	0.3	4.6	0.0	39.9	100.0	488
Education																
No education	52.8	48.8	22.5	9.3	3.3	1.1	9.4	1.3	1.9	3.9	1.1	2.8	0.0	47.2	100.0	4,580
Primary	47.0	40.5	11.8	9.1	4.0	1.3	10.0	1.5	2.9	6.6	0.8	5.6	0.1	53.0	100.0	1,844
Some secondary	46.1	37.9	8.4	5.4	6.3	1.4	9.3	0.7	6.4	8.2	1.1	7.1	0.0	53.9	100.0	1,833
SLC and above	47.7	34.6	4.0	4.5	4.5	1.7	7.2	0.8	11.9	13.1	1.8	11.3	0.0	52.3	100.0	1,350
Wealth quintile																
Lowest	40.4	35.6	8.5	7.9	3.2	0.7	11.4	1.9	2.1	4.8	1.2	3.6	0.0	59.6	100.0	1,664
Second	46.3	41.1	16.3	6.8	2.8	1.7	9.4	1.5	2.6	5.2	0.7	4.5	0.1	53.7	100.0	1,846
Middle	48.2	43.3	19.3	7.3	3.8	1.0	8.3	0.7	2.9	4.9	1.0	3.8	0.1	51.8	100.0	2,022
Fourth	52.0	45.3	17.2	9.5	4.2	1.0	8.5	0.8	4.1	6.7	1.0	5.7	0.0	48.0	100.0	2,052
Highest	59.6	48.9	13.5	7.5	6.4	2.0	8.8	1.2	9.4	10.6	1.8	8.8	0.1	40.4	100.0	2,023
Total	49.7	43.2	15.2	7.8	4.1	1.3	9.2	1.2	4.3	6.5	1.1	5.4	0.0	50.3	100.0	9,608

Note: If more than one method is used, only the most effective method is considered in this tabulation. Total includes one woman who uses a modern method not listed.
SLC = School Leaving Certificate

Urban women are more likely to use a family planning method than rural women, reflecting wider availability and easier access to methods in urban than in rural areas. The CPR for any method is 60 percent in urban areas, compared with 48 percent in rural areas. Condom use is nearly three times higher in urban than in rural areas.

Overall, use of contraceptives does not vary extensively by ecological zone, although differences in use of modern methods are slightly more pronounced. Much of the variation in use of modern methods is due to differences in the use of female and male sterilization and injectables. Female sterilization is more popular in the terai, where 23 percent of currently married women are using this method, than in the hill (7 percent) or

mountain (3 percent) zone. On the other hand, male sterilization and injectables are more popular in the mountain and hill zones than in the terai. While 17 percent of women in the mountain zone and 11 percent of women in the hill zone reported using male sterilization, only 5 percent of women in the terai did so. By development region, use of modern methods is highest in the Central region (50 percent) and lowest in the Eastern region (36 percent). Female sterilization is especially popular in the Central region (20 percent). There are small variations in the use of injectables by development region, with women in the Western region showing the lowest coverage (6 percent).

Current use of modern contraceptive methods is highest in the Far-western terai (55 percent) and lowest in the Eastern hill subregion (32 percent). Female sterilization is especially popular in the Central terai (29 percent) and male sterilization in the Western and Central mountain subregions (20 percent each). Injectables are popular in the Eastern mountain (18 percent), Central hill (16 percent), and Eastern hill (15 percent) subregions. Use of traditional methods is most popular in the Eastern hill subregion (11 percent).

The impact of education on contraceptive use is mixed. Use of any method is higher among women with no education (53 percent) than among women with at least some education (46-47 percent). Use of a modern method is also highest among women with no education and decreases with increasing education. The primary reason for the higher prevalence of contraceptive use among women with little or no education is that a sizable proportion of these women use sterilization, while women with at least some secondary education are more likely to use non-permanent methods such as injectables.

Wealth has a positive association with women's contraceptive use. Modern contraceptive use increases as household wealth increases, from 36 percent among currently married women in the lowest wealth quintile to 49 percent among those in the highest wealth quintile.

7.4 TRENDS IN CURRENT USE OF FAMILY PLANNING

Trends in current use of family planning can be used to monitor and evaluate the success of family planning programs over time. Table 7.4 and Figure 7.1 show trends in modern contraceptive use among currently married women from 1996 to 2011. Data from four DHS surveys conducted in Nepal over the past 15 years show an impressive increase in the use of modern contraceptive methods from 26 percent in 1996 to 43 percent in 2011. The increase in the use of modern contraceptives is due mainly to increased use of female sterilization, injectables, the pill, and condoms between 1996 and 2006. However, as a result of several possible factors, the increase in contraceptive use has not been sustained in the past five years. There has been a decline in the use of female sterilization and injectables, while the use of male sterilization has increased slightly. It is also notable that the long-term use of temporary methods such as implants and IUDs has been increasing over the past few years, providing options for women to drift away from permanent methods such as sterilization. Use of traditional methods has also increased over the years.

Table 7.4 Trends in current use of contraceptive methods

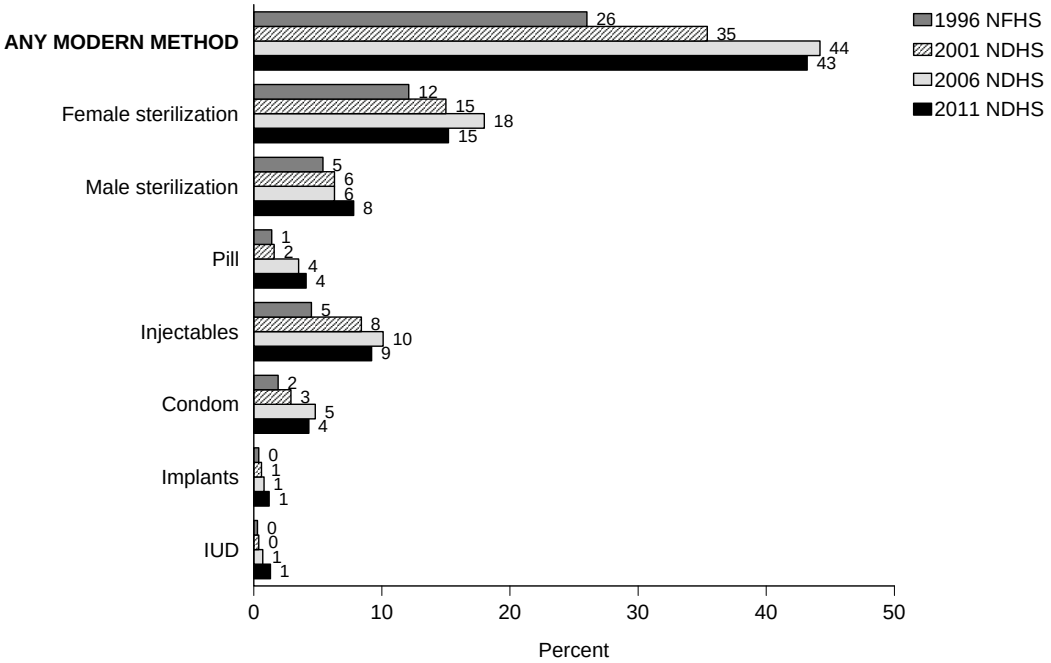
Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to selected sources, Nepal 1996-2011

Method	1996 NFHS[1]	2001 NDHS[2]	2006 NDHS[3]	2011 NDHS
Any method	**28.5**	**39.3**	**48.0**	**49.7**
Any modern method	**26.0[a]**	**35.4[a]**	**44.2**	**43.2**
Female sterilization	12.1	15.0	18.0	15.2
Male sterilization	5.4	6.3	6.3	7.8
Pill	1.4	1.6	3.5	4.1
Injectables	4.5	8.4	10.1	9.2
Condom	1.9	2.9	4.8	4.3
Implants	0.4	0.6	0.8	1.2
IUD	0.3	0.4	0.7	1.3
Any traditional method	**2.5**	**3.9**	**3.7**	**6.5**
Rhythm	0.9	1.1	1.2	1.1
Withdrawal	1.4	2.6	2.6	5.4
Other	0.2	0.3	0.0	0.0
Not currently using	**71.5**	**60.7**	**52.0**	**50.3**
Total	100.0	100.0	100.0	100.0
Number of women	7,982	8,342	8,257	9,608

[1] Pradhan et al., 1997
[2] MOHP, New ERA, and ORC Macro, 2002
[3] MOHP, New ERA, and Macro International Inc., 2007
[a] Includes users of vaginal methods

Table 7.4 shows that the proportion of currently married women who are using a method of contraception has increased by 4 percent in the past five years, primarily as a result of an increase in the use of traditional methods from 4 percent in 2006 to 7 percent in 2011.

Figure 7.1 Trends in Contraceptive Use among Currently Married Women



NDHS 2011

7.5 TIMING OF FEMALE STERILIZATION

Given the importance of female sterilization as a means of preventing pregnancies among women in high-risk groups, the family planning program in Nepal emphasizes dissemination of information about this method. The program also provides services in accordance with a women's age and health status. Trends in the use of sterilization as a family planning method are of interest, especially trends in women's age at the time of the operation.

Table 7.5 shows the percent distribution of sterilized women by age at the time of sterilization, according to the number of years since the operation. As expected, the vast majority (93 percent) of women were age 34 or younger at the time of sterilization. Thus, female sterilization in Nepal occurs early in women's reproductive lives. The median age at sterilization among women sterilized before age 40 (27 years) has not changed much over the past 10 years.

Table 7.5 Timing of sterilization

Percent distribution of sterilized women age 15-49 by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Nepal 2011

Years since operation	Age at time of sterilization					Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44			
<2	32.6	31.3	22.2	9.2	4.7	100.0	144	27.2
2-3	29.9	42.3	18.5	7.8	1.5	100.0	182	26.8
4-5	37.3	36.5	15.8	6.8	3.6	100.0	156	26.8
6-7	29.5	36.6	25.2	6.4	2.3	100.0	176	27.5
8-9	23.8	38.4	26.5	11.3	0.0	100.0	149	27.6
10+	33.9	43.9	20.2	2.0	0.0	100.0	699	a
Total	32.2	40.3	20.9	5.3	1.3	100.0	1,506	27.0

a = Not calculated due to censoring
[1] Median age at sterilization is calculated only for women sterilized before age 40 to avoid problems of censoring.

7.6 SOURCE OF CONTRACEPTION

Table 7.6 documents the main sources of contraception for users of different modern methods. Such information on where women obtain their contraceptive method is important for program managers and implementers in designing family planning policies and programs. All current users of modern contraceptive methods were asked the most recent source of their methods. The government sector remains the major source of contraceptive methods in Nepal, providing methods to 69 percent of current users (however, the share of the government sector as a source of modern methods has decreased from 77 percent in 2006). Within the government sector, one-third of users obtain their methods from government hospitals, 13 percent from mobile clinics, and 9 percent from government sub-health posts.

Nine percent of users obtain their methods from the nongovernment sector, mostly from Marie Stopes (6 percent) and the Family Planning Association of Nepal (2 percent).

Twenty percent of modern contraceptive users obtain their methods from the private sector, primarily from pharmacies (11 percent) and private hospitals/clinics (8 percent). It is worth noting that the percentage of users obtaining their methods from the private sector has increased by 43 percent in the past five years (from 14 percent in 2006).

Table 7.6 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Nepal 2011

Source	Female sterilization	Male sterilization	Pill	IUD[1]	Injectables	Implants[1]	Condom	Total
Government sector	77.8	83.6	50.9	57.9	69.0	66.6	32.3	69.0
Government hospital/clinic	55.3	47.5	6.2	24.1	9.7	30.3	4.7	33.0
PHC center	2.9	3.6	2.1	12.0	4.8	10.2	2.8	3.8
Health post	0.0	0.0	8.4	2.3	16.5	13.6	4.7	5.2
Sub-health post	0.0	0.0	16.0	9.8	30.0	3.9	10.1	9.2
PHC outreach	0.0	0.0	0.6	0.7	7.0	0.7	0.3	1.6
Other government	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Mobile clinic	19.4	32.5	0.0	9.0	0.3	7.9	0.0	13.3
FCHV	0.0	0.0	17.6	0.0	0.7	0.0	9.3	2.7
Condom box	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Nongovernment (NGO) sector	13.6	8.7	1.1	13.8	4.8	12.3	2.1	8.5
FPAN	2.0	3.1	0.6	5.4	2.9	2.0	0.5	2.2
Marie Stopes	10.1	5.5	0.3	8.0	1.3	8.8	0.7	5.5
Nepal Red Cross	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
UMN	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other NGO	1.2	0.1	0.2	0.3	0.6	1.5	0.8	0.7
Private medical	8.3	5.3	44.6	7.7	25.7	4.1	59.3	19.8
Private hospital/clinic	8.3	5.3	10.8	4.6	8.8	4.1	6.7	7.7
Pharmacy	0.0	0.0	31.5	2.3	12.1	0.0	52.2	10.8
Sangini outlet	0.0	0.0	2.4	0.0	4.7	0.0	0.3	1.2
Other private medical	0.0	0.1	0.0	0.9	0.0	0.0	0.0	0.0
Other source	0.0	0.0	2.7	0.0	0.5	0.0	4.8	0.8
Shop	0.0	0.0	0.4	0.0	0.1	0.0	1.7	0.2
Friend/relative	0.0	0.0	2.4	0.0	0.4	0.0	3.2	0.6
Other	0.4	0.3	0.6	0.0	0.1	0.0	1.5	0.4
Don't know	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.4
Missing	0.0	0.0	0.0	20.6	0.0	17.0	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,506	760	400	124	882	114	421	4,208

PHC = Primary health care
FCHV = Female community health volunteer
FPAN = Family Planning Association of Nepal
UMN = United Mission of Nepal
[1] For users of implants, the source is where the respondent obtained the method when she started the current episode of use. Source of method is missing for IUD and implant users if they began using the method more than five years before the survey.

Female and male sterilizations are performed mostly in government hospitals (55 and 48 percent, respectively) and mobile clinics (19 percent and 33 percent, respectively). Half of pill users obtain their supply from a government source (51 percent), primarily from female community health volunteers (FCHVs) (18 percent) and government sub-health posts (16 percent). Pill users who obtain their supply from a private medical source primarily go to pharmacies (32 percent) and private hospital/clinics (11 percent). Seven in 10 women who use injectables obtain them from a government source, primarily sub-health posts (30 percent) and health posts (17 percent). Of special note is that 17 percent of women obtain injectables from pharmacies, including

Sangini outlets. Condoms are obtained primarily from private medical sources (59 percent), of which 52 percent are pharmacies. Although these findings point to the continued reliance on government facilities as a major source of contraceptives, the role of the private sector and the nongovernment sector cannot be ignored.

7.7 BRANDS OF PILLS AND CONDOMS USED

The government of Nepal, with the assistance of USAID/Nepal, has engaged in social marketing of contraceptives through the Nepal CRS Company since 1978 (MOHP, 2011a). Among the various products launched through social marketing, contraceptive methods account for a major portion. Nilocon White and Sunaulo Gulaph are the two brands of oral contraceptives that have been promoted through social marketing. Dhaal and Panther are the two condom brands launched through the CRS Company.

Information on women's use of socially marketed contraceptives is useful for monitoring and evaluating the success of social marketing programs. In 2011, for the first time, the NDHS collected information on the brands of pills and condoms used by women and men. Women age 15-49 who were using oral contraceptives and condoms were asked for the brand name of the pills and condoms they last used.

Table 7.7 shows that, among pill users, Nilocon White (40 percent) and Sunaulo Gulaph (28 percent) are the most commonly used brands. Nilocon White is the most popular brand among women regardless of their background characteristics. Although there are many brands of condoms on the market, the most popular are Dhaal (26 percent) and Panther (23 percent).

Table 7.7 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15-49 using a specific social marketing brand, by background characteristics, Nepal 2011

	Among pill users			Among condom users		
Background characteristic	Percentage using Nilocon White	Percentage using Sunaulo Gulaph	Number of women using the pill	Percentage using Dhaal	Percentage using Panther	Number of women using condoms
Age						
15-19	(38.1)	(33.0)	23	22.5	20.3	50
20-24	32.3	33.6	66	30.8	16.1	89
25-29	43.1	23.6	101	25.2	25.4	102
30-34	45.4	28.8	92	19.1	23.0	71
35-39	41.3	23.6	65	28.6	28.1	49
40-44	(27.7)	(34.3)	35	(33.9)	(19.0)	26
45-49	*	*	14	*	*	9
Residence						
Urban	51.0	22.5	78	22.6	29.5	113
Rural	36.9	28.9	319	26.8	20.5	283
Ecological zone						
Mountain	(20.2)	(21.8)	19	(41.7)	(18.9)	18
Hill	44.0	26.3	156	22.3	25.6	179
Terai	38.2	29.0	222	27.1	21.2	199
Development region						
Eastern	37.3	36.3	132	34.5	28.4	78
Central	48.5	14.6	111	18.7	26.8	124
Western	48.1	28.0	76	23.5	25.1	68
Mid-western	30.1	33.9	36	19.0	19.3	57
Far-western	16.6	28.6	42	35.6	11.7	69
Education						
No education	32.2	21.5	148	30.0	14.2	80
Primary	34.5	27.2	75	27.1	20.0	49
Some secondary	43.1	38.9	114	25.9	23.8	114
SLC and above	57.8	22.1	60	22.7	28.2	154
Wealth quintile						
Lowest	11.6	28.3	51	(33.5)	(10.4)	31
Second	38.3	25.1	52	35.9	18.6	44
Middle	29.2	28.5	77	33.3	11.3	57
Fourth	43.6	34.1	87	19.8	26.8	83
Highest	54.7	23.5	130	22.0	28.4	180
Total	39.7	27.6	397	25.6	23.1	396

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

7.8 INFORMED CHOICE

Informed choice is an important tool for assessing, monitoring and evaluating the quality of family planning services. Current users of modern methods of contraception were asked whether they were informed about side effects or problems they might have with a method, what to do if they experienced side effects, and other methods they could use. This information assists users in coping with side effects and decreases unnecessary discontinuations. Moreover, such data serve as a measure of the quality of family planning service provision. Table 7.8 presents results by method type and source.

Sixty-three percent of modern contraceptive users were informed by a health or family planning worker about potential side effects of the method they use, 59 percent were informed about what to do if they experienced side effects, and 54 percent were informed of other available methods of contraception.

Users were slightly less likely to receive information about side effects or problems from a private medical facility (60 percent) than from a government or nongovernment facility (64 percent each). The same was true of information on what to do if side effects were experienced; 55 percent of users of a modern contraceptive method were given the information in a private medical facility, as compared with 60 percent in a government facility and 62 percent in a nongovernment facility.

Table 7.8 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Nepal 2011

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilization	42.8	42.4	30.1	403
Pill	57.8	54.3	55.7	313
IUD	89.6	86.4	71.6	91
Injectables	72.7	64.1	63.7	642
Implants	82.2	81.5	75.3	86
Initial source of method[1]				
Public sector	64.3	59.7	58.0	1,009
Hospital/clinic	55.7	54.3	47.4	331
PHC center	63.0	62.4	70.4	92
Health post	74.5	70.4	73.2	142
Sub-health post	69.9	60.3	59.7	282
PHC OUTREACH	(75.7)	(67.0)	(68.1)	38
Mobile clinic	57.7	52.0	43.5	78
FCHV	(64.6)	(62.8)	(68.6)	47
Nongovernment (NGO) sector	64.2	61.5	48.8	161
FPAN	(78.3)	(78.3)	(70.4)	35
Marie Stopes	60.8	58.1	41.6	113
Other NGO	*	*	*	13
Private medical	60.3	54.7	46.5	363
Private hospital/clinic/nursing home	62.3	59.0	47.5	146
Pharmacy	57.7	49.1	43.3	173
Sangini outlet	(64.8)	(62.9)	(56.4)	41
Other	*	*	*	2
Total	63.3	58.7	54.3	1,533

Note: Table includes users of only the methods listed individually. Total excludes users who obtained their methods from friends/relatives/shops. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

7.9 CONTRACEPTIVE DISCONTINUATION RATES

Couples can realize their reproductive goals only when they consistently and correctly use contraceptive methods. A prominent concern for family planning programs is the rate at which contraceptive users discontinue using their methods. In the "Calendar" section of the Woman's Questionnaire, all segments of contraceptive use from 3-59 months prior to the survey are recorded. The month of interview and the two months prior to the survey are ignored in order to avoid the bias that may be introduced by unrecognized pregnancies. One-year contraceptive discontinuation rates based on the calendar data are presented in Table 7.9.

Overall, 51 percent of the episodes of contraceptive use were discontinued within 12 months of starting its use for any reason. Twenty-six percent of episodes of discontinuation occurred because the women's husbands were away, 12 percent was due to the fear of side effects or health concerns, and 5 percent because the woman wanted to become pregnant.

Discontinuation rates vary by method. Rates are highest for pill and male condom (71 percent and 63 percent, respectively), followed by injectables (55 percent) and withdrawal (51 percent).

Table 7.9 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the five years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Nepal 2011

Method	Method failure	Desire to become pregnant	Other fertility-related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[3]	Husband away	Other reason	Any reason[4]	Switched to another method[5]
Pill	3.0	5.7	1.9	15.0	2.0	1.1	40.8	1.1	70.6	6.4
Injectables	0.6	3.4	1.1	26.3	1.5	0.6	20.2	1.1	54.8	10.2
Male condom	4.0	11.7	3.2	0.6	5.4	4.6	29.3	4.1	63.0	8.2
Withdrawal	6.7	3.4	1.6	0.1	3.3	0.2	35.5	0.5	51.4	3.4
All methods[1]	2.5	4.9	1.5	11.7	2.4	1.2	25.5	1.4	51.2	6.7

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey. Female sterilization is excluded as there are no failure cases.
[1] Implants and male sterilization are included in the discontinuation rate for all methods but not listed separately.
[2] Includes infrequent sex, difficulty in getting pregnant/menopausal, and marital dissolution/separation
[3] Includes lack of access/too far, costs too much, and inconvenient to use
[4] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[5] The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she cited "wanted a more effective method" as the reason for discontinuation and started another method within two months of discontinuation.

7.10 REASONS FOR DISCONTINUATION OF CONTRACEPTIVE USE

Another perspective on discontinuation of modern contraceptive use is provided in Table 7.10, which shows the percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by reasons for discontinuation, according to method. The most common reason for discontinuing a method is that the husband is away (40 percent), followed by side effects or health concerns (24 percent), desire to become pregnant (13 percent), becoming pregnant while using or method failure (7 percent), and wanting a more effective method (6 percent). It is worth noting that the reason most often cited for discontinuing use of IUDs, injectables, and implants is side effects or health concerns (59 percent, 46 percent, and 40 percent, respectively). Absence of the husband was the reason most often reported for discontinuing use of the pill, condom, rhythm method, and withdrawal.

Table 7.10 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Nepal 2011

Reason	Pill	IUD	Injectables	Implants	Condom	Rhythm	Withdrawal	All methods
Became pregnant while using	7.4	0.4	1.7	0.0	8.6	14.5	15.8	6.8
Wanted to become pregnant	8.6	4.6	9.9	17.3	21.9	33.9	14.0	12.8
Husband disapproved	0.8	0.0	0.6	5.4	3.8	3.0	1.4	1.5
Wanted a more effective method	3.8	2.9	3.9	3.9	10.0	13.2	9.8	6.1
Side effects/health concerns	24.0	59.1	46.1	39.6	1.0	0.0	0.3	24.2
Lack of access/too far	0.4	0.0	0.9	1.6	0.5	0.0	0.0	0.6
Inconvenient to use	0.8	7.1	0.1	3.1	6.6	0.0	1.0	1.8
Difficult to get pregnant/ menopausal	0.2	0.0	0.7	2.8	0.4	0.4	0.7	0.6
Infrequent sex	3.0	4.1	1.5	0.0	4.2	8.6	2.9	2.7
Marital dissolution/separation	0.2	0.0	0.7	0.0	0.1	0.0	0.1	0.3
Husband away	49.2	18.9	30.3	11.3	40.5	23.1	52.3	40.0
Other	1.2	2.9	3.4	15.0	2.0	0.3	1.5	2.4
Don't know	0.0	0.0	0.0	0.0	0.4	2.1	0.0	0.1
Missing	0.1	0.0	0.0	0.0	0.0	0.7	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	1,125	57	1,598	51	810	76	710	4,434

Note: Total includes seven cases in which women reported discontinuation while using other methods.

7.11 KNOWLEDGE OF FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for the successful practice of the rhythm method. As shown in Table 7.1 and Table 7.3, 48 percent of married women have heard of the rhythm method, but only 1 percent are currently using the method. Table 7.11 shows women's knowledge about the time during the menstrual cycle when a woman is most likely to get pregnant.

Overall, only 25 percent of all women correctly reported the most fertile time as being halfway between two menstrual periods. Among users of the rhythm method, 52 percent were able to correctly identify a woman's monthly cycle; 46 percent incorrectly reported that a woman's most fertile period is directly after menstruation has ended. Knowledge of the fertile period among Nepalese women is limited; 16 percent of all women and 17 percent of those not using the rhythm method did not know about the fertile period. These results indicate a continued need for education about women's physiology of reproduction and effective use of contraceptive methods.

Table 7.11 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Nepal 2011

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	0.0	2.0	2.0
During her menstrual period	0.0	2.7	2.7
Right after her menstrual period has ended	46.0	45.6	45.6
Halfway between two menstrual periods	51.7	24.8	25.0
No specific time	0.5	8.4	8.3
Don't know	1.8	16.5	16.4
Total	100.0	100.0	100.0
Number of women	110	12,564	12,674

7.12 NEED AND DEMAND FOR FAMILY PLANNING SERVICES

Data in this section provide information on the extent of need and potential demand for family planning services in Nepal. Currently married fecund women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning. Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrheic women who are not using family planning and whose last birth was mistimed are considered to have an unmet need for spacing, and those whose last child

was unwanted have an unmet need for limiting. Women who are currently using a family planning method are said to have a met need for family planning. Total demand for family planning services comprises those who fall in the met need and unmet need categories.

Table 7.12 shows need and demand for family planning among currently married women by background characteristics. Twenty-seven percent of currently married women have an unmet need for family planning, with 10 percent having an unmet need for spacing and 17 percent having an unmet need for limiting. Fifty percent of women have a met need for family planning. If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase to 77 percent. Currently, only 65 percent of the family planning needs of married women are being met.

Table 7.12 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Nepal 2011

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning[3]			Percentage of demand satisfied	Percentage of demand satisfied by modern methods	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	37.5	4.0	41.5	13.3	4.3	17.6	51.1	8.3	59.4	30.2	24.3	792
20-24	23.3	13.5	36.8	13.2	16.3	29.5	37.5	29.9	67.4	45.4	35.2	1,761
25-29	8.5	22.0	30.5	6.9	39.4	46.3	15.5	62.0	77.5	60.6	51.3	1,914
30-34	2.0	24.0	26.1	2.8	56.7	59.6	5.0	80.9	85.9	69.7	60.7	1,659
35-39	1.0	19.7	20.7	0.4	67.0	67.4	1.4	86.9	88.4	76.6	67.8	1,461
40-44	0.4	15.4	15.8	0.0	68.1	68.1	0.4	83.5	83.9	81.1	71.3	1,190
45-49	0.3	12.8	13.2	0.0	53.7	53.7	0.3	66.7	67.0	80.4	71.6	832
Residence												
Urban	6.4	13.1	19.6	9.4	50.2	59.6	16.5	63.4	79.9	75.5	62.3	1,261
Rural	10.1	18.0	28.1	4.8	43.4	48.2	15.2	61.6	76.8	63.4	54.9	8,346
Ecological zone												
Mountain	7.5	16.8	24.3	4.6	43.8	48.3	12.5	61.3	73.8	67.0	58.4	630
Hill	9.4	20.3	29.7	5.8	42.4	48.2	15.5	62.9	78.4	62.1	51.7	3,784
Terai	10.1	15.3	25.3	5.3	45.7	51.0	15.6	61.1	76.6	66.9	58.8	5,193
Development region												
Eastern	11.5	18.5	30.0	6.7	39.6	46.4	18.5	58.3	76.8	61.0	47.1	2,293
Central	8.1	13.5	21.6	4.9	49.8	54.7	13.3	63.5	76.7	71.8	65.1	3,210
Western	11.5	22.5	34.0	4.3	41.8	46.1	16.0	64.6	80.6	57.8	48.0	2,031
Mid-western	9.1	17.0	26.1	5.4	41.4	46.9	15.1	58.6	73.7	64.6	58.1	1,149
Far-western	6.8	17.3	24.1	6.5	45.4	51.9	13.5	62.9	76.3	68.5	61.7	925
Subregion												
Eastern mountain	7.7	20.6	28.3	5.7	38.7	44.4	14.3	60.5	74.8	62.2	46.6	169
Central mountain	5.5	14.4	20.0	3.3	56.1	59.4	9.3	71.2	80.5	75.2	67.3	190
Western mountain	8.8	16.1	24.9	4.7	38.4	43.1	13.7	54.9	68.5	63.7	59.0	271
Eastern hill	11.3	20.2	31.6	5.5	37.2	42.8	17.2	57.8	74.9	57.9	42.7	702
Central hill	5.3	14.9	20.2	9.2	53.0	62.2	14.9	67.9	82.8	75.6	65.4	1,103
Western hill	12.0	24.1	36.1	3.9	39.0	42.9	16.2	63.5	79.7	54.7	44.2	1,164
Mid-western hill	10.7	21.3	32.0	4.2	37.4	41.6	15.3	58.7	74.0	56.7	51.0	510
Far-western hill	7.5	24.1	31.6	3.6	37.6	41.2	11.5	61.7	73.2	56.9	49.3	305
Eastern terai	12.0	17.3	29.4	7.5	40.9	48.4	19.7	58.2	77.9	62.3	49.3	1,421
Central terai	10.0	12.6	22.6	2.6	47.4	50.0	12.7	60.1	72.8	69.0	64.6	1,918
Western terai	10.9	20.3	31.2	4.8	45.5	50.3	15.8	66.1	81.9	61.9	53.0	867
Mid-western terai	7.5	13.5	21.0	7.5	46.7	54.2	15.8	60.5	76.3	72.4	64.7	499
Far-western terai	5.9	12.6	18.5	8.2	51.9	60.1	14.2	64.7	78.9	76.6	69.9	488
Education												
No education	5.0	17.5	22.5	1.6	51.1	52.8	6.8	68.8	75.6	70.3	64.6	4,580
Primary	10.3	19.9	30.2	5.2	41.8	47.0	15.8	61.9	77.7	61.1	52.1	1,844
Some secondary	15.6	17.1	32.6	8.4	37.7	46.1	24.2	54.9	79.1	58.8	48.0	1,833
SLC and above	16.3	14.0	30.3	14.5	33.2	47.7	31.8	47.3	79.1	61.7	43.8	1,350
Wealth quintile												
Lowest	9.1	22.1	31.1	3.5	36.9	40.4	12.7	59.7	72.4	57.0	49.3	1,664
Second	9.2	18.8	28.1	4.3	42.0	46.3	13.9	61.0	74.8	62.5	54.9	1,846
Middle	12.7	15.5	28.2	3.9	44.3	48.2	16.9	59.9	76.7	63.3	56.4	2,022
Fourth	9.1	17.3	26.4	6.3	45.7	52.0	15.7	63.1	78.8	66.5	57.5	2,052
Highest	7.9	14.1	22.0	8.7	50.8	59.6	17.0	65.0	82.0	73.2	59.6	2,023
Total	9.6	17.4	27.0	5.4	44.3	49.7	15.3	61.8	77.2	65.0	55.9	9,608

[1] Unmet need for spacing: Includes women who are fecund and not using family planning and who say they want to wait two or more years for their next birth, who say they are unsure whether they want another child, or who want another child but are unsure when to have the child. In addition, unmet need for spacing includes pregnant women whose current pregnancy was mistimed, or whose last pregnancy was unwanted but who now say they want more children. Unmet need for spacing also includes amenorrheic women whose last birth was mistimed, or whose last birth was unwanted but who now say they want more children.
Unmet need for limiting: Includes women who are fecund and not using family planning and who say they do not want another child. In addition, unmet need for limiting includes pregnant women whose current pregnancy was unwanted but who now say they do not want more children or who are undecided whether they want another child. Unmet need for limiting also includes amenorrheic women whose last birth was unwanted but who now say they do not want more children or who are undecided whether they want another child.
[2] Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.
[3] Nonusers who are pregnant or amenorrheic and whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in total demand for contraception (since they would have been using had their method not failed).
SLC = School Leaving Certificate

Unmet need for family planning declines with age from 42 percent among women age 15-19 to 13 percent in the oldest age group. Unmet need is higher in rural than in urban areas. Unmet need is highest in the hill zone (30 percent), the Western region (34 percent), and the Western hill subregion (36 percent). Unmet need is lowest among women with no education (23 percent) and highest among women with some secondary education (33 percent). Unmet need declines with increasing wealth, from 31 percent in the lowest wealth quintile to 22 percent in the highest quintile.

Demand for family planning is highest among women age 35-39 (88 percent) and lowest among those age 15-19 (59 percent). There are small variations in demand for family planning by urban-rural residence, ecological zone, development region, and subregion. Demand increases with increasing education, from 76 percent among women with no education to 79 percent among those with at least some secondary education. A similar pattern is observed by wealth quintile. The percentage of women whose demand for modern methods is satisfied is highest among those age 45-49; those living in urban areas, the Central region, and the Far-western terai; those with no education; and those in the highest wealth quintile.

7.13 FUTURE USE OF CONTRACEPTION

An important indicator of the changing demand for family planning is the extent to which nonusers plan to use contraceptive methods in the future. In the 2011 NDHS, women age 15-49 who were not using any contraceptive method at the time of the survey were asked about their intention to use family planning in the future. Table 7.13 shows that, among currently married women not using contraception, 81 percent intend to use a family planning method in the future, 3 percent are unsure of their intentions, and 17 percent have no intention of using any method in the future.

The proportion of women intending to use family planning peaks at 91 percent among nonusers with one child, declines to 75 percent among those with three children, and further declines sharply to 57 percent among those who have four or more children.

Table 7.13 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Nepal 2011

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	89.1	90.7	85.8	74.8	57.2	80.6
Unsure	2.5	2.1	2.1	2.3	4.5	2.6
Does not intend to use	8.5	7.2	12.2	22.9	38.3	16.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	670	1,305	1,253	682	923	4,833

[1] Includes current pregnancy

7.14 EXPOSURE TO FAMILY PLANNING MESSAGES

The media play an important role in communicating messages about family planning. Data on level of exposure to such media as radio, television, and printed materials are important for program managers and planners to effectively target population subgroups for information, education, and communication campaigns. In Nepal, the most common media sources are the radio and posters. Television is mostly found in urban areas, while print media are accessed mostly by the educated. To assess the extent to which the media serve as a source of family planning messages, respondents were asked whether they had heard or seen a message about family planning on the radio or television, in the print media (newspaper, magazine, poster, or billboard), or at a street drama in the months preceding the survey. The results are shown in Table 7.14.

Posters and billboards are the most popular source for family planning messages in Nepal, with 55 percent of women and 70 percent of men having seen a family planning message on a poster or billboard. Fifty-two percent of women and 59 percent of men age 15-49 heard a family planning message on the radio, and 40 percent of women and 45 percent of men saw a message on television. Fourteen percent of women and 34

percent of men read about family planning in a newspaper or magazine, while 6 percent of women and 14 percent of men were exposed to family planning messages at a street drama. Overall, 26 percent of women and 15 percent of men were not exposed to family planning messages in any of the specified media sources.

In general, exposure to media messages on family planning decreases with age, with older women and men (age 45-49) least likely to have been exposed to family planning messages in any media.

Table 7.14 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on the radio or on television or in a newspaper/magazine, poster/billboard, and street drama in the past few months, according to background characteristics, Nepal 2011

	Women							Men						
Background characteristic	Radio	Tele-vision	News-paper/ magazine	Poster/ billboard	Street drama	None of these five media sources	Number of women	Radio	Tele-vision	News-paper/ magazine	Poster/ billboard	Street drama	None of these five media sources	Number of men
Age														
15-19	57.1	40.7	18.6	60.4	8.4	21.3	2,753	60.3	46.0	34.5	73.5	17.3	11.5	978
20-24	53.4	43.4	19.5	61.1	6.8	22.9	2,297	65.1	50.5	44.3	78.1	18.0	9.3	685
25-29	52.0	41.7	15.6	57.6	5.8	24.5	2,101	54.5	40.7	31.1	71.0	12.7	14.3	581
30-34	48.9	43.5	13.4	56.2	4.6	26.0	1,734	55.9	46.3	32.9	71.1	9.0	17.7	499
35-39	51.3	36.9	11.1	53.0	5.1	28.6	1,557	58.8	48.3	34.5	69.8	11.0	14.7	542
40-44	49.3	34.0	6.3	43.9	4.0	30.7	1,285	57.1	41.5	28.7	63.0	11.7	18.8	438
45-49	45.2	31.1	4.8	37.5	3.5	36.6	947	54.6	36.7	22.1	57.0	8.8	22.0	399
Residence														
Urban	51.8	63.5	31.5	72.9	7.6	14.2	1,819	54.6	62.9	52.5	80.0	15.4	8.4	717
Rural	52.1	35.9	11.5	52.2	5.7	27.7	10,855	59.5	41.2	29.7	68.4	13.1	15.8	3,404
Ecological zone														
Mountain	60.9	25.7	7.8	51.3	5.5	24.1	805	72.9	25.1	18.0	60.5	11.5	13.9	245
Hill	59.1	38.7	15.8	58.1	5.1	21.2	5,090	62.1	42.0	33.6	69.4	9.9	12.5	1,658
Terai	45.7	42.4	14.0	53.4	6.6	29.4	6,779	54.5	49.4	35.4	72.3	16.4	16.1	2,218
Development region														
Eastern	54.9	45.1	17.8	59.7	5.9	21.4	3,057	58.0	46.8	33.9	66.3	17.4	15.9	996
Central	45.7	38.4	15.7	51.2	3.9	31.0	4,236	59.4	50.0	38.4	69.9	13.9	14.7	1,448
Western	55.5	47.9	13.5	58.3	5.5	23.2	2,660	53.8	49.4	33.6	73.9	10.6	15.0	798
Mid-western	58.0	28.6	9.3	56.0	9.7	23.1	1,478	63.2	31.6	26.5	67.2	11.3	14.3	493
Far-western	52.8	28.2	8.8	50.0	10.0	27.5	1,242	61.9	29.4	24.6	80.1	11.0	9.3	385
Subregion														
Eastern mountain	70.5	26.2	12.7	58.8	3.5	17.4	229	69.0	24.0	23.0	56.1	13.9	15.8	66
Central mountain	63.2	34.2	10.0	52.1	5.6	19.8	258	75.0	39.1	21.6	72.0	13.8	10.8	69
Western mountain	52.2	18.3	2.6	45.3	7.0	32.4	319	73.9	17.0	12.8	56.0	8.7	14.7	110
Eastern hill	61.8	28.6	9.6	50.4	2.0	23.3	956	65.9	32.9	23.0	62.3	9.9	16.2	293
Central hill	59.6	57.6	29.2	73.4	6.9	9.9	1,563	56.5	52.5	46.0	68.8	9.4	10.4	616
Western hill	58.1	38.7	11.4	50.6	2.8	27.4	1,513	61.5	46.4	32.5	72.0	9.8	14.0	440
Mid-western hill	61.4	23.8	10.0	56.7	8.5	23.4	649	73.8	28.2	25.7	68.7	11.2	12.4	189
Far-western hill	51.3	13.3	4.8	48.2	9.2	32.5	409	65.5	16.2	12.5	82.1	11.3	8.6	120
Eastern terai	49.4	55.7	22.7	64.7	8.1	20.9	1,873	53.3	55.5	40.0	69.1	21.3	15.8	638
Central terai	34.8	26.5	7.7	36.7	1.7	45.8	2,415	60.3	48.9	33.7	70.7	17.5	18.4	763
Western terai	52.0	60.0	16.2	68.4	9.1	17.6	1,147	44.4	53.0	34.9	76.3	11.6	16.1	358
Mid-western terai	56.4	35.0	10.5	58.5	11.0	21.0	668	52.3	37.8	31.1	70.4	13.1	14.3	242
Far-western terai	53.4	40.1	12.5	51.5	11.5	22.9	676	57.0	39.6	33.6	82.7	10.3	10.2	217
Education														
No education	39.4	20.0	0.6	34.1	2.7	43.1	5,045	44.3	14.8	0.7	41.1	4.0	38.0	567
Primary	51.8	37.7	5.0	52.0	5.3	25.2	2,209	56.9	29.7	13.1	58.9	7.1	20.2	814
Some secondary	61.7	50.3	19.4	69.1	8.7	13.8	3,088	59.6	46.7	31.3	74.4	14.2	10.3	1,437
SLC and above	67.0	71.1	46.2	85.3	10.1	4.5	2,331	65.1	65.8	63.5	86.0	20.9	5.4	1,303
Wealth quintile														
Lowest	45.5	8.1	2.5	35.1	4.0	42.8	2,120	60.2	8.4	7.8	50.0	4.2	25.2	610
Second	49.6	17.2	4.4	44.2	4.6	34.4	2,393	61.2	25.6	17.7	62.7	8.2	18.5	695
Middle	51.8	32.3	8.0	47.4	4.8	30.3	2,600	60.3	39.6	27.8	69.8	18.3	18.4	830
Fourth	56.1	55.9	15.4	65.7	7.3	17.4	2,722	59.6	59.6	41.1	74.6	13.6	10.5	920
Highest	55.5	74.2	36.4	76.5	8.3	9.7	2,839	54.1	70.1	56.9	84.1	18.5	6.1	1,066
Total 15-49	52.1	39.9	14.3	55.2	6.0	25.8	12,674	58.7	45.0	33.7	70.4	13.5	14.5	4,121

SLC = School Leaving Certificate

Not surprisingly, women and men residing in urban areas are much more likely to have been exposed to family planning messages in any media than their rural counterparts. This is especially true for messages on television and in the print media. Women living in the hill zone are more likely than women in the mountain zone and terai to have read or seen family planning messages in a newspaper or magazine or on a poster or billboard. Women living in the Eastern region and men living in the Far-western region are more likely to be exposed to family planning messages in any media than women and men in the other regions. Similarly, women living in the Central hill subregion and men living in the Far-western hill subregion have more exposure to family planning messages in the media than those in other areas.

Education has a positive influence on media exposure. For example, 43 percent of uneducated women have no exposure to family planning information in any media, as compared with 5 percent of women with a School Leaving Certificate (SLC) and higher. A similar pattern is observed for men. Among both women and men, exposure to family planning messages increases with wealth.

7.15 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

When family planning providers visit women in the field or when women visit health facilities, family planning fieldworkers and health providers are expected to discuss reproductive needs, contraceptive options available, and to counsel them to adopt a method of family planning. In Nepal, two types of field volunteers provide family planning services and information: female community health volunteers and reproductive health volunteers (RHVs) functioning under the Family Planning Association of Nepal. To get insight into the level of contact between nonusers and health workers, women who were not using contraception were asked whether an FCHV or RHV had visited them during the 12 months preceding the survey and discussed family planning. In addition, women were asked whether they had visited a health facility in the 12 months preceding the survey for any reason and whether anyone at the facility had discussed family planning with them during the visit.

Table 7.15 shows that FCHVs or RHVs discussed family planning with only 9 percent of nonusers during the 12 months preceding the survey. At the same time, only 6 percent of nonusers visited a health facility and discussed family planning at the facility. This low level of contact of nonusers with family planning providers varies little by background characteristics. Overall, 88 percent of women who could have been exposed to family planning information did not discuss family planning during a field visit or at a health facility, indicating numerous missed opportunities to inform and educate women about family planning.

Table 7.15 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the last 12 months were visited by an FCHV/RHV who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with an FCHV/RHV or at a health facility, by background characteristics, Nepal 2011

Background characteristic	Percentage of women who were visited by FCHV/RHV who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with FCHV/RHV or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	3.4	2.1	38.1	95.2	2,612
20-24	10.7	7.7	57.8	85.1	1,773
25-29	14.2	10.2	59.9	81.3	1,212
30-34	13.0	9.7	56.8	80.8	741
35-39	13.6	8.9	51.8	82.4	555
40-44	12.0	5.5	42.0	85.3	464
45-49	5.1	2.0	43.9	94.6	480
Residence					
Urban	4.9	5.1	52.1	91.6	1,055
Rural	9.6	6.2	48.8	87.3	6,781
Ecological zone					
Mountain	10.6	6.6	47.6	86.3	499
Hill	9.4	6.3	49.6	87.3	3,243
Terai	8.5	5.8	49.1	88.5	4,095
Development region					
Eastern	6.8	7.0	46.5	89.0	1,984
Central	7.0	5.3	47.1	90.2	2,454
Western	8.9	5.5	57.9	88.1	1,709
Mid-western	15.4	6.7	47.7	81.9	933
Far-western	13.3	5.9	45.4	84.2	757
Subregion					
Eastern mountain	8.8	8.6	47.2	86.8	153
Central mountain	8.3	2.2	43.2	91.1	144
Western mountain	13.6	8.3	51.0	82.6	201
Eastern hill	5.8	6.6	42.0	89.6	655
Central hill	5.2	5.4	50.9	91.6	872
Western hill	10.9	6.0	57.3	86.5	1,002
Mid-western hill	17.5	8.2	44.4	79.0	433
Far-western hill	12.6	6.2	44.4	84.0	282
Eastern terai	7.1	7.1	48.9	89.0	1,176
Central terai	8.0	5.6	45.2	89.2	1,437
Western terai	6.1	5.0	58.8	90.3	708
Mid-western terai	12.6	4.4	51.2	85.8	394
Far-western terai	14.7	5.4	43.8	83.8	379
Education					
No education	10.9	7.5	46.0	85.4	2,585
Primary	11.5	7.6	50.2	84.7	1,329
Some secondary	6.4	4.4	49.4	91.0	2,238
SLC and above	7.5	4.8	53.2	89.9	1,685
Wealth quintile					
Lowest	10.6	6.3	37.1	86.7	1,438
Second	11.1	6.8	49.3	85.6	1,526
Middle	9.9	7.0	49.0	86.5	1,615
Fourth	7.8	5.0	54.5	89.0	1,636
Highest	5.7	5.2	54.9	91.2	1,622
Total	9.0	6.0	49.2	87.9	7,837

FCHV = female community health volunteer
RHV = reproductive health volunteer
SLC = School Leaving Certificate

7.16 COUNSELING DURING POSTPARTUM AND POST-ABORTION

The government of Nepal, under the Family Health Division of the Ministry of Health and Population, has emphasized on strengthening the family planning counseling and services to Comprehensive Abortion Care (CAC) and postpartum care. The 2011 NDHS included questions on information and counseling on family planning methods for women during the post-abortion and postpartum periods to assess these programs.

The results are shown in Table 7.16. Forty-four percent of women who had an abortion in the five years preceding the survey were given information or counseled on family planning during their post-abortion visit. Only 9 percent of women who had a live birth in the five years preceding the survey were given information or counseled on family planning during their postpartum checkup. The results indicate many missed opportunities to provide information and counseling on family planning methods and services.

Table 7.16 Information on family planning methods and counseling

Percentage of women with an abortion in the five years preceding the survey who were given information on family planning methods and counseling during the post-abortion visit and percentage of women with a live birth in the five years preceding the survey who were given information on family planning during the postpartum visit, according to background characteristics, Nepal 2011

Background characteristic	Information on family planning during post-abortion period	Number of women with abortion	Information on family planning during postpartum period	Number of women with a live birth in the last five years
Age				
15-19	*	13	6.9	333
20-24	52.8	63	7.7	1,329
25-29	38.7	154	9.9	1,310
30-34	43.5	128	9.3	670
35-39	56.2	70	7.4	317
40-44	(49.3)	25	7.7	140
45-49	*	13	(0.7)	50
Residence				
Urban	47.7	90	14.0	418
Rural	43.1	376	7.8	3,730
Ecological zone				
Mountain	51.4	23	5.8	306
Hill	43.5	197	7.9	1,669
Terai	43.7	246	9.2	2,174
Development region				
Eastern	47.6	90	8.4	999
Central	46.1	111	8.0	1,293
Western	36.9	137	7.6	818
Mid-western	48.2	63	10.3	598
Far-western	46.3	65	8.9	440
Subregion				
Eastern mountain	*	3	5.4	78
Central mountain	*	6	6.9	72
Western mountain	(44.4)	14	5.6	155
Eastern hill	*	18	3.8	331
Central hill	55.2	66	11.6	403
Western hill	31.9	67	5.7	488
Mid-western hill	(40.2)	26	11.3	275
Far-western hill	(38.6)	20	8.2	171
Eastern terai	(45.7)	68	11.3	589
Central terai	*	39	6.4	818
Western terai	41.8	70	10.4	330
Mid-western terai	55.5	30	10.7	238
Far-western terai	50.9	39	10.9	200
Education				
No education	52.1	113	5.2	1,822
Primary	41.4	119	9.4	835
Some secondary	43.8	146	10.9	866
SLC and above	37.5	88	13.2	627
Wealth quintile				
Lowest	49.4	49	3.7	979
Second	42.8	56	5.9	899
Middle	39.8	77	7.1	873
Fourth	35.8	109	12.3	748
Highest	49.8	175	16.5	649
Total 15-49	44.0	466	8.5	4,148

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

7.17 MEN'S ATTITUDES TOWARDS CONTRACEPTION

The 2011 NDHS also included questions in the male survey to elicit further information on men's attitudes toward contraception. This information is useful in formulating family planning programs and policies geared toward men since they play a key role in women's reproductive health. Men's attitudes toward family planning and specific methods are also important in shaping educational activities geared toward addressing some of their misconceptions and fears.

To get a sense of their attitude toward contraception in general, men were asked their opinion on a number of stereotypical statements pertaining to contraception and its use. The results are shown in Table 7.17. Thirteen percent of Nepalese men agree that contraception is a woman's business, and 20 percent agree that women who use contraception may become promiscuous. Men living in rural areas, the terai, and the Western region, particularly the Western hill subregion, are more likely to have these perceptions than other men. Men with SLC and higher level of education and those in the highest wealth quintile are less likely to have these misconceptions regarding contraceptive use than other men.

Table 7.17 Men's attitudes towards contraceptive use

Among men who know a family planning method, the percentage who agree with stereotypical statements about contraceptive use, according to background characteristics, Nepal 2011

Background characteristic	Contraception is women's business	Women who use contraception may become promiscuous	Number of men who know a family planning method
Age			
15-19	10.9	21.0	973
20-24	11.8	18.1	684
25-29	16.4	18.9	581
30-34	14.1	19.9	499
35-39	11.5	21.0	541
40-44	10.1	21.1	434
45-49	13.6	21.6	398
Residence			
Urban	10.1	13.6	717
Rural	13.0	21.5	3,393
Ecological zone			
Mountain	5.6	11.5	245
Hill	9.8	21.6	1,650
Terai	15.2	20.0	2,216
Development region			
Eastern	8.0	17.4	994
Central	15.1	19.9	1,447
Western	16.0	32.8	795
Mid-western	9.0	12.0	490
Far-western	11.4	12.7	385
Subregion			
Eastern mountain	7.6	17.2	66
Central mountain	8.3	10.2	69
Western mountain	2.8	8.8	110
Eastern hill	4.6	17.0	291
Central hill	8.8	14.4	615
Western hill	16.7	39.5	436
Mid-western hill	3.0	12.2	188
Far-western hill	13.3	19.8	120
Eastern terai	9.6	17.6	638
Central terai	20.8	25.1	763
Western terai	15.2	24.6	358
Mid-western terai	15.3	13.5	240
Far-western terai	12.2	8.7	217
Education			
No education	17.7	27.9	560
Primary	20.2	24.7	810
Some secondary	12.9	20.8	1,437
SLC and above	5.0	13.3	1,303
Wealth quintile			
Lowest	13.7	26.0	604
Second	15.1	25.5	692
Middle	14.8	22.5	829
Fourth	12.5	18.3	919
Highest	8.3	13.1	1,066
Total 15-49	12.5	20.1	4,110

SLC = School Leaving Certificate

INFANT AND CHILD MORTALITY 8

Key Findings:

- Infant and under-five mortality rates in the past five years are 46 and 54 deaths per 1,000 live births, respectively. At these mortality levels, one in every 22 Nepalese children dies before reaching age 1, and one in every 19 does not survive to his or her fifth birthday.
- Infant mortality has declined by 42 percent over the last 15 years, while under-five mortality has declined by 54 percent over the same period.
- Childhood mortality is relatively higher in the mountain ecological zone than in the terai and hill zone and is highest in the Far-western region.
- The neonatal mortality rate in the past five years is 33 deaths per 1,000 live births, which is two and a half times the postneonatal rate. The perinatal mortality rate is 37 per 1,000 pregnancies.

This chapter describes levels, trends, and differentials in early childhood mortality and high-risk fertility behavior of women in Nepal. Infant and child mortality rates are important indicators of a country's socioeconomic development and quality of life, as well as health status. Measures of childhood mortality also contribute to a better understanding of the progress of population and health programs and policies. Analyses of mortality measures are useful in identifying promising directions for health and nutrition programs and improving child survival efforts in Nepal. Disaggregation of mortality measures by socioeconomic and demographic characteristics helps to identify differentials in population subgroups and target high-risk groups for effective programs. Measures of childhood mortality are also useful for population projections.

Childhood mortality in general and infant mortality in particular are often used as broad indicators of social development or as specific indicators of health status. Childhood mortality rates are used for monitoring a country's progress toward Millennium Development Goal 4, which aims for a two-thirds reduction in child mortality by the year 2015 (UNDP, 2011a). Results from the 2011 NDHS can be used in monitoring the impact of major national neonatal and child health interventions, strategies, and policies such as the National Newborn Health Strategy-2004 (Ministry of Health and Population, 2004a) and the Nepal Health Sector Program 2005-2009 on achievement of this goal.

Neonatal, postneonatal, infant, child, and under-5 year mortality rates are calculated from birth and death data derived from vital registration or from household surveys. The reliability of mortality estimates depends on the accuracy and completeness of reporting and recording of births and deaths. Underreporting and misclassification are common, especially for deaths occurring early on in life.

The 2011 NDHS provides various measures of mortality. The mortality rates presented in this chapter are computed from information gathered in the pregnancy history section of the Woman's Questionnaire. Women age 15-49 were asked whether they had ever given birth, and if they had, they were asked to report the number of sons and daughters living with them, the number living elsewhere, and the number who had died. Women were also asked for the number of pregnancies they had that did not end in a live birth. A detailed history of all pregnancies was gathered in chronological order starting with the first pregnancy. Women were asked whether a pregnancy was single or multiple, the sex of the child, the date of birth (month and year), survival status, the age of the child on the date of the interview if alive, and, if not alive, the age at death of each child born alive or the duration in months of a pregnancy that ended before full term. Since the primary causes of childhood mortality change as children age—from biological factors to environmental factors—childhood mortality rates are expressed by age categories and are customarily defined as follows:

- **Neonatal mortality (NN):** the probability of dying within the first month of life
- **Postneonatal mortality (PNN):** the difference between infant and neonatal mortality
- **Infant mortality ($_1q_0$):** the probability of dying between birth and the first birthday
- **Child mortality ($_4q_1$):** the probability of dying between exact ages one and five
- **Under-five mortality ($_5q_0$):** the probability of dying between birth and the fifth birthday

Rates of childhood mortality are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age one.

Information on stillbirths and deaths that occurred within seven days of birth is used to estimate perinatal mortality, which is the number of stillbirths and early neonatal deaths per 1,000 stillbirths and live births.

8.1 ASSESSMENT OF DATA QUALITY

The accuracy of mortality estimates depends on the sampling variability of the estimates and on nonsampling errors. Sampling variability and sampling errors are discussed in detail in Appendix B. Nonsampling errors depend on the extent to which the date of birth and age at death are accurately reported and recorded and the completeness with which child deaths are reported. Omission of births and deaths affects mortality estimates, displacement of birth and death dates impacts mortality trends, and misreporting of age at death may distort the age pattern of mortality. Typically, the most serious source of nonsampling errors in a survey that collects retrospective information on births and deaths is the underreporting of births and deaths of children who were dead at the time of the survey. It may be that mothers are reluctant to talk about their dead children because of the sorrow associated with their death, or they may live in a culture that discourages discussion of the dead. The possible occurrence of these data problems in the 2011 NDHS is discussed with reference to the data quality tables in Appendix C. Underreporting of births and deaths is generally more severe the further back in time an event occurred.

An unusual pattern in the distribution of births by calendar years is an indication of omission of children or age displacement. In the 2011 NDHS, the cutoff date for asking health questions was Baisakh 2062 in the Nepalese calendar (corresponding to April 2005 in the Gregorian calendar). Table C.4 shows that the overall percentage of births for which a month and year of birth was reported is almost 100 percent for both children who have died and children who are alive.

Table C.4 shows some age displacement across this boundary for both living and dead children. The distribution of living children and the total number of children does not show a deficit in 2062 (2005-2006) in relation to 2063 (2006-2007) but does show an excess in 2061 (2004-2005), as denoted by the calendar year ratios. The deficit in 2062 (2005-2006) can be attributed to the transference of births by interviewers out of the period for which health data were collected. Transference is proportionately higher for dead children than living children, and this displacement may affect mortality rates. The transference of children, especially deceased children, out of the five-year period preceding the survey is likely to underestimate the true level of childhood mortality for that period.

Underreporting of deaths is usually assumed to be higher for deaths that occur very early in infancy. Omission of deaths or misclassification of deaths as stillbirths may also be more common among women who have had several children or in cases where a death took place in the distant past. In order to assess the impact of omission on measures of child mortality, two indicators are used: the percentage of deaths that occurred under seven days to the number that occurred under one month and the percentage of neonatal deaths to infant deaths. It is hypothesized that omission will be more prevalent among those who died immediately after birth than those who lived longer and that it will be more serious for events that took place in the distant past than for those that occurred in the more recent past. Table C.5 shows data on age at death for early infant deaths. Selective underreporting of early neonatal deaths would result in an abnormally low ratio of deaths within the first seven days of life to all neonatal deaths. Early infant deaths were not severely underreported in the 2011 NDHS

survey, as suggested by the high ratio of deaths in the first seven days of life to all neonatal deaths (84 percent in the five years preceding the survey).

Heaping of the age at death on certain digits is another problem that is inherent in most retrospective surveys. Misreporting of age at death biases age pattern estimates of mortality if the net result is the transference of deaths between age segments for which the rates are calculated; for example, child mortality may be overestimated relative to infant mortality if children who died in the first year of life are reported as having died at age one or older. In an effort to minimize misreporting of age at death, interviewers were instructed to record deaths under one month in days and deaths under two years in months. In addition, they were trained to probe deaths reported at exactly one year or 12 months to ensure that they had actually occurred at 12 months. The distribution of deaths under two years during the 20 years prior to the survey by month of death shows that there is some heaping at 5, 15, and 18 months of age, with corresponding deficits in adjacent months (Table C.6). However, heaping is not obvious for deaths in the five years preceding the survey, for which the most recent mortality rates are calculated.

8.2 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

Table 8.1 presents neonatal, postnatal, infant, child, and under-five mortality rates for three five-year periods preceding the survey. Neonatal mortality in the most recent period (2006-2010) is 33 deaths per 1,000 live births. This rate is two and a half times the postneonatal rate (13 deaths per 1,000 live births) during the same period. Therefore, the risk of dying for any Nepalese child who survived the first month of life is reduced by two-fifths (i.e., 39 percent) in the remaining 11 months of the first year of life. The infant mortality rate in the five years preceding the survey is 46 deaths per 1,000 live births, and the under-five mortality rate for the same period is 54 deaths per 1,000 live births. This means that one in every 22 Nepalese children dies before reaching age 1, while one in every 19 does not survive to her or his fifth birthday. Mortality trends can be examined in two ways: by comparing mortality rates for three five-year periods preceding a single survey and by comparing mortality estimates obtained from various surveys. However, comparisons between surveys should be interpreted with caution because of variations in quality of data, time references, and sample coverage. In particular, sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Nepal 2011

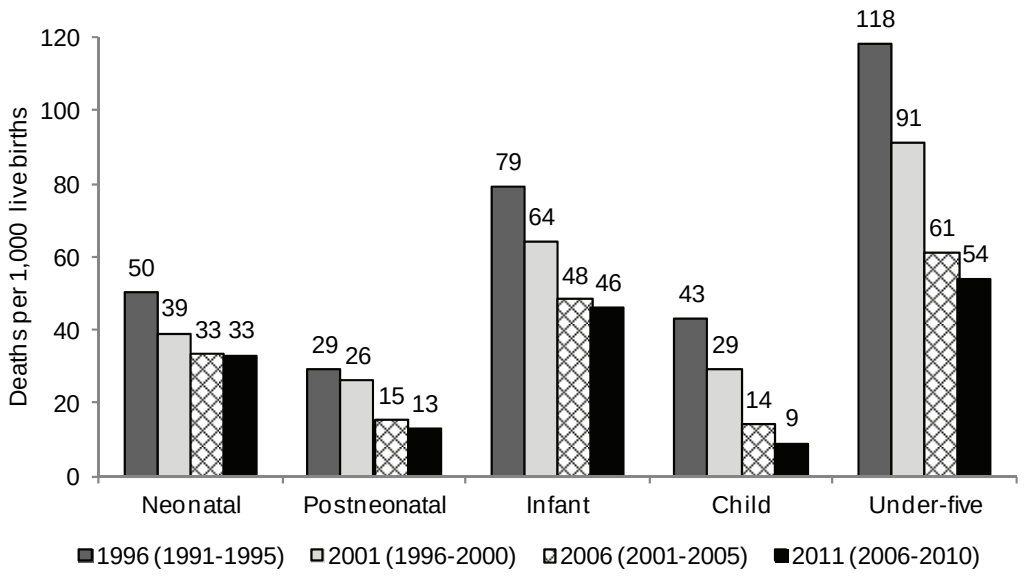
Years preceding the survey	Approximate calendar year	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-4	2006-2010	33	13	46	9	54
5-9	2001-2005	37	23	60	10	70
10-14	1996-2000	45	25	70	19	87

[1] Computed as the difference between the infant and neonatal mortality rates

Data from the 2011 NDHS show that neonatal mortality has declined by 27 percent over the 15-year period preceding the survey, from 45 to 33 deaths per 1,000 live births. The corresponding declines in postneonatal, infant, and under-five mortality over the 15-year period are 48 percent, 34 percent, and 38 percent.

Mortality trends can also be observed by comparing data from the 2011 NDHS with data from the 1996, 2001, and 2006 NDHS (Figure 8.1). Infant and under-five mortality rates obtained for the five years preceding the four surveys confirm a declining trend in mortality. Infant mortality has declined by 42 percent over the last 15 years, from 79 deaths per 1,000 live births in 1991-1995 to 46 per 1,000 deaths in 2006-2010. An even more impressive decline was observed in under-five mortality, which decreased by 54 percent from 118 deaths per 1,000 live births to 54 per 1,000 deaths over the same period. The data also show 34 percent and 55 percent declines in neonatal and postneonatal mortality, respectively. An examination of neonatal, infant, and under-five mortality rates in Nepal over the past 15 years reveals that neonatal mortality has decreased at a slower pace than infant and child mortality, with the result that neonatal deaths have risen from 63 percent of all infant deaths in 1996 to 72 percent in 2011 and from 42 percent of under-five deaths to 61 percent.

Figure 8.1 **Trends in Childhood Mortality, Nepal 1991-2010**



Data source: NFHS 1996, NDHS 2001, NDHS 2006, and NDHS 2011

It is interesting to note that in the past five years there have been only minimal changes in neonatal, postneonatal, and infant mortality. In 2004, the Ministry of Health and Population (MOHP) developed and passed the National Neonatal Health Strategy. The first phase of the Community-Based Neonatal Care Package (CB-NCP) was implemented in 10 pilot districts in 2007 through the Child Health Division with the support of the government of Nepal and development partners (Karki et al., 2010). The MOHP further expanded the CB-NCP in 25 districts by 2011 (MOHP, 2011a).

Data from the 2011 NDHS show increased antenatal care and postnatal visits, improved delivery practices, and improved maternal health and newborn care indicators (see Chapter 9). These indicators are directly or indirectly related to neonatal health. Despite these improvements, neonatal mortality has remained the same over the past five years. An in-depth examination of the reasons for the stagnation in neonatal mortality is outside the scope of this report and is suggested for further analysis.

8.3 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.2 shows differentials in childhood mortality by socioeconomic variables. To minimize sampling errors associated with mortality estimates and to ensure a sufficient number of cases for statistical reliability, the mortality rates shown in the table are calculated for a 10-year period.

Table 8.2 shows that infant and child mortality is higher in rural areas than in urban areas. For example, infant mortality in rural areas is 55 deaths per 1,000 live births, compared with 38 deaths per 1,000 live births in urban areas. Rural-urban differences are also significant in the case of neonatal, child, and under-five mortality rates. Moreover, there are wide differentials in infant and under-five mortality by ecological zone, with under-five mortality ranging from 62 deaths per 1,000 live births in the terai zone to 87 deaths per 1,000 live births in the mountain zone. Under-five mortality is higher in the Far-western and Mid-western development regions than in the other regions. Similarly, infant mortality is highest in the Far-western development region (65 deaths per 1,000 live births) and lowest in the Eastern development region (47 deaths per 1,000 live births).

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Urban	25	13	38	7	45
Rural	36	19	55	10	64
Ecological zone					
Mountain	46	27	73	16	87
Hill	33	17	50	8	58
Terai	35	18	53	10	62
Development region					
Eastern	30	17	47	8	55
Central	36	15	52	8	60
Western	37	16	53	4	57
Mid-western	34	24	58	16	73
Far-western	41	24	65	18	82
Mother's education					
No education	40	22	62	12	73
Primary	34	19	53	9	62
Some secondary	27	10	37	4	41
SLC and above	(20)	(11)	(31)	(1)	(32)
Wealth quintile					
Lowest	37	25	61	15	75
Second	40	16	56	11	66
Middle	39	17	55	9	64
Fourth	37	16	53	6	59
Highest	19	13	32	4	36

Note: Figures in parentheses are based on 250-499 unweighted exposed persons.
SLC = School Leaving Certificate
[1] Computed as the difference between the infant and neonatal mortality rates

As expected, mother's education is inversely related to a child's risk of dying. Under-five mortality among children born to mothers with no education (73 deaths per 1,000 live births) is more than double that of children born to mothers with an School Leaving Certificate (SLC) or a higher level of education (32 deaths per 1,000 live births). Table 8.2 also shows that the risk of dying among children below age five gradually decreases with increasing household wealth, from 75 deaths per 1,000 live births in the poorest households to 36 deaths per 1,000 live births in the wealthiest households.

8.4 DEMOGRAPHIC DIFFERENTIALS IN MORTALITY

Demographic characteristics of both mother and child play an important role in the survival probability of children. Table 8.3 shows that neonatal mortality is slightly higher among male children but that there are few significant differences in other childhood mortality rates by sex of the child.

As expected, the relationship between maternal age at birth and childhood mortality is generally U-shaped, being relatively higher among children born to mothers under age 20 and over age 30 than among children born to mothers in the 20-29 age group. This pattern is especially obvious in the case of under-five mortality. In general, mortality rates are also significantly higher among first births and births of order seven or above than among births of order two or three. For example, 1 in 17 first births do not survive to the first year, compared with 1 in 20 births of order two or three.

The spacing of births is another factor that has a significant impact on a child's chances of survival. Generally, shorter birth intervals are associated with higher mortality, both during and after infancy. The 2011 NDHS data confirm this pattern. All childhood mortality rates show a strong relationship with the length of the previous birth interval. For example, infant mortality is more than three times higher among children born less than two years after a preceding sibling than among children born four or more years after a previous child (87 deaths and 26 deaths per 1,000 live births, respectively).

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, post-neonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Nepal 2011

Demographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Child's sex					
Male	37	17	54	9	63
Female	33	19	52	10	62
Mother's age at birth					
<20	51	18	69	9	78
20-29	32	17	49	8	57
30-39	27	23	49	13	62
40-49	*	*	*	*	*
Birth order					
1	44	15	59	7	66
2-3	30	19	49	7	56
4-6	31	14	46	16	61
7+	42	40	83	20	100
Previous birth interval[2]					
<2 years	57	30	87	16	102
2 years	31	20	50	13	62
3 years	21	16	38	6	43
4+ years	14	12	26	7	32
Birth size[3]					
Small/very small	51	14	65	na	na
Average or larger	29	12	41	na	na

Note: An asterisk indicates that a rate is based on fewer than 250 unweighted exposed persons and has been suppressed.
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the five-year period before the survey
na = Not applicable

Studies have shown that children's birth weight is an important determinant of their survival chances. Since most births in Nepal occur at home, where children often are not weighed at birth, data on birth weight are available for only a few children. However, mothers in the 2011 NDHS survey were asked whether their child was very large, larger than average, average, smaller than average, or small at birth, since this has been found to be a good proxy for a child's weight. As expected, the size of the baby at birth and mortality were negatively associated. For example, 1 in 15 children regarded as very small or small did not survive to the first year, as compared with 1 in 24 children regarded as average or large in size.

8.5 PERINATAL MORTALITY

The 2011 NDHS asked women to report on any pregnancy loss that occurred in the five years preceding the survey. For each pregnancy that did not end in a live birth, the duration of pregnancy was recorded. In this report, perinatal deaths include pregnancy losses of at least seven months' gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths). The perinatal mortality rate is the sum of stillbirths and early neonatal deaths divided by the sum of all stillbirths and live births. Information on stillbirths and infant deaths within the first week of life is highly susceptible to omission and misreporting. Nevertheless, retrospective surveys in developing countries provide more representative and accurate perinatal death rates than do vital registration systems and hospital-based studies.

Table 8.4 shows that out of the 5,444 reported pregnancies of at least seven months' gestation in the five years preceding the survey, 53 were stillbirths and 149 were early neonatal deaths, yielding an overall perinatal mortality rate of 37 per 1,000 pregnancies. Because the rate is subject to a high degree of sampling variation, differences by background characteristics should be interpreted with caution.

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	10	43	48	1,111
20-29	27	89	35	3,355
30-39	13	15	33	863
40-49	3	2	35	116
Previous pregnancy interval in months[4]				
First pregnancy	19	57	44	1,732
<15	5	10	52	293
15-26	8	36	40	1,101
27-38	9	25	38	884
39+	12	20	23	1,434
Residence				
Urban	4	11	29	507
Rural	49	137	38	4,938
Ecological zone				
Mountain	9	13	50	437
Hill	23	57	37	2,154
Terai	20	79	35	2,854
Development region				
Eastern	16	33	38	1,286
Central	4	58	36	1,721
Western	10	26	36	1,017
Mid-western	14	18	40	807
Far-western	9	14	37	614
Mother's education				
No education	25	79	40	2,575
Primary	16	26	38	1,095
Some secondary	10	40	34	1,478
SLC and above	2	4	20	297
Wealth quintile				
Lowest	20	32	37	1,410
Second	11	35	39	1,194
Middle	12	41	46	1,145
Fourth	5	31	38	943
Highest	5	10	19	753
Total	53	149	37	5,444

SLC = School Leaving Certificate
[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1000
[4] Categories correspond to birth intervals of less than 24 months, 24-35 months, 36-47 months, and 48+ months.

The perinatal mortality rate is higher among young mothers (below age 20) and among births that occur less than 15 months after the previous birth. The perinatal mortality rate is higher in rural than in urban areas and higher in the mountain zone than in the hill and terai zones. It is highest in the Mid-western region. There is a marked difference in perinatal mortality by mother's education. It is twice as high among women with no education as among women with an SLC or higher level of education. Perinatal mortality is lowest among women in the highest wealth quintile. Perinatal mortality has declined from 45 to 37 deaths per 1,000 pregnancies in the last five years.

8.6 HIGH-RISK FERTILITY BEHAVIOR

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. Typically, the probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). The risk is elevated when a child is born to a mother who has a combination of these risk characteristics.

The first column in Table 8.5 shows the percentages of births occurring in the five years before the survey that fall into the various risk categories. Thirty-nine percent of births in Nepal are at an elevated risk of dying that is avoidable, while 34 percent are in a risk-free category. First births, which make up 27 percent of births, are considered an unavoidable risk. Twenty-nine percent of births are in a single high-risk category, and 11 percent are in a multiple high-risk category. The most common single high-risk category is births of order higher than three (12 percent), while the most common multiple high-risk category is births to mothers above age 34 and of birth order over three (5 percent).

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Nepal 2011

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	33.6	1.00	38.8[a]
Unavoidable risk category			
First-order births between ages 18 and 34	27.4	1.09	8.8
Single high-risk category			
Mother's age <18	6.7	1.61	1.3
Mother's age >34	1.1	*	7.3
Birth interval <24 months	8.6	1.78	8.4
Birth order >3	12.1	(0.81)	9.9
Subtotal	28.5	1.27	26.9
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.5	2.69	0.2
Age >34 and birth interval <24 months	0.0	*	0.1
Age >34 and birth order >3	5.3	(0.60)	20.7
Age >34 and birth interval <24 months and birth order >3	0.6	3.77	1.0
Birth interval <24 months and birth order >3	4.0	2.10	3.5
Subtotal	10.5	1.46	25.5
In any avoidable high-risk category	39.0	1.32	52.4
Total	100.0	na	100.0
Number of births/women	5,391	na	9,608

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order three or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilized women
na = Not applicable

The risk ratios in the second column of Table 8.5 denote the relationship between risk factors and mortality. In general, risk ratios are higher for children in a multiple high-risk category than in a single high-risk category. The most vulnerable births are those to women older than 34 years, with a birth interval less than 24 months, and birth order of higher than three. This group of children is nearly four times as likely to die as children not in any high-risk category. Less than 1 percent of births fall in this category.

The last column of Table 8.5 shows the distribution of currently married women with the potential for having a high-risk birth by category. This column is purely hypothetical and does not take into consideration the protection provided by family planning, postpartum insusceptibility, and prolonged abstinence. However, it provides insight into the magnitude of high-risk births. Twenty-one percent of women are or would be too old (over 34) and have or would have too many children (more than three) if they were to become pregnant. A slightly lower proportion of women (26 percent) have the potential of having a birth in a multiple high-risk category than in a single high-risk category (27 percent).

MATERNAL HEALTH 9

Key Findings:

- About 6 in 10 mothers receive antenatal care from a skilled provider, a significant improvement from 24 percent in 1996.
- Fifty percent of women make four or more antenatal care visits during their pregnancy, a five-fold increase in the past 15 years. The median duration of pregnancy for the first antenatal visit is 3.7 months.
- Eighty-two percent of mothers with a birth in five years preceding the survey were protected against neonatal tetanus.
- More than one in three births in the past five years have been assisted by a skilled provider. Skilled birth attendance has doubled over this period.
- In the two years before the survey, 45 percent of women received postnatal care for their last birth in the first two days after delivery.
- Only 38 percent of women are aware that abortion is legal in Nepal. In addition, their knowledge of the specific circumstances under which abortion is legal is poor.

The maternal mortality ratio (MMR) in Nepal decreased substantially between 1996 and 2006, from 539 to 281 deaths per 100,000 births (Ministry of Health and Population [MOHP], New ERA, and Macro International Inc., 2007). Improvements in maternal health services have been key in reducing the country's MMR. The National Safe Motherhood Program has made significant progress in terms of development of policies and protocols as well as expansion of the role of service providers such as staff nurses and auxiliary nurse midwives. The National Safe Motherhood Program is a priority for the government of Nepal's Health Sector Strategy, which works toward meeting the Tenth Five-year Poverty Reduction Strategy and health sector targets set out in the Millennium Development Goals (MDGs). The target for maternal health is to reduce the MMR by three-quarters between 1990 and 2015. The Policy on Skilled Birth Attendants, endorsed in 2006 by the MOHP, specifically identifies the importance of skilled birth attendants (SBAs) at every birth and embodies the government's commitment to training and deploying doctors, nurses, and auxiliary nurse midwives with the required skills across the country. In order to ensure focused and coordinated efforts among various stakeholders involved in safe motherhood and neonatal health programming, the National Safe Motherhood (2002-2007) Program has been revised with wider participation by the government and nongovernmental, national, and international institutions. By the end of 2008-2009, the birth preparedness package (BPP) had been rolled out in all 75 districts. Similarly, a maternity incentive scheme was adopted in 2005 to encourage women to use health facilities for maternity care and improve access to maternity care services (MOHP, 2011a).

The health care services that a woman receives during pregnancy, childbirth, and the immediate postnatal period are important for the survival and well-being of both the mother and the child. The 2011 NDHS collected information on the extent to which women in Nepal receive care during each of these stages. The findings can be used to identify subgroups of women at increased risk of mortality because of nonuse of maternal health services and to assist in the planning of appropriate improvements in services.

9.1 ANTENATAL CARE

Antenatal care (ANC) from a skilled provider is important to monitor the pregnancy and reduce the risk of morbidity for mother and baby during pregnancy and delivery. The quality of antenatal care can be monitored through the content of services received and the kind of information mothers are given during their visit. Information on ANC coverage was obtained from women who gave birth in the five years preceding the survey. Among women with two or more live births during the five-year period, data refer to the most recent birth only.

Table 9.1 shows the percent distribution of mothers in the five years preceding the survey by source of antenatal care received during pregnancy, according to selected characteristics. Women were asked to report on

all persons they saw for antenatal care for their last birth. However, if a woman saw more than one provider, only the provider with the highest qualifications was considered in the tabulation of results.

Fifty-eight percent of mothers received antenatal care from a skilled provider (a doctor, nurse, or midwife) for their most recent birth in the five years preceding the survey. In addition, 26 percent of mothers received antenatal care from trained health workers such as a health assistant or auxiliary health worker (AHW), a maternal and child health worker (MCHW), or a village health worker (VHW). Less than 1 percent of women received antenatal care from a female community health volunteer (FCHV). Fifteen percent of women received no antenatal care for births in the five years before the survey.

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Nepal 2011

Background characteristic	Antenatal care provider						No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Health assistant/ AHW	MCHW	VHW	FCHV				
Mother's age at birth										
<20	25.6	37.9	9.6	14.4	1.1	0.5	10.9	100.0	63.5	739
20-34	28.2	31.6	12.4	12.2	1.4	0.7	13.5	100.0	59.8	3,085
35-49	17.2	14.3	6.6	15.6	1.7	4.0	40.7	100.0	31.5	325
Birth order										
1	37.1	35.8	11.2	8.9	0.8	0.3	5.9	100.0	72.8	1,302
2-3	27.6	32.6	11.6	13.4	1.6	0.7	12.4	100.0	60.2	1,895
4-5	13.9	28.5	13.2	15.5	1.4	2.2	25.3	100.0	42.4	614
6+	6.9	12.9	8.3	20.3	2.3	1.8	47.4	100.0	19.8	337
Residence										
Urban	59.3	28.6	3.3	1.8	0.2	0.3	6.3	100.0	87.9	418
Rural	23.3	31.7	12.4	14.1	1.5	1.0	16.1	100.0	54.9	3,730
Ecological zone										
Mountain	10.1	42.0	9.7	14.9	0.4	0.3	22.6	100.0	52.1	306
Hill	23.5	29.7	12.0	11.8	0.8	1.7	20.4	100.0	53.2	1,669
Terai	31.9	31.1	11.2	13.4	1.9	0.4	10.1	100.0	63.0	2,174
Development region										
Eastern	26.4	34.3	14.0	11.4	1.4	0.6	11.9	100.0	60.7	999
Central	34.9	21.6	14.5	10.5	1.5	0.0	17.0	100.0	56.4	1,293
Western	29.9	30.0	8.6	12.9	1.8	1.9	14.8	100.0	59.9	818
Mid-western	14.2	39.0	7.8	15.0	1.0	1.9	21.2	100.0	53.1	598
Far-western	16.2	45.6	6.9	20.0	0.7	1.2	9.5	100.0	61.8	440
Subregion										
Eastern mountain	9.7	40.7	13.3	17.9	1.7	0.0	16.7	100.0	50.3	78
Central mountain	19.4	39.8	15.2	2.9	0.0	0.6	22.3	100.0	59.2	72
Western mountain	5.9	43.7	5.3	19.1	0.0	0.3	25.7	100.0	49.7	155
Eastern hill	14.5	36.9	22.4	4.0	2.2	1.0	19.0	100.0	51.4	331
Central hill	45.1	16.1	12.3	7.7	0.4	0.0	18.4	100.0	61.2	403
Western hill	23.6	27.7	10.6	13.6	0.8	2.8	21.0	100.0	51.3	488
Mid-western hill	10.3	33.1	6.5	17.0	0.0	2.7	30.4	100.0	43.3	275
Far-western hill	11.0	48.5	4.4	22.8	0.7	2.4	10.3	100.0	59.5	171
Eastern terai	35.3	32.1	9.4	14.8	0.9	0.4	7.2	100.0	67.3	589
Central terai	31.2	22.6	15.5	12.6	2.2	0.0	15.9	100.0	53.9	818
Western terai	39.3	33.5	5.7	11.8	3.2	0.7	5.8	100.0	72.8	330
Mid-western terai	21.7	39.3	10.8	15.1	2.5	1.5	9.1	100.0	60.9	238
Far-western terai	24.2	49.5	8.8	13.3	0.9	0.2	3.1	100.0	73.7	200
Education										
No education	14.5	27.5	12.7	17.9	1.6	1.2	24.7	100.0	42.0	1,822
Primary	19.4	36.6	14.2	13.3	1.3	0.9	14.4	100.0	56.0	835
Some secondary	35.8	36.7	12.0	7.9	1.2	0.6	5.9	100.0	72.4	866
SLC and above	60.7	28.3	3.5	4.5	1.1	0.7	1.2	100.0	89.0	627
Wealth quintile										
Lowest	6.8	26.5	13.6	17.7	0.8	1.6	32.9	100.0	33.3	979
Second	11.4	33.3	15.4	17.7	1.9	1.7	18.5	100.0	44.7	899
Middle	22.9	35.4	15.0	14.6	2.4	0.4	9.2	100.0	58.3	873
Fourth	42.3	35.6	7.0	7.6	1.1	0.2	6.3	100.0	77.9	748
Highest	66.1	25.7	3.2	2.6	0.2	0.3	2.0	100.0	91.8	649
Total	26.9	31.4	11.4	12.9	1.4	0.9	15.2	100.0	58.3	4,148

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
AHW = auxiliary health worker; MCH = maternal and child health worker; VHW = village health worker; FCHV = female community health volunteer; SLC = School Leaving Certificate
[1] Skilled provider includes doctor, nurse, and midwife.

Younger mothers (less than age 20) are more likely to receive antenatal care from a skilled provider than older mothers (age 35-49). Mothers are also much more likely to receive care from a skilled provider for their first births (73 percent) than for births of order six and higher (20 percent).

There are large differences in the use of antenatal care services between urban and rural women. Eighty-eight percent of urban mothers received antenatal care from a skilled provider, compared with only 55

percent of rural mothers. Sixty-three percent of mothers living in the terai received antenatal care from a skilled provider, compared with 53 percent of mothers in the hill zone and 52 percent of mothers in the mountain zone. About 60 percent of mothers living in the Far-western, Eastern, and Western regions received antenatal care from a skilled provider. Less than 55 percent of mothers living in the Mid-western region received antenatal care from a skilled provider. The proportion of women who received antenatal care from a skilled provider was lowest in the Mid-western hill subregion (43 percent) and highest in the Western terai (73 percent) and Far-western terai (74 percent) subregions.

The use of antenatal care services from a skilled provider is strongly related to the mother's level of education. Women with a School Leaving Certificate (SLC) and higher are more than twice as likely to receive antenatal care from a skilled provider (89 percent) as women with no education (42 percent). Similarly, women in the highest wealth quintile are almost three times as likely to receive care from a skilled provider (92 percent) as women in the lowest wealth quintile (33 percent).

The proportion of women receiving antenatal care from a skilled provider has more than doubled in the past 15 years, from 24 percent in 1996 to 58 percent in 2011.

9.1.1 Number and Timing of Antenatal Visits

Regular antenatal care is helpful in identifying and preventing adverse pregnancy outcomes when it is sought early in the pregnancy and is continued through delivery. WHO recommends that a woman should have at least four ANC visits. It is possible during these visits to detect health problems associated with a pregnancy. In the event of any complications, more frequent visits are advised, and admission to a health facility may be necessary.

Table 9.2 presents information on the number of antenatal visits and the timing of the first antenatal visit for the most recent birth in the five years preceding the survey. The findings show that 50 percent of pregnant women make four or more antenatal care visits during their entire pregnancy. Urban women (72 percent) are more likely to have had four or more antenatal visits than rural women (48 percent).

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Nepal 2011

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	6.3	16.1	15.2
1	2.9	6.5	6.1
2-3	19.0	29.7	28.6
4+	71.8	47.7	50.1
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	6.3	16.1	15.2
<4	67.3	47.7	49.7
4-5	19.9	26.8	26.1
6-7	5.6	7.6	7.4
8+	0.7	1.8	1.7
Don't know/missing	0.1	0.0	0.0
Total	100.0	100.0	100.0
Number of women	418	3,730	4,148
Median months pregnant at first visit (for those with ANC)	3.4	3.8	3.7
Number of women with ANC	392	3,128	3,520

Fifty percent of women made their first antenatal care visit before the fourth month of pregnancy. The median duration of pregnancy at the first antenatal care visit was 3.7 months (3.4 months in urban areas and 3.8 months in rural areas).

Over the past 15 years, there has been a five-fold increase in the percentage of women with four or more antenatal visits during their pregnancy (from 9 percent in 1996 to 50 percent in 2011).

9.2 Components of Antenatal Care

The content of antenatal care is an essential component of ANC service quality. Focused antenatal care hinges on the principle that every pregnancy is at risk of complications. Therefore, apart from receiving basic care, every pregnant woman should be monitored for complications. Ensuring that pregnant women receive information and undergo screening for complications should be a routine part of all antenatal care visits. To assess ANC services, mothers in the 2011 NDHS were asked a number of questions about the care they received during pregnancy for their most recent live birth in the five years preceding the survey.

Table 9.3 presents information on the percentage of women who took iron tablets and intestinal parasite drugs during their most recent pregnancy in the five years preceding the survey. The table also shows the percentage of women who were informed about the signs of pregnancy complications and, among women receiving antenatal care, the percentage who received specific routine antenatal care services.

Among women with a live birth in the past five years, 80 percent took iron tablets and 55 percent took intestinal parasite drugs during their most recent pregnancy. There are substantial variations by background characteristics. Women less than age 34 at delivery, women pregnant with their first child, urban women, women residing in the terai, women living in the Far-western and Eastern regions (and particularly the Far-western hill, Eastern terai, Western terai, Mid-western terai, and Far-western terai subregions), women with at least some secondary education, and women in the middle and higher wealth quintiles were more likely than their counterparts to take iron tablets during their pregnancy.

A similar pattern by background characteristics is seen in use of drugs for intestinal parasites, with the exception of place of residence. Rural women are slightly more likely than urban women to have taken drugs for intestinal parasites. There is little variation by wealth quintile with the exception of women in the lowest quintile, who are least likely to take anti-parasitic drugs.

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Nepal 2011

	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:			Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services				
Background characteristic	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past five years	Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth								
<20	82.9	58.7	739	76.1	87.6	54.4	44.9	658
20-34	81.5	56.5	3,085	76.0	86.8	57.1	46.2	2,669
35-49	53.0	33.7	325	66.7	78.0	44.3	34.4	192
Birth order								
1	89.7	64.4	1,302	80.7	92.5	67.3	58.2	1,225
2-3	82.0	57.3	1,895	76.4	85.4	55.0	43.7	1,659
4-5	69.2	41.1	614	65.4	79.7	38.7	27.7	459
6+	45.2	33.0	337	57.7	71.4	29.6	16.4	177
Residence								
Urban	88.9	49.8	418	83.2	95.3	83.9	77.2	392
Rural	78.5	55.7	3,730	74.5	85.3	52.4	41.3	3,128
Ecological zone								
Mountain	73.0	58.2	306	83.5	86.0	37.7	28.3	237
Hill	75.0	50.9	1,669	80.8	84.7	52.0	41.9	1,328
Terai	83.9	58.0	2,174	70.9	87.6	60.7	49.7	1,955
Development region								
Eastern	82.8	60.9	999	78.8	90.6	59.7	45.5	880
Central	76.6	41.8	1,293	63.3	86.7	61.3	53.0	1,073
Western	79.0	54.2	818	77.7	83.6	58.2	47.9	697
Mid-western	74.6	62.2	598	82.8	81.3	48.5	32.3	472
Far-western	88.5	73.3	440	88.6	87.6	37.6	35.0	398
Subregion								
Eastern mountain	75.2	63.1	78	84.9	90.9	32.0	24.3	65
Central mountain	72.0	50.9	72	75.5	88.7	51.8	36.3	56
Western mountain	72.4	59.2	155	86.7	81.9	34.1	26.5	115
Eastern hill	73.9	53.3	331	75.7	83.1	42.0	26.8	268
Central hill	77.9	39.7	403	77.6	97.4	73.3	63.6	329
Western hill	73.6	48.2	488	81.2	79.3	51.8	42.9	386
Mid-western hill	67.9	57.4	275	88.6	77.7	48.3	30.9	191
Far-western hill	86.4	69.7	171	86.0	83.2	29.3	32.9	153
Eastern terai	88.9	64.9	589	79.5	94.3	71.8	57.3	547
Central terai	76.4	42.1	818	55.5	81.4	56.4	49.2	688
Western terai	87.0	63.0	330	73.3	88.9	66.1	53.9	311
Mid-western terai	83.3	68.4	238	76.6	84.3	51.1	33.8	216
Far-western terai	95.7	81.8	200	91.0	92.6	47.1	40.7	194
Education								
No education	69.0	44.4	1,822	63.9	79.2	40.7	31.0	1,372
Primary	78.8	56.4	835	74.6	85.2	52.9	40.0	714
Some secondary	89.7	67.7	866	82.6	91.5	63.0	52.8	814
SLC and above	97.2	67.2	627	92.8	97.5	83.7	73.4	619
Wealth quintile								
Lowest	61.8	43.8	979	69.6	77.0	31.2	20.2	657
Second	77.8	55.8	899	70.8	81.4	37.8	26.2	733
Middle	82.1	58.9	873	69.5	85.3	50.3	39.9	792
Fourth	88.6	61.7	748	81.2	91.8	75.9	63.1	701
Highest	94.8	58.7	649	88.3	97.5	87.1	80.3	637
Total	79.5	55.1	4,148	75.5	86.4	55.9	45.3	3,520

SLC = School Leaving Certificate

More than three-fourths (76 percent) of mothers who received antenatal care reported that they were informed about pregnancy complications during an antenatal visit. Eighty-six percent of pregnant women who sought antenatal care had their blood pressure taken. Fifty-six percent and 45 percent of women had urine and blood taken for testing, respectively.

The quality of antenatal care is particularly related to mother's education, wealth, residence, and birth order. For example, 98 percent of women with an SLC and higher education had their blood pressure measured, compared with 79 percent of women with no education. Women in the lowest wealth quintile were less often provided information about pregnancy complications (70 percent) than women in the highest wealth quintile (88 percent). Slightly more urban women (83 percent) than rural women (75 percent) were provided information about pregnancy complications.

The overall quality of antenatal care has improved in the past five years. The percentage of pregnant women who were informed of complications during pregnancy increased by 32 percent, the percentage who had their blood pressure measured increased by 10 percent, and the percentage who had urine samples taken increased by 77 percent during that period.

9.3 TETANUS TOXOID VACCINATION

Neonatal tetanus is a leading cause of death among infants in developing countries where a considerable proportion of deliveries take place at home or at locations where hygienic conditions may be poor. Tetanus toxoid (TT) vaccine is given to women during pregnancy to prevent infant deaths caused by neonatal tetanus, which can occur when sterile procedures are not followed in cutting the umbilical cord after delivery. For full protection, women should receive at least two doses of TT vaccine during each pregnancy. If a woman has been vaccinated during a previous pregnancy or during maternal and neonatal tetanus vaccination campaigns, however, she may require only one dose for the current pregnancy. Five doses are considered to provide lifetime protection.

Table 9.4 presents the percentage of women who had a live birth in the five years preceding the survey and whose last birth was protected against neonatal tetanus. More than four of five mothers (82 percent) with a birth in the five years preceding the survey were protected against neonatal tetanus. More than two-thirds (70 percent) of pregnant women received two or more tetanus injections during their last pregnancy.

Younger mothers (less than age 34), mothers of lower order births (three and below), and urban mothers are more likely to have received two or more tetanus injections during their last pregnancy than their counterparts. There are marked differences in tetanus toxoid coverage by ecological zone, development region, and subregion. Over 70 percent of mothers from the terai, Eastern and Central regions, and Eastern terai, Central terai, and Western terai subregions received two or more tetanus toxoid injections. Education and wealth have a positive impact on receipt of tetanus toxoid injections, with coverage of two doses or more ranging from a low of 60 percent among mothers with no education to a high of 87 percent among mothers with an SLC and higher education. Similarly, coverage with two or more doses of tetanus toxoid ranges from a low of 50 percent among mothers in the poorest households to 88 percent among mothers in the wealthiest households.

Between 2006 and 2011, the percentage of mothers who received at least two tetanus toxoid injections for their last birth and the percentage whose last birth was protected against neonatal tetanus increased by just 10 percent and 4 percent, respectively.

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid (TT) injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Nepal 2011

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
Mother's age at birth			
<20	73.2	82.5	739
20-34	71.2	83.7	3,085
35-49	47.8	58.6	325
Birth order			
1	80.3	87.6	1,302
2-3	71.2	85.9	1,895
4-5	57.5	69.9	614
6+	42.6	54.6	337
Residence			
Urban	80.7	90.8	418
Rural	68.5	80.5	3,730
Ecological zone			
Mountain	60.9	69.6	306
Hill	62.4	73.0	1,669
Terai	76.5	89.8	2,174
Development region			
Eastern	72.2	83.6	999
Central	74.3	84.5	1,293
Western	66.3	78.8	818
Mid-western	61.0	72.1	598
Far-western	68.6	85.9	440
Subregion			
Eastern mountain	61.3	74.6	78
Central mountain	57.3	63.8	72
Western mountain	62.5	69.7	155
Eastern hill	63.3	73.2	331
Central hill	69.3	78.6	403
Western hill	57.1	70.0	488
Mid-western hill	56.2	63.4	275
Far-western hill	69.6	83.3	171
Eastern terai	78.7	90.7	589
Central terai	78.3	89.3	818
Western terai	79.9	91.8	330
Mid-western terai	66.7	83.6	238
Far-western terai	69.2	92.9	200
Education			
No education	60.4	72.6	1,822
Primary	66.4	80.0	835
Some secondary	80.4	90.7	866
SLC and above	86.5	96.8	627
Wealth quintile			
Lowest	49.8	59.6	979
Second	61.7	77.4	899
Middle	77.7	90.2	873
Fourth	80.5	92.1	748
Highest	87.8	96.4	649
Total	69.7	81.5	4,148

[1] Includes mothers with two injections during the pregnancy of their last birth, or two or more injections (the last within three years of the last live birth), or three or more injections (the last within five years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth
SLC = School Leaving Certificate

9.4 PLACE OF DELIVERY

Increasing the percentage of births delivered in health facilities is important for reducing deaths arising from complications of pregnancy. The expectation is that if complications arise during delivery in a health facility, a skilled attendant can manage the complication or refer the mother early to the next level of care. Hence, Nepal is promoting safe motherhood through initiatives such as providing financial assistance through maternity incentives schemes to women seeking skilled delivery care in a health facility. Subsidies are also provided to health institutions on the basis of deliveries conducted.

Table 9.5 presents the percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics. Thirty-five percent of births take place in a health facility: 26 percent are delivered in a public-sector health facility, 2 percent in a nongovernment facility, and 7 percent in

a private facility. Still two-thirds of births (63 percent) take place at home. Delivery in a health facility is more common among mothers less than age 34 (35-41 percent) and mothers of first-order births (54 percent). Children in urban areas are more than twice as likely (71 percent) to be delivered in an institutional setting as children born in rural areas (32 percent). Delivery in a health facility varies widely by ecological region, being lowest in the mountain zone (19 percent) and highest in the terai (41 percent). Institutional deliveries range from a low of 29 percent in the Far-western and Mid-western regions to a high of 40 percent in the Eastern region, and they are most frequent in the Eastern terai subregion, where one of two mothers has a facility-based delivery. There is a strong association between health facility delivery, mother's education, and wealth quintile. The proportion of deliveries in a health facility is nearly four times higher among births to mothers with an SLC and higher education (75 percent) than among births to mothers with no education (19 percent). A similar pattern is seen in terms of wealth quintile: delivery at a health facility is significantly lower among births in the lowest wealth quintile (11 percent) than in the highest wealth quintile (78 percent).

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Nepal 2011

Background characteristic	Health facility			Home	Other	Total	Percentage delivered in a health facility	Number of births
	Government sector	Non-government sector	Private sector					
Mother's age at birth								
<20	33.0	2.2	6.1	57.7	1.1	100.0	41.2	1,101
20-34	25.2	2.1	7.9	63.2	1.6	100.0	35.2	3,910
35-49	13.6	2.5	3.8	77.1	3.1	100.0	19.9	380
Birth order								
1	38.5	4.0	11.6	44.5	1.4	100.0	54.1	1,833
2-3	22.8	1.6	6.7	67.3	1.6	100.0	31.1	2,368
4-5	15.1	0.1	2.0	81.7	1.1	100.0	17.2	773
6+	8.6	0.8	1.1	86.3	3.3	100.0	10.4	417
Antenatal care visits[1]								
None	6.7	0.1	1.4	90.1	1.7	100.0	8.3	629
1-3	18.5	1.2	4.0	74.4	1.9	100.0	23.7	1,442
4+	41.8	4.0	12.1	40.5	1.6	100.0	58.0	2,078
Residence								
Urban	51.8	2.8	16.7	27.9	0.8	100.0	71.3	503
Rural	23.3	2.1	6.3	66.7	1.7	100.0	31.6	4,888
Ecological zone								
Mountain	16.3	0.6	2.0	79.4	1.7	100.0	18.8	428
Hill	25.6	1.3	4.4	66.4	2.3	100.0	31.3	2,130
Terai	27.7	3.0	10.2	58.1	1.0	100.0	40.9	2,833
Development region								
Eastern	24.8	6.0	8.8	59.3	1.1	100.0	39.6	1,269
Central	25.7	0.5	9.5	63.0	1.2	100.0	35.7	1,717
Western	31.6	1.8	4.7	59.8	2.2	100.0	38.0	1,007
Mid-western	23.6	0.3	5.2	69.0	1.9	100.0	29.1	793
Far-western	22.8	1.7	4.4	68.9	2.2	100.0	29.0	605
Subregion								
Eastern mountain	17.5	0.3	1.8	79.7	0.7	100.0	19.6	101
Central mountain	19.0	2.2	5.0	72.2	1.7	100.0	26.1	96
Western mountain	14.6	0.0	0.9	82.3	2.2	100.0	15.5	230
Eastern hill	19.7	2.8	2.9	73.0	1.5	100.0	25.5	416
Central hill	35.6	0.2	10.0	52.7	1.4	100.0	45.9	495
Western hill	26.9	0.6	3.6	66.0	3.0	100.0	31.1	604
Mid-western hill	22.9	0.1	1.4	72.4	3.1	100.0	24.5	367
Far-western hill	16.3	4.2	1.8	75.3	2.4	100.0	22.3	247
Eastern terai	28.5	8.6	12.9	49.0	0.9	100.0	50.1	752
Central terai	21.9	0.4	9.7	66.8	1.1	100.0	32.1	1,126
Western terai	38.5	3.5	6.4	50.6	1.0	100.0	48.4	402
Mid-western terai	28.0	0.6	11.9	59.6	0.0	100.0	40.4	301
Far-western terai	32.9	0.0	8.3	56.6	2.2	100.0	41.1	252
Mother's education								
No education	15.3	0.6	3.5	79.3	1.3	100.0	19.3	2,550
Primary	23.3	1.8	6.4	66.7	1.8	100.0	31.5	1,079
Some secondary	38.2	4.1	8.9	47.6	1.2	100.0	51.3	1,039
SLC and above	49.8	5.4	19.4	22.8	2.6	100.0	74.6	723
Wealth quintile								
Lowest	9.6	0.7	1.1	86.5	2.0	100.0	11.4	1,390
Second	19.7	0.4	3.1	74.9	1.7	100.0	23.3	1,182
Middle	28.4	1.1	5.9	63.2	1.4	100.0	35.4	1,133
Fourth	36.3	4.6	11.0	46.9	1.2	100.0	51.9	938
Highest	49.5	5.9	22.4	21.0	1.1	100.0	77.9	748
Total	26.0	2.1	7.2	63.1	1.6	100.0	35.3	5,391

[1] Includes only the most recent birth in the five years preceding the survey
SLC = School Leaving Certificate

The percentage of births taking place in a health facility has doubled in the past five years (from 18 percent in 2006 to 35 percent in 2011) as a result of continued government encouragement of institutional deliveries through free delivery services and payment for transportation costs.

Women who did not deliver in a health facility were asked for their reasons for not doing so. Table 9.6 shows that a large majority of women who did not deliver in a health facility believed that it was not necessary (62 percent). In addition, 14 percent of women said that the health facility was too far or they had transportation problems, and 10 percent said it was not customary. Eight percent of women reported that the child was delivered before reaching a health facility, and 5 percent reported cost as a barrier to having a delivery in a health facility.

Table 9.6 Reasons for not delivering in a health facility

Among last live births not delivered in a health facility, percentage whose mothers cite specific reasons for not delivering in a facility, according to background characteristics, Nepal 2011

Background characteristic	Cost too much	Facility not open	Too far/ no transpor-tation	Don't trust facility/ poor-quality service	No female provider at facility	Husband/ family did not allow	Security concerns	Not necessary	Not customary	Child born before reaching facility	Other	Total number of births
Residence												
Urban	3.6	1.0	7.6	1.5	0.0	3.1	0.0	56.8	3.9	19.0	7.2	107
Rural	4.6	1.5	13.7	2.0	0.2	2.8	0.3	62.5	9.8	7.6	4.0	2,444
Ecological zone												
Mountain	1.0	1.2	24.5	1.6	0.2	1.3	0.2	62.8	9.3	7.0	5.3	242
Hill	1.8	1.3	18.1	1.1	0.3	1.5	0.1	58.4	16.1	7.2	5.0	1,088
Terai	7.7	1.7	7.1	2.9	0.2	4.2	0.5	65.5	3.8	8.9	3.2	1,221
Development region												
Eastern	4.4	0.9	11.1	2.6	0.6	2.8	0.0	60.8	9.0	10.8	9.1	570
Central	8.0	1.1	10.0	2.6	0.1	3.3	0.4	67.1	5.6	7.2	1.5	790
Western	2.6	0.9	6.0	0.4	0.0	1.8	0.0	71.7	13.2	6.6	2.4	488
Mid-western	2.4	0.3	28.0	1.8	0.2	3.1	0.4	50.3	14.3	7.0	5.4	404
Far-western	1.7	6.3	19.7	2.4	0.4	2.5	1.2	52.6	8.8	8.9	2.8	300
Subregion												
Eastern mountain	1.1	2.4	14.8	2.2	0.0	2.2	0.0	54.5	13.5	16.0	8.3	62
Central mountain	3.1	0.0	21.3	0.8	0.8	1.6	0.8	71.9	12.4	2.0	3.1	53
Western mountain	0.0	1.2	30.5	1.6	0.0	0.8	0.0	63.1	6.0	4.8	4.8	127
Eastern hill	5.6	0.4	19.4	1.4	0.4	1.3	0.0	57.3	14.2	8.0	8.8	240
Central hill	1.6	3.2	13.6	2.4	0.0	2.8	0.0	59.3	11.4	11.8	3.6	196
Western hill	0.1	1.3	7.5	0.6	0.0	1.2	0.0	67.0	17.0	7.4	2.5	329
Mid-western hill	0.8	0.0	31.4	0.8	0.4	2.0	0.8	48.0	21.4	4.6	7.5	198
Far-western hill	0.9	1.9	29.8	0.5	0.9	0.0	0.0	53.1	16.1	2.3	2.0	125
Eastern terai	4.1	1.1	2.8	3.7	0.9	4.3	0.0	65.3	3.2	12.1	9.5	268
Central terai	10.8	0.5	7.6	2.8	0.0	3.7	0.5	69.5	2.8	6.0	0.6	540
Western terai	7.6	0.0	3.0	0.0	0.0	3.0	0.0	81.4	5.4	4.9	2.2	159
Mid-western terai	6.0	0.0	15.9	2.7	0.0	5.6	0.0	52.6	7.1	10.2	2.7	135
Far-western terai	3.3	13.4	10.7	5.6	0.0	6.4	3.1	41.0	3.5	19.6	2.5	119
Mother's education												
No education	6.0	1.4	14.5	1.6	0.2	3.2	0.4	62.2	11.3	5.8	3.9	1,445
Primary	4.2	2.4	13.4	2.8	0.4	2.8	0.2	60.7	8.4	9.3	3.8	549
Some secondary	1.3	0.4	9.9	2.9	0.2	2.4	0.3	64.5	6.1	10.9	6.4	399
SLC and above	0.0	1.9	13.5	1.2	0.0	0.2	0.0	62.1	6.3	17.2	2.0	157
Wealth quintile												
Lowest	3.0	1.9	22.2	1.3	0.1	1.5	0.2	54.9	17.8	5.2	4.0	852
Second	6.7	2.0	11.0	1.6	0.2	3.9	0.4	65.4	9.0	5.0	5.1	670
Middle	6.7	0.9	9.6	1.5	0.1	3.4	0.4	64.6	4.5	10.8	3.4	554
Fourth	2.0	0.1	5.8	3.2	0.9	3.5	0.4	67.9	1.8	14.6	3.7	346
Highest	0.9	2.4	5.4	8.1	0.0	0.9	0.0	68.2	0.7	12.9	4.4	128
Total	4.5	1.5	13.5	2.0	0.2	2.8	0.3	62.2	9.5	8.0	4.1	2,551

SLC = School Leaving Certificate

9.5 ASSISTANCE DURING DELIVERY

Obstetric care from a health professional during delivery is recognized as critical for the reduction of maternal and neonatal mortality. Children delivered at home are usually more likely to be delivered without assistance from a trained provider, whereas children delivered at a health facility are more likely to be delivered by a trained health professional.

Table 9.7 shows delivery assistance by type of provider according to background characteristics. More than one-third (36 percent) of births take place with the assistance of a skilled birth attendant (SBA), which includes doctor, nurse, or midwife. Health assistants or AHWs assist in the delivery of 4 percent of births, FCHVs assist in 3 percent, and traditional birth attendants assist in 11 percent. Two in five (40 percent) births are attended by a relative or some other person, while 3 percent of births take place without any type of assistance.

Births to mothers less than age 20 and first-order births (42 percent and 55 percent, respectively) are more likely to be assisted by an SBA. Not surprisingly, substantially more births delivered in a health facility than births delivered elsewhere are attended by an SBA.

Seventy-three percent of urban births are assisted by an SBA, compared with 32 percent of births in rural areas. Births in the terai, and particularly in the Eastern terai subregion, are more likely to be attended by an SBA than births in other areas.

Table 9.7 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage delivered by cesarean section, according to background characteristics, Nepal 2011

	Person providing assistance during delivery											
Background characteristic	Doctor	Nurse/ midwife	Health assistant/ AHW	MCHW/ VHW	FCHV	Traditional birth attendant	Relative/ other	No one	Total	Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
Mother's age at birth												
<20	16.9	25.3	3.3	2.5	4.0	11.2	35.5	1.4	100.0	42.1	3.0	1,101
20-34	18.0	17.9	4.1	2.0	3.1	11.6	40.2	3.0	100.0	35.9	5.0	3,910
35-49	10.8	9.0	3.1	0.8	2.2	8.0	56.8	9.4	100.0	19.8	5.0	380
Birth order												
1	27.9	27.1	3.8	2.2	3.5	7.5	27.4	0.7	100.0	54.9	7.4	1,833
2-3	15.3	16.4	4.3	2.3	3.2	12.6	43.5	2.3	100.0	31.8	4.2	2,368
4-5	6.3	12.1	3.0	1.8	3.1	16.1	50.8	6.8	100.0	18.4	1.7	773
6+	2.2	7.9	2.9	0.5	2.1	11.0	61.2	12.3	100.0	10.1	0.0	417
Place of delivery												
Health facility	47.3	49.5	2.2	0.8	0.0	0.0	0.2	0.1	100.0	96.8	13.0	1,905
Elsewhere	0.9	2.0	4.8	2.7	5.0	17.4	62.4	4.8	100.0	2.8	0.0	3,487
Residence												
Urban	43.4	29.3	1.5	0.2	1.6	4.9	17.5	1.5	100.0	72.7	15.3	503
Rural	14.6	17.7	4.1	2.2	3.4	11.9	42.8	3.3	100.0	32.3	3.5	4,888
Ecological zone												
Mountain	6.2	12.7	2.3	1.4	3.6	2.3	65.6	5.9	100.0	18.9	1.4	428
Hill	14.8	15.6	3.7	1.6	3.2	2.8	52.8	5.5	100.0	30.4	3.7	2,130
Terai	20.8	22.1	4.2	2.5	3.2	19.0	27.3	1.0	100.0	42.8	5.8	2,833
Development region												
Eastern	22.4	19.6	4.7	2.2	2.7	6.3	40.2	1.8	100.0	42.0	6.2	1,269
Central	18.5	17.4	4.4	1.1	2.6	18.2	36.2	1.7	100.0	35.9	5.9	1,717
Western	17.8	20.0	4.5	1.8	3.4	11.3	38.6	2.6	100.0	37.8	3.8	1,007
Mid-western	8.9	19.8	2.5	2.5	2.7	7.0	47.8	8.9	100.0	28.7	2.4	793
Far-western	13.2	17.4	1.3	4.2	6.3	7.5	46.5	3.5	100.0	30.7	1.8	605
Subregion												
Eastern mountain	6.5	13.7	4.8	3.5	3.8	3.6	62.0	2.0	100.0	20.3	1.5	101
Central mountain	11.6	14.1	3.6	1.7	6.0	1.9	55.0	6.0	100.0	25.7	4.3	96
Western mountain	3.8	11.7	0.7	0.4	2.4	2.0	71.5	7.5	100.0	15.5	0.2	230
Eastern hill	10.6	14.5	5.6	0.2	3.7	3.9	57.0	4.4	100.0	25.1	2.0	416
Central hill	31.5	13.1	1.8	1.3	2.2	1.8	45.4	3.0	100.0	44.5	10.0	495
Western hill	12.2	17.3	6.9	1.3	3.3	3.9	52.0	3.1	100.0	29.5	2.2	604
Mid-western hill	7.0	17.3	0.9	3.0	2.5	2.4	52.9	14.0	100.0	24.3	1.5	367
Far-western hill	6.8	15.8	0.7	2.9	5.1	0.8	62.6	5.2	100.0	22.7	0.8	247
Eastern terai	31.0	23.3	4.2	3.1	2.0	8.0	28.0	0.4	100.0	54.3	9.2	752
Central terai	13.4	19.6	5.6	0.9	2.5	26.8	30.5	0.7	100.0	33.0	4.2	1,126
Western terai	26.2	24.0	0.9	2.6	3.6	22.4	18.4	1.8	100.0	50.2	6.2	402
Mid-western terai	13.2	26.2	5.1	2.8	2.3	14.3	34.4	1.7	100.0	39.4	4.6	301
Far-western terai	23.6	21.3	2.1	7.1	10.2	16.9	16.9	1.8	100.0	44.9	3.4	252
Mother's education												
No education	6.9	12.5	3.7	2.0	2.5	16.9	50.5	5.1	100.0	19.4	1.8	2,550
Primary	11.5	20.5	4.5	1.8	4.5	8.0	46.7	2.6	100.0	31.9	4.1	1,079
Some secondary	27.9	25.5	4.0	3.1	4.5	6.6	27.4	1.1	100.0	53.4	6.3	1,039
SLC and above	47.2	28.8	3.4	1.0	2.0	2.9	14.5	0.1	100.0	76.0	12.9	723
Wealth quintile												
Lowest	3.0	7.7	2.8	1.7	3.0	5.9	67.1	8.8	100.0	10.7	1.0	1,390
Second	7.1	16.6	4.7	2.6	3.7	16.5	46.5	2.3	100.0	23.7	0.8	1,182
Middle	14.2	21.8	5.5	2.2	4.0	16.6	34.9	0.9	100.0	35.9	4.6	1,133
Fourth	26.6	26.4	4.7	2.0	2.5	12.1	24.9	0.8	100.0	53.0	7.1	938
Highest	52.8	28.7	1.0	1.7	2.5	3.8	9.2	0.4	100.0	81.5	14.1	748
Total	17.3	18.8	3.9	2.0	3.2	11.3	40.4	3.1	100.0	36.0	4.6	5,391

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
AHW = auxiliary health worker; MCHW = maternal and child health worker; VHW = village health worker; FCHV = female community health volunteer; SLC = School Leaving Certificate
[1] Skilled provider includes doctor, nurse, and midwife.

There is a strong relationship between mother's education and delivery by an SBA. Births to highly educated women (SLC or higher) are nearly four times (76 percent) as likely as births to women with no education (19 percent) to receive assistance from an SBA. Similarly, assistance during delivery by an SBA varies by women's economic status: births to women in the highest wealth quintile are much more likely to be assisted by an SBA (82 percent) than births to women in the lowest wealth quintile (11 percent).

Table 9.7 also shows that 5 percent of births are delivered by cesarean section. Delivery by cesarean section is highest among births to highly educated mothers (13 percent), births to mothers in the highest wealth quintile (14 percent), urban births (15 percent), and first births (7 percent). Among births delivered by cesarean section, 12 percent were planned, while the rest was carried out due to complications at delivery (data not shown).

The percentage of births assisted at delivery by an SBA has almost doubled in the last five years (from 19 percent in 2006 to 36 percent in 2011), while the percentage of births assisted by relatives and others has declined (from 50 percent to 40 percent). Also noteworthy is the fact that delivery assistance by an SBA in rural areas has more than doubled in the last five years, from 14 percent to 32 percent.

9.5.1 Care and Support during Delivery

The government of Nepal has implemented various strategies to reduce maternal deaths. One of the primary causes of maternal deaths in Nepal is postpartum hemorrhage (PPH). The 2008-2009 Maternal Mortality Survey indicated that 24 percent of maternal deaths were due to postpartum hemorrhage (however, this was a reduction from 41 percent in 1998) (Suvedi et al., 2009). WHO reports that postpartum hemorrhage is responsible for one quarter of maternal mortality worldwide (Mathai et al., 2007). In response to the high incidence of postpartum hemorrhage, the government of Nepal has initiated use of prophylactic oxytocin immediately after birth under the Active Management of Third Stage of Labor (AMTSL) intervention program. The intramuscular oxytocin dose of 10 milligrams soon after delivery prevents postpartum hemorrhage (Ojha and Malla, 2007).

Similarly, a national free delivery policy was launched in Nepal in January 2009 to address the financial barriers women face in accessing health facilities for delivery and to encourage institutional deliveries. This is known as the *Aama* (mother) program. It covers all of the districts in the country. Similarly, a cash incentive scheme, the Safe Delivery Incentive Program (SDIP), was initiated in 2005. This program provides cash payments (differing by ecological region) to women who deliver in health facilities and incentive payments for health workers who undertake home deliveries (Witter et al., 2011).

To determine the effectiveness of the government's program promoting maternal health, the 2011 NDHS asked women a series of questions on care and support during delivery with respect to their last birth in the two years before the survey. Mothers were asked whether they had received an oxytocin injection immediately after delivery from health personnel (doctor, nurse, midwife, health assistant, AHW, MCHW, or VHW). Information was also collected on receipt of cash incentives for women's most recent birth at any health facility (government, nongovernment, or private), cash payments to the health facility where the delivery took place, and the time taken to reach the health facility for delivery.

Table 9.8 shows that 63 percent of mothers who had a live birth in the two years preceding the survey and were assisted by health personnel received an oxytocin injection immediately after delivery. Urban women and those living in the terai were more likely to have received an oxytocin injection for their most recent delivery than rural mothers and those from the other ecological zones. Women with a primary education and those in the lowest wealth quintile were least likely to have received an oxytocin injection.

As part of the government strategy to promote institutional delivery, women who deliver in any health facility are provided cash incentives to defray the cost of transportation to the facility. In addition, delivery in a health facility is provided free of cost to mothers. The findings show that 71 percent of mothers received payment to defray the cost of transportation to a health facility. Seventy-three percent of rural women received transportation incentives, compared to 60 percent of urban women. Similarly, women living in the mountain zone and the Mid-western region were more likely to have received cash incentives than women in other areas. These incentives may have contributed to the doubling of institutional deliveries in the last five years.

Forty percent of women reported paying cash to the health facility where they delivered. Urban women and women in the terai were more likely to pay cash for delivery services than rural women and those living in the mountain zone. As expected, women at higher levels of education and wealth were less likely to use free services provided by the government.

Table 9.8 Care and support during delivery

Among women with a live birth in the two years preceding the survey who were assisted at delivery by a health professional, percentage who received an injection of oxytocin immediately after delivery of the last live birth; and among women with a live birth in the two years preceding the survey delivered in a health facility, the percentage who received a cash incentive for transportation, the percentage who paid cash to the health facility, and the percent distribution of women by time taken to reach the health facility for delivery, according to background characteristics, Nepal 2011

Background characteristic	Received an injection of oxytocin after delivery	Number of women assisted by health personnel at delivery	Received cash incentive for transpor-tation	Paid cash to health facility	Time to reach health facility					Number of women who delivered in a health facility
					<30 minutes	30-60 minutes	60+ minutes	Don't know	Total	
Mother's age at birth										
<20	60.5	223	80.1	34.7	28.1	27.0	44.8	0.0	100.0	199
20-34	63.8	744	68.5	41.3	28.8	27.3	43.5	0.3	100.0	652
35-49	(70.3)	38	(64.3)	(39.5)	(10.5)	(28.9)	(60.6)	(0.0)	100.0	37
Birth order										
1	58.6	495	76.0	39.8	26.6	28.8	44.3	0.4	100.0	454
2-3	69.0	410	62.6	43.8	29.5	25.8	44.5	0.2	100.0	349
4-5	59.2	77	75.2	20.4	24.7	32.3	43.0	0.0	100.0	65
6+	*	23	*	*	*	*	*	*	100.0	20
Antenatal care visits										
None	(60.6)	43	*	*	*	*	*	*	100.0	34
1-3	63.5	228	78.1	33.0	26.4	26.6	47.1	0.0	100.0	187
4+	63.4	734	68.7	40.5	29.0	28.2	42.5	0.3	100.0	666
Residence										
Urban	69.1	155	59.8	51.7	43.4	33.4	22.7	0.4	100.0	150
Rural	62.3	850	73.2	37.3	24.8	26.1	48.9	0.2	100.0	738
Ecological zone										
Mountain	60.6	53	81.2	17.2	28.7	21.6	49.8	0.0	100.0	46
Hill	60.5	327	75.1	37.0	28.7	27.4	43.3	0.5	100.0	298
Terai	65.0	624	67.8	43.2	27.4	27.8	44.7	0.1	100.0	544
Development region										
Eastern	74.0	276	71.6	39.4	27.4	24.5	48.2	0.0	100.0	241
Central	57.2	314	60.1	57.8	21.5	30.2	47.5	0.8	100.0	274
Western	55.3	195	76.6	36.6	33.2	24.4	42.3	0.0	100.0	177
Mid-western	71.0	120	83.9	14.4	33.8	29.5	36.7	0.0	100.0	110
Far-western	59.6	100	75.6	22.1	31.6	29.5	38.9	0.0	100.0	86
Subregion										
Eastern mountain	66.5	15	(91.5)	(13.4)	(28.6)	(11.6)	(59.8)	(0.0)	100.0	12
Central mountain	37.7	15	(70.3)	(39.8)	(22.9)	(33.1)	(44.0)	(0.0)	100.0	12
Western mountain	(71.7)	23	(81.8)	(6.8)	(31.8)	(20.5)	(47.7)	(0.0)	100.0	22
Eastern hill	64.5	58	86.6	30.1	19.8	25.0	55.2	0.0	100.0	53
Central hill	71.1	99	58.5	54.3	32.2	39.7	26.4	1.7	100.0	94
Western hill	42.6	97	79.8	39.8	36.1	15.9	48.0	0.0	100.0	83
Mid-western hill	65.5	46	82.0	14.7	26.7	29.6	43.7	0.0	100.0	41
Far-western hill	68.6	28	85.4	14.6	13.8	21.4	64.8	0.0	100.0	26
Eastern terai	77.2	204	65.8	44.0	29.6	25.1	45.3	0.0	100.0	176
Central terai	51.8	201	60.3	61.1	15.4	24.7	59.6	0.4	100.0	168
Western terai	67.9	98	73.7	33.7	30.6	32.1	37.3	0.0	100.0	93
Mid-western terai	76.0	61	83.0	16.9	42.0	30.8	27.2	0.0	100.0	57
Far-western terai	52.2	61	72.1	27.9	37.8	36.3	25.9	0.0	100.0	49
Mother's education										
No education	61.7	290	70.8	39.7	20.4	27.7	51.1	0.7	100.0	233
Primary	56.7	167	68.3	38.2	23.4	33.7	42.9	0.0	100.0	154
Some secondary	66.4	271	80.0	33.6	31.3	23.1	45.3	0.3	100.0	242
SLC and above	66.1	276	64.1	46.5	34.2	27.2	38.6	0.0	100.0	258
Wealth quintile										
Lowest	46.6	89	87.6	28.0	16.6	20.9	62.5	0.0	100.0	74
Second	62.3	173	78.6	27.1	19.0	26.1	54.9	0.0	100.0	145
Middle	61.4	250	78.4	37.9	28.1	21.8	50.1	0.0	100.0	210
Fourth	67.7	245	72.4	36.0	27.0	36.7	35.3	1.0	100.0	219
Highest	67.7	248	53.4	56.1	37.5	26.4	36.1	0.0	100.0	241
Total	63.3	1,005	71.0	39.8	27.9	27.3	44.5	0.3	100.0	888

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

The table also describes the time taken for women to reach a health facility for delivery. Twenty-eight percent of women took less than 30 minutes to reach a health facility, 27 percent took 30-60 minutes, and 45 percent took more than one hour. One in two women in the mountains (50 percent) took more than one hour to reach a health facility for delivery. Also, two in five women in the hill zone and terai reported that it took them more than one hour to reach a health facility.

9.5.2 Birth Preparedness

In an effort to prevent unnecessary delays related to delivery care, the MOHP has implemented the birth preparedness package, which outlines steps mothers should take to prepare for their birth. Adherence to these guidelines reduces delays in accessing delivery services, which can save lives, especially among women living in rural locations. The guidelines recommend that families save money for emergencies, arrange transportation beforehand based on local conditions, identify persons who can and are eligible to donate blood if required, identify and contact health facilities and health workers who can provide services, and have a clean delivery kit handy (USAID, New ERA, and NFHP, 2010).

Table 9.9 shows that more than one in three women (36 percent) saved money for delivery. Five percent bought a home delivery kit and 2 percent contacted a health worker, which are reductions in comparison to similar data in the 2006 NDHS. More than half of women (56 percent) arranged for food and clothing for the newborn in 2011, in comparison to 26 percent in 2006. Nearly one-third of women said they had not made any preparations at all for the birth of their child. Arrangements for transportation increased from 1 percent in 2006 to 3 percent in 2011.

Table 9.9 Birth preparedness

Percentage of women who had made specific preparations before delivery of the most recent birth in the past five years, according to background characteristics, Nepal 2011

Background characteristic	Saved money	Arranged for transport	Found blood donor	Contacted health worker	Bought clean delivery kit	Arranged for food and clothing	Other	No preparation	Number of women
Residence									
Urban	51.8	6.1	1.3	2.3	3.8	63.3	1.7	23.8	418
Rural	34.0	3.1	0.4	1.6	4.6	54.9	2.2	36.7	3,730
Ecological zone									
Mountain	29.5	2.0	0.3	0.4	3.5	62.6	0.3	31.8	306
Hill	34.1	2.3	0.4	1.2	4.7	61.3	1.5	31.9	1,669
Terai	38.0	4.4	0.5	2.3	4.5	50.5	2.9	38.6	2,174
Development region									
Eastern	42.8	3.8	0.6	1.8	6.2	62.0	4.7	28.3	999
Central	31.8	2.4	0.4	1.4	1.8	49.7	1.3	42.5	1,293
Western	32.8	3.2	0.0	0.8	2.0	55.0	1.2	37.4	818
Mid-western	30.0	3.0	0.9	0.5	5.0	54.5	1.2	36.3	598
Far-western	45.4	6.3	0.4	5.5	12.5	62.1	2.1	25.6	440
Subregion									
Eastern mountain	40.7	2.3	0.4	0.6	6.5	78.2	0.0	20.4	78
Central mountain	34.7	1.1	0.0	1.1	3.4	61.4	0.0	26.4	72
Western mountain	21.4	2.3	0.3	0.0	2.0	55.3	0.7	40.1	155
Eastern hill	36.4	2.1	0.6	2.2	6.7	68.1	2.2	27.4	331
Central hill	43.7	3.1	0.6	1.0	2.4	67.6	1.2	24.9	403
Western hill	29.3	1.9	0.0	0.4	2.4	56.7	1.7	36.9	488
Mid-western hill	25.7	2.9	0.6	1.2	6.2	60.2	1.2	34.2	275
Far-western hill	34.3	1.5	0.5	2.2	10.1	47.9	0.9	38.6	171
Eastern terai	46.7	5.0	0.7	1.8	5.9	56.5	6.8	29.8	589
Central terai	25.7	2.3	0.3	1.6	1.3	39.8	1.4	52.6	818
Western terai	37.9	5.1	0.1	1.4	1.4	52.4	0.5	38.2	330
Mid-western terai	41.5	3.5	1.5	0.0	4.3	51.9	1.2	33.7	238
Far-western terai	59.0	11.5	0.2	10.2	18.6	71.6	3.8	14.0	200
Education									
No education	23.7	1.1	0.1	0.9	2.9	48.5	2.8	45.8	1,822
Primary	36.9	1.8	0.2	1.0	4.1	60.9	3.1	31.1	835
Some secondary	46.2	3.9	0.6	2.5	8.3	58.1	0.9	29.0	866
SLC and above	55.3	11.5	1.6	3.9	4.4	66.4	0.9	19.6	627
Wealth quintile									
Lowest	18.4	0.8	0.2	1.0	2.6	55.3	2.0	40.0	979
Second	34.1	2.1	0.1	1.7	5.3	57.1	2.8	37.7	899
Middle	36.2	3.2	0.2	1.4	4.4	49.0	2.9	41.8	873
Fourth	47.1	3.3	0.6	2.2	7.0	55.9	1.5	29.2	748
Highest	51.0	9.6	1.6	2.6	3.5	63.2	1.2	23.7	649
Total	35.8	3.4	0.4	1.7	4.5	55.7	2.2	35.4	4,148

SLC = School Leaving Certificate

9.6 POSTNATAL CARE

The postpartum period is particularly important for women, as during this period they may develop serious, life-threatening complications after delivery. Evidence has shown that a large proportion of deaths occur during this period, with postpartum hemorrhage being an important cause. A postnatal care visit is an ideal time to educate a new mother on how to care for herself and her newborn Therefore, it is highly

recommended that women receive at least three postnatal checkups, the first within 24 hours of delivery, the second on the third day following delivery, and the third on the seventh day after delivery (MOHP, 2011a).

9.6.1 Timing of First Postnatal Checkup for the Mother

Table 9.10 shows that in the two years preceding the survey, 45 percent of women received postnatal care for their last birth within the critical first two days following delivery. One in three women received postnatal care within four hours of delivery, 7 percent received care within 4-23 hours, and 4 percent were seen 1-2 days following delivery. Differences by mother's age, birth order, place of residence, wealth quintile, and education are pronounced and are similar to the differences discussed for delivery care. More than one in two (54 percent) women did not receive a checkup within the recommended time.

Table 9.10 Timing of first postnatal checkup

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and the percentage of women with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Nepal 2011

	Time after delivery of mother's first postnatal checkup									
Background characteristic	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal checkup[1]	Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
Mother's age at birth										
<20	37.3	8.0	2.7	1.9	0.3	0.0	49.9	100.0	48.0	381
20-34	33.5	7.4	3.6	0.5	1.3	0.2	53.5	100.0	44.5	1,525
35-49	28.1	2.5	4.5	0.2	0.0	0.0	64.7	100.0	35.1	125
Birth order										
1	45.8	10.7	4.5	1.0	0.6	0.2	37.1	100.0	61.0	717
2-3	31.2	5.5	3.2	0.9	1.7	0.2	57.3	100.0	40.0	915
4-5	20.3	5.3	2.3	0.0	0.3	0.0	71.9	100.0	27.9	268
6+	14.7	3.6	1.7	0.2	0.0	0.0	79.7	100.0	20.1	129
Place of delivery										
Health facility	66.8	14.2	6.3	0.6	0.4	0.2	11.4	100.0	87.3	888
Elsewhere	8.3	1.7	1.3	0.9	1.4	0.1	86.2	100.0	11.3	1,143
Residence										
Urban	55.7	11.1	5.6	1.9	0.9	0.9	23.9	100.0	72.4	189
Rural	31.6	6.8	3.3	0.7	1.0	0.1	56.6	100.0	41.7	1,842
Ecological zone										
Mountain	23.7	5.1	2.0	0.3	2.0	0.0	66.9	100.0	30.7	166
Hill	28.1	5.5	3.2	0.5	0.8	0.4	61.5	100.0	36.7	785
Terai	39.7	8.7	3.9	1.0	1.0	0.0	45.6	100.0	52.4	1,079
Development region										
Eastern	39.3	8.7	2.9	1.1	0.6	0.1	47.4	100.0	50.9	468
Central	30.6	7.4	4.0	0.7	1.3	0.4	55.8	100.0	41.9	658
Western	35.7	6.3	2.3	0.5	1.0	0.0	54.3	100.0	44.2	398
Mid-western	29.5	6.3	3.4	1.2	0.8	0.0	58.8	100.0	39.2	291
Far-western	34.9	6.2	5.5	0.4	1.4	0.1	51.6	100.0	46.5	215
Subregion										
Eastern mountain	26.9	2.6	1.8	0.0	2.6	0.0	66.0	100.0	31.3	39
Central mountain	20.7	9.1	4.6	0.0	2.3	0.0	63.3	100.0	34.4	36
Western mountain	23.5	4.5	1.1	0.6	1.7	0.0	68.7	100.0	29.1	91
Eastern hill	26.4	5.2	4.3	0.0	0.0	0.2	63.9	100.0	35.8	152
Central hill	32.2	8.6	5.3	0.6	0.0	1.5	51.7	100.0	46.1	177
Western hill	25.9	6.4	2.2	0.2	1.6	0.0	63.7	100.0	34.5	240
Mid-western hill	27.2	3.2	2.8	2.0	0.6	0.0	64.2	100.0	33.2	131
Far-western hill	29.6	0.5	0.0	0.0	2.1	0.0	67.9	100.0	30.1	85
Eastern terai	48.2	11.5	2.3	1.9	0.6	0.0	35.6	100.0	61.9	277
Central terai	30.7	6.7	3.4	0.7	1.7	0.0	56.8	100.0	40.8	445
Western terai	50.3	6.1	2.4	1.0	0.0	0.0	40.2	100.0	58.9	159
Mid-western terai	34.1	11.7	5.2	0.8	0.0	0.0	48.2	100.0	51.0	111
Far-western terai	46.5	11.2	12.9	0.3	1.4	0.3	27.5	100.0	70.6	88
Education										
No education	23.5	5.7	1.9	0.5	0.8	0.2	67.3	100.0	31.1	862
Primary	31.8	6.2	3.2	0.7	0.6	0.1	57.5	100.0	41.2	392
Some secondary	40.7	9.1	4.1	1.2	1.3	0.0	43.7	100.0	53.8	429
SLC and above	53.6	9.6	6.9	0.9	1.5	0.4	27.1	100.0	70.1	347
Wealth quintile										
Lowest	12.4	2.5	1.7	1.0	1.3	0.0	81.0	100.0	16.7	489
Second	28.8	4.9	2.1	0.2	0.4	0.0	63.7	100.0	35.7	428
Middle	36.5	8.0	3.7	0.5	0.7	0.0	50.5	100.0	48.2	469
Fourth	45.8	9.3	3.9	1.6	2.1	0.4	36.7	100.0	59.1	370
Highest	59.4	14.9	7.7	0.6	0.2	0.6	16.5	100.0	82.1	274
Total 15-49	33.9	7.2	3.5	0.8	1.0	0.2	53.5	100.0	44.5	2,030

[1] Includes women who received a checkup after 41 days
SLC = School Leaving Certificate

9.6.2 Provider of First Postnatal Checkup for Mother

The skill level of the provider who performs the first postnatal checkup also has important implications for maternal and neonatal health. Table 9.11 shows that 23 percent of women received postnatal care from a nurse or midwife and 16 percent from a doctor. Six percent of women received postnatal care from a health assistant, AHW, MCHW, VHW, or FCHV. Mothers of first-order births, those who delivered in a health facility, those with an SLC and higher education, those from the wealthiest households, and those in urban areas were more likely to have received postnatal care from an SBA than other mothers. Postnatal care from an SBA was highest in the terai, in the Eastern region, and in the Eastern terai subregion.

Table 9.11 Type of provider of first postnatal checkup for the mother

Among women giving birth in the two years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the two days after the last live birth, according to background characteristics, Nepal 2011

Background characteristic	Type of health provider of mother's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of women
	Doctor	Nurse/ midwife	Health assistant/ AHW	MCHW/ VHW	FCHV			
Mother's age at birth								
<20	10.7	30.9	4.6	1.4	0.4	52.0	100.0	381
20-34	17.7	21.2	2.3	1.8	1.5	55.5	100.0	1,525
35-49	14.1	16.5	2.6	1.5	0.4	64.9	100.0	125
Birth order								
1	20.7	36.1	2.9	0.7	0.6	39.0	100.0	717
2-3	16.1	17.0	2.5	2.7	1.6	60.0	100.0	915
4-5	8.9	12.6	2.1	2.0	2.3	72.1	100.0	268
6+	6.3	9.6	4.2	0.0	0.0	79.9	100.0	129
Place of delivery								
Health facility	35.8	49.1	1.1	1.2	0.1	12.7	100.0	888
Elsewhere	0.9	2.2	4.0	2.1	2.1	88.7	100.0	1,143
Residence								
Urban	39.9	30.0	1.8	0.1	0.5	27.6	100.0	189
Rural	13.7	22.0	2.8	1.9	1.3	58.3	100.0	1,842
Ecological zone								
Mountain	5.4	19.4	2.6	1.6	1.8	69.3	100.0	166
Hill	13.2	19.4	2.0	1.4	0.7	63.3	100.0	785
Terai	20.0	25.6	3.2	2.0	1.5	47.6	100.0	1,079
Development region								
Eastern	18.2	26.3	3.7	2.3	0.3	49.1	100.0	468
Central	21.4	16.5	3.0	1.0	0.0	58.1	100.0	658
Western	14.4	24.7	2.9	1.3	1.1	55.8	100.0	398
Mid-western	10.2	23.0	1.1	2.5	2.4	60.8	100.0	291
Far-western	7.1	29.9	1.4	2.7	5.5	53.5	100.0	215
Subregion								
Eastern mountain	6.3	16.2	5.3	3.5	0.0	68.7	100.0	39
Central mountain	13.7	13.9	3.4	3.4	0.0	65.6	100.0	36
Western mountain	1.7	22.9	1.1	0.0	3.4	70.9	100.0	91
Eastern hill	7.8	24.0	3.4	0.0	0.7	64.2	100.0	152
Central hill	33.8	11.7	0.6	0.0	0.0	53.9	100.0	177
Western hill	8.7	20.6	2.8	1.6	0.8	65.5	100.0	240
Mid-western hill	6.0	20.4	1.2	4.9	0.6	66.8	100.0	131
Far-western hill	3.3	22.4	1.4	0.9	2.1	69.9	100.0	85
Eastern terai	25.5	29.1	3.7	3.4	0.2	38.1	100.0	277
Central terai	17.1	18.7	4.0	1.1	0.0	59.2	100.0	445
Western terai	22.9	30.8	3.0	0.7	1.5	41.1	100.0	159
Mid-western terai	18.7	26.8	1.0	0.8	3.8	49.0	100.0	111
Far-western terai	13.7	39.5	1.4	5.6	10.4	29.4	100.0	88
Education								
No education	9.1	16.0	3.0	2.1	1.0	68.9	100.0	862
Primary	11.9	20.3	4.5	1.9	2.4	58.8	100.0	392
Some secondary	18.4	30.5	1.5	2.2	1.3	46.2	100.0	429
SLC and above	35.6	32.5	1.6	0.1	0.4	29.9	100.0	347
Wealth quintile								
Lowest	2.8	9.6	2.5	0.7	1.1	83.3	100.0	489
Second	6.9	21.5	3.3	1.7	2.3	64.3	100.0	428
Middle	14.0	26.2	3.4	3.8	0.8	51.8	100.0	469
Fourth	25.2	30.1	2.0	1.1	0.7	40.9	100.0	370
Highest	46.0	32.2	2.0	0.8	1.1	17.9	100.0	274
Total	16.2	22.7	2.7	1.7	1.2	55.5	100.0	2,030

SLC = School Leaving Certificate

9.7 NEWBORN CARE

Newborn care is essential to reduce neonatal problems and death. To identify, manage, and prevent complications, the government of Nepal recommends at least three postnatal checkups for the newborn within seven days of delivery, which is considered a critical time period for neonates and mothers. Table 9.12 shows the percent distribution of last births in the two years preceding the survey by timing of the first postnatal

checkup after birth, along with the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics.

Thirty percent of newborns were taken for their first postnatal checkup within the critical first two days after birth. One in four births had a postnatal checkup within three hours after birth (23 percent). Twenty-eight percent of births had a postnatal visit within 24 hours after birth.

Table 9.12 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Nepal 2011

Background characteristic	Time after birth of newborn's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing				
Mother's age at birth										
<20	11.6	13.0	5.5	3.1	2.2	0.0	64.5	100.0	33.2	381
20-34	11.6	11.9	4.9	2.1	1.9	0.0	67.7	100.0	30.5	1,525
35-49	3.6	8.3	2.1	1.9	0.0	0.6	83.5	100.0	15.9	125
Birth order										
1	15.7	16.9	6.9	2.6	2.5	0.0	55.3	100.0	42.2	717
2-3	10.4	10.5	4.3	2.8	1.6	0.0	70.3	100.0	28.0	915
4-5	5.2	6.9	2.1	1.0	1.5	0.0	83.2	100.0	15.2	268
6+	2.0	3.6	2.5	0.0	0.0	0.6	91.3	100.0	8.1	129
Place of delivery										
Health facility	21.8	23.0	8.5	3.1	1.8	0.0	41.7	100.0	56.5	888
Elsewhere	2.7	3.2	1.9	1.7	1.8	0.1	88.6	100.0	9.6	1,143
Residence										
Urban	17.9	21.5	6.9	3.4	2.7	0.2	47.4	100.0	49.7	189
Rural	10.4	10.9	4.6	2.2	1.7	0.0	70.2	100.0	28.1	1,842
Ecological zone										
Mountain	11.0	6.1	2.9	2.2	2.7	0.0	75.1	100.0	22.2	166
Hill	10.0	10.5	4.0	1.9	2.1	0.1	71.4	100.0	26.4	785
Terai	11.8	13.7	5.7	2.6	1.5	0.0	64.5	100.0	33.9	1,079
Development region										
Eastern	7.7	13.7	5.3	2.0	1.4	0.1	69.9	100.0	28.7	468
Central	9.1	12.3	4.5	0.8	1.4	0.0	71.9	100.0	26.7	658
Western	14.0	11.5	4.7	2.9	1.8	0.0	65.1	100.0	33.1	398
Mid-western	15.1	10.4	4.1	3.8	1.8	0.3	64.5	100.0	33.4	291
Far-western	13.5	9.3	6.1	4.3	4.1	0.0	62.7	100.0	33.2	215
Subregion										
Eastern mountain	13.4	6.3	1.8	0.0	2.6	0.0	75.9	100.0	21.5	39
Central mountain	6.8	5.7	4.6	5.7	1.1	0.0	76.1	100.0	22.8	36
Western mountain	11.7	6.1	2.8	1.7	3.4	0.0	74.3	100.0	22.3	91
Eastern hill	2.9	10.3	2.9	0.9	2.0	0.2	80.8	100.0	17.0	152
Central hill	8.5	16.0	7.3	1.9	2.2	0.0	64.0	100.0	33.8	177
Western hill	7.4	10.4	3.8	3.4	1.4	0.0	73.6	100.0	25.0	240
Mid-western hill	18.6	7.1	3.0	1.4	1.2	0.6	68.0	100.0	30.1	131
Far-western hill	19.9	5.1	0.9	0.0	5.1	0.0	68.9	100.0	26.0	85
Eastern terai	9.5	16.6	7.1	2.9	0.8	0.0	63.0	100.0	36.1	277
Central terai	9.5	11.4	3.3	0.0	1.1	0.0	74.6	100.0	24.2	445
Western terai	23.9	13.0	6.1	2.2	2.4	0.0	52.2	100.0	45.3	159
Mid-western terai	11.7	15.5	7.1	7.3	1.5	0.0	56.8	100.0	41.6	111
Far-western terai	9.2	15.4	11.2	10.1	3.9	0.0	50.1	100.0	45.9	88
Mother's education										
No education	6.3	7.5	3.3	1.5	2.0	0.1	79.3	100.0	18.5	862
Primary	9.9	12.6	4.9	1.5	0.7	0.0	70.3	100.0	29.0	392
Some secondary	13.8	14.1	5.5	3.8	2.2	0.0	60.6	100.0	37.2	429
SLC and above	21.0	19.0	7.7	3.5	2.1	0.1	46.6	100.0	51.1	347
Wealth quintile										
Lowest	5.4	4.1	1.1	0.8	1.7	0.0	86.8	100.0	11.5	489
Second	8.9	8.1	4.1	3.2	1.9	0.2	73.7	100.0	24.3	428
Middle	10.7	14.0	4.6	1.7	1.2	0.0	67.8	100.0	31.0	469
Fourth	14.0	16.9	7.2	2.7	3.3	0.0	55.8	100.0	40.9	370
Highest	21.3	20.9	9.7	4.1	1.1	0.1	42.7	100.0	56.1	274
Total	11.1	11.9	4.8	2.3	1.8	0.1	68.0	100.0	30.1	2,030

[1] Includes newborns who received a checkup after the first week
SLC = School Leaving Certificate

The proportion of postnatal checkups within the first two days of birth is higher among births to mothers with an SLC and above (51 percent) than among births to mothers with no education (19 percent). Similarly, the proportion is higher among births to women less than age 20, first births, and births that took place in a health facility than among births in other categories.

The majority of newborns (68 percent) did not receive a postnatal checkup. Newborns delivered outside of a health facility were less likely to receive a postnatal checkup within the first week after birth (11 percent) than newborns delivered in a health facility (58 percent). Similarly, postnatal checkups were less likely among births to mothers age 35-49, births of order six and over, rural births, and births in the Central region than among births in the other categories.

9.7.1 Provider of First Postnatal Checkup for the Newborn

Table 9.13 presents the percent distribution of last births in the two years preceding the survey by type of provider of newborn care during the first two days after delivery, according to background characteristics.

The findings show that 25 percent of newborns received postnatal care in the two days following birth from a doctor, nurse, or midwife. An additional 4 percent of newborns received care from a health assistant, AHW, MCHW, or VHW. About 2 percent received care from an FCHV. The distribution of newborns who received care from an SBA by background characteristics is similar to the pattern described for providers of mothers' postnatal checkups.

Table 9.13 Type of provider of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after the last live birth, according to background characteristics, Nepal 2011

Background characteristic	Type of health provider of newborn's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of births
	Doctor	Nurse/ midwife	Health assistant/ AHW	MCHW/ VHW	FCHV			
Mother's age at birth								
<20	7.0	19.1	4.7	1.7	0.8	66.8	100.0	381
20-34	11.3	14.1	1.7	1.5	1.9	69.5	100.0	1,525
35-49	2.3	9.3	2.3	1.5	0.4	84.1	100.0	125
Birth order								
1	12.9	24.8	3.0	0.7	0.7	57.8	100.0	717
2-3	10.7	10.5	1.8	2.7	2.2	72.0	100.0	915
4-5	2.7	7.8	1.9	0.4	2.3	84.8	100.0	268
6+	3.2	2.7	2.2	0.0	0.0	91.9	100.0	129
Place of delivery								
Health facility	21.9	32.1	1.4	1.1	0.0	43.5	100.0	888
Elsewhere	0.7	1.3	2.9	1.8	2.8	90.4	100.0	1,143
Residence								
Urban	27.9	20.3	1.0	0.4	0.0	50.3	100.0	189
Rural	8.1	14.2	2.4	1.6	1.7	71.9	100.0	1,842
Ecological zone								
Mountain	2.9	14.8	1.0	1.3	2.1	77.8	100.0	166
Hill	9.5	12.6	1.7	1.6	1.0	73.6	100.0	785
Terai	11.4	16.3	2.9	1.5	1.9	66.1	100.0	1,079
Development region								
Eastern	10.3	14.4	1.4	2.4	0.2	71.3	100.0	468
Central	11.1	11.8	3.2	0.5	0.0	73.3	100.0	658
Western	12.5	14.7	2.9	1.5	1.6	66.9	100.0	398
Mid-western	7.3	17.0	1.4	2.5	5.2	66.6	100.0	291
Far-western	4.7	21.2	1.4	1.5	4.4	66.8	100.0	215
Subregion								
Eastern mountain	3.7	12.5	1.8	3.5	0.0	78.5	100.0	39
Central mountain	8.0	12.5	0.0	2.3	0.0	77.2	100.0	36
Western mountain	0.6	16.8	1.1	0.0	3.9	77.7	100.0	91
Eastern hill	3.6	12.1	0.7	0.0	0.7	83.0	100.0	152
Central hill	23.2	9.9	0.6	0.0	0.0	66.2	100.0	177
Western hill	7.6	10.0	3.4	2.4	1.6	75.0	100.0	240
Mid-western hill	6.0	17.4	1.2	4.9	0.6	69.9	100.0	131
Far-western hill	2.3	18.8	1.4	0.7	2.8	74.0	100.0	85
Eastern terai	14.9	16.0	1.7	3.5	0.0	63.9	100.0	277
Central terai	6.6	12.5	4.5	0.6	0.0	75.8	100.0	445
Western terai	19.8	21.8	2.2	0.0	1.5	54.7	100.0	159
Mid-western terai	12.0	16.5	1.8	0.8	10.7	58.4	100.0	111
Far-western terai	8.7	25.8	1.4	3.1	7.0	54.1	100.0	88
Mother's education								
No education	4.3	8.7	2.6	1.4	1.5	81.5	100.0	862
Primary	5.5	15.3	2.9	2.1	3.1	71.0	100.0	392
Some secondary	12.6	20.0	1.5	1.7	1.3	62.8	100.0	429
SLC and above	25.9	22.4	1.8	0.8	0.2	48.9	100.0	347
Wealth quintile								
Lowest	0.8	6.3	2.2	0.8	1.3	88.5	100.0	489
Second	3.8	13.3	1.9	1.2	4.0	75.7	100.0	428
Middle	8.4	14.4	3.6	3.4	1.2	69.0	100.0	469
Fourth	16.0	21.4	1.9	0.9	0.8	59.1	100.0	370
Highest	30.4	23.4	1.1	1.0	0.0	43.9	100.0	274
Total	10.0	14.7	2.3	1.5	1.6	69.9	100.0	2,030

SLC = School Leaving Certificate

9.7.2 Newborn Care Practices

The MOHP has developed a series of recommendations for newborn care that focus on use of safe delivery kits, cord care, prevention and management of hypothermia, drying and bathing the newborn, and other health care services. As of 2011, the Community-Based Newborn Care Program (CB-NCP) in Nepal has been implemented in 15 districts. Based on the National Neonatal Health Strategy, the CB-NCP recommends the following practices to promote newborn care: (1) wiping the newborn with a soft, dry cloth immediately after birth; (2) putting the newborn on the mother's chest and initiating skin-to-skin contact; (3) providing advice on early (within the first hour) initiation of breastfeeding and exclusive breastfeeding for up to six months; (4) not applying anything on the cord stump; and (5) bathing the newborn only after 24 hours post-birth (Save the Children, 2009). A series of questions were asked of women who, for their last birth in the two years preceding the survey, gave birth outside an institutional setting.

Table 9.14 Use of clean home delivery kits and other instruments to cut the umbilical cord

Percent distribution of non-institutional last live births in the two years preceding the survey, by type of instrument used to cut the umbilical cord, and percentage who had something placed on stump after the umbilical cord was cut, according to background characteristics, Nepal 2011

Background characteristic	Instrument used to cut the umbilical cord										Placed something on stump after cutting umbilical cord	Number of births
	Instruments from a clean home delivery kit	New/boiled blade	Used blade	Knife	Hasiya (sickle)	Khukuri (curved knife)	Scissors	Other	Don't know	Total		
Residence												
Urban	19.0	70.8	1.2	0.0	1.4	0.7	0.7	2.9	3.2	100.0	46.5	39
Rural	13.9	67.9	3.7	0.4	11.1	0.4	0.9	1.3	0.3	100.0	41.0	1,103
Ecological zone												
Mountain	10.2	53.8	4.4	2.3	25.0	1.8	1.3	0.9	0.3	100.0	31.7	120
Hill	15.3	57.2	4.2	0.4	18.6	0.4	0.8	2.6	0.5	100.0	29.3	487
Terai	13.8	81.1	2.9	0.0	0.5	0.0	1.0	0.4	0.3	100.0	54.1	536
Development region												
Eastern	15.7	69.1	5.5	1.1	1.6	1.4	0.6	4.6	0.5	100.0	41.3	227
Central	8.6	79.1	3.8	0.2	5.8	0.1	1.6	0.7	0.1	100.0	49.1	384
Western	14.1	72.6	0.9	0.0	9.8	0.0	0.9	0.9	0.9	100.0	32.7	222
Mid-western	14.1	50.3	5.4	0.7	27.7	0.3	0.6	0.4	0.6	100.0	46.7	181
Far-western	27.5	50.4	2.1	0.0	19.8	0.0	0.0	0.0	0.2	100.0	24.7	129
Subregion												
Eastern mountain	10.8	65.7	3.8	5.0	5.4	4.2	1.3	3.8	0.0	100.0	38.2	27
Central mountain	15.5	47.8	5.2	3.4	18.9	2.4	5.2	0.0	1.7	100.0	17.9	24
Western mountain	8.1	51.1	4.4	0.7	34.8	0.7	0.0	0.0	0.0	100.0	34.1	69
Eastern hill	13.8	62.4	9.3	1.0	2.1	2.1	1.0	7.2	1.0	100.0	24.8	99
Central hill	11.0	60.7	3.8	0.0	21.1	0.0	0.0	3.3	0.0	100.0	29.1	83
Western hill	16.9	65.2	1.2	0.0	13.9	0.0	1.2	1.2	0.3	100.0	26.5	156
Mid-western hill	12.7	41.5	5.6	0.9	36.5	0.0	0.9	0.9	0.9	100.0	39.2	90
Far-western hill	23.3	46.5	2.0	0.0	27.8	0.0	0.0	0.0	0.4	100.0	29.5	59
Eastern terai	18.9	76.5	2.3	0.0	0.0	0.0	0.0	2.3	0.0	100.0	58.2	101
Central terai	7.3	87.3	3.6	0.0	0.0	0.0	1.8	0.0	0.0	100.0	57.7	277
Western terai	7.2	90.5	0.0	0.0	0.0	0.0	0.0	0.0	2.3	100.0	47.3	65
Mid-western terai	20.2	71.0	3.1	0.0	4.7	0.0	0.5	0.0	0.5	100.0	58.1	54
Far-western terai	(50.0)	(46.2)	(3.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(23.1)	38
Mother's education												
No education	8.9	69.9	4.8	0.5	13.7	0.3	0.7	0.8	0.4	100.0	47.6	629
Primary	15.6	68.0	4.1	0.4	8.1	0.7	1.2	1.6	0.3	100.0	35.7	238
Some secondary	25.4	61.3	0.9	0.2	6.9	0.5	0.5	3.8	0.5	100.0	30.7	187
SLC and above	22.4	69.2	0.0	0.0	5.3	0.0	2.8	0.0	0.2	100.0	32.6	89
Wealth quintile												
Lowest	8.2	59.3	6.4	0.5	22.1	0.7	0.6	2.0	0.3	100.0	37.0	415
Second	13.1	68.7	3.9	0.4	10.3	0.2	1.7	0.7	0.9	100.0	40.6	283
Middle	18.9	76.9	0.9	0.5	0.7	0.2	1.0	0.8	0.1	100.0	49.4	259
Fourth	20.7	75.7	0.2	0.0	0.3	0.1	0.4	2.3	0.3	100.0	37.2	151
Highest	(28.3)	(67.5)	(3.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.6)	100.0	(54.3)	34
Total	14.1	68.0	3.6	0.4	10.8	0.4	0.9	1.4	0.4	100.0	41.2	1,143

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

One important newborn care practice is care of the umbilical cord. Table 9.14 shows that a new/boiled blade was used to cut the umbilical cord in 68 percent of non-institutional births in the two years preceding the survey, while instruments from a clean home delivery kit were used in 14 percent of births. A hasiya (sickle) was used in 11 percent of births, and 4 percent were exposed to used, unsterile blades.

Forty-one percent of babies had some material (usually oil, an ointment, turmeric, or ash) placed on their umbilical stump. Only 2 percent of babies had chlorhexidine ointment placed on their stump after cutting

of the umbilical cord (data not shown). Nineteen percent of babies had an unknown ointment/powder placed on their stump.

The 2011 NDHS asked mothers with non-institutional deliveries in the two years preceding the survey about the newborn care practices they adopted. Table 9.15 indicates that 59 percent of newborns were wiped before the placenta was delivered and 62 percent were wrapped in cloth; only 10 percent were placed on the belly or breast of the mother before the placenta was delivered. As hypothermia among newborns is one of the principal causes of neonatal death, these practices should be more common. Immediate wiping, skin-to-skin contact, and wrapping are more frequent among urban women and among those in the Far-western region.

One in two newborns is bathed within an hour of birth, a practice that is not recommended. However, the practice of first bathing babies at least 24 hours after birth has improved since 2006, with one in four newborns being bathed only after 24 hours post-birth compared with only 9 percent in 2006.

Table 9.15 Newborn care practices

Percentage of non-institutional last live births in the two years preceding the survey that were wiped before the placenta was delivered; the percentage placed on the mother's belly/breast before the placenta was delivered; the percentage wrapped in cloth before the placenta was delivered; and the percent distribution by timing of first bath, according to background characteristics, Nepal 2011

Background characteristic	Wiped before the placenta was delivered	Placed on belly/breast before placenta was delivered	Wrapped in cloth before placenta was delivered	Timing of first bath					Number of births
				Within 1 hour	2-24 hours	After 24 hours	Don't know/ missing	Total	
Residence									
Urban	77.0	25.5	78.5	56.1	12.8	27.5	3.6	100.0	39
Rural	58.6	9.9	61.6	49.8	22.8	26.1	1.3	100.0	1,103
Ecological zone									
Mountain	61.0	10.2	68.3	57.7	25.8	16.2	0.3	100.0	120
Hill	58.7	8.4	61.7	60.0	16.1	22.5	1.4	100.0	487
Terai	59.4	12.3	61.2	39.1	27.5	31.7	1.7	100.0	536
Development region									
Eastern	58.2	10.1	61.9	55.3	11.8	32.7	0.2	100.0	227
Central	51.0	10.6	54.7	41.4	29.5	26.5	2.7	100.0	384
Western	64.3	5.0	65.0	57.2	14.1	26.5	2.3	100.0	222
Mid-western	59.9	10.0	61.8	61.3	21.5	17.1	0.0	100.0	181
Far-western	76.2	20.2	80.7	37.9	36.3	25.6	0.2	100.0	129
Subregion									
Eastern mountain	52.3	7.9	64.0	54.3	8.8	35.6	1.3	100.0	27
Central mountain	48.4	12.0	58.7	65.6	17.2	17.2	0.0	100.0	24
Western mountain	68.9	10.4	73.3	56.3	35.6	8.1	0.0	100.0	69
Eastern hill	44.1	6.5	51.0	66.6	7.2	26.2	0.0	100.0	99
Central hill	55.0	13.5	56.9	63.2	11.5	22.0	3.3	100.0	83
Western hill	61.1	6.2	61.1	55.9	15.4	26.3	2.5	100.0	156
Mid-western hill	62.0	5.6	65.6	63.2	20.5	16.3	0.0	100.0	90
Far-western hill	77.4	14.4	82.1	50.8	32.5	16.7	0.0	100.0	59
Eastern terai	73.7	14.2	71.9	44.5	17.2	38.4	0.0	100.0	101
Central terai	50.1	9.6	53.7	32.7	35.9	28.6	2.7	100.0	277
Western terai	72.0	2.3	74.3	60.4	10.8	27.0	1.8	100.0	65
Mid-western terai	60.6	18.5	57.5	53.3	23.9	22.7	0.0	100.0	54
Far-western terai	(65.4)	(35.3)	(70.5)	(14.7)	(28.2)	(56.4)	(0.6)	100.0	38
Mother's education									
No education	57.9	10.3	60.7	50.4	26.0	22.3	1.3	100.0	629
Primary	56.6	10.9	57.8	56.2	17.4	25.6	0.8	100.0	238
Some secondary	61.5	11.5	68.0	45.9	19.8	33.6	0.7	100.0	187
SLC and above	71.4	7.4	72.1	39.0	16.8	39.2	5.0	100.0	89
Wealth quintile									
Lowest	54.3	7.8	57.6	64.0	20.6	15.4	0.0	100.0	415
Second	55.7	8.2	58.4	48.4	22.2	27.5	1.9	100.0	283
Middle	60.4	12.1	62.6	38.0	26.0	33.1	2.9	100.0	259
Fourth	68.9	15.6	73.1	38.2	22.9	36.9	2.0	100.0	151
Highest	(97.1)	(24.4)	(97.8)	(35.1)	(19.8)	(45.1)	(0.0)	100.0	34
Total	59.3	10.4	62.2	50.0	22.5	26.1	1.4	100.0	1,143

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

9.8 ABORTION

Nepal made abortion legal in September 2002. The government began providing comprehensive abortion care services in March 2004 (GoN/DoHS/FHD/WHO/CHREPA, 2006).

The abortion law allows women to terminate their pregnancy under the following conditions: pregnancies of 12 weeks gestation or less for any woman on her own decision, pregnancies of 18 weeks gestation if the pregnancy is a result of rape or incest, and pregnancies of any duration with the recommendation of an authorized medical practitioner if the life of the mother is at risk, if her physical or mental health is at risk, or if the fetus is deformed. However, the law prohibits abortions done without the consent of the woman, sex-selective abortions, and abortions performed outside the legally permissible criteria.

Abortion services are provided at service delivery points with surgical facilities and medicines located at district hospitals, some primary health care centers, health posts, and private hospitals. The Nepal government, through the Ministry of Health and Population, has prioritized the national safe abortion program, and significant efforts have been made in the last five years to expand services. In collaboration with Ipas, an international NGO, the Family Health Division has scaled up service facilities. There are currently about 245 registered sites covering all 75 districts in the country (Ipas, 2010a). The 2011 NDHS included a series of questions specific to abortion, including knowledge on legalization of abortion and the legal conditions for abortion, knowledge about places that provide safe abortions, and, among women who had an abortion in the five years preceding the survey, the reason for the abortion, the type of abortion procedure, the type of provider, complications due to the procedure, and the cost of the abortion.

9.8.1 Knowledge that Abortion is Legal in Nepal

Table 9.16 shows that only 38 percent of women age 15-49 believe that abortion in Nepal is legal. Women age 45-49 are least likely to know that abortion is legal. Urban women and women who reside in the Far-western region, particularly the Far-western terai subregion, are more likely than their counterparts to believe that abortion in Nepal is legal. Nearly two-thirds of women with an SLC and higher education, and half of women with some secondary education believe that abortion is legal, along with 54 percent of women in the highest wealth quintile.

Those who stated that abortion is legal in Nepal were further asked under what circumstances it is legal. Among women who believe that abortion is legal in Nepal, one-third stated that it is legal for pregnancies up to 12 weeks, and one-fifth stated that it is legal for pregnancies of 18 weeks duration if they were a result of rape or incest. Fewer than 10 percent of women each believed that abortion is legal if the mother's life is in danger, if the mother has a physical or mental condition that would make a pregnancy a health risk, or if there is a fetal abnormality. Nearly two-fifths of women did not know under what circumstances abortion in Nepal is legal. This was especially true for women in rural areas, those with no education, and those in the lowest wealth quintile. It is interesting to note that although a large proportion of women in the Far-western region believe that abortion is legal in Nepal, many of these women do not know under what circumstances it is legal.

Table 9.16 Knowledge that abortion is legal in Nepal

Percentage of women who think abortion is legal in Nepal, and among women who think abortion is legal, percentage who report specific circumstances under which abortion is legal, according to background characteristics, Nepal 2011

	Knowledge of abortion		Circumstances for legal abortion							
Background characteristic	Percentage who think abortion is legal	Number of women	Pregnancy of 12 weeks duration or less for any woman	Pregnancy of 18 weeks duration if resulted from rape/ incest	Life of mother in danger	Mother's physical/ mental health at risk	Fetus abnormality	Other	Don't know	Number of women who think abortion is legal
Age										
15-19	39.8	2,753	29.5	20.1	5.7	7.7	3.9	6.9	45.3	1,097
20-24	42.3	2,297	34.5	18.5	8.2	11.0	7.5	9.8	39.4	973
25-29	41.0	2,101	40.6	19.7	11.3	10.7	10.9	8.5	31.1	861
30-34	38.2	1,734	38.3	25.1	9.6	9.1	7.2	8.2	35.3	663
35-39	35.7	1,557	39.4	23.7	11.2	8.6	6.4	13.1	33.3	555
40-44	30.2	1,285	35.4	19.2	5.7	6.1	6.4	7.5	44.1	388
45-49	26.5	947	32.5	24.1	5.4	7.7	5.2	9.5	40.2	251
Residence										
Urban	47.2	1,819	33.7	26.1	11.0	13.0	11.5	13.8	29.8	859
Rural	36.2	10,855	35.9	19.8	7.8	8.2	5.9	7.8	40.3	3,929
Ecological zone										
Mountain	39.8	805	47.5	12.5	4.0	6.4	2.7	2.5	43.8	321
Hill	38.2	5,090	39.7	23.7	8.4	9.9	7.7	11.4	31.9	1,945
Terai	37.2	6,779	30.8	19.9	8.9	8.8	6.8	7.7	42.7	2,522
Development region										
Eastern	37.9	3,057	40.2	18.0	10.5	11.3	7.3	9.3	30.8	1,157
Central	35.1	4,236	29.0	27.4	8.4	10.4	9.6	11.6	35.3	1,488
Western	35.5	2,660	41.9	26.6	8.4	8.6	6.9	9.2	32.3	944
Mid-western	36.9	1,478	28.7	13.5	5.7	4.6	2.4	7.3	54.9	546
Far-western	52.6	1,242	38.3	9.6	6.8	6.5	3.7	2.8	53.8	653
Subregion										
Eastern mountain	34.6	229	57.7	22.4	8.1	13.6	4.6	1.7	27.0	79
Central mountain	43.8	258	46.0	11.1	2.9	5.0	3.4	3.8	44.5	113
Western mountain	40.4	319	42.7	7.5	2.4	3.2	0.8	2.0	53.4	129
Eastern hill	38.5	956	47.5	9.7	7.8	6.5	6.5	8.6	36.5	368
Central hill	44.0	1,563	36.5	34.6	12.1	15.3	13.7	16.8	17.2	688
Western hill	32.0	1,513	43.4	26.2	5.9	8.0	5.5	6.7	35.1	483
Mid-western hill	34.6	649	25.5	20.3	4.8	6.7	1.2	15.1	47.4	225
Far-western hill	44.2	409	43.4	7.7	7.1	5.0	1.0	4.9	49.8	181
Eastern terai	37.9	1,873	34.4	21.8	12.2	13.5	8.1	10.5	28.3	710
Central terai	28.4	2,415	18.7	22.9	5.6	6.4	6.5	7.6	51.9	687
Western terai	40.1	1,147	40.5	27.0	11.0	9.2	8.4	11.9	29.3	460
Mid-western terai	39.4	668	27.7	8.6	7.4	3.5	3.9	2.2	62.2	263
Far-western terai	59.5	676	35.6	11.0	7.4	7.6	5.2	1.8	55.2	402
Education										
No education	20.4	5,045	27.1	13.5	3.8	1.9	3.2	7.9	53.6	1,030
Primary	31.5	2,209	31.1	12.5	5.3	6.5	4.2	6.5	48.0	695
Some secondary	50.2	3,088	37.5	20.2	7.8	7.1	5.0	8.6	38.8	1,551
SLC and above	64.8	2,331	41.2	30.7	13.6	17.1	12.6	10.9	23.1	1,512
Wealth quintile										
Lowest	21.8	2,120	29.3	7.3	2.0	3.4	1.5	3.0	60.8	461
Second	28.5	2,393	35.2	13.0	5.0	4.9	3.0	6.1	46.9	681
Middle	32.5	2,600	34.4	17.3	5.1	5.6	4.6	6.1	46.6	845
Fourth	46.7	2,722	34.5	23.4	10.0	8.2	7.2	10.3	36.5	1,270
Highest	53.9	2,839	38.9	28.7	12.3	15.3	11.3	12.3	24.9	1,530
Total	37.8	12,674	35.5	21.0	8.4	9.1	6.9	8.9	38.4	4,788

Note: Other includes "can abort if no more children desired" and "unwanted."
SLC = School Leaving Certificate

9.8.2 Knowledge about Places That Provide Safe Abortions

With the legalization of abortion, service providers in Nepal have been trained to conduct safe abortions. Table 9.17 shows that 59 percent of women age 15-49 report knowing a place where a safe abortion can be obtained. Knowledge of a safe abortion place is higher among urban, educated, and wealthy women than among their counterparts. Knowledge of a safe abortion place is also higher in the terai than in the hill or mountain zone and higher in the Western and Mid-western terai than in the other subregions.

Women who report knowing places for safe abortion are more likely to mention the government sector (71 percent) than the private sector (58 percent) or the nongovernment sector (29 percent).

Table 9.17 Knowledge about places that provide safe abortions

Percentage of women who know about a place for safe abortion, and among those women who know about a place for safe abortion, the percentage who report specific service sectors for safe abortion, according to background characteristics, Nepal 2011

Background characteristic	Knowledge on place		Place for safe abortion				Number of women who know a place for safe abortion
	Percentage who know a place for safe abortion	Number of women	Government sector	Non-government sector	Private sector	Other	
Age							
15-19	53.5	2,753	72.7	22.8	57.2	0.1	1,472
20-24	63.5	2,297	72.9	32.0	55.4	0.4	1,459
25-29	66.3	2,101	70.2	34.3	59.7	0.4	1,392
30-34	65.3	1,734	67.9	36.0	59.3	0.6	1,131
35-39	59.2	1,557	71.1	27.0	57.4	0.7	922
40-44	49.8	1,285	71.3	22.0	59.2	0.2	639
45-49	46.8	947	74.6	21.4	55.9	1.0	443
Residence							
Urban	63.2	1,819	71.7	36.6	61.4	1.0	1,151
Rural	58.1	10,855	71.3	27.8	57.1	0.3	6,308
Ecological zone							
Mountain	60.1	805	88.3	18.1	46.9	0.0	484
Hill	50.4	5,090	76.9	28.5	54.9	0.3	2,564
Terai	65.1	6,779	66.3	30.7	60.6	0.6	4,411
Development region							
Eastern	57.4	3,057	60.1	30.5	57.1	0.6	1,755
Central	59.5	4,236	70.7	27.7	58.9	0.4	2,520
Western	54.1	2,660	73.1	30.5	62.4	0.1	1,438
Mid-western	67.4	1,478	80.5	30.4	51.4	0.3	997
Far-western	60.3	1,242	84.7	26.6	54.7	1.1	749
Subregion							
Eastern mountain	58.2	229	91.7	7.3	49.4	0.0	133
Central mountain	56.5	258	76.5	27.1	68.5	0.0	146
Western mountain	64.3	319	94.5	18.6	30.0	0.0	205
Eastern hill	48.4	956	75.0	25.8	47.5	0.4	463
Central hill	55.1	1,563	73.7	35.5	60.1	0.4	861
Western hill	39.7	1,513	77.4	21.8	63.5	0.0	600
Mid-western hill	62.4	649	80.7	28.2	44.4	0.3	405
Far-western hill	57.5	409	84.2	25.4	47.0	0.5	236
Eastern terai	61.9	1,873	50.5	35.1	61.9	0.7	1,159
Central terai	62.7	2,415	68.4	23.3	57.3	0.4	1,513
Western terai	73.0	1,147	70.1	36.6	61.7	0.2	838
Mid-western terai	71.2	668	76.7	33.0	64.8	0.4	476
Far-western terai	62.9	676	83.0	31.4	61.8	1.6	425
Education							
No education	48.1	5,045	70.8	16.0	55.3	0.6	2,425
Primary	55.6	2,209	73.7	24.1	56.1	0.2	1,229
Some secondary	63.8	3,088	72.0	32.4	58.6	0.3	1,971
SLC and above	78.6	2,331	69.7	46.4	61.2	0.5	1,833
Wealth quintile							
Lowest	40.2	2,120	80.6	15.4	43.7	0.4	852
Second	51.3	2,393	75.5	15.8	56.0	0.1	1,228
Middle	60.2	2,600	67.8	22.5	60.0	0.3	1,567
Fourth	66.2	2,722	70.8	33.9	57.0	0.6	1,802
Highest	70.8	2,839	68.2	44.1	63.8	0.6	2,009
Total	58.8	12,674	71.4	29.1	57.8	0.4	7,458

SLC = School Leaving Certificate

9.8.3 Pregnancy Outcomes

A pregnancy that does not end in a live birth is a stillbirth, a miscarriage, or an abortion. Table 9.18 shows the percent distribution of all pregnancies that ended during the five years preceding the survey by type of outcome. The majority of pregnancies (85 percent) end in a live birth. Eight percent of pregnancies are aborted, 7 percent result in a miscarriage, and a very small proportion end up as stillbirths (1 percent). Abortions are proportionately higher among women age 20 and above and pregnancies of order three and higher. The percentage of pregnancies ending in abortion is more than twice as high in urban as in rural areas. Abortions are relatively higher in the hill zone and terai than in the mountain zone. The Western region has a higher proportion of pregnancies ending in abortion than the other development regions, and abortions are particularly high in the Western terai subregion, where 15 percent of pregnancies are aborted. Around 10 percent of pregnancies among women with at least some education end in an abortion. The proportion of pregnancies ending in abortion rises with household wealth, from 3 percent among pregnancies in the poorest households to 18 percent in the wealthiest households.

Table 9.18 Pregnancy outcomes by background characteristics

Percent distribution of pregnancies ending in the five years preceding the survey by type of outcome, according to background characteristics, Nepal 2011

Background characteristic	Pregnancy outcome					Number of pregnancies
	Live birth	Stillbirth	Miscarriage	Abortion	Total	
Age at end of pregnancy						
<20	88.4	0.8	7.9	2.8	100.0	1,245
20-34	84.9	0.9	6.1	8.1	100.0	4,605
35-49	75.3	1.1	9.9	13.7	100.0	505
Pregnancy order						
1	90.2	1.1	7.2	1.5	100.0	1,889
2	88.1	0.6	6.0	5.2	100.0	1,550
3	82.1	0.8	6.3	10.7	100.0	1,154
4	78.2	0.6	5.3	15.8	100.0	706
5+	77.8	1.2	8.5	12.5	100.0	1,058
Residence						
Urban	76.5	0.5	8.2	14.7	100.0	658
Rural	85.8	1.0	6.6	6.7	100.0	5,698
Ecological zone						
Mountain	85.5	1.9	7.7	4.9	100.0	500
Hill	84.2	0.9	6.7	8.2	100.0	2,531
Terai	85.2	0.8	6.7	7.3	100.0	3,325
Development region						
Eastern	85.9	1.3	7.6	5.2	100.0	1,478
Central	88.5	0.3	5.0	6.2	100.0	1,940
Western	80.3	0.8	6.8	12.2	100.0	1,255
Mid-western	84.4	1.5	7.4	6.7	100.0	940
Far-western	81.4	1.2	8.9	8.5	100.0	744
Subregion						
Eastern mountain	87.9	2.4	6.9	2.8	100.0	115
Central mountain	87.1	0.4	6.9	5.6	100.0	110
Western mountain	83.9	2.2	8.3	5.6	100.0	275
Eastern hill	86.8	2.1	7.2	3.9	100.0	480
Central hill	83.5	0.0	4.6	11.8	100.0	593
Western hill	83.1	0.3	6.5	10.1	100.0	727
Mid-western hill	85.1	1.3	7.6	5.9	100.0	432
Far-western hill	82.5	1.7	9.0	6.7	100.0	299
Eastern terai	85.2	0.6	7.9	6.2	100.0	883
Central terai	91.0	0.5	5.0	3.5	100.0	1,237
Western terai	76.3	1.5	7.2	15.1	100.0	528
Mid-western terai	84.1	1.0	6.6	8.3	100.0	358
Far-western terai	78.9	0.8	9.1	11.3	100.0	320
Education						
No education	89.4	1.0	5.6	4.0	100.0	2,851
Primary	82.5	1.2	7.1	9.2	100.0	1,308
Some secondary	79.5	0.9	7.7	12.0	100.0	1,307
SLC and above	81.3	0.3	8.6	9.8	100.0	889
Wealth quintile						
Lowest	89.2	1.3	6.2	3.3	100.0	1,557
Second	88.3	0.8	6.8	4.1	100.0	1,340
Middle	86.4	1.1	6.2	6.3	100.0	1,312
Fourth	82.9	0.4	7.0	9.6	100.0	1,130
Highest	73.6	0.7	8.2	17.5	100.0	1,016
Total	84.8	0.9	6.8	7.5	100.0	6,356

SLC = School Leaving Certificate

9.8.4 Reason for the Most Recent Abortion

Women who had an abortion in the five years preceding the survey were asked the reason for their most recent abortion. One in five women mentioned that the main reason for their most recent abortion was that they did not want any more children, while 12 percent said that their husband/partner did not want the child (Table 9.19). Another 10 percent of women said that they wanted to space their births, and 7 percent mentioned that they wanted to delay childbearing. Ten percent of women reported that they had an abortion because of their health, and 12 percent mentioned that they aborted because there was no money to take care of the baby.

Table 9.19 Main reason for the most recent abortion in the past five years

Percent distribution of women with an abortion in the five years preceding the survey by main reason for the most recent abortion, according to background characteristics, Nepal 2011

Background characteristic	Main reason for having most recent abortion								Number of women
	Health of mother	No money to take care of baby	Wanted to delay child-bearing	Wanted to space child	Did not want any more children	Husband/ partner did not want child	Other	Total	
Age at end of pregnancy									
<20	(21.5)	(7.7)	(18.7)	(22.8)	(0.0)	(1.0)	(28.3)	100.0	34
20-34	10.7	13.3	7.5	10.1	20.4	13.8	24.2	100.0	325
35-49	2.3	10.1	0.0	1.7	30.7	10.7	44.5	100.0	61
Pregnancy order									
1	(32.2)	(6.9)	(9.6)	(6.6)	(0.0)	(1.2)	(43.5)	100.0	28
2	7.9	6.7	21.4	36.5	3.2	2.6	21.8	100.0	79
3	11.0	16.0	6.4	4.5	21.6	15.3	25.1	100.0	112
4	13.2	13.3	1.6	3.0	32.2	12.7	23.9	100.0	92
5+	3.6	13.3	2.3	2.6	26.5	18.8	33.0	100.0	109
Residence									
Urban	11.4	14.4	9.3	8.9	15.4	12.4	28.3	100.0	81
Rural	10.1	11.9	6.9	10.1	21.4	12.3	27.3	100.0	339
Ecological zone									
Mountain	7.9	14.0	5.6	4.2	21.8	12.9	33.7	100.0	22
Hill	9.3	11.8	7.1	10.0	20.0	10.4	31.5	100.0	183
Terai	11.6	12.7	7.7	10.3	20.4	13.8	23.5	100.0	215
Development region									
Eastern	17.9	7.5	8.4	13.2	11.8	12.1	29.0	100.0	68
Central	12.3	11.0	5.7	12.8	20.7	8.2	29.4	100.0	105
Western	8.7	13.3	5.1	7.7	27.5	7.8	29.9	100.0	132
Mid-western	6.0	16.2	8.4	8.6	15.1	16.6	29.0	100.0	58
Far-western	6.0	14.6	13.5	6.7	18.0	26.4	14.9	100.0	56
Education									
No education	10.0	14.8	4.7	4.6	23.7	20.3	22.0	100.0	103
Primary	7.5	16.4	7.3	11.1	18.1	11.3	28.3	100.0	108
Some secondary	13.7	10.0	7.3	9.2	17.9	9.7	32.2	100.0	131
SLC and above	9.2	7.6	11.1	16.3	22.6	7.5	25.8	100.0	79
Wealth quintile									
Lowest	12.7	19.5	1.1	4.1	26.4	14.5	21.7	100.0	47
Second	5.9	13.3	14.2	4.5	19.3	15.6	27.3	100.0	51
Middle	4.7	12.1	6.0	9.7	18.5	15.7	33.3	100.0	75
Fourth	18.3	14.0	10.7	8.8	14.3	5.6	28.4	100.0	96
Highest	9.0	8.9	5.5	14.2	23.4	13.1	25.9	100.0	151
Total	10.4	12.4	7.4	9.9	20.3	12.3	27.5	100.0	420

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

9.8.5 Type of Abortion Procedure

In the past, manual vacuum aspiration was the main procedure used for safe abortion in Nepal; recently, however, the government has encouraged medical abortion. Keeping in view the lack of modern technologies in rural areas of Nepal, medical abortion seems to be a viable option. Medical abortion was piloted from December 2008 to June 2009 with successful results (Ipas, 2010b).

Women who had an abortion were asked what procedure was used to terminate their pregnancy. Table 9.20 shows that 39 percent of women had a dilation and curettage (D & C), 24 percent had manual vacuum aspiration, 20 percent took unspecified tablets, and 9 percent had a medical abortion. Other actions to end a pregnancy taken by less than 5 percent of women each included injection, catheter, and other unspecified reasons.

Table 9.20 Abortion services in the past five years

Percent distributions of women receiving an abortion in the five years preceding the survey by procedure and provider used for the last abortion, and the percentage who received their last abortion in various places for abortion, Nepal 2011

Abortion services	Total
Procedure for abortion	
Took tablets	19.5
D & C	38.5
Manual vacuum aspiration	24.1
Medical abortion	9.1
Injection	3.5
Catheter	2.5
Other	2.7
Total	100.0
Provider for abortion[1]	
Doctor	61.9
Nurse/midwife	27.4
Health assistant/health worker	2.9
Pharmacist/medical shop	5.3
Friends/relatives	0.9
No one	1.6
Total	100.0
Place of abortion[2]	
Government sector	18.7
Nongovernment sector	34.4
Private sector	36.3
Home	9.7
Other	1.4
Number of women with abortion	420

[1] If the respondent mentioned more than one person attending during abortion, only the most qualified person is considered.
[2] Some respondents went to more than one place for an abortion.

9.8.6 Place and Provider for Abortion

In patriarchal societies such as Nepal, having an abortion has been associated with women losing morality and status in the community, cultivating a feeling of guilt among women. Because of the stigma attached to abortion, some women end up using traditional remedies, which can be unsafe and, in some cases, even fatal. However, with legalization of abortion, services are now available in health centers where women can access better and safer care. Safe abortion services are provided at government referral-level hospitals, district hospitals, clinics, and health posts. They are also provided by nongovernmental organizations and certain private-sector hospitals and clinics. Doctors, nurses, and auxiliary midwives trained as skilled birth attendants typically provide these services.

The majority of women who had an abortion in the five years preceding the survey went to a doctor (62 percent) or a nurse/midwife (27 percent) for the last abortion (Table 9.20). Five percent received services in a medical shop or from a pharmacist, while 3 percent received services from a health assistant or other health workers. The proportion of women who sought services from their friends and relatives was low (1 percent), and 2 percent of women did not receive any assistance in aborting their pregnancy.

Women who had an abortion in the five years before the survey were also asked for the place of their last abortion. About one in five women went to government health facilities, while one in three went to nongovernment health facilities such as Marie Stopes and FPAN. Another one-third went to private-sector facilities (36 percent). About 10 percent of women had their abortion at home.

Among those who went to government facilities and nongovernment facilities, all accessed government-listed sites for their abortion. However, among those who visited private-sector facilities, only 19 percent went to listed sites. Notably, about 8 percent of women went to India for abortion services (data not shown).

9.8.7 Complications during and after Abortion and Contraception

Women were also asked whether they experienced complications either during their last abortion or following the abortion. One in four women who had an abortion in the five years preceding the survey mentioned that they had complications during the last such procedure, and another 24 percent mentioned experiencing post-abortion complications (i.e., complications within one month following the abortion) (data not shown).

The 2011 NDHS collected information on women's use of contraception following an abortion. Forty-one percent of women who had an abortion in the five years preceding the survey used a contraceptive method after their abortion. Thirteen percent of these women used injectables, 11 percent used the pill, 2 percent used implants, and 1 percent each used female sterilization and IUDs; the remaining 13 percent of women used other methods (data not shown).

9.8.8 Abortion and Post-abortion Cost

Nearly one in two (48 percent) women with an abortion in the five years before the survey said that they paid more than Nepalese Rupees 1,500 for their most recent abortion, while 36 percent paid 1,000-1,500 and 10 percent paid less than 1,000. Only 6 percent of women mentioned that they had obtained free abortion services (data not shown).

The majority of women (69 percent) who had an abortion in the five years preceding the survey did not use post-abortion care services, even when they suffered from complications after their most recent abortion. Twenty-seven percent of women with an abortion in the five years preceding the survey paid less than Nepalese Rupees 1,000 while 4 percent paid more than 1,000 for post-abortion care services (data not shown).

9.9 Uterine Prolapse

In Nepal, uterine prolapse affects about 10 percent of women nationally (Institute of Medicine, 2006). It is the most frequently reported cause of poor health among women of reproductive age and postmenopausal women. Many women in Nepal are engaged in extremely hard work (including heavy lifting), with little or no rest during pregnancy or the postpartum period, contributing to high rates of uterine prolapse.

Six percent of women who had ever given birth said they had experienced symptoms of uterine prolapse. Among these women 55 percent sought medical treatment, 9 percent sought traditional treatment, and 36 percent did not seek any treatment at all (data not shown). In 2006, 7 percent of women age 15-49 experienced uterine prolapse.

9.10 Problems in Accessing Health Care

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

In the 2011 NDHS, women were asked whether or not each of the following factors would be a significant problem for them in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to a health facility, and not wanting to go alone. The majority of women (72 percent) reported that at least one of these problems would pose a barrier to seeking health care for themselves when they are sick (Table 9.21). Sixty percent of women stated that not wanting to go alone is a problem in accessing health care, while getting money for treatment and distance to a health facility were each cited as a problem by around one in two women. Only 13 percent of women perceived getting permission to go for treatment as a problem.

Table 9.21 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Nepal 2011

Background characteristic	Problems in accessing health care					
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	Number of women
Age						
15-19	12.8	41.5	45.7	66.1	74.9	2,753
20-34	13.4	45.4	45.6	58.5	70.1	6,132
35-49	11.0	52.7	48.7	58.6	73.0	3,789
Number of living children						
0	12.2	38.5	40.8	62.0	70.3	3,823
1-2	12.0	43.2	43.1	55.9	67.9	4,591
3-4	13.1	55.1	53.3	61.1	76.0	3,207
5+	14.8	67.1	62.0	69.2	83.9	1,053
Marital status						
Never married	10.3	37.9	38.9	61.1	69.6	2,708
Married	13.3	48.7	48.7	59.9	72.4	9,608
Divorced/separated/widowed	9.2	61.8	48.8	60.3	79.8	358
Employed last 12 months						
Not employed	9.6	33.4	34.2	53.0	61.6	3,126
Employed for cash	9.7	45.5	36.2	52.6	66.2	2,924
Employed not for cash	15.2	53.6	57.0	66.9	79.5	6,625
Residence						
Urban	8.6	30.1	20.5	45.6	56.3	1,819
Rural	13.2	49.6	50.9	62.6	74.6	10,855
Ecological zone						
Mountain	12.6	54.6	64.8	70.7	80.9	805
Hill	14.1	48.7	48.7	62.0	74.1	5,090
Terai	11.4	44.4	42.8	57.6	69.4	6,779
Development region						
Eastern	10.1	46.8	45.5	61.4	72.2	3,057
Central	12.0	45.1	45.7	60.1	70.8	4,236
Western	12.8	39.5	38.4	54.2	67.1	2,660
Mid-western	15.5	52.8	56.2	64.4	77.9	1,478
Far-western	16.4	60.8	58.2	65.5	78.8	1,242
Subregion						
Eastern mountain	13.2	54.5	62.9	65.6	77.4	229
Central mountain	10.6	50.9	59.9	71.5	80.2	258
Western mountain	13.7	57.6	70.0	73.7	84.1	319
Eastern hill	12.6	59.3	64.3	75.9	85.7	956
Central hill	14.5	40.4	36.8	55.6	65.2	1,563
Western hill	16.4	44.8	43.8	59.2	72.9	1,513
Mid-western hill	14.3	50.4	55.2	59.9	75.1	649
Far-western hill	7.8	67.1	65.9	67.4	83.6	409
Eastern terai	8.5	39.5	33.9	53.5	64.7	1,873
Central terai	10.5	47.4	49.9	61.7	73.5	2,415
Western terai	8.1	32.4	31.4	47.6	59.5	1,147
Mid-western terai	15.6	53.6	52.1	65.1	78.2	668
Far-western terai	23.7	58.2	52.5	63.8	75.7	676
Education						
No education	16.9	63.6	61.3	69.4	83.7	5,045
Primary	15.8	53.5	51.4	64.0	77.3	2,209
Some secondary	9.9	37.2	38.7	57.0	67.3	3,088
SLC and above	3.6	16.5	20.5	41.0	47.9	2,331
Wealth quintile						
Lowest	21.1	72.1	74.5	76.8	90.1	2,120
Second	16.3	64.0	62.8	70.0	84.2	2,393
Middle	13.3	52.0	51.1	62.7	77.4	2,600
Fourth	10.3	37.6	39.0	57.4	69.3	2,722
Highest	4.6	17.3	15.1	39.8	46.0	2,839
Total	12.6	46.8	46.6	60.2	72.0	12,674

SLC = School Leaving Certificate

Women with five or more children, those employed but not for cash, and those living in rural areas, the mountain zone, the Far-western region, and the Eastern hill subregion were more likely than their counterparts to cite having at least one of these problems in seeking health care for themselves, as were women with no education and women from the poorest households.

9.10.1 Awareness and Practice of Health Services in the Government Sector

Women age 15-49 were also asked whether they were aware of the government health incentives to encourage women to use health facilities: free delivery services, and transportation cost for delivering in a government health facility. The vast majority of women are aware of transportation cost encouraging government facility delivery (89 percent) and free delivery services (76 percent) (Table 9.22).

The 2011 NDHS also collected information on whether registration fees were waived for women age 15-49 who visited a government health facility in the 12 months prior to the survey and, among those who were prescribed medicines, whether some or all of the medicines were provided free of cost. Sixty-four percent of women who visited a health facility in the 12 months prior to the survey did not pay registration fees during their visit. In addition, of those who were prescribed medicines, 62 percent received some or all of the medicine free of cost. The government's program seems to be successful in targeting the poorer sectors of the population. Rural women; women living in the mountain zone, Far-western region, and Eastern and Far-western hill subregions; women with less than an SLC; and women in the lowest and second lowest wealth quintiles were more likely than their counterparts to not pay registration fees. A similar pattern is seen for free medicine.

Table 9.22 Awareness and practice of health services in government sector

Percentage of women age 15-49 with knowledge on government health incentives; among women who visited a government health facility in the 12 months preceding survey, the percentage who did not pay a registration fee; and among women who visited a government health facility in the past 12 months and were prescribed medicine, the percentage who received some or all of the medicine free of cost, by background characteristics, Nepal 2011

	Among all women age 15-49, the percentage who know about:			Among those visiting a government health facility in the past 12 months:		Among those visiting a government health facility in the past 12 months who were prescribed medicine:	
Background characteristic	Free delivery services	Transportation cost for government facility delivery	Number of women	Percentage who did not pay registration fee	Number of women	Percentage who received some or all medicine free of cost	Number of women
Residence							
Urban	75.0	88.7	1,819	28.8	427	34.2	335
Rural	76.4	88.6	10,855	68.3	3,186	65.9	2,441
Ecological zone							
Mountain	86.8	95.3	805	71.4	328	77.9	265
Hill	75.1	87.2	5,090	68.4	1,633	66.7	1,214
Terai	75.8	89.0	6,779	57.4	1,652	54.5	1,297
Development region							
Eastern	79.8	90.6	3,057	67.3	902	64.3	637
Central	68.6	85.6	4,236	48.2	1,126	47.2	888
Western	72.0	84.4	2,660	68.4	703	60.1	516
Mid-western	85.6	94.1	1,478	73.1	437	75.5	352
Far-western	91.4	96.9	1,242	78.2	445	83.2	383
Subregion							
Eastern mountain	87.9	95.7	229	74.9	120	77.3	91
Central mountain	78.7	92.2	258	53.3	54	62.4	43
Western mountain	92.7	97.4	319	75.1	153	83.3	131
Eastern hill	84.3	92.2	956	81.5	356	72.9	221
Central hill	71.1	85.8	1,563	42.8	438	47.6	343
Western hill	65.7	81.6	1,513	74.0	467	67.4	357
Mid-western hill	82.3	90.8	649	77.3	235	77.9	183
Far-western hill	92.4	95.8	409	81.3	139	92.7	109
Eastern terai	76.4	89.1	1,873	53.2	426	54.9	325
Central terai	65.9	84.8	2,415	51.6	634	45.6	502
Western terai	80.2	88.1	1,147	57.4	236	43.4	158
Mid-western terai	87.5	96.3	668	71.0	126	68.4	106
Far-western terai	90.1	97.7	676	73.6	230	77.2	206
Mother's education							
No education	68.9	85.7	5,045	64.3	1,554	64.0	1,224
Primary	77.3	87.9	2,209	67.4	695	66.7	511
Some secondary	82.4	91.8	3,088	64.8	810	61.3	627
SLC and above	82.8	91.5	2,331	55.2	555	51.9	414
Wealth quintile							
Lowest	70.3	84.3	2,120	80.2	708	82.5	517
Second	73.7	87.2	2,393	76.3	865	69.2	671
Middle	76.5	90.6	2,600	65.2	800	62.5	637
Fourth	80.4	90.6	2,722	51.7	687	48.6	524
Highest	78.4	89.5	2,839	35.1	553	42.0	427
Total	76.2	88.7	12,674	63.6	3,613	62.1	2,776

SLC = School Leaving Certificate

CHILD HEALTH 10

Key Findings:

- The percentage of children age 12-23 months who are fully immunized has doubled in the past 15 years, from 43 percent in 1996 to 87 percent in 2011.
- Five percent of children under age five showed symptoms of acute respiratory infection in the two weeks before the survey, and half of them were taken to a health facility or provider for advice or treatment.
- Nineteen percent of children under five had a fever in the two weeks before the survey, and two-fifths of them were taken to a health facility or provider for advice or treatment.
- Fourteen percent of children under age five had diarrhea in the two weeks before the survey.
- The proportion of children with diarrhea taken to a health provider for advice or treatment has increased over time, from 14 percent in 1996 to 38 percent in 2011.

Nepalese children under age five face multiple obstacles for survival and development. Exposure to infectious diseases, malnutrition, and poor hygiene and sanitation and lack of a healthy environment compromise early childhood development. In addition, a mother's nutritional status during pregnancy and her general well-being impact the health of her child during pregnancy as well as after delivery (Ministry of Health and Population [MOHP], 2004a; BASICS II, The MOST Project, and USAID, 2004).

The Child Health Division of the Ministry of Health and Population (MOHP) has launched several child survival interventions, including various operational initiatives, to improve the health of children in Nepal. These include the Expanded Program on Immunization (EPI), the Community-Based Integrated Management of Childhood Illnesses (CB-IMCI) program, the Community-Based Newborn Care Program (CB-NCP), the Infant and Young Child Feeding program, a micronutrients supplementation program, vitamin A and deworming campaign, and the Community-Based Management of Acute Malnutrition program (MOHP, 2011a).

The EPI was initiated in 1979, following the eradication of smallpox; the Control of Diarrheal Diseases (CDD) Program began in 1982; and the Control of Acute Respiratory Infections (ARI) Program was initiated in 1987. The CDD and ARI programs were merged into the CB-IMCI program in 1998. A comprehensive nutrition program was also introduced in 1979. These child survival interventions were initially launched as vertical programs under the MOHP but were subsequently integrated and brought under the Child Health Division in 1995.

Over the past decade, the country has had success in reducing under-five mortality, largely due to the implementation of the CB-IMCI program with vitamin A supplementation and the immunization program. The MOHP, in an effort to decrease newborn deaths, has incorporated newborn health as an integral component of safe motherhood, endorsing the National Neonatal Health Strategy in 2004. The CB-NCP was developed in 2007 with the goal of improving the health and survival of newborn babies; the program was piloted in 10 districts in 2008-2009 and scaled up to 15 more districts in 2010-2011 (MOHP, 2010a; MOHP, 2011a). The Health Sector Reform Strategy recognizes management of childhood illnesses as a core component of the Essential Health Care Strategy.

This chapter presents findings on several areas of importance relating to child health, including infant birth weight and size at birth; childhood vaccination coverage by timing, source of information on coverage, and background characteristics; prevalence and treatment of ARI symptoms (a proxy for pneumonia); prevalence and treatment of fever; and prevalence of diarrhea, diarrhea treatment, feeding practices during diarrhea, knowledge of oral rehydration salt (ORS) packets, and disposal of children's stools.

Information on birth weight or size at birth is important for the design and implementation of programs aimed at reducing neonatal and infant mortality. Vaccination coverage information focuses on the age group 12-23 months (i.e., the typical age by which children should have received all basic vaccinations). Data on differences in vaccination coverage between subgroups of the population aid in program planning. Data on treatment practices and contact with health services among children ill with the three most important childhood illnesses (acute respiratory infection, fever, and diarrhea) help in the assessment of national programs aimed at reducing the mortality impact of these illnesses. Information is provided on the prevalence and treatment of ARIs, including treatment with antibiotics, and the prevalence of fever and its treatment with antimalarial drugs and antibiotics. Data on the treatment of diarrheal disease with oral rehydration therapy and increased fluids help in the assessment of programs that recommend such treatments. Because sanitary practices can help prevent and reduce the severity of diarrheal disease, information is also provided on disposal of children's fecal matter. The information on child health presented in this chapter pertains only to children born during the five years preceding the survey unless otherwise specified.

10.1 Child's Weight and Size at Birth

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illnesses and chances of survival. Children whose birth weight is less than 2.5 kilograms or children reported to be "very small" or "smaller than average" are considered to have a higher than average risk of early childhood death. For births in the five years preceding the survey, birth weight was recorded in the questionnaire if available from either a written record or the mother's recall. Since birth weight may not be known for many babies, the mother's estimate of the baby's size at birth was also obtained. Such estimates, even though subjective, can be a useful proxy for the weight of the child.

Table 10.1 presents information on children's weight and size at birth according to background characteristics. Thirty-six percent of children born in the past five years were weighed at birth. This is not surprising given that the majority of births do not take place in a health facility, and children are less likely to be weighed at birth in a non-institutional setting. Among children born in the five years before the survey with a reported birth weight, 12 percent were of low birth weight (less than 2.5 kg).

There is little difference in the percentage of children of low birth weight by birth order, mother's smoking status, mother's age at birth, or urban-rural residence. However, there are differences by ecological zone and development region. The percentage of low birth weight children varies from a high of 15 percent in the mountain zone to 13 percent in the hill zone and 12 percent in the terai. The percentage is highest in the Eastern region (16 percent) and lowest in the Central region (9 percent). Children in the Central mountain subregion (21 percent) are most likely to be of low birth weight, while children in the Central terai (6 percent) are least likely. Children of women with a primary education are more likely to be of low birth weight (16 percent) and children of mothers with no education less likely (10 percent). Children in the lowest wealth quintile are more likely to be of low birth weight (17 percent) than children in the other quintiles.

In the absence of birth weight, a mother's subjective assessment of the size of the baby at birth may be a useful proxy. Four percent of children were reported to be very small at birth, 12 percent were reported to be smaller than average, and 84 percent were reported to be average or larger in size. The differences in children's size by background characteristics followed a pattern similar to that observed for reported birth weight. Children living in the mountain zone were more likely to be reported as very small or smaller than average than children living in the hill zone and terai, and children living in the Mid-western hill subregion were most likely to be reported as being smaller than average. Children of mothers with no education and those from households in the lowest wealth quintile were more likely to be reported as very small or smaller than average than their counterparts.

Table 10.1 Child's weight and size at birth

Percentage of live births in the five years preceding the survey that have a reported birth weight; among live births in the five years preceding the survey with a reported birth weight, percent distribution by birth weight; and percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth, according to background characteristics, Nepal 2011

Background characteristic	Percentage of all births that have a reported birth weight[1]	Percent distribution of births with a reported birth weight[1]				Percent distribution of all live births by size of child at birth					
		Less than 2.5 kg	2.5 kg or more	Total	Number of births	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Number of births
Mother's age at birth											
<20	42.6	13.4	86.6	100.0	470	4.7	13.4	81.9	0.0	100.0	1,101
20-34	36.0	12.1	87.9	100.0	1,407	3.2	12.0	84.7	0.1	100.0	3,910
35-49	20.6	12.3	87.7	100.0	78	5.5	12.1	81.9	0.5	100.0	380
Birth order											
1	54.0	12.7	87.3	100.0	989	3.7	13.7	82.6	0.0	100.0	1,833
2-3	33.3	12.3	87.7	100.0	789	3.8	10.7	85.4	0.1	100.0	2,368
4-5	16.9	11.8	88.2	100.0	131	2.4	12.4	84.8	0.3	100.0	773
6+	(11.0)	(11.3)	(88.7)	100.0	46	4.9	14.8	79.8	0.5	100.0	417
Mother's smoking status											
Smokes cigarettes/tobacco	9.7	12.9	87.1	100.0	46	5.4	18.1	75.9	0.7	100.0	475
Does not smoke	38.8	12.4	87.6	100.0	1,909	3.5	11.7	84.7	0.1	100.0	4,917
Residence											
Urban	71.2	12.0	88.0	100.0	358	4.0	11.6	84.3	0.0	100.0	503
Rural	32.7	12.5	87.5	100.0	1,597	3.6	12.3	83.9	0.1	100.0	4,888
Ecological zone											
Mountain	18.0	14.6	85.4	100.0	77	4.7	16.3	79.0	0.0	100.0	428
Hill	32.8	12.8	87.2	100.0	700	4.2	13.9	81.7	0.2	100.0	2,130
Terai	41.6	12.1	87.9	100.0	1,179	3.1	10.4	86.4	0.1	100.0	2,833
Development region											
Eastern	41.5	15.8	84.2	100.0	527	5.1	11.2	83.8	0.0	100.0	1,269
Central	35.1	9.1	90.9	100.0	603	2.3	9.4	88.1	0.2	100.0	1,717
Western	39.0	10.8	89.2	100.0	392	2.3	10.9	86.5	0.2	100.0	1,007
Mid-western	29.8	14.1	85.9	100.0	236	5.8	17.0	77.1	0.1	100.0	793
Far-western	32.5	14.9	85.1	100.0	196	3.8	18.8	77.3	0.0	100.0	605
Subregion											
Eastern mountain	20.7	11.9	88.1	100.0	21	6.2	14.4	79.4	0.0	100.0	101
Central mountain	25.3	21.1	78.9	100.0	24	4.7	16.6	78.7	0.0	100.0	96
Western mountain	13.7	11.3	88.7	100.0	32	4.0	17.0	79.0	0.0	100.0	230
Eastern hill	28.0	14.6	85.4	100.0	117	6.1	13.7	80.2	0.0	100.0	416
Central hill	47.6	12.8	87.2	100.0	236	4.6	11.0	84.1	0.3	100.0	495
Western hill	31.6	10.0	90.0	100.0	191	2.4	11.4	85.9	0.3	100.0	604
Mid-western hill	26.7	12.2	87.8	100.0	98	4.7	19.1	76.2	0.0	100.0	367
Far-western hill	23.4	19.1	80.9	100.0	58	3.8	18.7	77.5	0.0	100.0	247
Eastern terai	51.8	16.4	83.6	100.0	389	4.4	9.3	86.3	0.0	100.0	752
Central terai	30.5	5.8	94.2	100.0	343	1.1	8.1	90.7	0.2	100.0	1,126
Western terai	50.0	11.6	88.4	100.0	201	2.2	10.3	87.5	0.0	100.0	402
Mid-western terai	39.6	15.7	84.3	100.0	119	6.7	15.6	77.4	0.3	100.0	301
Far-western terai	49.9	13.6	86.4	100.0	126	5.1	18.3	76.6	0.1	100.0	252
Mother's education											
No education	19.1	9.8	90.2	100.0	487	3.7	14.3	81.7	0.3	100.0	2,550
Primary	32.4	16.4	83.6	100.0	350	3.6	10.8	85.5	0.0	100.0	1,079
Some secondary	55.5	12.7	87.3	100.0	577	3.7	10.2	86.1	0.0	100.0	1,039
SLC and above	74.9	12.1	87.9	100.0	542	3.4	10.3	86.3	0.0	100.0	723
Wealth quintile											
Lowest	11.8	16.8	83.2	100.0	165	5.3	15.4	79.1	0.3	100.0	1,390
Second	23.0	12.0	88.0	100.0	272	3.3	12.8	83.9	0.0	100.0	1,182
Middle	35.8	12.1	87.9	100.0	406	2.3	12.1	85.5	0.1	100.0	1,133
Fourth	54.9	11.8	88.2	100.0	515	3.1	10.9	85.8	0.2	100.0	938
Highest	79.8	12.2	87.8	100.0	597	3.7	7.7	88.5	0.0	100.0	748
Total	36.3	12.4	87.6	100.0	1,955	3.6	12.3	84.0	0.1	100.0	5,391

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Based on either a written record or the mother's recall
SLC = School Leaving Certificate

10.2 VACCINATION COVERAGE

The National Immunization Program (at the time known as the Expanded Program on Immunization) was initiated in 1979 in three districts with only two antigens (BCG and DPT) and was rapidly expanded to include all 75 districts with all six recommended antigens (BCG; diphtheria, pertussis, and tetanus [DTP]; oral polio vaccine [OPV]; and measles) by 1988. In 2003, the monovalent hepatitis B (HepB) vaccine was introduced, which was later administered as a single tetravalent (DPT-HepB) injection. In 2009, a vaccination against *Haemophilus influenzae* type B (Hib) was introduced in phases in the country. Likewise, in 2009, the Japanese encephalitis (JE) vaccine was introduced into the routine immunization program in 16 JE-endemic districts following JE mass vaccination campaigns. All children should receive the suggested number of doses of BCG, DPT-HepB-Hib, OPV, and measles vaccines during their first year of life. Similarly, all women of childbearing age should complete five doses of TT vaccine during their reproductive life. All of the vaccines in the routine immunization schedule are provided free of cost in all public health facilities in Nepal (MOHP, 2011a; MOHP, 2011b).

Universal immunization of children against the six vaccine-preventable diseases—tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles—is crucial to reducing infant and child mortality. Data on differences in immunization coverage among subgroups of the population are useful for program planning and targeting resources to areas most in need. Additionally, information on immunization coverage is important for the monitoring and evaluation of the EPI.

The 2011 NDHS collected information on immunization coverage for all living children born in the five years preceding the survey. According to WHO guidelines, children are considered fully immunized when they have received one dose of the vaccine against tuberculosis (BCG), three doses each of the DPT and polio vaccines, and one dose of measles vaccine. BCG is given at birth or at first clinical contact; DPT and polio require three doses at approximately 6, 10, and 14 weeks of age; and measles vaccine is given soon after 9 months of age.

In the 2011 NDHS, as in previous NDHS surveys, information on immunization coverage was collected in two ways: from immunization cards shown to the interviewer and from mothers' reports. If the cards were available, the interviewer copied the immunization dates directly onto the questionnaire. When there was no immunization card, or if a vaccine had not been recorded on the card as being administered, the respondent was asked to recall the specific vaccines given to her child.

Information on vaccination coverage among children age 12-23 months is shown in Table 10.2 by source of information (i.e., vaccination record or mother's report). This is the youngest cohort of children who have reached the age by which they should be fully immunized. Overall, 87 percent of children age 12-23 months were fully immunized by the time of the survey. With regard to specific vaccines, 97 percent of children age 12-23 months had received the BCG immunization and 88 percent had been immunized against measles. Coverage of the first dose of the DPT and polio vaccines was relatively high (96 percent and 97 percent, respectively); however, only 92 percent and 93 percent of these children went on to receive the third dose of DPT and polio, respectively, contributing to a dropout of 5 percent and 4 percent between the first and third dose of the DPT and polio vaccines, respectively. There are minimal differences between DPT and polio vaccine coverage because these vaccines are administered at the same time. The findings show that 3 percent of children 12-23 months did not receive any vaccine at all.

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Nepal 2011

Source of information	BCG	DPT 1[1]	DPT 2[1]	DPT 3[1]	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[2]	No vaccinations	Number of children
Vaccinated at any time before survey											
Vaccination card	33.7	33.8	33.6	32.5	33.8	33.6	32.5	31.0	30.7	0.0	339
Mother's report	62.8	62.6	61.0	59.2	62.7	61.3	60.0	57.0	56.3	2.9	661
Either source	96.5	96.4	94.6	91.7	96.6	94.9	92.5	88.0	87.0	2.9	1,000
Vaccinated by 12 months of age[3]	96.5	96.4	94.5	91.4	96.6	94.8	92.1	82.3	80.7	2.9	1,000

[1] DPT vaccinations include DPT/HepB as well as DPT/HepB/Hib.
[2] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
[3] For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccination.

10.3 VACCINATION BY BACKGROUND CHARACTERISTICS

Table 10.3 shows the percentage of children age 12-23 months who received specific vaccines at any time before the survey according to background characteristics. Boys are slightly more likely than girls to be fully immunized (88 percent versus 86 percent). Birth order varies inversely with immunization coverage; as birth order increases, immunization coverage generally decreases. Ninety-one percent of first-born children have been fully immunized, compared with 60 percent of children of birth order six and above.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Nepal 2011

Background characteristic	BCG	DPT 1[1]	DPT 2[1]	DPT 3[1]	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[2]	No vaccinations	Percentage with a vaccination card seen	Number of children
Sex												
Male	96.9	96.2	94.5	92.1	96.4	95.1	92.9	89.7	88.2	2.8	37.6	501
Female	96.2	96.6	94.7	91.3	96.7	94.8	92.0	86.3	85.7	3.0	30.2	499
Birth order												
1	98.8	99.1	97.7	94.2	99.0	97.6	95.4	92.3	91.1	0.8	35.4	348
2-3	96.7	96.2	94.8	92.5	96.3	95.1	93.0	89.2	88.3	3.1	34.3	469
4-5	98.5	97.6	95.0	93.9	97.6	95.0	93.9	86.2	86.2	1.5	34.5	109
6+	81.6	83.4	78.2	71.6	85.0	80.9	73.2	63.1	59.6	14.3	23.1	74
Residence												
Urban	98.0	99.5	95.5	94.9	100.0	96.9	96.7	91.8	90.0	0.0	38.7	97
Rural	96.4	96.1	94.5	91.4	96.2	94.7	92.0	87.6	86.6	3.2	33.4	903
Ecological zone												
Mountain	93.7	93.7	90.4	90.4	94.3	91.1	91.1	90.9	88.2	4.3	25.9	75
Hill	96.3	96.5	95.4	93.4	96.3	95.7	93.5	90.4	89.5	3.2	35.1	402
Terai	97.1	96.7	94.6	90.6	97.0	94.9	91.9	85.8	84.8	2.5	34.1	523
Development region												
Eastern	98.1	96.9	95.1	93.8	96.9	95.1	94.1	87.9	87.7	1.6	40.7	229
Central	96.1	96.4	93.2	89.1	96.4	93.6	90.9	84.6	83.1	3.6	26.2	345
Western	97.3	97.3	97.3	94.0	97.9	97.9	94.6	91.2	91.2	2.1	40.6	187
Mid-western	91.4	91.8	90.1	87.7	92.0	90.7	87.5	87.4	84.7	6.7	28.2	138
Far-western	100.0	100.0	99.5	97.1	100.0	99.5	97.1	94.9	93.7	0.0	39.7	101
Subregion												
Eastern mountain	98.0	98.0	98.0	98.0	98.0	98.0	98.0	97.4	97.4	2.0	40.8	17
Central mountain	(95.0)	(95.0)	(92.5)	(92.5)	(95.0)	(92.5)	(92.5)	(92.5)	(92.5)	(5.0)	(37.0)	17
Western mountain	91.3	91.3	86.3	86.3	92.5	87.5	87.5	87.5	82.5	5.0	15.0	41
Eastern hill	98.7	97.4	95.6	95.6	97.4	95.6	95.6	90.4	90.4	1.3	35.8	78
Central hill	97.1	98.3	95.9	94.2	98.3	97.1	95.4	92.5	89.6	1.7	46.1	94
Western hill	97.0	97.0	97.0	93.9	97.0	97.0	93.9	91.7	91.7	3.0	36.7	127
Mid-western hill	88.8	90.0	88.8	86.3	88.8	88.8	85.0	83.8	82.5	10.0	23.7	64
Far-western hill	100.0	100.0	100.0	97.0	100.0	100.0	97.0	91.8	91.8	0.0	20.9	38
Eastern terai	97.8	96.5	94.4	92.2	96.5	94.4	92.6	85.2	84.8	1.7	43.6	133
Central terai	95.7	95.7	92.2	86.8	95.7	92.2	89.0	80.9	79.8	4.3	17.5	234
Western terai	98.0	98.0	98.0	94.1	100.0	100.0	96.1	90.2	90.2	0.0	48.9	60
Mid-western terai	97.9	97.3	97.3	94.1	98.4	97.9	94.1	95.2	93.6	1.6	42.2	52
Far-western terai	100.0	100.0	100.0	97.2	100.0	100.0	97.2	96.7	93.9	0.0	63.3	44
Mother's education												
No education	94.3	94.1	90.5	85.8	94.3	91.2	86.9	79.6	78.1	4.5	26.7	452
Primary	98.1	98.1	97.9	95.3	98.1	97.9	96.5	96.3	94.6	1.9	31.8	200
Some secondary	98.6	98.6	98.3	97.4	98.7	98.5	97.4	95.2	95.2	1.3	43.4	211
SLC and above	98.3	98.3	97.5	97.1	98.3	97.5	97.5	92.8	92.4	1.7	45.9	137
Wealth quintile												
Lowest	94.2	94.0	91.8	87.6	93.9	92.0	88.5	86.0	84.5	5.1	28.6	247
Second	97.3	96.3	93.5	89.7	96.8	94.0	90.2	85.2	83.9	2.0	27.1	227
Middle	94.4	94.4	94.4	90.5	94.4	94.4	91.6	85.2	84.0	5.6	31.8	217
Fourth	98.9	99.9	96.7	96.7	100.0	97.5	97.4	92.2	91.5	0.0	41.8	183
Highest	100.0	100.0	99.5	98.4	100.0	99.5	98.8	96.1	95.7	0.0	48.6	126
Total	96.5	96.4	94.6	91.7	96.6	94.9	92.5	88.0	87.0	2.9	33.9	1,000

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] DPT vaccinations include DPT/HepB as well as DPT/HepB/Hib.
[2] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
SLC = School Leaving Certificate

Urban-rural differences in immunization coverage are small, with children residing in urban areas slightly more likely to be fully immunized (90 percent) than children in rural areas (87 percent). There are differences in coverage by ecological zone, with 85 percent of children fully immunized in the terai, compared with 90 percent in the hill zone and 88 percent in the mountain zone. Coverage ranges from a low of 83 percent among children living in the Central region to a high of 94 percent among children living in the Far-western region. Children living in the Eastern mountain subregion are most likely to be fully immunized (97 percent), and children in the Central terai subregion are least likely (80 percent).

There are marked differences in immunization coverage between children of women with no education (78 percent) and children of women in the other education groups (above 90 percent). Children in households in the highest wealth quintile (96 percent) are much more likely to be fully immunized than those in lower three wealth quintiles (less than 85 percent).

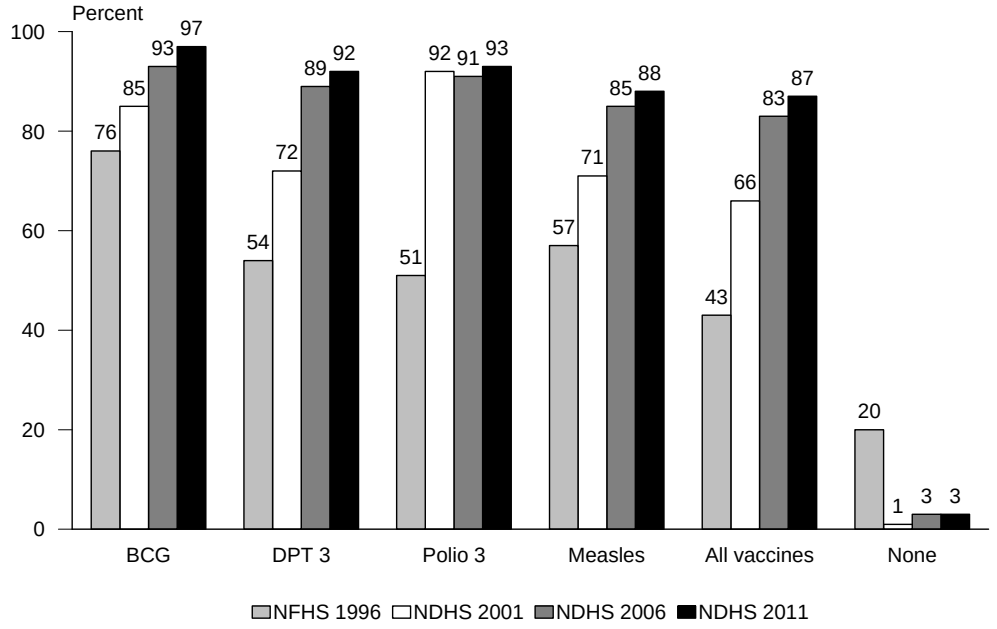
Table 10.3 also shows that an immunization card was seen for 34 percent of children age 12-23 months. Cards were most likely to have been seen for boys (38 percent), first-order births (35 percent), children living in urban areas (39 percent), children living in the hill zone, children living in the Western and Eastern regions (41 percent each), children living in the Far-western terai subregion (63 percent), children of mothers

with a School Leaving Certificate (SLC) or higher education (46 percent), and children of mothers in the highest wealth quintile (49 percent).

10.4 TRENDS IN IMMUNIZATION COVERAGE

Trends in immunization coverage over the past 15 years can be seen by comparing similarly collected data from the 1996 NFHS, 2001, 2006, and 2011 NDHS. Immunization coverage in Nepal has improved over the past 15 years, doubling from 43 percent in 1996 to 87 percent in 2011 (Figure 10.1). The percentage of children age 12-23 months who did not receive any of the six basic immunizations decreased from 20 percent to 3 percent over the same period. A marked increase in the coverage of polio vaccine was observed between 1996 and 2001, with little change thereafter.

Figure 10.1 **Trends in Vaccination Coverage among Children 12-23 Months, Nepal 1996-2011**



10.5 ACUTE RESPIRATORY INFECTION

The Ministry of Health and Population recognizes acute respiratory infections as a major public health problem among children under age five (MOHP, 2011a). The CB-IMCI program is an integrated package that addresses the management of diseases such as pneumonia, diarrhea, malaria, and measles, as well as malnutrition, among children age 2 months to 5 years. The program follows WHO guidelines on standard ARI case management. Accordingly, all ARI cases assessed by health workers are classified into one of the following categories: severe or very severe pneumonia, pneumonia, or no pneumonia (cough and cold). The program recognizes the important role of mothers and other caretakers in identifying the difference between the need for home care in the case of cough and cold symptoms that do not result in pneumonia and the need for referral to health facilities in the case of severe pneumonia.

ARIs are a leading cause of childhood morbidity and mortality in Nepal. Early diagnosis and treatment with antibiotics can reduce the number of deaths caused by ARIs, particularly deaths resulting from pneumonia. Pneumonia has emerged as the leading cause of death among children under age five in Nepal (MOHP, New ERA, and Macro International Inc., 2007). In 1995, a community-based ARI intervention program was initiated, with assistance from WHO, UNICEF, and USAID, to increase accessibility to care and reduce mortality resulting from pneumonia. Under this program, female community health volunteers (FCHVs) are trained to diagnose pneumonia and to treat infected children at the ward level with the antibiotic (paediatric cotrimoxazole). In the 2011 NDHS, the prevalence of ARI symptoms was estimated by asking mothers whether, in the two weeks preceding the survey, their children under age five had been ill with a cough accompanied by short, rapid breathing and difficulty breathing as a result of a problem in the chest. These symptoms are consistent with conditions leading to pneumonia. It should be noted that the data collected on ARI symptoms are subjective because they are based on a mother's perception of the illness without validation by medical personnel.

Table 10.4 shows that 5 percent of children under five years of age exhibited symptoms of ARI in the two weeks preceding the survey. Prevalence of ARI symptoms varied by age of the child. Children age 6-23 months were more likely to have symptoms of ARI (8 percent) than children in the other age groups. Children from the hill zone and the Western development region were most likely to exhibit symptoms of ARI. Symptoms were least likely to be reported for children in the highest wealth quintile (2 percent), with little difference among children in the other wealth quintiles (about 5 percent).

Half of children with symptoms of ARI were taken to a health facility or health provider. Seven percent of children with ARI symptoms received antibiotics. Due to the small number of cases, these data are not shown by background characteristics. There has been an increase in the past 15 years in the proportion of cases in which treatment is sought from a health facility for symptoms of pneumonia (from 18 percent in 1996 to 50 percent in 2011).

Table 10.4 Prevalence of symptoms of ARI

Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, according to background characteristics, Nepal 2011

Background characteristic	Among children under age five: Percentage with symptoms of ARI[1]	Number of children
Age in months		
<6	3.9	531
6-11	7.5	491
12-23	7.9	1,000
24-35	4.1	1,013
36-47	3.6	1,106
48-59	2.1	999
Sex		
Male	4.6	2,649
Female	4.7	2,490
Mother's smoking status		
Smokes cigarettes/tobacco	4.6	450
Does not smoke	4.6	4,690
Cooking fuel		
Electricity or gas	3.5	764
Wood/straw[2]	4.9	4,009
Animal dung	3.5	332
Residence		
Urban	4.9	483
Rural	4.6	4,656
Ecological zone		
Mountain	3.1	400
Hill	5.2	2,033
Terai	4.4	2,707
Development region		
Eastern	3.6	1,210
Central	3.6	1,639
Western	6.5	965
Mid-western	5.7	760
Far-western	5.5	565
Mother's education		
No education	4.4	2,410
Primary	5.0	1,032
Some secondary	5.2	995
SLC and above	4.1	703
Wealth quintile		
Lowest	4.7	1,322
Second	4.7	1,121
Middle	5.4	1,071
Fourth	5.6	899
Highest	2.1	726
Total	4.6	5,140

Note: Total includes 19 children living in households using kerosene, 14 children living in households using coal/lignite/charcoal, and 1 child living in a household where no food is cooked who are not shown separately.
[1] Symptoms of ARI (cough accompanied by short, rapid breathing that is chest-related and/or by difficult breathing that is chest-related) are considered a proxy for pneumonia.
[2] Includes grass, shrubs, and crop residues
SLC = School Leaving Certificate

10.6 FEVER

Fever is a major manifestation of malaria and other acute infections in children. Malaria and fever contribute to high levels of malnutrition and morbidity. While fever can occur year-round, malaria is more prevalent following the end of the rainy season, particularly in the terai, inner terai, and basins of the hill districts of Nepal, where the climatic conditions are more favorable to malaria transmission. For this reason, temporal factors must be taken into account when interpreting fever as an indicator of malaria prevalence. Since malaria is a major contributory cause of death in infancy and childhood in many developing countries, presumptive treatment of fever with antimalarial medication is advocated in many countries where malaria is endemic. The 2011 NDHS fieldwork was carried out from February to mid-June 2011, before and during the rainy season.

Table 10.5 shows the percentage of children under five with fever during the two weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. Nineteen percent of children under five were reported to have had fever in the two weeks preceding the survey. Fever prevalence varied by age of the child. Children age 6-23 months were more prone to have fever (24-30 percent) than other children.

Table 10.5 Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, Nepal 2011

	Among children under age five:		Among children under age five with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Age in months						
<6	17.1	531	34.2	1.8	29.4	91
6-11	29.7	491	45.9	0.0	34.4	146
12-23	24.2	1,000	46.2	1.5	38.1	242
24-35	19.3	1,013	39.4	0.0	28.8	195
36-47	15.0	1,106	40.1	0.0	30.7	166
48-59	11.9	999	40.8	0.0	23.0	119
Sex						
Male	20.5	2,649	42.5	0.9	32.1	543
Female	16.7	2,490	41.1	0.1	31.1	417
Residence						
Urban	18.9	483	55.6	0.6	41.2	91
Rural	18.7	4,656	40.5	0.6	30.6	869
Ecological zone						
Mountain	14.7	400	43.0	0.0	27.6	59
Hill	17.0	2,033	37.5	0.2	31.0	345
Terai	20.6	2,707	44.5	0.8	32.5	557
Development region						
Eastern	17.8	1,210	50.7	0.3	26.9	216
Central	18.6	1,639	35.3	0.0	34.6	305
Western	23.3	965	37.9	1.0	36.1	225
Mid-western	16.1	760	44.8	2.0	32.8	122
Far-western	16.2	565	49.1	0.0	20.5	91
Subregion						
Eastern mountain	12.5	96	(71.4)	(0.0)	(21.8)	12
Central mountain	20.9	92	(44.4)	(0.0)	(41.4)	19
Western mountain	12.9	212	29.6	0.0	20.4	27
Eastern hill	17.7	394	37.5	0.0	24.3	70
Central hill	15.7	477	37.4	0.0	34.4	75
Western hill	21.2	576	40.5	0.0	35.8	122
Mid-western hill	13.5	355	32.0	1.7	33.2	48
Far-western hill	12.8	231	34.5	0.0	15.0	29
Eastern terai	18.6	720	55.7	0.4	28.7	134
Central terai	19.7	1,070	33.8	0.0	34.1	211
Western terai	26.4	390	34.8	2.3	36.4	103
Mid-western terai	19.9	291	61.9	2.9	38.1	58
Far-western terai	21.4	237	59.4	0.0	21.3	51
Mother's education						
No education	16.9	2,410	33.4	0.9	27.6	407
Primary	18.4	1,032	43.4	0.0	27.7	190
Some secondary	23.5	995	53.7	0.0	39.0	233
SLC and above	18.4	703	45.3	1.3	37.0	129
Wealth quintile						
Lowest	13.4	1,322	29.8	0.3	22.5	177
Second	19.4	1,121	38.2	0.4	30.0	217
Middle	20.8	1,071	44.7	1.1	28.2	223
Fourth	23.7	899	50.1	0.8	45.2	213
Highest	18.0	726	46.4	0.0	30.6	131
Total	18.7	5,140	41.9	0.6	31.6	960

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, and traditional practitioner
SLC = School Leaving Certificate

Fever is more prevalent among male children (21 percent) than female children (17 percent). In addition, the prevalence of fever is higher among children residing in the terai and hill zone than among children in the mountain zone, and this is particularly true in the Western region and Western terai subregion. Fever prevalence is highest among children of mothers with some secondary education and children living in households in the fourth wealth quintile.

Forty-two percent of children with fever were taken to a health facility or provider for treatment. Children age 6-23 months, male children, and children of mothers with some secondary education were more likely than other children to be taken to a health facility or provider for treatment of fever. Also, children living in urban areas, in the terai and mountain zones, in the Eastern development region, and in the Mid-western terai were more likely than children living elsewhere to be taken for treatment. The percentage of children with fever taken to a health facility or provider varied significantly by wealth quintile; children from the poorest households were least likely to be taken for treatment, and children from the fourth wealth quintile were most likely.

Table 10.5 also shows that 32 percent of children with fever received antibiotics. Children age 12-23 months, children residing in urban areas, and those living in the terai and hill zones, Western region, and Mid-western terai subregion were more likely than other children to receive antibiotic treatment. Furthermore, children of mothers with some secondary education and those living in households in the fourth wealth quintile were more likely to receive antibiotics for fever than their counterparts. Less than 1 percent of children received antimalarial drugs. The percentage of children with fever for whom medical care is sought from a health facility or provider has increased steadily over the past 15 years (from 18 percent in 1996 to 24 percent in 2001, 34 percent in 2006, and 42 percent in 2011).

10.7 DIARRHEA

Diarrhea continues to be a major cause of childhood morbidity and mortality in Nepal (MOHP, 2011a). The 2006 NDHS showed that 12 percent of children under five years suffer from diarrhea, and 5 percent die due to the condition (MOHP, New ERA, and Macro International, 2007).

The 2011 NDHS asked mothers of children born during the five years preceding the survey a series of questions about episodes of diarrhea suffered by their children in the two weeks before the survey, including questions on feeding practices during diarrhea, treatment of the condition, and their knowledge and use of ORS.

Table 10.6 shows the percentage of children under five years with diarrhea in the two weeks preceding the survey, by selected background characteristics. Overall, 14 percent of all children under five had diarrhea, with 2 percent having diarrhea with blood. As there are seasonal variations in the prevalence of diarrhea, the percentages shown in Table 10.6 may not reflect the situation throughout the year. It is noteworthy to point out that the 2011 NDHS was fielded from February to June, whereas the period of high diarrhea prevalence is April to August. Thus, the prevalence of diarrhea may be understated since the survey did not cover the entire duration of the high prevalence period. Children age 6-23 months are most susceptible to diarrhea. The prevalence of bloody diarrhea is highest among children age 12-23 months, and children living in the Mid-western region, particularly the Mid-western terai.

Children of mothers with an SLC and higher and those in the highest wealth quintile are less likely than others to suffer from diarrhea. The prevalence of diarrhea is higher among children living in households with non-improved toilet facilities than in households with improved toilet facilities that are not shared.

Table 10.6 Prevalence of diarrhea

Percentage of children under age five who had diarrhea in the two weeks preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea in the two weeks preceding the survey: Diarrhea with blood	Number of children
Age in months			
<6	12.9	0.8	531
6-11	24.1	1.2	491
12-23	23.9	5.0	1,000
24-35	14.2	2.0	1,013
36-47	8.2	1.3	1,106
48-59	5.2	1.2	999
Sex			
Male	15.5	2.5	2,649
Female	12.0	1.7	2,490
Source of drinking water[1]			
Improved	13.9	1.9	4,442
Not improved	13.2	3.0	698
Toilet facility[2]			
Improved, not shared	12.2	1.7	1,557
Non-improved or shared	14.6	2.2	3,583
Residence			
Urban	13.4	1.6	483
Rural	13.9	2.1	4,656
Ecological zone			
Mountain	13.4	2.9	400
Hill	12.7	2.1	2,033
Terai	14.8	1.9	2,707
Development region			
Eastern	11.6	1.1	1,210
Central	14.9	1.6	1,639
Western	15.7	2.2	965
Mid-western	14.6	4.2	760
Far-western	11.4	2.5	565
Subregion			
Eastern mountain	10.8	1.5	96
Central mountain	12.8	2.9	92
Western mountain	14.9	3.6	212
Eastern hill	10.8	1.6	394
Central hill	11.2	1.2	477
Western hill	14.1	1.9	576
Mid-western hill	14.1	4.1	355
Far-western hill	13.1	2.2	231
Eastern terai	12.1	0.8	720
Central terai	16.7	1.6	1,070
Western terai	17.9	2.7	390
Mid-western terai	14.7	4.6	291
Far-western terai	8.8	2.3	237
Mother's education			
No education	14.4	2.8	2,410
Primary	13.9	2.4	1,032
Some secondary	14.8	1.1	995
SLC and above	10.5	0.5	703
Wealth quintile			
Lowest	12.6	3.1	1,322
Second	14.4	2.5	1,121
Middle	16.9	2.1	1,071
Fourth	12.8	1.2	899
Highest	11.9	0.7	726
Total	13.8	2.1	5,140

[1] See Table 2.1 for definition of categories
[2] See Table 2.2 for definition of categories
SLC = School Leaving Certificate

10.8 DIARRHEA TREATMENT

The CB-IMCI program, under the Child Health Division, focuses on the management of diarrheal diseases among children under five years. Nepal became one of the first few countries in the region to create a zinc task force and to include zinc in the treatment protocol of diarrhea along with ORS and oral rehydration therapy (ORT) (Wang et al., 2011). USAID/Nepal, through the Nepal Family Health Project and UNICEF, supported the promotion of treatment of childhood diarrhea with both ORS/ORT and zinc. In addition,

USAID/Nepal funded the global Social Marketing for Diarrheal Disease Control Plus: Point-of-Use Water Disinfection and Zinc Treatment (POUZN) Project, which was implemented by Abt Associates in partnership with Population Services International and has targeted 30 districts in Nepal (MacDonald and Mitchell, 2009). The first phase covered three districts in Kathmandu Valley, and the second phase had covered 27 additional districts by 2008.

The government has a standard diarrhea case management strategy including ORT, counseling on continued feeding, and zinc tablets provided through health institutions. ORT services have been established in all hospitals, primary health care centers, health posts, and sub-health posts throughout the country. Health facilities and community health volunteers serve as the primary health providers in treating diarrhea with ORS and zinc supplementation. The national program on promotion of salt-sugar solutions as a treatment strategy was abandoned because, apart from possible difficulties in obtaining the ingredients, preparation was often imprecise and resulted in ineffective or sometimes dangerous solutions (BASICS II, The MOST Project, and USAID, 2004). ORT thus includes fluids prepared from lower osmolar ORS packets and is referred as such in this section. Caution should be exercised in comparing the 2011 NDHS results with the findings of previous NDHS surveys, in which the definition of ORT did not include increased fluids.

In the 2011 NDHS, mothers of children who had diarrhea were asked about what was done to treat the illness. Table 10.7 shows the percentage of children with diarrhea who received specific treatments according to background characteristics. Thirty-eight percent of children with diarrhea were taken to a health provider. Children age 6-11 months, male children, children with bloody diarrhea, urban children, children living in the hill zone, and children living in the Far-western region were more likely than their counterparts to be taken to a health facility for treatment, as were children of mothers with some secondary education and children from households in the fourth wealth quintile.

Thirty-nine percent of children were treated with ORS, 14 percent were given increased fluids, and 50 percent were given either ORS or increased fluids. Six percent were treated with zinc, and 5 percent were treated with zinc and ORS. Although not a preferred treatment, 2 percent were treated with anti-motility drugs.

Thirteen percent of children with diarrhea were given antibiotic drugs, 13 percent were given other pills or syrups, 13 percent were given unknown pills or syrups, and 4 percent were treated with home remedies. However, about one-third (30 percent) of children with diarrhea did not receive any treatment at all.

Use of ORS or increased fluids varies by age, from a low of 20 percent among children less than age 6 months to a high of 60 percent among children age 12-23 months. Use of ORS or increased fluids is more common among male than female children. There are differences in the use of ORS or increased fluids according to urban (55 percent) and rural (50 percent) residence and ecological zone (with the proportion ranging from 46 percent in the mountain zone to 54 percent in the hill zone). Use varies by region as well, ranging from 43 percent in the Central region to 61 percent in the Eastern region. Use of ORS or increased fluids is much higher among children of mothers with an SLC and above than among women with a primary education. Use of ORS or increased fluids ranges from a low of 44 percent among children in the middle wealth quintile to a high of 62 percent among children in the fourth wealth quintile.

The proportion of children with diarrhea taken to a health provider for treatment has increased over time, from 14 percent in 1996 to 21 percent in 2001, 27 percent in 2006, and 38 percent in 2011. Twenty-four percent of children with diarrhea are taken to government health facilities, and 23 percent are taken to private pharmacies; about 3 percent are taken to an FCHV for treatment (data not shown).

Table 10.7 Diarrhea treatment

Among children under age five who had diarrhea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration salts (ORS), the percentage given increased fluids, the percentage given ORS or increased fluids, and the percentage who were given other treatments, by background characteristics, Nepal 2011

Background characteristic	Percentage of children with diarrhea for whom advice or treatment was sought from a health facility or provider[1]	Fluid from ORS packets	Increased fluids	ORS or increased fluids	Zinc and ORS	Zinc supplements	Antibiotic drugs	Antimotility drugs	Other pill or syrup	Unknown pill or syrup	Non-antibiotic injection	Unknown injection	Intravenous solution	Home remedy	Other	No treatment	Number of children with diarrhea
Age in months																	
<6	32.6	5.8	13.6	19.5	0.0	1.8	6.8	1.0	17.2	3.0	0.0	0.0	0.0	1.5	7.1	53.1	68
6-11	41.6	35.2	9.3	41.5	4.6	5.7	14.9	2.6	18.1	6.9	1.9	0.7	0.0	6.4	5.8	36.3	118
12-23	40.2	48.2	17.7	60.1	6.2	6.3	14.3	2.0	16.9	15.9	0.1	4.0	0.5	3.1	4.3	20.4	239
24-35	39.2	39.9	13.0	50.7	5.2	8.1	13.4	2.4	6.5	14.5	0.0	0.0	0.0	3.9	1.6	33.6	144
36-47	31.8	39.9	9.9	54.5	8.6	8.6	10.7	0.0	6.0	19.5	0.0	0.9	0.0	2.0	9.5	23.7	90
48-59	(34.4)	(45.5)	(18.1)	(53.2)	(3.0)	(3.0)	(19.3)	(4.5)	(6.4)	(6.2)	(0.5)	(0.0)	(0.0)	(3.7)	(1.6)	(25.1)	52
Sex																	
Male	40.9	42.8	15.8	55.3	6.5	7.4	12.4	1.5	12.6	13.1	0.5	2.8	0.3	3.8	4.9	24.9	412
Female	34.0	34.0	11.5	42.6	3.4	4.5	14.8	2.8	13.3	12.0	0.2	0.0	0.0	3.2	4.5	36.0	299
Type of diarrhea																	
Non-bloody	37.2	38.8	13.8	50.1	5.4	6.3	12.0	2.2	12.4	12.2	0.4	1.1	0.2	3.7	4.7	30.9	604
Bloody	42.6	40.4	15.1	49.3	4.3	5.6	21.3	1.2	15.6	15.1	0.2	4.5	0.0	3.1	4.9	22.1	107
Residence																	
Urban	43.2	44.2	26.0	54.7	4.4	5.0	11.1	3.0	15.4	6.0	1.8	0.4	0.0	5.0	4.5	29.5	65
Rural	37.5	38.5	12.8	49.5	5.3	6.3	13.6	1.9	12.6	13.3	0.2	1.7	0.2	3.4	4.8	29.6	646
Ecological zone																	
Mountain	35.5	35.2	19.5	46.3	5.7	6.5	9.8	0.9	23.3	6.1	0.0	0.0	0.0	2.9	3.3	32.3	54
Hill	38.6	40.3	18.8	53.8	5.9	7.1	8.8	1.3	11.7	2.8	0.7	0.3	0.0	4.2	1.6	33.6	258
Terai	38.0	38.7	10.1	48.0	4.7	5.5	16.9	2.6	12.2	19.9	0.2	2.6	0.3	3.3	6.9	26.6	400
Development region																	
Eastern	40.0	45.4	16.5	60.7	10.3	10.3	14.1	3.7	13.0	5.0	0.0	0.0	0.0	4.6	5.7	22.9	140
Central	27.7	36.0	10.6	43.3	1.8	1.9	12.8	1.3	9.1	17.4	0.9	2.1	0.0	3.6	6.9	34.9	244
Western	42.5	29.9	12.9	43.8	3.1	4.3	14.6	2.4	10.4	18.7	0.0	1.6	0.8	3.1	1.9	33.3	151
Mid-western	43.9	45.8	18.8	57.7	8.3	9.8	14.8	1.7	21.6	6.4	0.5	2.2	0.0	4.1	4.9	22.4	111
Far-western	52.0	46.3	15.2	53.3	6.8	11.3	8.7	0.8	17.7	7.6	0.0	2.3	0.0	1.3	0.9	28.0	64
Mother's education																	
No education	33.9	39.3	6.0	46.5	2.1	3.0	11.0	2.0	10.3	18.0	0.1	2.4	0.3	2.9	3.3	33.1	347
Primary	37.4	30.9	14.5	46.4	8.3	10.2	18.5	2.3	17.6	6.6	0.0	1.2	0.0	1.9	5.0	33.4	144
Some secondary	49.8	46.5	20.7	54.1	9.2	9.7	13.2	1.3	13.2	8.1	1.7	1.0	0.0	5.4	7.2	21.0	147
SLC and above	35.4	38.9	37.1	65.3	5.9	5.9	15.4	3.1	14.7	7.9	0.0	0.0	0.0	6.4	6.4	22.9	74
Wealth quintile																	
Lowest	32.7	39.3	8.3	48.3	5.6	5.7	4.2	2.1	11.2	6.5	0.1	0.5	0.0	2.8	2.4	38.7	167
Second	38.7	40.3	12.1	48.3	3.1	3.6	13.2	2.3	12.6	15.3	0.0	3.1	0.0	6.5	3.8	27.5	162
Middle	38.9	35.0	12.1	43.6	4.0	5.7	14.9	0.4	11.3	19.6	0.0	1.8	0.7	1.3	7.3	31.0	181
Fourth	44.1	45.8	17.3	61.6	9.4	11.7	18.7	2.2	17.1	12.3	1.6	1.8	0.0	2.6	6.7	18.5	116
Highest	37.1	35.7	27.7	54.1	5.4	5.4	21.3	4.6	14.4	5.5	0.8	0.3	0.0	5.8	2.7	27.8	86
Total	38.0	39.0	14.0	50.0	5.2	6.2	13.4	2.0	12.9	12.6	0.4	1.6	0.2	3.6	4.7	29.6	711

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, and traditional practitioner
SLC = School Leaving Certificate

The percentage of children treated with ORS increased from 29 percent in 2006 to 39 percent in 2011. Use of zinc to treat diarrhea, rare in 2006 (when less than 1 percent of children received zinc), has increased in recent years (to 6 percent in 2011). A population-based survey conducted in 2008 in the 26 POUZN target districts indicated that 15 percent of children suffering from diarrhea received zinc during their most recent episode (Wang et al., 2011). The current national coverage level of 6 percent is encouraging.

10.9 FEEDING PRACTICES DURING DIARRHEA

Mothers are encouraged to continue feeding children with diarrhea normally and to increase the amount of fluids given. Table 10.8 shows that 71 percent of children who had diarrhea were given the same amount of fluid as usual, 14 percent were given more, 10 percent were given somewhat less than the usual amount, and 1 percent were given much less. Four percent of children with diarrhea were not given any liquids.

Regarding the amount of food offered to children who had diarrhea, 61 percent were given the same amount of food as usual. On the other hand, 18 percent of children were given somewhat less than the usual amount of food, and 2 percent were given much less than the usual amount.

Table 10.8 Feeding practices during diarrhea

Percent distribution of children under age five who had diarrhea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhea episode, and the percentage of children who continued feeding and were given increased fluids during the episode of diarrhea, by background characteristics, Nepal 2011

	Amount of liquids given							Amount of food given										
Background characteristic	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total	Percentage given increased fluids and continued feeding[1]	Percentage who continued feeding and were given ORS and/or increased fluids[1]	Number of children with diarrhea
Age in months																		
<6	13.6	69.0	2.2	0.0	15.1	0.0	100.0	0.0	10.0	6.0	3.4	0.7	79.9	0.0	100.0	3.7	6.3	68
6-11	9.3	78.3	5.3	0.0	7.1	0.0	100.0	5.5	58.4	8.2	1.9	0.7	25.3	0.0	100.0	7.9	34.4	118
12-23	17.7	67.5	11.4	1.1	2.4	0.0	100.0	10.1	65.5	21.8	2.1	0.5	0.0	0.0	100.0	17.7	57.5	239
24-35	13.0	71.4	13.9	1.7	0.0	0.0	100.0	3.7	72.1	22.4	1.7	0.0	0.0	0.0	100.0	13.0	50.7	144
36-47	9.9	75.9	11.5	0.0	2.8	0.0	100.0	6.3	66.1	27.7	0.0	0.0	0.0	0.0	100.0	9.9	54.5	90
48-59	(18.1)	(58.6)	(15.1)	(0.0)	(0.0)	(8.2)	100.0	(5.3)	(71.3)	(15.2)	(0.0)	(0.0)	(0.0)	(8.2)	100.0	(18.1)	(53.2)	52
Sex																		
Male	15.8	69.3	10.8	0.6	2.5	1.0	100.0	8.7	61.0	18.3	0.9	0.4	9.6	1.0	100.0	14.7	52.9	412
Female	11.5	72.6	9.5	0.8	5.6	0.0	100.0	2.9	60.6	18.5	2.7	0.3	15.0	0.0	100.0	10.2	38.1	299
Type of diarrhea																		
Non-bloody	13.8	71.1	9.7	0.8	4.2	0.4	100.0	6.0	60.9	17.1	1.9	0.4	13.4	0.4	100.0	12.5	46.3	604
Bloody	15.1	68.2	13.6	0.0	1.3	1.8	100.0	7.8	60.4	25.9	0.5	0.0	3.6	1.8	100.0	14.6	48.8	107
Residence																		
Urban	26.0	63.7	9.2	0.0	1.1	0.0	100.0	5.9	63.5	23.2	0.0	0.2	7.3	0.0	100.0	25.6	54.1	65
Rural	12.8	71.4	10.4	0.8	4.0	0.7	100.0	6.3	60.5	17.9	1.9	0.4	12.4	0.7	100.0	11.5	45.9	646
Ecological zone																		
Mountain	19.5	66.9	11.6	0.0	1.9	0.0	100.0	6.8	66.7	15.2	2.5	0.8	7.9	0.0	100.0	18.0	44.6	54
Hill	18.8	66.4	12.3	0.0	1.7	0.8	100.0	7.1	63.0	22.3	0.0	0.0	6.9	0.8	100.0	18.1	53.0	258
Terai	10.1	73.9	8.8	1.3	5.3	0.6	100.0	5.6	58.6	16.4	2.7	0.5	15.6	0.6	100.0	8.6	42.8	400
Development region																		
Eastern	16.5	71.1	8.4	0.0	2.4	1.7	100.0	6.3	64.1	15.3	1.9	0.3	10.5	1.7	100.0	16.2	60.4	140
Central	10.6	66.7	12.7	2.1	7.9	0.0	100.0	5.0	56.9	20.1	3.1	0.0	14.8	0.0	100.0	9.6	38.1	244
Western	12.9	74.4	11.1	0.0	0.3	1.3	100.0	5.1	62.7	21.0	0.0	0.8	9.1	1.3	100.0	12.9	43.1	151
Mid-western	18.8	73.2	7.0	0.0	1.0	0.0	100.0	9.6	61.5	17.0	1.7	0.8	9.4	0.0	100.0	15.9	52.5	111
Far-western	15.2	71.6	8.8	0.0	4.4	0.0	100.0	7.7	62.8	14.9	0.0	0.0	14.6	0.0	100.0	11.4	47.6	64
Mother's education																		
No education	6.0	74.4	12.4	1.4	5.2	0.6	100.0	3.9	61.2	19.3	1.8	0.3	12.9	0.6	100.0	5.1	43.1	347
Primary	14.5	71.3	9.1	0.0	5.1	0.0	100.0	6.1	59.4	15.3	4.0	0.6	14.6	0.0	100.0	14.3	42.4	144
Some secondary	20.7	67.1	9.6	0.0	1.0	1.6	100.0	7.2	61.3	19.9	0.0	0.3	9.7	1.6	100.0	18.9	52.2	147
SLC and above	37.1	58.8	4.1	0.0	0.0	0.0	100.0	15.8	60.7	17.1	0.0	0.0	6.4	0.0	100.0	33.7	60.7	74
Wealth quintile																		
Lowest	8.3	71.5	15.8	0.0	3.3	1.2	100.0	5.4	61.9	17.2	0.8	0.7	12.9	1.2	100.0	7.7	46.5	167
Second	12.1	77.0	9.3	0.0	1.6	0.0	100.0	4.5	65.5	23.2	0.2	0.2	6.5	0.0	100.0	10.1	45.6	162
Middle	12.1	69.5	11.1	1.4	5.8	0.0	100.0	5.8	56.6	14.8	3.0	0.5	19.3	0.0	100.0	11.2	38.0	181
Fourth	17.3	66.7	8.0	2.2	5.9	0.0	100.0	7.4	54.4	22.1	4.3	0.1	11.6	0.0	100.0	15.1	56.4	116
Highest	27.7	64.9	2.8	0.0	1.8	2.7	100.0	10.6	67.3	14.5	0.0	0.0	4.9	2.7	100.0	27.7	54.1	86
Total	14.0	70.7	10.3	0.7	3.8	0.6	100.0	6.2	60.8	18.4	1.7	0.3	11.9	0.6	100.0	12.8	46.7	711

Note: It is recommended that children should be given more liquids to drink during diarrhea and food should not be reduced. Figures in parentheses are based on 25-49 unweighted cases.
[1] Continued feeding practice includes children who were given more, same as usual, or somewhat less food during the diarrhea episode.
SLC = School Leaving Certificate

The practice of continuing feeding and giving ORS and/or increased fluids is recommended in the management of diarrhea. Among children suffering from diarrhea, those age 12-23 months are more likely than those in other age groups to be continually fed and given ORS and/or increased fluids during the episode. Children under six months are least likely to be given ORS and/or increased fluids and fed normally during diarrhea.

There are variations in feeding practices by other background characteristics as well. Male children and children suffering from bloody diarrhea, children in urban areas, children residing in the hill zone and the Eastern region, children of mothers with an SLC and higher education, and children from the fourth wealth quintile are more likely than other children to receive ORS and/or increased fluids with continued feeding.

The percentage of children with diarrhea given increased fluids and continued feeding has declined in the last five years from 20 percent to 13 percent. However, the practice of giving ORS and/or increased fluids along with continued feeding has improved over the same period, from 40 percent to 47 percent.

10.10 KNOWLEDGE OF ORS PACKETS

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of ORT, including the use of a solution prepared from ORS packets. To assess knowledge of ORS, mothers with a child who had suffered from diarrhea within the two weeks preceding the

survey were asked about ORS packets. The commonly available brands in the country are Jeevan Jal, Nava Jeevan, and Orestal.

Knowledge of ORS is universal among women giving birth in the five years preceding the survey, with 99 percent being aware of ORS packets (data not shown).

10.11 Disposal of Children's Stools

Unsafe disposal of human feces spreads disease, either by direct contact or through indirect transmission. Hence, the proper disposal of children's stools is extremely important in preventing the spread of disease.

Table 10.9 presents information on the disposal of stools of children less than five years of age. The stools of 41 percent of children are disposed of safely; 20 percent of children under five use a toilet or latrine, the stools of 19 percent of children are disposed of in a toilet or latrine, and the stools of 2 percent of children are buried. On the other hand, 10 percent of children's stools are put or rinsed into a drain or ditch, 30 percent are thrown into the garbage, and 15 percent are left in the open.

There is a positive relationship between both education of the mother and household wealth and the safe disposal of children's stools. Seventy-six percent of mothers with an SLC or higher level of education dispose of their children's stools safely, compared with only 21 percent of children of mothers with no education. Similarly, stools are disposed of in a safe manner for 85 percent of children living in households in the highest wealth quintile, as compared with only 20 percent of children living in households in the lowest wealth quintile. Safe disposal of stools increases with age of the child.

Stools of children living in households in the lowest wealth quintile are most likely to be left in the open. Children's stools are nearly two times as likely to be disposed of safely in urban areas (73 percent) as in rural areas (38 percent). In rural areas, about one-half (47 percent) of children's stools are left in the open or thrown in the garbage, as compared with 17 percent in urban areas. Thirty-two percent of urban children use latrines, compared with 18 percent of rural children.

Although the marked difference in safe disposal of children's stools between urban and rural areas can be partially attributed to the greater access to toilet facilities in urban areas, it is notable that even in households with improved toilet facilities, children's stools are not necessarily disposed of safely.

The proportion of children whose stools are disposed of safely varies from one-third (29 percent) in the Far-western region to one-half (52 percent) in the Western region.

There has been improvement in the safe disposal of children's stools over the last 10 years. In 2001, only 18 percent of mothers disposed of their children's stools safely, as compared with 26 percent in 2006 and 41 percent in 2011.

Table 10.9 Disposal of children's stools

Percent distribution of youngest children under age five living with the mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Nepal 2011

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age in months										
<6	0.6	16.4	2.2	27.5	34.0	7.2	12.1	100.0	19.2	530
6-11	0.7	25.7	2.3	17.9	35.7	10.0	7.7	100.0	28.7	488
12-23	3.8	28.5	3.4	8.4	38.7	12.0	5.1	100.0	35.7	952
24-35	22.0	21.1	2.5	5.3	29.8	17.2	2.2	100.0	45.5	797
36-47	38.6	11.2	2.2	3.5	22.7	19.2	2.6	100.0	52.1	756
48-59	53.1	8.5	1.2	1.1	12.6	21.3	2.2	100.0	62.8	521
Toilet facility[2]										
Improved, not shared[3]	35.0	35.9	2.0	7.6	12.3	4.5	2.7	100.0	72.9	1,277
Non-improved or shared	12.3	11.7	2.6	10.5	37.7	19.4	5.9	100.0	26.5	2,765
Residence										
Urban	31.6	40.2	1.3	8.1	12.1	5.3	1.4	100.0	73.1	407
Rural	18.1	17.0	2.5	9.7	31.6	15.7	5.3	100.0	37.6	3,635
Ecological zone										
Mountain	15.3	19.8	2.1	13.8	29.2	17.6	2.3	100.0	37.2	293
Hill	24.2	23.6	2.3	7.6	20.0	14.7	7.6	100.0	50.0	1,618
Terai	16.5	16.0	2.6	10.5	37.0	14.3	3.2	100.0	35.0	2,131
Development region										
Eastern	19.1	27.3	3.8	8.0	25.1	12.8	3.8	100.0	50.2	968
Central	15.5	18.3	0.9	5.9	42.4	12.8	4.3	100.0	34.7	1,263
Western	30.1	19.6	1.9	10.8	18.5	8.4	10.7	100.0	51.7	795
Mid-western	17.8	13.9	3.0	12.2	25.5	24.4	3.2	100.0	34.7	584
Far-western	14.3	11.1	3.9	18.1	28.7	23.0	1.0	100.0	29.3	431
Subregion										
Eastern mountain	18.6	37.7	2.5	12.8	13.6	8.5	6.4	100.0	58.7	76
Central mountain	19.0	21.6	1.8	12.6	29.7	14.2	1.2	100.0	42.3	70
Western mountain	11.8	9.7	2.1	14.9	37.0	23.9	0.7	100.0	23.5	147
Eastern hill	17.2	24.0	4.8	8.2	24.0	17.5	4.3	100.0	46.1	318
Central hill	26.3	33.9	0.0	5.7	13.8	12.6	7.7	100.0	60.2	389
Western hill	32.0	24.0	1.7	5.2	18.6	5.2	13.3	100.0	57.7	474
Mid-western hill	20.3	18.4	4.4	11.0	20.2	19.6	6.0	100.0	43.2	270
Far-western hill	16.6	6.1	0.6	12.7	30.7	33.0	0.4	100.0	23.2	166
Eastern terai	20.3	27.7	3.4	7.3	27.3	10.8	3.1	100.0	51.4	574
Central terai	10.0	10.4	1.2	5.4	57.3	12.7	2.9	100.0	21.7	804
Western terai	27.4	13.2	2.2	19.2	18.2	13.1	6.7	100.0	42.8	321
Mid-western terai	16.4	10.0	1.2	13.8	27.4	30.5	0.7	100.0	27.6	235
Far-western terai	13.9	16.0	7.7	22.4	24.3	13.8	1.9	100.0	37.6	197
Mother's education										
No education	11.4	7.8	2.2	9.1	43.0	22.3	4.2	100.0	21.4	1,772
Primary	20.0	16.4	2.9	11.6	25.9	16.0	7.2	100.0	39.4	809
Some secondary	29.9	26.2	2.9	10.1	19.4	6.8	4.7	100.0	59.0	846
SLC and above	27.4	46.7	1.8	7.6	10.3	2.0	4.2	100.0	76.0	615
Wealth quintile										
Lowest	8.8	8.1	2.6	9.3	37.4	26.7	7.0	100.0	19.6	950
Second	13.5	10.2	2.6	12.3	36.6	19.3	5.5	100.0	26.3	871
Middle	15.6	14.5	3.7	10.8	37.4	13.9	4.0	100.0	33.8	852
Fourth	28.7	26.7	2.1	9.2	22.5	6.3	4.5	100.0	57.5	731
Highest	38.0	46.3	0.4	5.1	6.3	1.3	2.5	100.0	84.7	637
Total	19.5	19.3	2.4	9.6	29.6	14.7	4.9	100.0	41.2	4,042

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] See Table 2.2 for definition of categories
[3] Non-shared facilities that are of the following types: flush or pour flush into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrine; pit latrine with a slab; and composting toilet
SLC = School Leaving Certificate

NUTRITION OF CHILDREN AND WOMEN 11

Key Findings:

- Forty-one percent of children under five years of age are stunted, 11 percent are wasted, and 29 percent are underweight.
- Breastfeeding is nearly universal in Nepal, and half of the children born in the three years before the survey were breastfed for about 34 months or longer.
- Seventy percent of children less than age 6 months are exclusively breastfed, and the median duration of exclusive breastfeeding is 4.2 months.
- Complementary foods are not introduced in a timely fashion for all children. Seventy percent of breastfed children have been given complementary foods by age 6-9 months.
- Overall, only one-fourth of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Forty-six percent of children age 6-59 months are anemic, 27 percent are mildly anemic, 18 percent are moderately anemic, and less than 1 percent are severely anemic.
- Eighteen percent of women are malnourished, that is, they fall below the body mass index (BMI) cutoff of 18.5. Fourteen percent of women are overweight or obese. Women's nutritional status has improved only slightly over the years.
- Thirty-five percent of women age 15-49 are anemic, 29 percent are mildly anemic, 6 percent are moderately anemic, and less than 1 percent are severely anemic.

Good nutrition is a prerequisite for the national development of countries and for the well-being of individuals. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics.

Adequate nutrition is critical to children's growth and development. The period from birth to age two is especially important for optimal physical, mental, and cognitive growth, health, and development. Unfortunately, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal growth. Childhood illnesses such as diarrhea and acute respiratory infections (ARIs) also are common.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slowed recovery from illness, and a heightened risk of adverse pregnancy outcomes. For example, a woman with poor nutritional status, as indicated by a low body mass index (BMI), short stature, anemia, or other micronutrient deficiencies, has a greater risk of obstructed labor, of having a baby with a low birth weight, of producing low-quality breast milk, of death from postpartum hemorrhage, and of morbidity for both herself and her baby.

This chapter reviews the nutritional status of children and women in Nepal. Specific issues discussed include the nutritional status of children based on anthropometric measurements, infant and young child feeding practices based on information on initiation of breastfeeding, exclusive and continued breastfeeding status and feeding with solid or semisolid foods, diversity of foods fed and frequency of feeding, micronutrient intake among children and women, and prevalence of anemia. The discussion also covers the nutritional status of women age 15-49. In addition, relationships between the nutritional status of children and women are analyzed by various background characteristics such as education, wealth quintile, and smoking status of mothers.

11.1 NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children under age 5 is an important measure of children's health. The anthropometric data on height and weight collected in the 2011 NDHS permit the measurement and evaluation of the nutritional status of young children in Nepal. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death.

11.1.1 Measurement of Nutritional Status among Young Children

The 2011 NDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in the selected households. The data collected allow the calculation of three indices: weight-for-age, height-for-age, and weight-for-height.

Indicators of the nutritional status of children were calculated using new growth standards published by the World Health Organization (WHO) in 2006. These new growth standards were generated through data collected in the WHO Multicenter Growth Reference Study (WHO, 2006). The findings of that study, which sampled 8,440 children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), describe how children should grow under optimal conditions. The WHO child growth standards can therefore be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding practices. The new growth standards replace the previously used NCHS/CDC/WHO reference standards.

It should be noted that the new WHO child growth standards are not comparable with those based on the previously used NCHS/CDC/WHO standards. When the new WHO child growth standards are used instead of the previous reference, several changes are evident (WHO, 2006):

- The level of stunting is higher.
- The level of wasting in infancy is substantially higher.
- The level of underweight is substantially higher during the first half of infancy (0-6 months) and decreases thereafter.
- The level of overweight/obesity is higher.

The three indices are expressed in standard deviation units from the Multicenter Growth Reference Study median. Anthropometry is one of the most important indicators of children's nutritional status.

The height-for-age index provides an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children with Z-scores below minus two standard deviations (-2 SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) are considered severely wasted.

The weight-for-height index also provides data on overweight and obesity. Children more than two standard deviations (+2 SD) above the median weight-for-height are considered overweight or obese.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both chronic and acute malnutrition. Children whose weight-for-age is below minus two standard deviations (-2 SD) are classified as underweight. Children whose weight-for-age is below minus three standard deviations (-3 SD) are considered severely underweight.

11.1.2 Data Collection

Measurements of height and weight were obtained for all children born in the five years preceding the survey in the subsample of households selected for the male survey and listed in the Household Questionnaire. Children who were not biological children of the women interviewed in the survey were included. Each team of interviewers carried a scale and measuring board. Measurements were made using lightweight SECA scales (with digital screens) designed and manufactured under the authority of the United Nations Children's Fund (UNICEF). The measuring boards employed were specially produced by Shorr Productions for use in survey settings. Children under age 2 or less than 85 cm were measured lying down on the board (recumbent length), and standing height was measured for all other children.

11.1.3 Measures of Child Nutrition Status

Height-for-age

Table 11.1 presents the nutritional status of children under age 5 by various background characteristics. Nationally, 41 percent of children under age 5 are stunted, and 16 percent are severely stunted. Analysis by age group shows that stunting is highest (53 percent) in children age 36-47 months and lowest (14 percent) in children age 9-11 months (Figure 11.1). Severe stunting shows a similar pattern, with the highest proportion of severe stunting in children age 36-47 months (23 percent) and the lowest in those age 6-11 months (4 percent). Stunting is slightly higher in male children (41 percent) than in female children (40 percent). There is an inverted U-shaped relationship between the length of the preceding birth interval and the proportion of children who are stunted, with stunting being higher among children born within 24 to 47 months of a previous birth than among first births and births 48 or more months after a previous birth. More than half of children whose size at birth was very small or small are stunted. Mothers' nutritional status, as measured by their body mass index, also has an impact on the level of stunting in their children. For example, mothers who are thin (BMI < 18.5) have children with the highest levels of stunting (47 percent), while mothers who are overweight/obese (BMI ≥ 25) have children with the lowest levels (27 percent).

Children in rural areas are more likely to be stunted (42 percent) than those in urban areas (27 percent), and a similar pattern is noted for severe stunting (17 percent in rural areas and 6 percent in urban areas). Ecologically, the highest proportion of stunted children (53 percent) is found in the mountain zone. Among the development regions, stunting is highest among children in the Mid-western region (50 percent). Three-fifths (60 percent) of children in the Western mountain subregion are stunted, compared with one-third of children in the Central hill, Eastern terai, and Far-western terai subregions (31-32 percent each).

A mother's level of education generally has an inverse relationship with stunting levels, ranging from a low of 26 percent among children whose mothers have a School Leaving Certificate (SLC) or higher education to a high of 48 percent among those whose mothers have no education. A similar inverse relationship is observed between household wealth and stunting levels. Children in the poorest households are more than twice as likely to be stunted (56 percent) as children in the wealthiest households (26 percent). Similarly, children in households with food security (33 percent) are less likely to be stunted than children in households with mild food insecurity (41 percent), moderate food insecurity (46 percent), and severe food insecurity (49 percent).

Weight-for-height

Table 11.1 also shows the nutritional status of children less than age 5 as measured by weight-for-height. Overall, 11 percent of children are wasted and 3 percent are severely wasted. Analysis by age group shows that wasting is highest (25 percent) in children age 9-11 months and lowest (7 percent) in children age 36-47 months. Male children are more likely to be wasted (12 percent) than female children (10 percent). Wasting is not strongly correlated with the length of the preceding birth interval. However, the data show a substantial correlation between wasting and birth weight. Babies who were very small at birth are more likely to be wasted (15 percent) than those whose weight at birth was average or large (10 percent). Children born to mothers who are thin (BMI < 18.5) are 2.5 times more likely to be wasted than those born to mothers who are overweight/obese (BMI ≥ 25). Children residing in urban areas are less likely to be wasted (8 percent) than children in rural areas (11 percent). Wasting in children does not vary markedly by ecological zone or development region. However, wasting levels across subregions are substantial, ranging from a low of 8 percent among children in the Eastern and Central mountain, Western and Mid-western hill, and Far-western terai subregions to a high of 15 percent among children in the Central hill and Western terai subregions.

Table 11.1 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Nepal 2011

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	7.5	19.4	-0.8	5.3	11.8	5.7	-0.5	7.3	18.2	0.1	-1.0	227
6-8	4.3	17.7	-0.7	3.0	16.7	1.2	-0.7	5.3	18.5	2.0	-1.0	135
9-11	4.1	13.6	-1.0	6.4	24.7	3.5	-1.1	4.3	26.8	0.0	-1.3	110
12-17	13.2	28.6	-1.4	3.7	14.2	0.4	-0.9	6.1	24.9	0.0	-1.3	266
18-23	16.2	42.2	-1.7	4.5	19.4	0.6	-0.9	10.3	37.0	0.0	-1.5	221
24-35	20.2	51.7	-2.0	1.2	7.4	1.5	-0.5	7.9	30.5	0.3	-1.5	500
36-47	22.9	53.0	-2.1	1.1	7.2	0.5	-0.5	8.6	30.4	0.1	-1.6	524
48-59	16.6	43.4	-1.8	2.1	7.8	0.7	-0.6	7.9	32.0	0.4	-1.5	492
Sex												
Male	16.7	41.4	-1.7	3.4	12.0	1.3	-0.7	8.2	29.6	0.3	-1.5	1,268
Female	15.7	39.5	-1.6	1.8	9.7	1.5	-0.6	7.2	28.0	0.3	-1.4	1,207
Birth interval in months[3]												
First birth[4]	12.6	35.0	-1.5	2.1	9.4	2.1	-0.5	4.5	23.2	0.3	-1.2	940
<24	24.4	47.3	-2.0	3.4	13.5	0.7	-0.8	13.3	35.9	0.0	-1.7	321
24-47	18.3	46.3	-1.8	2.5	11.3	0.9	-0.8	9.9	34.0	0.2	-1.6	725
48+	13.0	36.5	-1.6	2.8	11.8	1.5	-0.6	6.4	25.6	0.4	-1.4	393
Size at birth[3]												
Very small	20.8	50.6	-2.0	1.4	15.4	1.3	-1.0	12.7	42.8	0.0	-1.9	93
Small	21.6	50.8	-2.0	5.1	13.7	0.3	-0.9	13.1	44.6	0.0	-1.8	329
Average or larger	14.7	38.1	-1.6	2.2	10.2	1.6	-0.6	6.4	25.2	0.3	-1.3	1,952
Mother's interview status												
Interviewed	16.0	40.3	-1.7	2.5	10.9	1.4	-0.7	7.6	28.6	0.3	-1.4	2,379
Not interviewed but in household	(26.9)	(37.4)	(-1.6)	(7.1)	(11.9)	(0.0)	(-0.8)	(6.3)	(43.3)	(0.0)	(-1.5)	35
Not interviewed and not in household[5]	19.5	48.9	-1.9	4.1	10.4	0.9	-0.5	11.8	28.7	1.6	-1.4	62
Mother's nutritional status[6]												
Thin (BMI < 18.5)	18.6	47.0	-1.9	4.7	18.9	0.5	-1.1	12.7	40.1	0.0	-1.8	465
Normal (BMI 18.5-24.9)	16.2	40.0	-1.7	2.0	9.2	1.2	-0.6	6.8	27.5	0.2	-1.4	1,704
Overweight/ obese (BMI ≥ 25)	8.1	27.2	-1.1	2.1	7.0	4.9	-0.2	1.7	12.6	1.5	-0.8	224
Residence												
Urban	6.2	26.7	-1.2	2.7	8.2	1.8	-0.5	4.0	16.5	0.6	-1.0	216
Rural	17.2	41.8	-1.7	2.6	11.2	1.4	-0.7	8.1	30.0	0.3	-1.5	2,259
Ecological zone												
Mountain	22.2	52.9	-2.1	3.2	10.9	0.5	-0.7	9.9	35.9	0.2	-1.7	195
Hill	16.7	42.1	-1.7	1.7	10.6	1.6	-0.6	7.1	26.6	0.3	-1.4	989
Terai	14.9	37.4	-1.6	3.2	11.2	1.4	-0.7	7.8	29.5	0.3	-1.4	1,291
Development region												
Eastern	13.1	37.0	-1.6	1.8	10.2	2.1	-0.6	5.6	25.4	0.2	-1.4	596
Central	16.8	38.2	-1.6	3.1	11.6	0.9	-0.7	8.9	29.5	0.5	-1.4	767
Western	14.5	37.4	-1.6	2.5	10.4	1.9	-0.5	5.3	23.2	0.5	-1.3	463
Mid-western	21.1	50.3	-2.0	2.8	11.3	1.0	-0.7	10.7	36.9	0.0	-1.7	373
Far-western	17.5	46.4	-1.8	3.2	10.9	1.2	-0.8	8.7	32.6	0.1	-1.6	277
Subregion												
Eastern mountain	16.3	45.0	-1.7	0.7	8.4	0.0	-0.5	4.9	23.5	0.0	-1.3	46
Central mountain	14.2	45.5	-1.9	2.8	7.9	0.0	-0.7	7.6	34.7	0.9	-1.6	44
Western mountain	28.3	59.5	-2.3	4.4	13.2	1.0	-0.8	13.2	42.0	0.0	-1.9	105
Eastern hill	17.2	45.5	-1.8	1.3	10.5	1.6	-0.5	5.8	28.6	0.0	-1.4	191
Central hill	11.2	31.3	-1.4	2.7	15.0	1.9	-0.6	5.1	22.5	1.5	-1.2	216
Western hill	12.6	36.0	-1.5	1.0	7.6	2.1	-0.4	3.8	16.8	0.0	-1.1	294
Mid-western hill	23.4	51.7	-2.1	1.9	8.0	1.4	-0.6	11.5	37.1	0.0	-1.6	171
Far-western hill	26.9	57.5	-2.2	2.5	13.7	0.0	-0.9	14.9	39.7	0.0	-1.9	117
Eastern terai	10.5	31.4	-1.4	2.2	10.3	2.5	-0.7	5.6	24.0	0.3	-1.3	359
Central terai	19.5	40.5	-1.7	3.2	10.4	0.5	-0.7	10.7	32.0	0.0	-1.4	507
Western terai	17.8	39.9	-1.7	5.1	15.2	1.4	-0.7	8.1	34.4	1.4	-1.5	169
Mid-western terai	14.1	43.5	-1.7	3.4	13.9	0.6	-0.9	7.5	32.1	0.0	-1.6	142
Far-western terai	4.9	31.5	-1.3	3.4	7.9	2.4	-0.7	2.4	24.7	0.2	-1.2	115

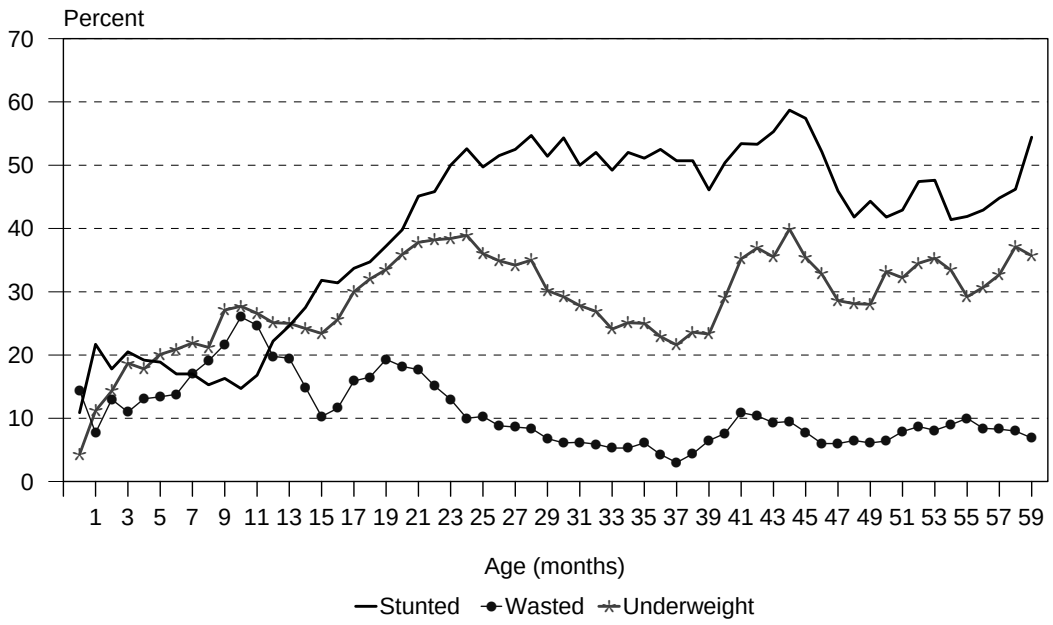
Continued…

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	
Mother's education[7]												
No education	22.2	47.6	-2.0	3.1	13.3	0.6	-0.8	11.6	38.4	0.0	-1.7	1,148
Primary	13.3	40.6	-1.6	3.1	11.3	1.1	-0.6	6.3	26.1	0.0	-1.4	479
Some secondary	9.8	32.0	-1.4	1.0	5.5	3.6	-0.4	2.4	18.8	1.2	-1.1	466
SLC and above	7.7	25.6	-1.0	2.2	9.7	1.5	-0.4	2.8	13.3	0.2	-0.9	321
Wealth quintile												
Lowest	25.2	56.0	-2.1	2.3	12.5	1.6	-0.7	10.5	40.3	0.0	-1.7	638
Second	20.0	45.7	-1.9	2.3	10.7	0.4	-0.8	8.7	31.6	0.0	-1.7	508
Middle	12.9	34.5	-1.5	3.0	12.8	1.6	-0.8	8.2	28.8	0.1	-1.4	580
Fourth	10.2	30.5	-1.4	3.5	8.8	1.5	-0.6	6.1	22.9	0.4	-1.2	419
Highest	6.5	25.8	-1.1	2.0	7.4	2.2	-0.3	2.0	10.0	1.6	-0.8	331
Household food insecurity												
Secure	12.1	33.2	-1.4	2.0	9.4	1.8	-0.6	5.3	21.7	0.5	-1.2	1,057
Mildly insecure	15.5	41.2	-1.7	4.7	11.6	0.7	-0.6	9.4	27.9	0.5	-1.4	304
Moderate	18.7	45.5	-1.8	3.4	12.7	1.1	-0.8	8.6	32.3	0.0	-1.6	575
Severe	22.0	49.0	-1.9	1.9	11.5	1.3	-0.7	10.5	39.5	0.0	-1.7	540
Total	16.2	40.5	-1.7	2.6	10.9	1.4	-0.7	7.7	28.8	0.3	-1.4	2,475

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Figures in parentheses are based on 25-49 unweighted cases. Total includes four children with missing information on size at birth.
Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.
[1] Recumbent length is measured for children under age 2 and in a few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.
[2] Includes children who are below -3 standard deviations from the WHO Child Growth Standards population median
[3] Excludes children whose mothers were not interviewed
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[5] Includes children whose mothers are deceased
[6] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.10.
[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.
SLC = School Leaving Certificate

Figure 11.1 Nutritional Status of Children by Age



Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average.

NDHS 2011

A mother's level of education generally has an inverse relationship with wasting levels, ranging from 6-10 percent of children of mothers with at least some secondary education to 13 percent of children of mothers with no education. A similar relationship is observed between household wealth and wasting levels.

Weight-for-age

As shown in Table 11.1, 29 percent of children under age 5 are underweight (low weight-for-age), and 8 percent are severely underweight. The proportion of underweight children is highest (37 percent) among those age 18-23 months and lowest (18 percent) among those under 6 months. Male children are slightly more likely to be underweight (30 percent) than female children (28 percent). The data show a strong correlation between underweight children and birth weight. Babies perceived by mothers as very small and small at birth are much more likely to also be underweight later in life (43 percent and 45 percent, respectively) than those perceived as average or large at birth (25 percent). Children born to mothers who are thin (BMI < 18.5) are three times more likely to be underweight (40 percent) than children born to mothers who are overweight/obese (13 percent).

Rural children are more likely to be underweight (30 percent) than urban children (17 percent). Children living in the mountain zone are more likely to be underweight (36 percent) than those in the terai (30 percent) and hill zone (27 percent). The Mid-western region has the highest percentage of underweight children (37 percent), while the Western region has the lowest (23 percent). Among the subregions, the highest percentage of underweight children is found in the Western mountain subregion (42 percent), and the lowest percentage is found in the Western hill subregion (17 percent).

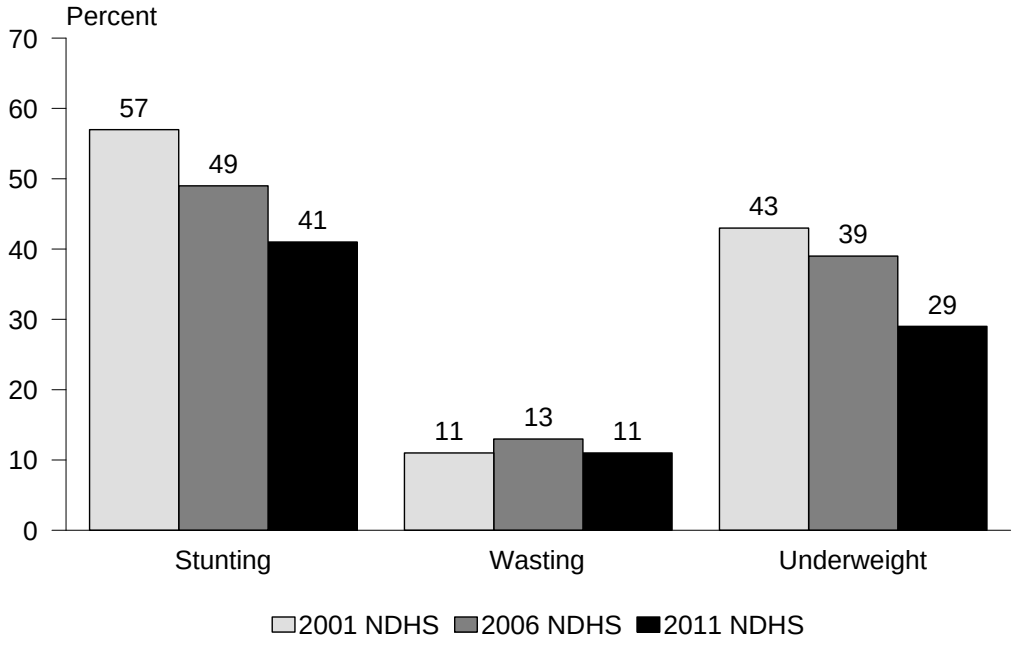
As with wasting and stunting, mother's education is associated with underweight, with the percentage of children who are underweight being lowest among children of mothers with an SLC and higher (13 percent) and highest among children of mothers with no education (38 percent). A similar inverse relationship is observed between household wealth and the percentage of underweight children: children in the poorest households are four times as likely to be underweight (40 percent) as children in the wealthiest households (10 percent).

11.1.4 Trends in Children's Nutritional Status

Trends in the nutritional status of children for the period 2001 to 2011 are shown in Figure 11.2. For the purpose of assessing trends, the data from the 2001 NDHS were recalculated using the WHO child growth standards adopted in 2006, as both the 2006 NDHS and 2011 NDHS are based on this reference population.

In general, the nutritional status of children in Nepal has improved over the past 15 years and is close to achieving the Millennium Development Goal (MDG) target of reducing the percentage of underweight children age 6-59 months to 29 percent by 2015 (National Planning Commission, 2010a). Figure 11.2 shows a downward trend in stunting and underweight over time. The percentage of stunted children declined by 14 percent between 2001 and 2006 and declined by an additional 16 percent between 2006 and 2011. A similar pattern is observed for the percentage of underweight children, which dropped by 9 percent between 2001 and 2006 and by 26 percent between 2006 and 2011. Similarly, the percentage of wasting declined by 15 percent between 2006 and 2011.

Figure 11.2 **Trends in Nutritional Status of Children under Five Years**



11.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Feeding practices play a critical role in child development. Poor feeding practices can adversely impact the health and nutritional status of children, which in turn has dire consequences for their mental and physical development. The duration and intensity of breastfeeding also affect a mother's period of postpartum infertility and, hence, the length of the birth interval and fertility levels.

11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. Early suckling stimulates the release of prolactin, which helps in the production of milk, and oxytocin, which is responsible for the ejection of milk. It also stimulates contraction of the uterus after childbirth and reduces postpartum blood loss. The first liquid to come from the breast, known as colostrum, is produced in the first few days after delivery. Colostrum is highly nutritious and contains antibodies that provide natural immunity to the infant. It is recommended that children be fed colostrum immediately after birth (within one hour) and that they continue to be exclusively breastfed even if the regular breast milk has not yet started to flow.

Table 11.2 shows the percentage of last-born children born in the two years preceding the survey according to whether they were ever breastfed, when they began breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Ninety-eight percent of children have been breastfed at some time, with negligible differences by background characteristics. Less than half of children (45 percent) are breastfed within one hour of birth. The vast majority (85 percent) of children are breastfed within one day of birth. Results from the 2006 NDHS showed that 35 percent of last-born children who were breastfed in the five years preceding the survey were breastfed within one hour of birth.[1] Initiation of breastfeeding within one hour and within one day of birth varies by background characteristics.

[1] These figures should be compared with caution given that the 2006 NDHS accounted for last-born children in the five years preceding the survey and that, rather than being calculated among all last-born children (as in the 2011 NDHS), initiation of breastfeeding within one hour and one day of birth was calculated among children who had ever been breastfed.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth; and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Nepal 2011

	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within one hour of birth	Percentage who started breastfeeding within one day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	98.1	44.5	86.8	1,027	26.4	1,007
Female	98.3	44.6	83.7	1,004	29.8	986
Assistance at delivery						
Skilled provider[3]	98.5	55.7	87.4	880	24.1	867
Other health worker[4]	96.6	36.0	76.8	125	35.9	121
Traditional birth attendant	96.8	27.6	74.5	197	54.9	190
Other	98.2	39.2	87.1	775	25.5	761
No one	100.0	20.4	82.2	54	15.7	54
Place of delivery						
Health facility	98.5	55.7	87.3	888	23.5	875
At home	98.2	36.2	83.9	1,095	31.8	1,075
Other	(90.6)	(29.0)	(78.8)	47	(29.0)	43
Residence						
Urban	97.6	50.8	86.0	189	27.8	184
Rural	98.2	43.9	85.2	1,842	28.1	1,809
Ecological zone						
Mountain	98.0	51.3	90.3	166	17.4	163
Hill	98.6	47.1	91.1	785	18.2	774
Terai	97.9	41.6	80.2	1,079	37.0	1,056
Development region						
Eastern	98.7	48.4	91.8	468	21.7	462
Central	97.2	34.3	71.8	658	41.2	640
Western	97.9	49.8	92.0	398	29.8	390
Mid-western	99.4	46.8	87.9	291	21.7	289
Far-western	98.9	54.6	95.9	215	7.9	212
Subregion						
Eastern mountain	96.5	52.5	93.6	39	14.9	38
Central mountain	98.9	42.8	92.0	36	19.3	36
Western mountain	98.3	54.2	88.3	91	17.6	89
Eastern hill	98.7	50.2	91.0	152	17.5	150
Central hill	98.7	40.3	87.9	177	16.9	175
Western hill	97.6	48.4	92.6	240	23.5	234
Mid-western hill	99.4	46.0	88.4	131	21.4	130
Far-western hill	99.7	53.6	97.7	85	2.8	84
Eastern terai	99.0	46.8	91.9	277	25.0	274
Central terai	96.5	31.3	63.8	445	53.0	429
Western terai	98.3	51.9	91.2	159	39.2	156
Mid-western terai	100.0	45.6	90.2	111	20.8	111
Far-western terai	98.0	54.3	93.8	88	12.0	86
Mother's education						
No education	97.7	34.7	78.3	862	35.1	842
Primary	98.9	44.5	92.0	392	17.8	388
Some secondary	98.7	57.6	92.6	429	22.6	424
SLC and above	97.8	52.8	85.8	347	29.4	340
Wealth quintile						
Lowest	99.3	40.2	86.9	489	19.9	486
Second	97.7	38.7	83.6	428	29.0	418
Middle	96.6	44.1	81.0	469	37.1	453
Fourth	98.6	52.3	89.0	370	25.3	365
Highest	99.0	51.8	87.1	274	30.0	272
Total	98.2	44.5	85.2	2,030	28.1	1,993

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children were living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes children who started breastfeeding within one hour of birth
[2] Children given something other than breast milk during the first three days of life
[3] Doctor, nurse, or midwife
[4] Health assistant/auxiliary health worker or maternal and child health worker/village health worker
SLC = School Leaving Certificate

Breastfeeding within one hour of birth was more common in urban areas (51 percent) than in rural areas (44 percent). Notable variations can be seen by region. Fifty-five percent of children in the Far-western region were breastfed within one hour of birth, compared with 34 percent of children in the Central region. Initiation of breastfeeding within one hour of birth was highest in the Western mountain, Far-western hill, and Far-western terai subregions (54 percent each). Children born in a health facility were more likely to start breastfeeding within one hour of birth (56 percent) than children delivered at home (36 percent). Fifty-eight percent of children born to mothers with some secondary education started breastfeeding within one hour of

birth, compared with 35 percent of children of mothers with no education. Early breastfeeding increased with increasing wealth, from 40 percent among children in the lowest wealth quintile to 52 percent among children in the fourth and fifth quintiles.

The practice of providing a prelacteal feed is discouraged because it limits the frequency of suckling by the infant and exposes the baby to the risk of infection. The data show that 28 percent of infants are given a prelacteal feed. Prelacteal feeding varies by ecological zone, region, and subregion. Prelacteal feeding is twice as high in the terai (37 percent) as in the mountain (17 percent) and hill (18 percent) zones. Regionally, 41 percent of children receive a prelacteal feed in the Central region, compared with only 8 percent of children in the Far-western region. Among the subregions, the highest proportion of children receiving a prelacteal feed is observed in the Central terai subregion (53 percent), while the lowest is seen in the Far-western hill subregion (3 percent).

Children who were delivered at home are more likely to receive a prelacteal feed (32 percent) than children who were delivered at a health facility (24 percent). Prelacteal feeding is more common among children whose mothers have no education (35 percent) than among children whose mothers have a primary education (18 percent). In general, prelacteal feeding increases with wealth. Prelacteal feeding is highest (37 percent) among children in the middle wealth quintile and lowest among those in the poorest households (20 percent).

11.3 Breastfeeding Status by Age

UNICEF and WHO recommend that children be exclusively breastfed (no other liquid, solid food, or plain water) during the first six months of life (WHO/UNICEF, 2002; PAHO/WHO, 2004). The nutrition program under the 2004 National Nutrition Policy and Strategy promotes exclusive breastfeeding through the age of 6 months and, thereafter, the introduction of semisolid or solid foods along with continued breast milk until the child is at least age 2. Introducing breast milk substitutes to infants before age 6 months can contribute to breastfeeding failure. Substitutes, such as formula, other kinds of milk, and porridge, are often watered down and provide too few calories. Furthermore, possible contamination of these substitutes exposes the infant to the risk of illness. Nepal's Breast Milk Substitute Act (2049) of 1992 promotes and protects breastfeeding and regulates the unauthorized or unsolicited sale and distribution of breast milk substitutes (Ministry of Health and Population [MOHP], 2004b).

After six months, a child requires adequate complementary foods for normal growth. Lack of appropriate complementary feeding may lead to malnutrition and frequent illnesses, which in turn may lead to death. However, even with complementary feeding, the child should continue to be breastfed for two years or more.

Table 11.3 shows the percentage of youngest children under 2 years living with their mother by breastfeeding status, the percentage currently breastfeeding, and the percentage using a bottle with a nipple, according to age in months. Breastfeeding in Nepal is almost universal, and exclusive breastfeeding for the first six months is widespread. The data show that 70 percent of children under 6 months are exclusively breastfed. This is an improvement from the 2006 NDHS, when the figure was 53 percent. Eighty-eight percent of infants age 0-1 months and 74 percent of infants age 2-3 months receive breast milk only, compared with 53 percent of infants age 4-5 months. Ten percent of children under age 6 months receive plain water in addition to breast milk, and 9 percent receive other milk in addition to breast milk.

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under two years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under two years using a bottle with a nipple, according to age in months, Nepal 2011

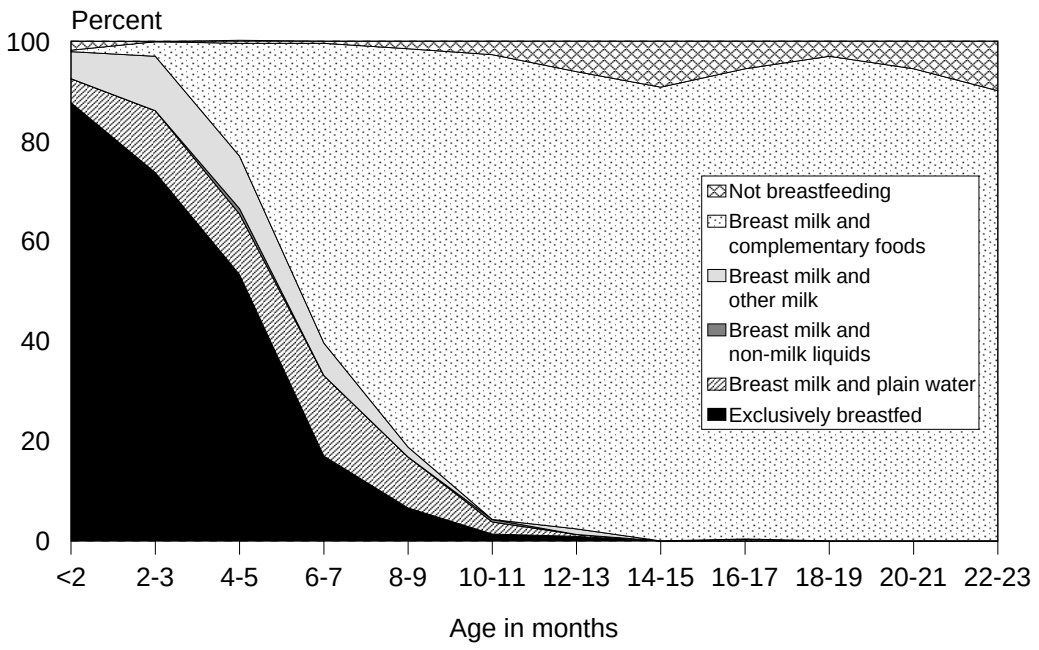
		Breastfeeding status									
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming nonmilk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under two years living with their mother	Percentage using a bottle with a nipple	Number of all children under two years
0-1	1.8	87.7	4.8	0.0	5.4	0.3	100.0	98.2	131	5.3	131
2-3	0.0	73.7	12.4	0.0	10.9	2.9	100.0	100.0	203	3.2	204
4-5	0.6	53.3	12.1	1.1	10.5	22.6	100.0	99.4	195	8.7	195
6-8	0.5	14.1	15.3	0.0	5.0	65.2	100.0	99.5	267	5.5	268
9-11	2.7	2.1	3.7	0.3	0.5	90.6	100.0	97.3	221	8.0	224
12-17	6.8	0.3	0.3	0.0	0.4	92.3	100.0	93.2	516	6.6	532
18-23	5.7	0.0	0.0	0.0	0.0	94.3	100.0	94.3	435	5.1	468
0-3	0.7	79.2	9.4	0.0	8.8	1.9	100.0	99.3	335	4.1	336
0-5	0.7	69.6	10.4	0.4	9.4	9.5	100.0	99.3	530	5.8	531
6-9	1.0	11.5	13.0	0.0	4.1	70.4	100.0	99.0	351	6.0	352
12-15	7.5	0.5	0.2	0.0	0.6	91.2	100.0	92.5	325	7.3	338
12-23	6.3	0.2	0.1	0.0	0.2	93.2	100.0	93.7	952	5.9	1,000
20-23	7.4	0.0	0.0	0.0	0.0	92.6	100.0	92.6	272	3.9	297

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, and breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and nonmilk liquids and who do not receive other milk and who do not receive complementary foods are classified in the nonmilk liquid category even though they may also be given plain water. Any children who receive complementary food are classified in that category as long as they are breastfeeding as well.

[1] Nonmilk liquids include juice, juice drinks, clear broth, and other liquids.

Table 11.3 and Figure 11.3 also show complementary feeding practices among children of different ages. Three percent of children age 2-3 months, 23 percent of children age 4-5 months, 65 percent of children age 6-8 months, and 91 percent of children age 9-11 months are given complementary foods. Seventy percent of children age 6-9 months are given complementary food (a decline from 2006, when the figure was 75 percent). Although all children age 6-9 months should receive complementary foods, Table 11.3 shows that 30 percent of children in this age group did not receive complementary foods the day or night preceding the survey.

Figure 11.3 **Infant Feeding Practices by Age**

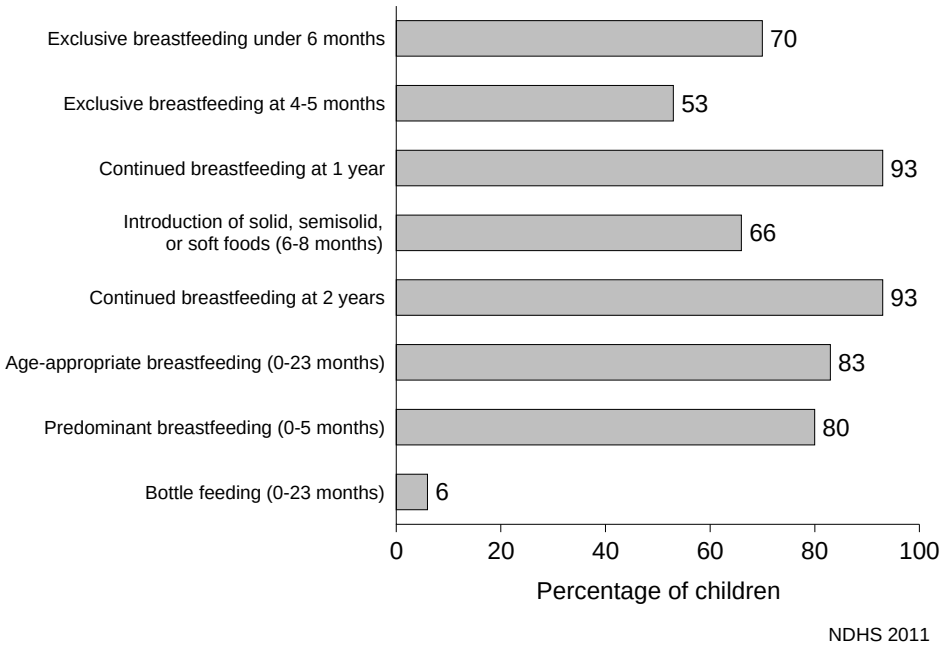


NDHS 2011

The Breast Milk Substitute Act discourages the use of bottles with nipples (MOHP, 2004b). The use of a bottle with a nipple, regardless of the contents (breast milk, formula, or any other liquid), requires hygienic handling to avoid contamination that may place the infant at risk for infection. The survey data show that 6 percent of infants less than age 6 months are fed using a bottle with a nipple.

Figure 11.4 shows 2011 NDHS results on Infant and Young Child Feeding (IYCF) practices indicators. As noted above, 70 percent of children under age 6 months are exclusively breastfed, and 66 percent of children 6-8 months (breastfed and non-breastfed) are introduced to complementary foods at an appropriate time. Ninety-three percent of all children are still breastfeeding at age 1, and the same proportion are still breastfeeding at age 2. Four of five Nepalese children age 0-23 months are breastfed appropriately for their age. This includes exclusive breastfeeding for children age 0-5 months and continued breastfeeding along with complementary foods for children age 6-23 months. Four-fifths of children under 6 months are predominantly breastfed. This percentage includes children who are exclusively breastfed and those who receive breast milk and only plain water or nonmilk liquids such as juice. Finally, 6 percent of children under age 2 are bottle fed.

Figure 11.4 **IYCF Indicators on Breastfeeding Status**



11.4 DURATION OF BREASTFEEDING

Table 11.4 provides information on the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey. The median duration of any breastfeeding in Nepal is 33.6 months, which is similar to the figure from the 2006 NDHS. The mean duration of breastfeeding for all children is 28.8 months. Differences in the median duration of breastfeeding by background characteristics are small.

The median duration of exclusive breastfeeding for all children is 4.2 months, and the mean duration is 5 months. These figures are higher than those reported in 2006, when the median duration of exclusive breastfeeding was 2.5 months and the mean duration was 4 months. The differences in the median duration of exclusive breastfeeding by background characteristics are small. However, the median duration of exclusive breastfeeding among children of mothers with no education is about twice as high as the duration among children of mothers with an SLC and higher level of education. Similarly, the median duration of exclusive breastfeeding among children in the highest wealth quintile is low (2.2 months) compared with children in the lowest and second quintiles (4.6 months).

Table 11.4 also shows the median duration of predominant breastfeeding, which is defined as exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices. The median duration of predominant breastfeeding is 5.4 months. Predominant breastfeeding is lower (4 months) among children of better educated mothers (SLC and above) than among children of mothers who have no education (7 months). Similar differences can be seen among children in the highest wealth quintile (3.4 months) compared with those in the other wealth quintiles.

Table 11.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]		
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding[2]
Sex			
Male	≥36.0	4.1	5.3
Female	31.4	4.4	5.5
Residence			
Urban	31.1	3.4	4.7
Rural	33.9	4.3	5.5
Ecological zone			
Mountain	27.8	3.2	4.0
Hill	33.3	3.3	4.3
Terai	33.8	4.9	6.6
Development region			
Eastern	31.4	3.6	4.7
Central	29.8	4.7	6.0
Western	34.0	3.6	5.0
Mid-western	≥36.0	4.0	5.3
Far-western	≥36.0	5.5	6.2
Subregion			
Eastern mountain	≥36.0	(2.3)	(2.6)
Central mountain	27.9	*	*
Western mountain	26.7	(4.2)	5.2
Eastern hill	31.2	(2.3)	(3.6)
Central hill	28.8	(2.7)	(4.5)
Western hill	≥36.0	(3.3)	(3.8)
Mid-western hill	≥36.0	(4.2)	(4.7)
Far-western hill	≥36.0	(5.0)	(5.6)
Eastern terai	30.2	(4.5)	6.4
Central terai	≥36.0	5.7	7.2
Western terai	32.2	3.9	5.9
Mid-western terai	≥36.0	(4.1)	(5.7)
Far-western terai	≥36.0	(6.5)	(7.0)
Mother's education			
No education	34.1	5.2	7.0
Primary	31.6	4.7	5.5
Some secondary	≥36.0	3.4	4.3
SLC and above	29.3	2.8	4.0
Wealth quintile			
Lowest	32.8	4.6	5.3
Second	≥36.0	4.6	5.9
Middle	≥36.0	4.7	6.0
Fourth	29.5	4.3	5.5
Highest	31.2	2.2	3.4
Total	33.6	4.2	5.4
Mean for all children	28.8	5.0	6.1

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. The median duration of any breastfeeding is shown as ≥36.0 for groups in which the exact median cannot be calculated because the proportion of breastfeeding children does not drop below 50 percent in any age group for children under age 36 months. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.
[2] Either exclusively breastfed or received breast milk and plain water and/or nonmilk liquids only
SLC = School Leaving Certificate

11.5 TYPES OF COMPLEMENTARY FOODS

It is recommended that complementary foods (solid or semisolid foods fed to infants in addition to breast milk) be started at age 6 months. The reason is that, at this age, breast milk alone is no longer sufficient to maintain the child's recommended daily allowances of nutritional requirements to enhance growth. Children are fed small quantities of solid and semisolid foods while continuing to breastfeed up to age 2 or beyond. The amount of food is increased gradually from 6 to 23 months, which is the period of transition to eating the regular family diet. This period is characterized by an increase in the prevalence of malnutrition because of poor feeding practices and infections. Table 11.5 shows the percentage of youngest children under age 2 who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding and nonbreastfeeding status of children by age.

The data show that, contrary to WHO recommendations, the practice of feeding children with solid or semisolid foods starts early in life. Three percent of breastfeeding children age 2-3 months receive some kind of solid or semisolid food, and by 4-5 months the proportion is 23 percent.

Overall, 92 percent of breastfed children age 6-23 months receive solid or semisolid complementary foods in addition to breast milk. These complementary foods include fortified baby foods (8 percent), foods made from grains (88 percent), fruits and vegetables rich in vitamin A (35 percent), other fruits and vegetables (21 percent), and food made from roots and tubers (65 percent). Children are also fed protein-rich foods such as legumes and nuts (49 percent); meat, fish, and poultry (17 percent); and eggs (9 percent). Other foods include cheese, yogurt, and other milk products (9 percent). Liquids other than breast milk fed to children in this age group include other milk (43 percent) and other liquids (33 percent). Use of infant formula is minimal (2 percent).

Table 11.5 also presents data on the types of complementary foods consumed by nonbreastfeeding children age 6-23 months. All nonbreastfeeding children are fed solid or semisolid foods, and consumption by type of food is higher among nonbreastfeeding children than breastfeeding children with the exception of consumption of fruits and vegetables rich in vitamin A, which is higher among breastfeeding than nonbreastfeeding children.

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Nepal 2011

	Liquids			Solid or semisolid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
0-1	0.8	5.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	129
2-3	1.0	11.2	1.0	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.9	203
4-5	1.5	22.1	4.2	3.4	13.0	1.8	1.9	5.2	4.6	0.4	0.2	1.1	22.7	194
6-8	2.6	38.0	21.2	9.3	54.1	15.1	10.2	26.9	27.4	3.8	6.2	5.2	65.5	266
9-11	3.7	46.1	33.3	11.6	88.5	22.9	15.6	54.3	49.6	8.3	7.5	7.1	93.1	215
12-17	2.6	41.8	37.1	7.3	96.2	40.9	22.1	76.3	55.7	21.1	9.2	8.0	99.0	481
18-23	0.8	45.4	35.0	5.3	98.9	47.0	29.1	81.4	53.6	25.2	10.8	12.4	100.0	410
6-23	2.2	42.8	32.8	7.7	87.7	34.9	20.9	64.8	48.6	17.0	8.8	8.6	91.9	1,372
Total	1.9	34.8	24.2	6.1	64.7	25.4	15.3	47.4	35.6	12.3	6.4	6.4	69.1	1,898
NONBREASTFEEDING CHILDREN														
6-23	3.2	66.0	35.2	12.8	96.0	29.1	32.4	69.7	58.8	24.2	16.3	16.6	100.0	67

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night).
[1] Other milk includes fresh, tinned, and powdered cow or other animal milk.
[2] Does not include plain water
[3] Includes fortified baby food
[4] Includes pumpkin, squash, carrots, red sweet potatoes, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

11.6 INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

Table 11.6 presents the percentage of children less than age 2 living with their mother who are fed according to three IYCF practices, by breastfeeding status. These practices take into account the percentages of children for whom feeding practices meet minimum standards with respect to food diversity (i.e., the number of food groups consumed), feeding frequency (i.e., the number of times the child is fed), and consumption of breast milk or other types of milk or milk products. Breastfed children are considered to be fed within the minimum standards if they consume at least four food groups and receive food other than breast milk at least twice a day in the case of infants 6-8 months and at least three times a day in the case of children 9-23 months. Nonbreastfed children are considered to be fed in accordance with the minimum standards if they consume milk or milk products, are fed four food groups (including milk products), and are fed at least four times a day. However, because of the small percentage of nonbreastfed children in Nepal, a separate analysis for this group of children is not presented.

Table 11.6 shows that, among breastfed children age 6-23 months, 28 percent were given foods from four or more food groups in the 24 hours preceding the survey. Only 21 percent of children residing in the terai were given foods from four or more food groups, compared with 36 percent of children living in the hill zone. Children living in the Western region and Western hill subregion, children of mothers with an SLC and higher education, and children from the wealthiest households were more likely than their counterparts to receive foods from four or more food groups.

Seventy-eight percent of breastfed children were fed the minimum number of times in the previous 24 hours. The combined percentage of children who fall in both categories (given foods from four or more groups and fed the minimum number of times per day) is 25 percent. The proportion of breastfeeding children age 6-23 months who are given a variety of foods at least three times daily increases with the mother's level of education and wealth.

Ninety-nine percent of children age 6-23 months (both breastfed and nonbreastfed) are given either breast milk or other milk products. Twenty-nine percent of children are given foods from the appropriate number of food groups, and 79 percent are fed an appropriate number of times per day. Overall, 24 percent of Nepalese children are fed in accordance with the three recommended IYCF practices. The likelihood of children being fed appropriately also increases with mother's education and wealth quintile.

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Nepal 2011

	Among breastfed children 6-23 months, percentage fed:				Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Breast milk, milk, or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices	Number of all children 6-23 months
Age in months									
6-8	12.2	60.2	11.4	266	100.0	12.4	60.4	11.4	267
9-11	19.8	70.7	16.8	215	100.0	22.0	71.5	17.6	221
12-17	32.7	84.5	29.0	481	97.7	32.6	85.5	28.3	516
18-23	36.0	84.7	32.1	410	97.9	36.8	84.8	31.1	435
Sex									
Male	28.0	78.4	24.3	677	98.5	28.6	79.3	24.5	712
Female	27.4	77.0	25.0	695	98.5	28.3	77.7	24.3	727
Residence									
Urban	45.6	75.5	37.8	131	98.3	45.5	76.0	36.9	140
Rural	25.8	77.9	23.2	1,241	98.6	26.6	78.7	23.1	1,300
Ecological zone									
Mountain	25.1	80.1	23.0	118	98.9	25.7	80.4	22.3	122
Hill	36.2	82.6	33.0	571	99.0	36.4	82.8	32.9	590
Terai	21.1	73.2	17.9	683	98.1	22.5	74.6	17.9	727
Development region									
Eastern	31.8	83.3	29.6	326	98.2	31.4	83.9	29.1	340
Central	21.2	75.4	17.7	431	98.4	23.9	77.0	17.9	465
Western	38.4	80.5	33.7	264	98.4	39.0	80.7	33.3	274
Mid-western	21.1	74.1	19.5	217	98.4	20.6	74.3	19.0	222
Far-western	28.1	71.8	25.2	135	100.0	28.5	72.5	25.7	138
Subregion									
Eastern mountain	39.9	88.1	34.6	28	98.5	40.6	87.5	32.9	29
Central mountain	26.2	84.1	26.2	29	98.6	28.3	84.6	25.5	30
Western mountain	18.0	74.6	16.4	62	99.2	17.6	75.2	16.0	64
Eastern hill	36.3	89.8	35.4	114	99.1	35.7	90.0	34.8	116
Central hill	40.6	77.6	35.8	130	99.2	41.3	78.1	36.0	138
Western hill	43.0	87.5	39.1	170	98.9	43.9	88.0	39.0	176
Mid-western hill	20.4	76.3	18.0	99	98.2	19.8	76.1	17.5	102
Far-western hill	32.8	76.2	29.8	58	100.0	32.8	76.2	29.8	58
Eastern terai	27.7	78.5	25.3	184	97.6	27.4	79.7	25.1	195
Central terai	11.5	73.5	8.2	272	98.1	15.4	75.8	8.8	297
Western terai	30.2	67.7	23.9	94	97.6	30.2	67.7	23.0	98
Mid-western terai	25.9	72.8	25.2	81	98.7	25.3	73.2	24.6	83
Far-western terai	23.8	62.9	20.5	52	100.0	25.3	64.7	22.2	54
Mother's education									
No education	12.1	72.9	11.3	569	97.1	12.2	74.2	11.0	603
Primary	25.5	78.4	21.8	258	99.2	26.8	78.8	21.7	269
Some secondary	43.0	80.4	38.7	309	99.9	44.2	81.0	38.4	318
SLC and above	47.6	85.0	41.5	236	99.4	49.4	85.3	41.7	250
Wealth quintile									
Lowest	14.5	76.1	13.9	347	99.1	14.2	76.3	13.7	354
Second	21.6	78.4	19.9	287	98.3	21.9	78.7	19.7	297
Middle	25.9	74.5	22.1	309	97.1	24.6	75.6	21.1	324
Fourth	41.0	80.1	36.3	237	99.1	43.3	81.1	35.3	250
Highest	47.1	81.7	40.7	192	99.4	49.7	83.1	41.0	214
Total	27.7	77.7	24.6	1,372	98.5	28.5	78.5	24.4	1,439

Note: As the number of nonbreastfed children is small, it is not shown separately. Total includes nonbreastfed children.
[1] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.
[2] For breastfed children, minimum meal frequency is receiving solid or semisolid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months.
[3] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt
[4] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in note 2 for breastfed children, and for nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid or semisolid food or milk feeds at least four times a day.
SLC = School Leaving Certificate

There have been changes in the definition of the standard IYCF indicators (such as the removal of "foods made with fats" as a food group, the requirement that breastfed children receive four instead of three food groups, the requirement that nonbreastfed children receive two or more servings of milk or milk products, and the removal of cheese from the milk or milk products group) from the 2006 NDHS, and thus direct comparisons of these indicators are problematic. However, for purposes of comparison, the data were recalculated based on the former IYCF definition, and results indicated that the percentage of children fed in accordance with the recommended three IYCF practices has decreased between 2006 (57 percent) and 2011 (44 percent). However, these results should be interpreted with caution, as they could be influenced by methodological differences in data collection (data not shown).

11.7 PREVALENCE OF ANEMIA IN CHILDREN

Anemia, characterized by a low level of hemoglobin in the blood, is a major health problem in Nepal, especially among young children and pregnant women. Anemia may be an underlying cause of maternal mortality, spontaneous abortions, premature births, and low birth weight. The most common cause of anemia is inadequate dietary intake of nutrients necessary for synthesis of hemoglobin, such as iron, folic acid, and vitamin B12. Anemia also results from sickle cell disease, malaria, and parasitic infections. A number of interventions have been put in place to address anemia in children. These include expanded distribution of multi-micronutrient powders; deworming of children age 1 to 5 years every six months, along with vitamin A distribution; and promotion of use of insecticide-treated mosquito nets for children under age 5 in malaria-endemic areas.

The 2011 NDHS used HemoCue rapid testing methodology to determine anemia levels among women age 15-49 and children under age 5. Table 11.7 presents anemia levels among children age 6 months to 5 years according to selected background characteristics. The results are based on children who stayed in the household the night before the interview. Hemoglobin was measured in 2,198 children. Unadjusted (i.e., measured) hemoglobin values were obtained using the HemoCue instrument. Given that hemoglobin requirements differ substantially depending on altitude, an adjustment to sea-level equivalents was made using CDC formulas before classifying children according to level of anemia (CDC, 1998).

Table 11.7 indicates that 46 percent of children in Nepal are anemic; 27 percent are mildly anemic, 18 percent are moderately anemic, and less than 1 percent are severely anemic. The prevalence of anemia among children under age 5 has declined by only 2 percentage points in the past five years.

The proportion with anemia is higher among children age 6-17 months (72-78 percent) than among children in other age groups. The prevalence of anemia among children age 6-23 months is 69 percent. Severe anemia, which has a serious impact on the health of an individual, is highest among children age 12-17 months (2 percent). Male children and children residing in urban areas are less likely to be anemic. The prevalence of anemia in children varies across ecological zones. Children in the terai are more anemic (50 percent) than children in the hill zone (41 percent). Children residing in the Far-western terai (60 percent) and Mid-western terai (57 percent) subregions are more likely to be anemic than children in the Central mountain (33 percent) and Mid-western hill (36 percent) subregions. There seems to be no significant linear relationship between anemia prevalence and mother's education or wealth quintile, although clearly children of mothers with no education are more likely to be anemic.

Table 11.7 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Nepal 2011

Background characteristic	Anemia status by hemoglobin level: Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (<7.0 g/dl)	Number of children
Age in months					
6-8	78.3	37.1	40.4	0.7	118
9-11	73.5	37.3	35.4	0.8	109
12-17	72.2	38.5	32.0	1.7	261
18-23	56.6	29.3	26.7	0.7	217
24-35	43.6	27.6	15.9	0.2	495
36-47	38.1	26.0	12.1	0.0	512
48-59	25.0	17.5	7.0	0.5	486
6-23 months	68.6	35.2	32.3	1.1	705
Sex					
Male	43.4	26.6	16.2	0.6	1,119
Female	49.1	28.3	20.4	0.4	1,079
Deworming status					
Child not eligible (<12 months old)	75.4	36.6	38.0	0.8	221
Received deworming medication in the past 6 months	41.3	25.5	15.2	0.5	1,538
Did not receive deworming medication in the past 6 months	50.6	29.2	21.3	0.2	344
Mother's interview status					
Interviewed	46.4	27.3	18.6	0.5	2,104
Not interviewed but in household	(45.7)	(26.6)	(19.1)	(0.0)	32
Not interviewed and not in household[1]	40.5	32.1	8.4	0.0	62
Residence					
Urban	41.2	22.9	17.9	0.4	188
Rural	46.7	27.9	18.3	0.5	2,011
Ecological zone					
Mountain	47.7	26.0	21.2	0.5	179
Hill	41.0	24.6	16.0	0.3	902
Terai	50.2	29.9	19.7	0.6	1,118
Development region					
Eastern	47.2	27.6	19.1	0.5	534
Central	43.9	27.8	15.6	0.6	674
Western	45.5	29.4	16.1	0.0	408
Mid-western	47.8	24.9	21.9	0.9	336
Far-western	49.4	26.2	22.6	0.5	246
Subregion					
Eastern mountain	51.3	32.0	18.5	0.8	42
Central mountain	33.1	20.1	13.0	0.0	43
Western mountain	52.7	26.1	26.1	0.5	94
Eastern hill	42.3	22.1	20.2	0.0	180
Central hill	40.2	26.1	12.6	1.5	204
Western hill	43.6	27.4	16.2	0.0	260
Mid-western hill	36.0	21.4	14.7	0.0	152
Far-western hill	40.9	23.7	17.1	0.0	105
Eastern terai	49.5	30.2	18.6	0.7	312
Central terai	46.7	29.3	17.3	0.2	428
Western terai	48.8	32.9	15.9	0.0	148
Mid-western terai	56.9	28.4	26.5	2.0	128
Far-western terai	60.4	29.2	29.9	1.2	102
Mother's education[2]					
No education	50.1	29.2	20.1	0.8	1,036
Primary	42.6	24.7	17.7	0.2	421
Some secondary	42.8	24.7	17.8	0.3	404
SLC and above	43.3	28.0	15.3	0.0	275
Wealth quintile					
Lowest	45.3	26.9	18.1	0.3	584
Second	49.6	28.4	20.3	0.9	457
Middle	51.4	31.2	19.4	0.7	503
Fourth	43.3	23.3	19.9	0.1	366
Highest	37.5	25.6	11.5	0.4	288
Total	46.2	27.4	18.3	0.5	2,198

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Hemoglobin is in grams per deciliter (g/dl). Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes children whose mothers are deceased

[2] For women who were not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

SLC = School Leaving Certificate

11.8 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. The 2011 NDHS collected information on consumption of foods rich in vitamin A and iron and the status of children receiving vitamin A capsules, iron supplements, and deworming during national campaigns.

Table 11.8 presents intake of key micronutrients among children. The table shows, by background characteristics, the percentage of youngest children age 6-23 months who are living with their mother and who consumed foods rich in vitamin A and iron in the day or night preceding the survey; the percentage of all children 6-59 months who were given vitamin A supplements in the six months preceding the survey and who were given iron supplements in the past seven days; the percentage of children 12-59 months who were given deworming medication in the six months preceding the survey; and, among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with iodized salt.

Vitamin A is an essential micronutrient for the immune system that plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase the severity of infections, such as measles and diarrheal diseases in children, and slow recovery from illness. Vitamin A is found in breast milk, other milk, liver, eggs, fish, butter, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months.

Forty-seven percent of children age 6-23 months consumed foods rich in vitamin A the day or night preceding the survey. The proportion of children consuming vitamin A-rich foods increases with age. There are only slight differences in consumption by sex and breastfeeding status. Urban children are more likely to consume vitamin A-rich foods (58 percent) than children in rural areas (46 percent). Children in the hill zone consume more vitamin A-rich foods (54 percent) than children in the terai (41 percent). At the subregional level, children in the Eastern mountain subregion (63 percent) are most likely to consume vitamin A-rich foods, and those in the Central terai subregion are least likely (35 percent). Mother's education correlates with level of consumption of vitamin A-rich foods: 40 percent of children whose mothers have no education consume vitamin A-rich foods, compared with 54 percent of children whose mothers have an SLC and higher education.

Iron is essential for cognitive development, and low iron intake can contribute to anemia. Iron requirements are greatest at age 6-23 months, when growth is extremely rapid. The results of the 2011 NDHS (Table 11.8) show that one in four children consumed foods rich in iron in the 24 hours prior to the survey and that consumption of iron-rich foods is highest among children age 18-23 months, children in urban areas, children in the hill zone, children in the Eastern hill subregion, and children in the highest wealth quintile. Children whose mothers have some secondary education are twice as likely to consume iron-rich foods as those whose mothers have no education.

Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop VAD. In Nepal, campaigns are in place for semiannual mass supplementation of vitamin A capsules (for children age 6-59 months) and distribution of deworming tablets (for children age 12-59 moths) since the past 15 years under the National Nutrition Program.

The 2011 NDHS collected data on vitamin A supplements for children under age 5. Table 11.8 shows that 90 percent of children age 6-59 months were given vitamin A supplements in the six months before the survey. The proportion of children receiving a vitamin A supplement increases with age from 70 percent at 6-8 months to 93 percent at 24-35 months before declining to 91 percent at 48-59 months. Children in rural areas are more likely to receive vitamin A supplements (91 percent) than those in urban areas (86 percent). There is only a slight difference in the proportion of children receiving vitamin A supplements by ecological zone and subregion. Similarly, mother's education and wealth do not have an impact on use of vitamin A supplementation.

Table 11.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey; among all eligible children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey and who were given iron supplements in the past seven days; among all eligible children 12-59 months, the percentage who were given deworming medication in the six months preceding the survey; and among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Nepal 2011

	Among youngest children age 6-23 months living with the mother:			Among all eligible children age 6-59 months:		Among all children age 6-59 months:		Among all eligible children age 12-59 months:		Among children age 6-59 months living in households tested for iodized salt:	
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in last 6 months	Number of children	Percentage given iron supplements in last 7 days	Number of children	Percentage given deworming medication in last 6 months[3]	Number of children	Percentage living in households with adequately iodized salt[4,5]	Number of children
Age in months											
6-8	20.5	8.9	267	70.4	85	2.0	268	na	na	74.3	268
9-11	31.2	14.6	221	82.5	158	2.3	224	na	na	73.6	224
12-17	56.0	28.2	516	85.4	532	2.3	532	70.7	268	71.4	531
18-23	59.8	33.4	435	90.1	468	2.3	468	77.5	468	71.1	467
24-35	na	na	0	93.1	1,013	3.0	1,013	86.0	1,013	73.0	1,013
36-47	na	na	0	92.2	1,106	2.5	1,106	86.6	1,106	71.9	1,105
48-59	na	na	0	91.4	999	2.5	999	84.6	999	73.1	993
Sex											
Male	46.8	22.8	712	91.5	2,252	2.1	2,369	84.4	1,997	73.7	2,362
Female	46.6	25.5	727	89.3	2,108	2.9	2,240	82.9	1,856	71.2	2,238
Breastfeeding status											
Breastfeeding	46.5	23.5	1,372	90.8	2,201	2.2	2,449	83.3	1,730	71.9	2,445
Not breastfeeding	51.7	37.2	67	90.0	2,158	2.8	2,160	84.1	2,123	73.1	2,154
Mother's age at birth											
15-19	35.6	24.9	160	87.9	230	3.0	263	82.6	163	69.5	263
20-29	47.3	25.2	979	90.1	2,855	2.3	3,027	83.9	2,523	74.4	3,023
30-39	51.6	20.7	268	90.8	1,073	2.7	1,117	83.8	971	70.2	1,111
40-49	43.2	15.1	32	95.8	202	4.1	202	81.6	195	60.1	202
Residence											
Urban	57.7	30.6	140	86.4	421	2.1	440	79.9	371	90.6	440
Rural	45.6	23.4	1,300	90.8	3,939	2.6	4,168	84.1	3,482	70.6	4,160
Ecological zone											
Mountain	46.2	22.1	122	92.6	350	4.6	363	88.1	303	71.2	362
Hill	54.1	28.9	590	90.5	1,764	2.8	1,858	87.0	1,557	70.4	1,857
Terai	40.8	20.6	727	90.0	2,245	1.9	2,387	80.5	1,993	74.3	2,380
Development region											
Eastern	52.9	33.6	340	93.4	1,040	2.3	1,099	86.5	934	76.2	1,099
Central	42.3	18.8	465	88.1	1,383	1.9	1,466	78.8	1,200	75.1	1,463
Western	51.7	25.9	274	88.8	806	0.8	851	83.5	715	82.8	848
Mid-western	40.1	19.3	222	90.8	653	6.1	696	85.6	577	63.8	693
Far-western	47.4	23.2	138	92.6	478	2.8	497	89.1	427	51.2	497
Subregion											
Eastern mountain	62.5	36.6	29	93.8	83	0.8	87	93.8	71	78.5	87
Central mountain	47.0	20.7	30	91.1	85	1.4	87	88.0	73	71.7	86
Western mountain	38.4	16.0	64	92.7	182	7.8	189	85.6	159	67.7	189
Eastern hill	57.5	44.2	116	94.6	340	0.9	363	89.2	307	79.4	363
Central hill	57.6	30.4	138	89.1	426	3.2	441	86.3	364	72.0	441
Western hill	59.8	27.0	176	88.9	492	0.8	520	83.1	437	78.4	520
Mid-western hill	37.6	19.6	102	89.6	306	8.6	328	87.5	272	64.2	326
Far-western hill	50.9	17.2	58	92.1	200	1.4	207	93.5	177	40.9	207
Eastern terai	48.7	26.9	195	92.8	616	3.3	649	84.1	556	74.1	649
Central terai	34.7	13.2	297	87.4	872	1.3	938	74.4	763	76.8	935
Western terai	37.2	23.8	98	88.6	314	0.7	331	84.1	278	89.9	328
Mid-western terai	43.4	20.9	83	92.1	244	0.4	263	85.0	217	57.5	261
Far-western terai	48.4	32.1	54	92.5	199	4.6	207	84.2	179	60.2	207
Mother's education											
No education	40.1	17.0	603	88.5	2,083	2.9	2,179	80.6	1,885	60.8	2,171
Primary	47.4	25.5	269	92.0	892	2.3	921	85.5	794	74.1	920
Some secondary	52.9	35.2	318	92.7	840	1.4	892	87.3	712	85.7	892
SLC and above	54.2	25.7	250	91.5	545	3.0	616	87.7	463	92.3	616
Wealth quintile											
Lowest	47.4	19.5	354	89.4	1,154	4.5	1,201	83.7	1,031	53.4	1,197
Second	46.6	23.3	297	89.7	966	1.4	1,003	81.8	861	65.9	1,000
Middle	39.9	20.7	324	91.4	871	1.6	944	84.0	764	73.9	944
Fourth	49.8	28.5	250	91.3	747	2.7	790	84.8	648	87.7	788
Highest	52.7	33.0	214	90.8	623	1.7	671	85.0	549	96.6	671
Total	46.7	24.1	1,439	90.4	4,360	2.5	4,608	83.7	3,853	72.5	4,599

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall. Children are considered eligible for receiving Vitamin A (6-59 months) and deworming medication (12-59 months) based on their age at the date of distribution campaign.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A.
[2] Includes meat (and organ meat)
[3] Deworming for intestinal parasites is commonly done for helminthes.
[4] Excludes children in households in which salt was not tested
[5] Salt with 15 ppm or more iodine
SLC = School Leaving Certificate

Use of multiple micronutrient powder (MNP) has proved to be effective in reducing anemia among children, and studies have shown a 45 percent decrease in anemia with this intervention (UNICEF, 2009). The government of Nepal, with assistance from the World Food Program (WFP) and UNICEF, has been distributing MNPs (locally known as "Vita-Mishran" and "Baal Vita") in selected districts of the country since 2009. The

target population for the WFP-sponsored Vita Mishran is children age 6-59 months, while Baal Vita, supported by UNICEF, targets children age 6-24 months.

Although it is too early to expect wide national coverage, the 2011 NDHS collected baseline information on the distribution of these MNPs. The survey indicated that 3 percent of children age 6-59 months were given iron supplements in the form of an MNP in the seven days preceding the survey. Coverage was relatively higher among children in the Mid-western hill (9 percent) and Western mountain (8 percent) subregions, the target areas for the WFP initiative.

Certain types of intestinal parasites can cause anemia. Periodic deworming for organisms such as helminthes can improve children's micronutrient status. Table 11.8 shows that 84 percent of children age 6-59 months received deworming medication in the six months before the survey. Children in rural areas are more likely than children in urban areas to receive deworming medication. The likelihood of receiving deworming medication increases with the child's age, mother's education, and mother's wealth. Children in the Eastern mountain subregion are more likely to receive deworming medication (94 percent) than those in the Central terai subregion (74 percent).

Iodine deficiency, most frequently caused by inadequate iodine intake, has serious effects on body growth and mental development. Fortification of salt with iodine is the most common method of preventing iodine deficiency. In Nepal, the compound used for fortification of salt is potassium iodate (KIO3). According to the World Health Organization, a country's salt iodization program is considered to be on a good track in eliminating iodine deficiency when 90 percent of households are using iodized salt. Fortified salt that contains 15 parts of iodine per million parts of salt (15 ppm) is considered adequate for the prevention of iodine deficiency (ICCIDD, UNICEF, and WHO, 2001). To assess the use of iodized salt in Nepal, the 2011 NDHS included salt testing at the household level using the MBI rapid test kit. Interviewers asked households to provide a teaspoon of salt used for cooking. A recheck solution was used when the salt showed no change in color to lower the pH with high alkalinity, after which the salt was tested again.

The MBI rapid test kit provides a good qualitative indication of the presence or absence of iodine. It cannot give a precise measurement of the iodine content in salt. However, as studies indicate that use of iodized salt in Nepal is universal (MOHP, New ERA, and Micronutrient Initiative, 2005), the interest from a program perspective has been in assessing the proportion of households using adequately iodized salt (15+ ppm). Given that baseline data using the MBI kit were available on the proportion of households using adequately iodized salt from the Iodine Deficiency Survey 2005, an assessment of the percentage of households using adequately iodized salt was carried out in the 2011 NDHS. Notably, the 2011 NDHS results also show that more than 95 percent of households are using iodized salt, indicating that Nepal is on track toward eliminating iodine deficiency (data not shown). The findings on salt iodization refer to children living in households with adequately iodized salt.

Table 11.8 shows that 73 percent of children live in households that use adequately iodized salt, with more children in urban (91 percent) than rural (71 percent) areas living in such households. The percentage of children living in households that use adequately iodized salt is lowest in the Far-western development region (51 percent), particularly the Far-western hill subregion (41 percent). Mother's education and household wealth are positively associated with the likelihood of children living in households with adequately iodized salt.

Eighty percent of households use salt that is adequately iodized (15+ ppm) (Table 11.9). The proportion of households that use adequately iodized salt has increased by 38 percent since 2005, when the figure was 58 percent (MOHP, New ERA, and Micronutrient Initiative, 2005). The percentage of households using adequately iodized salt is far larger in urban areas (94 percent) than in rural areas (78 percent).

A higher proportion of households in the terai (81 percent) than in the mountain zone (73 percent) are using salt that is adequately iodized. The Western, Central, and Eastern regions have the highest proportions of households using adequately iodized salt (88 percent, 84 percent, and 82 percent, respectively). A lower percentage of households in the Far-western hill subregion (43 percent) than in the Western terai subregion (92 percent) use adequately iodized salt. The proportion of households using adequately iodized salt rises steadily from 56 percent in the lowest wealth quintile to 98 percent in the highest wealth quintile.

Table 11.9 Presence of adequately iodized salt in household

Among all households, the percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percentage with adequately iodized salt, according to background characteristics, Nepal 2011

	Among all households, the percentage:			Among households with tested salt:	
Background characteristic	With salt tested	With no salt in the household	Number of households	Percentage with adequately iodized salt[1]	Number of households
Residence					
Urban	99.1	0.9	1,546	94.4	1,532
Rural	99.3	0.7	9,280	77.7	9,215
Ecological zone					
Mountain	99.3	0.7	761	72.6	756
Hill	99.5	0.5	4,563	79.7	4,538
Terai	99.1	0.9	5,502	81.4	5,453
Development region					
Eastern	99.2	0.8	2,685	81.7	2,663
Central	99.3	0.7	3,627	84.2	3,602
Western	99.3	0.7	2,304	88.3	2,288
Mid-western	99.2	0.8	1,241	67.0	1,230
Far-western	99.4	0.6	969	56.8	964
Subregion					
Eastern mountain	99.8	0.2	206	85.2	205
Central mountain	99.4	0.6	266	67.3	265
Western mountain	98.9	1.1	289	68.4	286
Eastern hill	99.6	0.4	847	78.6	843
Central hill	99.1	0.9	1,386	88.0	1,374
Western hill	99.7	0.3	1,415	85.8	1,411
Mid-western hill	99.3	0.7	577	68.1	573
Far-western hill	99.8	0.2	339	42.8	338
Eastern terai	98.9	1.1	1,632	82.9	1,615
Central terai	99.4	0.6	1,975	83.9	1,963
Western terai	98.7	1.3	889	92.3	877
Mid-western terai	98.9	1.1	519	63.2	513
Far-western terai	99.5	0.5	487	65.5	485
Wealth quintile					
Lowest	99.6	0.4	2,029	55.9	2,019
Second	99.6	0.4	2,168	71.4	2,159
Middle	99.7	0.3	2,068	80.9	2,061
Fourth	99.0	1.0	2,185	90.4	2,162
Highest	98.7	1.3	2,377	98.4	2,345
Total	99.3	0.7	10,826	80.0	10,747

[1] Salt with 15 ppm or more iodine

11.9 NUTRITIONAL STATUS OF WOMEN

The nutritional status of women was assessed with two anthropometric indices: height and body mass index. BMI is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2). To derive these indices, the 2011 NDHS took height and weight measurements among women age 15-49. Women who were pregnant and women who had given birth in the two months preceding the survey were excluded from the analysis.

Short stature reflects poor socioeconomic conditions and inadequate nutrition during childhood and adolescence. In a woman, short stature is a risk factor for poor birth outcomes and obstetric complications. For example, short stature is associated with small pelvic size, which increases the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. A woman is considered to be at risk if her height is below 145 cm.

According to Table 11.10, 12 percent of women are shorter than 145 cm. Adolescent women (age 15-19) are slightly less likely to be below 145 cm (10 percent) than older women. Women in rural areas are more likely to be below 145 cm (12 percent) than women in urban areas (8 percent). Women in the Western region are most likely to be shorter than 145 cm (14 percent), while women in the Far-western region are least likely (7 percent). Similarly, the highest proportion of women below 145 cm is in the Eastern mountain subregion (16 percent), while women from the Far-western and Mid-western terai are least likely to be below 145 cm (5

percent and 7 percent, respectively). The likelihood of being shorter than 145 cm decreases with level of education and wealth quintile.

BMI was used to measure thinness or obesity. A BMI below 18.5 indicates thinness or acute undernutrition, and a BMI of 25.0 or above indicates overweight or obesity. A BMI below 16 kg/m^2 indicates severe undernutrition and is associated with increased mortality. Low pre-pregnancy BMI, as with short stature, is associated with poor birth outcomes and obstetric complications.

Table 11.10 shows that the mean BMI among women age 15-49 is 21 kg/m^2. Mean BMI generally increases with age. Urban women have a slightly higher mean BMI (23 kg/m^2) than rural women (21 kg/m^2). There are only small differences in mean BMI among women living in the mountain, hill, and terai ecological zones. Variations by development region are also minimal. Mean BMI does not correlate with women's level of education. With regard to wealth, mean BMI shows a steady increase from 20 kg/m^2 among women in the lowest wealth quintile to 23 kg/m^2 among those in the highest quintile.

Table 11.10 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Nepal 2011

	Height		Body mass index[1]								
				Normal	Thin			Overweight/obese			
Background characteristic	Percentage below 145 cm	Number of women	Mean BMI	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
15-19	10.1	1,348	20.0	71.2	25.8	15.4	10.4	2.9	2.6	0.3	1,266
20-29	11.5	2,140	21.1	69.3	19.1	12.1	7.0	11.6	10.1	1.5	1,938
30-39	11.6	1,531	22.3	69.0	12.2	8.0	4.2	18.8	15.8	3.0	1,475
40-49	13.8	1,125	22.3	62.6	15.9	10.5	5.4	21.5	16.8	4.7	1,121
Residence											
Urban	8.4	849	22.7	59.5	14.1	9.2	4.9	26.3	21.3	5.1	808
Rural	12.1	5,295	21.2	69.8	18.8	11.8	7.0	11.4	9.6	1.8	4,992
Ecological zone											
Mountain	13.6	399	21.0	75.2	16.5	12.8	3.6	8.4	6.9	1.5	371
Hill	12.4	2,455	21.8	74.1	12.4	8.8	3.6	13.5	11.2	2.3	2,316
Terai	10.8	3,291	21.2	63.3	22.7	13.3	9.4	14.0	11.7	2.3	3,112
Development region											
Eastern	11.1	1,481	21.7	67.4	16.2	10.7	5.4	16.5	13.8	2.7	1,376
Central	12.8	2,003	21.6	64.1	20.2	10.9	9.4	15.6	12.5	3.1	1,895
Western	13.5	1,320	21.7	72.3	14.0	9.1	5.0	13.7	11.8	2.0	1,265
Mid-western	10.2	711	20.8	72.7	19.3	12.8	6.5	8.0	6.7	1.2	661
Far-western	6.5	629	20.3	70.8	23.9	18.6	5.3	5.3	4.9	0.4	603
Subregion											
Eastern mountain	15.5	114	21.8	75.7	10.0	7.7	2.3	14.2	12.6	1.6	104
Central mountain	13.4	125	21.2	75.6	14.9	10.7	4.2	9.5	6.7	2.8	118
Western mountain	12.3	161	20.3	74.4	22.2	18.1	4.1	3.4	3.1	0.3	149
Eastern hill	12.7	472	21.5	76.8	11.8	8.7	3.1	11.4	11.0	0.5	441
Central hill	11.5	732	22.7	66.3	11.5	7.7	3.8	22.2	17.5	4.7	693
Western hill	14.3	742	21.9	79.9	8.3	6.0	2.3	11.8	9.5	2.3	706
Mid-western hill	11.9	307	20.8	73.7	18.6	12.8	5.8	7.7	7.1	0.6	286
Far-western hill	8.3	202	19.8	75.1	23.4	17.9	5.5	1.5	1.4	0.1	191
Eastern terai	9.7	896	21.8	61.3	19.3	12.2	7.1	19.4	15.4	4.0	831
Central terai	13.7	1,147	20.9	61.5	26.4	12.9	13.5	12.1	10.0	2.1	1,084
Western terai	12.5	578	21.5	62.6	21.3	13.0	8.3	16.1	14.6	1.5	559
Mid-western terai	7.1	324	20.7	70.7	20.2	12.6	7.6	9.1	7.1	2.0	303
Far-western terai	5.0	346	20.6	68.3	23.7	18.3	5.4	8.0	7.5	0.6	335
Education											
No education	15.0	2,424	21.0	66.6	22.6	14.4	8.2	10.8	9.1	1.7	2,281
Primary	12.7	1,075	21.7	68.9	15.5	8.9	6.6	15.5	12.4	3.1	1,026
Some secondary	9.6	1,510	21.5	72.0	15.3	9.6	5.7	12.7	10.5	2.3	1,427
SLC and above	6.0	1,135	21.8	66.7	15.2	10.2	4.9	18.2	15.6	2.5	1,065
Wealth quintile											
Lowest	15.3	1,022	20.4	75.4	21.5	14.0	7.6	3.0	2.4	0.7	945
Second	15.3	1,161	20.6	73.2	21.2	13.9	7.3	5.6	5.2	0.4	1,098
Middle	11.8	1,271	20.8	69.5	21.5	13.5	8.0	9.0	7.7	1.3	1,186
Fourth	7.8	1,311	21.6	68.0	16.6	10.3	6.4	15.4	13.3	2.1	1,240
Highest	9.3	1,379	23.2	58.6	11.9	7.0	4.8	29.5	23.6	5.9	1,331
Total	11.6	6,145	21.4	68.3	18.2	11.5	6.7	13.5	11.2	2.2	5,800

Note: Body mass index is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding two months
SLC = School Leaving Certificate

Eighteen percent of women of reproductive age are thin or undernourished (BMI < 18.5 kg/m^2). The proportions of mild thinness (17.0-18.4 kg/m^2) and moderate and severe thinness (<17 kg/m^2) are 12 percent and 7 percent, respectively. Despite the absence of a linear correlation with age, the data show that adolescents (age 15-19) are most likely to be thin (26 percent). Rural women are more likely to be thin (19 percent) than urban women (14 percent). The proportion of women in the terai who are thin (23 percent) is almost double the proportion in the hill zone (12 percent). A notably higher percentage of women in the Far-western development region (24 percent) than in the Western region (14 percent) are thin. Among subregions, the highest proportion of thinness is in the Central terai subregion (26 percent) and the lowest is in the Western hill subregion (8 percent). Thinness is more common among women with no education (23 percent) than among women with an SLC and higher level of education (15 percent). Women in the lowest wealth quintile are more likely to be thin (22 percent) than women in the highest wealth quintile (12 percent).

Eleven percent of women are overweight (BMI 25-29 kg/m^2), and 2 percent are obese (BMI 30 kg/m^2 or above). The prevalence of overweight/obesity has increased by 5 percentage points since 2006. Younger women are less likely than older women to be overweight or obese. For example, 3 percent of women age 15-19 are overweight or obese, compared with 22 percent of women age 40-49. Urban women are more likely to be overweight/obese (26 percent) than rural women (11 percent). Ecologically, the proportion of overweight/obese women is higher in the terai and hill zones (14 percent each) than in the mountain zone (8 percent). The Eastern development region has the highest proportion of overweight or obese women (17 percent) and the Far-western and Mid-western regions the lowest (5 percent and 8 percent, respectively). Among the subregions, the highest proportions of overweight or obese women are seen in the Central hill and Eastern terai subregions (22 percent and 19 percent, respectively), while the lowest proportions are observed in the Far-western hill and Western mountain subregions (2 percent and 3 percent, respectively). Overweight and obesity are positively correlated with wealth quintile: the proportion of overweight/obese women increases steadily from 3 percent in the lowest wealth quintile to 30 percent in the highest wealth quintile.

11.10 Prevalence of Anemia in Women

In Nepal, a number of interventions have been put in place to address anemia in women. These include supplementation of iron with folic acid tablets for pregnant women from the second trimester to 45 days following delivery, deworming of pregnant women after completion of the first trimester, postpartum vitamin A supplements, and promotion of the use of insecticide-treated mosquito nets for pregnant women in malaria-endemic areas.

Table 11.11 presents anemia prevalence among women age 15-49 based on hemoglobin levels, according to selected background characteristics. Raw measured hemoglobin levels were obtained with the HemoCue instrument and adjusted by altitude and smoking status (if known) using CDC formulas (CDC, 1998).

Table 11.11 shows that 35 percent of women age 15-49 are anemic, 6 percent are moderately anemic, and a very small proportion are severely anemic (0.3 percent). Anemia prevalence has declined by only 1 percentage point since the 2006 NDHS. There is also no difference in the prevalence of mild and moderate anemia between the two surveys.

The prevalence of anemia is associated with maternity status. Pregnant women are more likely to be anemic (48 percent) than women who are breastfeeding (39 percent) and women who are neither pregnant nor breastfeeding (33 percent). This could be due to the high demand for iron and folic acid during pregnancy. Anemia is more prevalent in rural areas (36 percent) than in urban areas (28 percent). Anemia prevalence is higher among women in the terai (42 percent) than among women in the mountain or hill zone (27 percent). Notable variations can be seen across subregions. Women in the Mid-western terai and Eastern terai subregions are more likely to be anemic (49 percent and 45 percent, respectively) than women in the Central mountain and Central hill subregions (19 percent and 20 percent, respectively). Women's level of education does not have a substantial impact on their likelihood of suffering from anemia. Surprisingly, the prevalence of anemia is lower among women who smoke than among those who do not (30 percent versus 36 percent).

Table 11.11 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Nepal 2011

Background characteristic	Not pregnant: / Pregnant:	Anemia status by hemoglobin level: Any <12.0 g/dl / <11.0 g/dl	Mild 10.0-11.9 g/dl / 10.0-10.9 g/dl	Moderate 7.0-9.9 g/dl / 7.0-9.9 g/dl	Severe <7.0 g/dl / <7.0 g/dl	Number of women
Age						
15-19		38.5	32.5	5.7	0.4	1,341
20-29		35.9	29.8	5.9	0.3	2,113
30-39		32.4	26.0	6.0	0.4	1,513
40-49		32.5	27.0	5.2	0.3	1,121
Number of children ever born						
0		36.2	29.9	5.9	0.5	1,828
1		34.6	30.1	4.4	0.2	850
2-3		34.2	28.0	5.9	0.2	2,088
4-5		33.3	26.4	6.4	0.5	900
6+		37.8	32.1	5.4	0.2	422
Maternity status						
Pregnant		47.6	29.3	17.7	0.5	293
Breastfeeding		38.9	32.7	6.0	0.2	1,348
Neither		33.0	27.8	4.9	0.4	4,447
Using IUD						
Yes		40.8	33.4	7.4	0.0	63
No		34.9	28.9	5.7	0.3	6,025
Smoking status						
Smokes cigarettes/tobacco		29.8	23.1	6.4	0.3	630
Does not smoke		35.6	29.6	5.7	0.3	5,458
Residence						
Urban		27.6	22.5	4.7	0.4	836
Rural		36.2	29.9	5.9	0.3	5,252
Ecological zone						
Mountain		26.9	21.1	5.5	0.3	399
Hill		26.9	22.6	3.8	0.5	2,436
Terai		42.0	34.6	7.2	0.2	3,252
Development region						
Eastern		37.4	30.9	6.5	0.1	1,465
Central		32.8	27.4	5.0	0.4	1,980
Western		34.5	29.8	4.2	0.5	1,314
Mid-western		36.2	28.3	7.2	0.7	704
Far-western		35.9	28.0	7.7	0.2	624
Subregion						
Eastern mountain		26.5	20.7	5.6	0.3	114
Central mountain		19.2	17.8	1.5	0.0	124
Western mountain		33.1	24.0	8.5	0.6	161
Eastern hill		26.1	21.3	4.6	0.2	472
Central hill		19.5	15.8	3.2	0.5	716
Western hill		35.9	31.4	4.0	0.5	737
Mid-western hill		22.5	17.7	4.3	0.5	308
Far-western hill		28.8	25.6	2.8	0.3	202
Eastern terai		44.9	37.4	7.6	0.0	880
Central terai		42.6	35.7	6.6	0.3	1,139
Western terai		32.7	27.8	4.5	0.4	576
Mid-western terai		49.0	39.1	9.0	0.8	316
Far-western terai		41.9	30.8	11.1	0.0	341
Education						
No education		37.4	29.8	7.3	0.3	2,403
Primary		31.9	28.3	3.2	0.4	1,068
Some secondary		33.7	27.8	5.4	0.4	1,498
SLC and above		34.5	29.1	5.2	0.2	1,119
Wealth quintile						
Lowest		34.5	27.8	6.3	0.4	1,024
Second		35.4	28.6	6.3	0.4	1,152
Middle		38.6	31.8	6.4	0.4	1,265
Fourth		35.5	30.3	5.1	0.1	1,297
Highest		31.2	26.0	4.8	0.4	1,350
Total		35.0	28.9	5.7	0.3	6,088

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC, 1998.
SLC = School Leaving Certificate

11.11 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects the mother and infant against anemia, which is

considered a major cause of perinatal and maternal mortality. Anemia also results in an increased risk of premature delivery and low birth weight. Finally, iodine deficiency is related to a number of adverse pregnancy outcomes including abortion, fetal brain damage and congenital malformation, stillbirth, and prenatal death.

In Nepal, micronutrient deficiency among pregnant and lactating mothers is a common public health problem. Thus, the 2011 NDHS collected data on use of vitamin A and iron-folic acid supplements among women age 15-49 with a child born in the past five years, use of deworming medication during the last pregnancy, and the percentage of women living in households with iodized salt according to background characteristics.

A single dose of vitamin A is typically given to women within 45 days of childbirth, aimed at increasing the mother's vitamin A level and the content of the vitamin in breast milk for the benefit of the child. Because of the risk of teratogenesis (abnormal development of the fetus) resulting from high doses of vitamin A during pregnancy, the dose should not be given to pregnant women. The MOHP policy regarding maternal vitamin A supplementation is (as mentioned above) to provide a high-dose vitamin A capsule (200,000 IU) within the first 45 days after delivery (MOHP, 2004b). However, the new WHO guidelines on postpartum vitamin A supplements do not recommend providing vitamin A to postpartum women, and the policy needs to be reviewed (WHO, 2011).

Table 11.12 includes measures that are useful in assessing micronutrient intake by women during pregnancy and for two months after birth (postpartum period). The findings show that only 40 percent of women received a vitamin A dose during the postpartum period. There is no substantial variation across ecological zones. A slight difference can be seen among women who received postpartum vitamin A by urban and rural residence (46 percent and 40 percent, respectively). Women in the Far-western region were most likely to take vitamin A during the postpartum period (56 percent), while women in the Central region were least likely to do so (30 percent). The proportion of women taking vitamin A after childbirth was highest in the Far-western terai subregion (66 percent) and lowest in the Central terai subregion (24 percent). Women with an SLC and higher education were more than twice as likely as mothers with no education to have received a vitamin A supplement within two months of childbirth (62 and 28 percent, respectively). The prevalence of postpartum vitamin A supplementation increases with wealth, from 29 percent in the lowest quintile to 55 percent in the highest quintile.

Nutritional deficiencies such as anemia are often exacerbated during pregnancy because of the additional nutrient demands associated with fetal growth. Iron status can be enhanced by including iron supplements in food consumed by women, improving women's diets, and controlling parasites and malaria. Iron supplementation is necessary for pregnant women because their needs are usually too high to be met solely by food intake. Pregnant women are advised to take an iron tablet daily throughout their pregnancy and lactating period, starting from the second trimester and continuing to 45 days after childbirth (MOHP, 2004b). According to Table 11.12, 56 percent of women took iron tablets daily for 90 or more days during their last pregnancy. Five percent took iron supplements for 60 to 89 days, and 19 percent took supplements for fewer than 60 days. Twenty percent of pregnant women did not take iron supplements at all.

The proportion of women taking daily iron supplements for 90 or more days differs substantially between urban and rural areas (68 percent and 54 percent, respectively). Pregnant women in the terai are more likely to take iron supplements daily for 90 or more days (58 percent) than those in the mountain zone (49 percent). The proportion of women taking iron tablets for at least 90 days is highest in the Far-western region (71 percent) and lowest in the Central region (50 percent). Across the subregions, the Far-western terai subregion has the highest proportion of women taking iron supplements for at least 90 days (84 percent), while the Central terai subregion has the lowest proportion (44 percent). The proportion of pregnant women who take iron supplements daily for 90 or more days is related to age, level of education, and wealth quintile. Women with an SLC and higher level of education are more likely to take iron tablets for 90 or more days (84 percent) than women with no education (40 percent). Women in the highest wealth quintile are more than twice as likely to take iron tablets for 90 or more days (79 percent) as those in the lowest wealth quintile (37 percent).

Table 11.12 Micronutrient intake among mothers

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and the percentage who took deworming medication during the pregnancy of the last child; and among women age 15-49 with a child born in the past five years and who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Nepal 2011

	Among women with a childbirth in the past five years:									Among women with a child born in the last five years who live in households that were tested for iodized salt:	
		Number of days women took iron tablets or syrup during pregnancy of last birth									
Background characteristic	Percentage who received vitamin A dose postpartum[1]	None	<60	60-89	90+	Don't know/ missing	Total	Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Percentage living in households with adequately iodized salt[2,3]	Number of women
Age											
15-19	32.5	14.1	18.9	3.9	62.8	0.4	100.0	63.1	333	71.9	333
20-29	44.5	16.1	18.9	4.8	60.0	0.2	100.0	59.1	2,639	76.8	2,635
30-39	35.8	27.3	18.8	4.6	49.2	0.2	100.0	47.5	986	72.6	981
40-49	18.8	56.0	18.4	4.3	20.3	1.0	100.0	26.4	190	58.5	190
Residence											
Urban	45.8	11.1	16.0	4.5	68.3	0.0	100.0	49.8	418	91.8	418
Rural	39.7	21.5	19.2	4.7	54.4	0.2	100.0	55.7	3,730	72.6	3,721
Ecological zone											
Mountain	39.9	27.0	17.6	6.6	48.7	0.0	100.0	58.2	306	72.5	305
Hill	41.4	25.0	16.0	4.3	54.5	0.3	100.0	50.9	1,669	72.7	1,668
Terai	39.4	16.0	21.2	4.7	57.9	0.2	100.0	58.0	2,174	76.2	2,166
Development region											
Eastern	43.2	17.2	20.6	4.7	57.3	0.2	100.0	60.9	999	77.9	999
Central	30.4	23.4	21.8	4.7	49.9	0.1	100.0	41.8	1,293	77.3	1,290
Western	44.0	20.9	16.7	5.0	56.9	0.6	100.0	54.2	818	83.9	814
Mid-western	40.4	25.4	16.7	4.2	53.6	0.0	100.0	62.2	598	65.2	595
Far-western	55.7	11.5	13.0	4.5	71.0	0.0	100.0	73.3	440	54.0	440
Subregion											
Eastern mountain	52.0	24.8	20.2	5.4	49.6	0.0	100.0	63.1	78	80.0	78
Central mountain	42.5	28.0	19.5	4.6	48.0	0.0	100.0	50.9	72	73.1	72
Western mountain	32.6	27.6	15.5	8.2	48.7	0.0	100.0	59.2	155	68.4	155
Eastern hill	39.3	26.1	20.4	4.8	48.6	0.0	100.0	53.3	331	78.0	331
Central hill	40.8	22.1	13.1	2.9	61.4	0.4	100.0	39.7	403	78.5	403
Western hill	39.6	26.4	16.1	5.4	51.2	0.8	100.0	48.2	488	79.3	488
Mid-western hill	42.0	32.1	13.2	3.3	51.4	0.0	100.0	57.4	275	65.4	274
Far-western hill	51.2	13.6	18.3	4.6	63.5	0.0	100.0	69.7	171	41.6	171
Eastern terai	44.2	11.1	20.7	4.5	63.3	0.4	100.0	64.9	589	77.5	589
Central terai	24.1	23.6	26.4	5.6	44.3	0.0	100.0	42.1	818	77.1	815
Western terai	50.5	12.6	17.5	4.3	65.2	0.4	100.0	63.0	330	90.9	326
Mid-western terai	42.3	16.7	21.3	3.0	58.9	0.0	100.0	68.4	238	61.5	236
Far-western terai	66.3	4.3	7.6	4.3	83.8	0.0	100.0	81.8	200	62.4	200
Education											
No education	27.8	31.0	23.8	5.2	39.8	0.2	100.0	44.4	1,822	62.5	1,815
Primary	41.0	21.2	21.7	4.5	52.4	0.2	100.0	56.4	835	75.7	832
Some secondary	49.8	10.1	13.0	4.5	72.2	0.1	100.0	67.7	866	85.6	866
SLC and above	62.3	2.8	8.6	3.8	84.3	0.4	100.0	67.2	627	92.6	626
Wealth quintile											
Lowest	29.1	38.2	19.1	5.1	37.3	0.4	100.0	43.8	979	54.6	976
Second	36.6	22.2	22.0	4.4	51.4	0.0	100.0	55.8	899	66.9	897
Middle	38.7	17.8	22.8	5.7	53.6	0.1	100.0	58.9	873	76.5	871
Fourth	48.7	11.4	15.9	5.1	67.5	0.0	100.0	61.7	748	87.6	746
Highest	54.5	5.2	12.2	2.6	79.4	0.6	100.0	58.7	649	97.4	649
Total	40.3	20.4	18.8	4.7	55.8	0.2	100.0	55.1	4,148	74.5	4,139

[1] In the first two months after delivery
[2] Excludes women in households where salt was not tested
[3] Salt with 15 ppm or more iodine
SLC = School Leaving Certificate

Overall, only 38 percent of pregnant women took iron tablets for 180 days or more as recommended (data not shown separately). However, this is an improvement over 2006, when only 7 percent of women took the recommended dose (MOHP, New ERA, and Macro International Inc., 2007). Forty-one percent of women took iron tablets after childbirth, and one in two women took them for 45 days or more (data not shown separately).

Helminth (intestinal parasites) infections are one of the factors contributing to anemia among pregnant women. Deworming during pregnancy is a cost-effective intervention against intestinal worms that allows better absorption of nutrients and iron, thus reducing the prevalence of anemia. In Nepal, the Ministry of Health and Population has approved and implemented a policy to provide deworming medication (MOHP, 2004b).

Table 11.12 shows that 55 percent of women took deworming medication during their last pregnancy. Rural women are more likely to take deworming medication (56 percent) than urban women (50 percent). Women in the hill zone are less likely to take deworming tablets (51 percent) than women in the terai and mountain zone (58 percent). At the regional level, women in the Far-western region are most likely to take deworming medication (73 percent), while women in the Central region least likely (42 percent). There is a strong association between women's education and wealth status and their intake of deworming medication. The proportion of women taking deworming medication is higher among those with some secondary education (68 percent) than among those with no education (44 percent). The proportion of pregnant women taking deworming tablets steadily increases from the lowest to the fourth wealth quintile (44 percent to 62 percent) before decreasing slightly among women in the highest quintile (59 percent).

Iodine deficiency has adverse effects on all population groups, but women of reproductive age are often the most affected. As mentioned, iodine deficiency is related to adverse pregnancy outcomes such as abortion, fetal brain damage and congenital malformation, stillbirth, and perinatal death. As a result, use of iodized salt by women of reproductive age is emphasized.

Table 11.12 shows that three in four women with a child born in the five years preceding the survey live in households with adequately iodized salt. The Western region has the highest proportion of women living in households with adequately iodized salt (84 percent), while the Far-western region has the lowest (54 percent). At the subregional level, women in the Western terai subregion are most likely to live in households using adequately iodized salt (91 percent), while women in the Far-western hill subregion are least likely to live in such households (42 percent). The proportion of women living in households using adequately iodized salt is positively related to educational level and wealth status.

HIV AND AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR

12

Key Findings:

- Eighty-six percent of women and 97 percent of men age 15-49 have heard of AIDS.
- Comprehensive knowledge of AIDS is not widespread among either women (21 percent) or men (30 percent).
- Only about one in four women (27 percent) and men (29 percent) know of ways to prevent mother-to-child transmission of HIV.
- Overall, half of women and men age 15-49 express accepting attitudes toward people living with AIDS.
- Thirteen percent of sexually active women and 3 percent of sexually active men age 15-49 reported having had a sexually transmitted infection (STI) and/or STI symptoms in the 12 months prior to the survey.
- One-quarter of female and one-third of male youths age 15-24 have comprehensive knowledge of AIDS.

12.1 INTRODUCTION

According to the 2010 UNAIDS report on the global AIDS epidemic, an estimated 64,000 adults and children in Nepal were living with HIV by the end of 2009 (up from 60,000 in 2001), of whom 20,000 were women age 15 and older (NCASC, 2010a). In addition, an estimated 4,800 people were newly infected with HIV in 2009, and there were 4,700 deaths due to AIDS in that year, up from 4,000 in 2001. Since 1988, when the first case of AIDS was detected in Nepal, the HIV situation in the country has evolved from a low prevalence of cases to an epidemic concentrated among several key affected populations: injecting drug users, female sex workers (FSWs) and their clients, and men who have sex with men (MSM). As in other developing countries, transmission of HIV in Nepal is driven by factors such as poverty, low literacy levels, low levels of male and female condom use, cultural and religious factors, and stigma and discrimination.

Nepal's National HIV Strategic Information Plan is based on the second generation surveillance approach. As part of that plan, the National Centre for AIDS and STD Control (NCASC) within the Department of Health has been conducting Integrated Bio-behavioral and Surveillance Surveys at planned intervals since 2002 among at-risk groups. The survey results show that HIV/AIDS is concentrated among the key affected populations mentioned above to varying degrees and that commercial sex, sharing of injecting needles, and migration to India are the primary risk factors. In 2009, estimated HIV prevalence was highest among injecting drug users (9 percent), followed by MSM (3 percent), FSWs (2 percent), and migrants (1 percent) (NCASC, 2010a). Additionally, the NCASC reports that HIV infections are more common among men than women, as well as in urban areas and the Far-western region of the country, where migrant labor is more widespread.

Despite the challenges involved in scaling up and sustaining HIV programs at a high level, Nepal has made progress in several areas. The NCASC is the main government agency responsible for implementing prevention programs and providing technical guidance in the HIV and AIDS response. Many new initiatives have been undertaken since the development of the first AIDS policy. In 1995, a national HIV/AIDS policy was endorsed, with 12 key policy statements and supportive structures including the National AIDS Coordination Committee and the District AIDS Coordination Committee, to guide and coordinate the response at the central and district levels. In 2002, the National AIDS Council (NAC), chaired by the prime minister, was established to raise the profile of HIV/AIDS in the country. The NAC was intended to set overall policy, lead high-level advocacy, and provide overall guidance and direction to the national HIV/AIDS program (Ministry of Health and Population [MOHP], 2011a).

The first five-year national HIV/AIDS strategy, developed in 2002, focused on prevention, care, and support for the most-at-risk populations. The second national HIV and AIDS strategy (2006-2011) has focused on lowering the prevalence of HIV among these populations, reducing the vulnerability of young people, and providing quality treatment and care to infected as well as affected people (MOHP, 2011a). The second national policy on HIV and sexually transmitted infections (STIs) was developed recently with the vision of reducing the HIV infection rate and establishing an HIV and AIDS- and STI-free society (MOHP, 2010c). Based on this policy, the 2011-2015 HIV/AIDS strategy is currently being updated and finalized. The three-year interim plan identifies managing the HIV epidemic as a high priority in the health sector. The plan focuses on the need for prevention programs within an overall broader program that addresses the need for treatment, care, and support of people living with HIV/AIDS. The government is also committed to various global initiatives such as the UNGASS Declaration, the Millennium Development Goals, the universal access initiative, and the "three ones" principles. The national HIV/AIDS strategy (2006-2011) aims at achieving all HIV and AIDS commitments and targets included within these initiatives (MOHP, 2011a).

The 2011 NDHS included a series of questions on knowledge of HIV/AIDS, attitudes toward AIDS, and related behavior. All women and men age 15-49 were first asked whether they had ever heard of AIDS. Those who had heard of AIDS were asked about their knowledge of HIV transmission and prevention. Respondents were also asked whether they had used condoms to prevent HIV and about their perception of the precautions a person can take to avoid becoming infected with HIV. Additional questions dealt with common local misconceptions regarding the mode of transmission of HIV. This chapter presents current levels of HIV/AIDS knowledge, attitudes, and related behaviors in the general adult population. The chapter also focuses on HIV/AIDS knowledge and patterns of sexual activity among youth, as young people are the main target of many HIV prevention efforts.

12.2 HIV AND AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

12.2.1 Knowledge of AIDS

Table 12.1 shows that 86 percent of women and 97 percent of men age 15-49 have heard of AIDS. There are notable differences in awareness among women by background characteristics. Knowledge of AIDS declines with age, being higher among women younger than age 40 than among women age 40-49. Never-married women are more likely to have heard of AIDS than married women. Knowledge of AIDS among women is higher in the hill zone than in the terai and mountain zone. Knowledge is also higher among women in the Far-western development region than among women in the other four development regions. Knowledge of AIDS is universal among women with a School Leaving Certificate (SLC) or higher level of education; however, only slightly more than 70 percent of women with no education have heard of AIDS. Similarly, awareness is lowest among women living in the poorest households and highest among women living in the wealthiest households. There is little variation in AIDS awareness among men because of the very high percentage of men who have heard of AIDS.

Over the past five years, the percentage of women age 15-49 who have heard of AIDS has increased by 19 percent. Knowledge among men in the same age group has increased as well (by 6 percent), but not as much as among women. The increase in the percentage of women and men who have heard of AIDS can be attributed to the intensive HIV and AIDS prevention programs administered through nongovernmental organizations (NGOs), international NGOs, and the private and public sectors in the past decade. The NCASC has focused on awareness programs through government health facilities using mass media (radio, television, and print media), as well as through female community health volunteers across the 75 districts of the country.

Table 12.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Nepal 2011

Background characteristic	Women		Men	
	Has heard of AIDS	Number of women	Has heard of AIDS	Number of men
Age				
15-24	89.0	5,050	98.1	1,663
15-19	88.7	2,753	97.0	978
20-24	89.3	2,297	99.7	685
25-29	86.8	2,101	98.0	581
30-39	85.9	3,291	96.4	1,041
40-49	80.6	2,232	94.1	836
Marital status				
Never married	91.7	2,708	97.8	1,433
Ever had sex	*	18	99.4	352
Never had sex	91.7	2,691	97.3	1,081
Married	85.0	9,608	96.4	2,626
Divorced/separated/widowed	81.8	358	(92.3)	62
Residence				
Urban	94.7	1,819	99.1	717
Rural	85.0	10,855	96.4	3,404
Ecological zone				
Mountain	85.9	805	97.0	245
Hill	93.9	5,090	97.4	1,658
Terai	80.7	6,779	96.4	2,218
Development region				
Eastern	91.5	3,057	98.9	996
Central	78.7	4,236	95.0	1,448
Western	90.2	2,660	98.3	798
Mid-western	84.9	1,478	94.1	493
Far-western	93.2	1,242	99.1	385
Subregion				
Eastern mountain	89.5	229	98.5	66
Central mountain	89.9	258	95.8	69
Western mountain	80.2	319	96.8	110
Eastern hill	93.6	956	98.1	293
Central hill	95.6	1,563	97.8	616
Western hill	93.5	1,513	97.2	440
Mid-western hill	90.2	649	94.4	189
Far-western hill	96.1	409	99.5	120
Eastern terai	90.7	1,873	99.3	638
Central terai	66.6	2,415	92.7	763
Western terai	85.8	1,147	99.6	358
Mid-western terai	84.1	668	93.9	242
Far-western terai	91.3	676	98.6	217
Education				
No education	71.3	5,045	84.8	567
Primary	89.8	2,209	95.3	814
Some secondary	98.3	3,088	99.6	1,437
SLC and above	99.9	2,331	100.0	1,303
Wealth quintile				
Lowest	77.9	2,120	90.8	610
Second	79.1	2,393	94.2	695
Middle	82.6	2,600	97.5	830
Fourth	91.6	2,722	99.3	920
Highest	97.2	2,839	99.4	1,066
Total 15-49	86.3	12,674	96.8	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

12.2.2 Knowledge of HIV Prevention Methods

HIV is mainly transmitted through heterosexual contact. Nepal's national HIV prevention program has sought to reduce sexual transmission of the virus by promoting HIV prevention programs that focus their messages and efforts on important aspects of behavior. Most HIV/AIDS programs that target the general population promote being faithful to a partner and condom use as the primary ways of avoiding HIV infection among sexually active men and women, who make up the majority of all adults in virtually every population. To ascertain whether programs have effectively communicated these messages, respondents were asked specific questions about whether it is possible to reduce the chances of getting the AIDS virus by having just one faithful uninfected sexual partner and using a condom during every sexual encounter.

Table 12.2 shows that knowledge of HIV prevention methods is high in Nepal. Seventy-four percent of women and 89 percent of men know that using condoms every time they have sexual intercourse prevents the spread of HIV. Seventy-nine percent of women and 89 percent of men know that limiting sexual intercourse to one uninfected partner who has no other partners can reduce the chances of contracting HIV. Seventy-one percent of women and 84 percent of men know that both using condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV infection.

Table 12.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Nepal 2011

	Women				Men			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[2]	Number of men
Age								
15-24	78.9	83.6	76.6	5,050	91.7	91.5	87.0	1,663
15-19	78.2	83.7	76.0	2,753	90.1	91.3	85.9	978
20-24	79.8	83.4	77.2	2,297	94.0	91.7	88.5	685
25-29	76.3	80.3	73.4	2,101	89.9	92.0	85.6	581
30-39	74.0	77.7	70.3	3,291	88.7	87.2	83.7	1,041
40-49	62.0	68.0	57.5	2,232	85.1	85.0	79.0	836
Marital status								
Never married	82.6	87.4	80.8	2,708	91.5	91.6	87.3	1,433
Ever had sex	*	*	*	18	94.0	92.9	88.6	352
Never had sex	82.5	87.3	80.7	2,691	90.7	91.2	86.9	1,081
Married	72.2	76.7	68.7	9,608	88.7	88.4	83.4	2,626
Divorced/separated/widowed	64.6	70.2	59.4	358	(65.4)	(65.4)	(55.5)	62
Residence								
Urban	84.8	88.0	81.5	1,819	89.9	91.1	84.5	717
Rural	72.5	77.2	69.3	10,855	89.3	88.8	84.3	3,404
Ecological zone								
Mountain	72.1	78.5	68.8	805	90.8	93.6	88.4	245
Hill	80.9	85.7	77.3	5,090	91.4	89.9	85.6	1,658
Terai	69.5	73.6	66.7	6,779	87.7	88.1	83.0	2,218
Development region								
Eastern	77.6	83.7	73.7	3,057	91.2	91.7	86.4	996
Central	66.0	69.3	62.6	4,236	87.1	87.0	82.0	1,448
Western	79.4	83.7	76.9	2,660	92.6	89.1	86.2	798
Mid-western	74.5	78.9	72.5	1,478	85.7	86.2	81.5	493
Far-western	82.5	88.1	79.3	1,242	91.1	94.5	87.6	385
Subregion								
Eastern mountain	78.8	85.4	76.9	229	89.8	90.5	84.6	66
Central mountain	75.0	82.1	72.5	258	90.3	95.2	89.7	69
Western mountain	64.9	70.7	60.1	319	91.7	94.5	89.9	110
Eastern hill	80.1	87.8	77.1	956	91.0	95.0	87.9	293
Central hill	82.3	85.6	77.5	1,563	91.0	87.5	83.4	616
Western hill	80.7	84.5	77.3	1,513	91.5	87.3	84.1	440
Mid-western hill	76.3	81.7	73.4	649	89.9	91.0	86.9	189
Far-western hill	85.8	91.7	82.8	409	96.5	97.5	94.5	120
Eastern terai	76.2	81.4	71.5	1,873	91.4	90.3	86.0	638
Central terai	54.6	57.4	52.0	2,415	83.7	85.8	80.2	763
Western terai	77.5	82.6	76.2	1,147	94.0	91.4	88.7	358
Mid-western terai	78.0	80.9	77.0	668	81.8	81.1	76.0	242
Far-western terai	81.6	87.3	79.2	676	86.9	92.1	82.2	217
Education								
No education	54.4	59.8	50.1	5,045	70.3	71.3	63.4	567
Primary	77.8	80.7	73.5	2,209	85.1	81.8	76.2	814
Some secondary	89.3	94.4	87.2	3,088	92.9	93.9	89.0	1,437
SLC and above	93.9	97.4	92.6	2,331	96.4	96.4	93.4	1,303
Wealth quintile								
Lowest	59.7	65.8	55.6	2,120	80.0	79.5	74.0	610
Second	65.9	71.1	62.7	2,393	85.8	85.3	79.7	695
Middle	70.7	74.7	67.2	2,600	90.3	91.7	86.6	830
Fourth	81.2	85.0	77.9	2,722	91.6	90.3	85.8	920
Highest	88.7	92.6	86.6	2,839	94.4	94.1	90.3	1,066
Total 15-49	74.2	78.8	71.1	12,674	89.4	89.2	84.3	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners

Knowledge of HIV prevention methods is higher among young women (age 15-24) than among older women. Also, women who have never been married and who have never had sex are more likely to know of HIV prevention methods (81 percent) than married women (69 percent) and women who are divorced, separated, and widowed (59 percent). Knowledge of HIV prevention methods is higher among women in urban than rural areas (82 percent and 69 percent, respectively). Seventy-seven percent of women living in the hill zone know that both using condoms and being faithful reduce the risk of HIV transmission, compared with 67 percent of women in the terai and 69 percent of women in the mountain zone. Knowledge of HIV prevention methods increases with level of education and wealth quintile.

A similar pattern of differences by background characteristics is seen among men, although the differences are less pronounced. In contrast to women, however, knowledge of prevention methods is higher among men in the mountain zone than among men in the hill and terai areas. This result was different than in 2006, when men in the mountain zone were less aware of prevention methods (67 percent in 2006 versus 88 percent in 2011). In comparison to findings from the 2006 NDHS, knowledge of HIV prevention methods has increased among women in all regions. Women and men with no education and those from the poorest households are least likely to be aware of HIV prevention methods.

12.2.3 Comprehensive Knowledge of HIV and AIDS Transmission

As part of the effort to assess HIV and AIDS knowledge, the 2011 NDHS collected information on common misconceptions about HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have HIV and whether they believe HIV is transmitted through mosquito bites, touching someone who has AIDS, or sharing food with a person who has HIV or AIDS. Comprehensive knowledge is defined as knowing that consistent condom use and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about HIV transmission in Nepal: that HIV can be transmitted by mosquito bites and that HIV can be transmitted by sharing food with a person who has AIDS.

Tables 12.3.1 and 12.3.2 show that many Nepalese adults lack accurate knowledge about the ways in which the AIDS virus is transmitted. Seventy-four percent of women know that a healthy-looking person can have HIV, compared with 85 percent of men. Only 28 percent of women and 39 percent of men know that HIV cannot be transmitted by mosquitoes. The fact that a majority of men and women still have this misconception indicates that the government should focus on awareness programs to reduce these misconceptions. Fifty-three percent of women and 67 percent of men believe that HIV cannot be transmitted by sharing food with a person who has AIDS, and 69 percent of women and 81 percent of men believe that HIV cannot be transmitted by touching a person who has AIDS. Only 21 percent of women and 30 percent of men have comprehensive knowledge about AIDS. There has not been much change in comprehensive knowledge of HIV among women over the past five years, and there has been a decline in knowledge among men. The results of the 2006 NDHS showed that 20 percent of women and 36 percent of men age 15-49 had comprehensive knowledge of AIDS prevention and transmission, indicating that the government needs to do much more to increase awareness and knowledge of HIV and AIDS among the public.

Table 12.3.1 Comprehensive knowledge about AIDS: Women

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission and prevention of AIDS virus, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Nepal 2011

Background characteristic	Percentage of respondents who say that: A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	A person cannot become infected by sharing food with a person who has the AIDS virus	The AIDS virus cannot be transmitted by touching someone who has AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of women
Age							
15-24	77.8	33.4	61.7	75.8	28.0	25.8	5,050
15-19	77.9	32.1	61.8	76.7	27.2	25.0	2,753
20-24	77.6	34.9	61.5	74.8	28.9	26.7	2,297
25-29	75.0	30.5	56.6	70.5	25.2	23.9	2,101
30-39	73.3	25.0	49.2	66.9	20.2	18.5	3,291
40-49	64.8	15.4	38.2	56.9	10.2	9.2	2,232
Marital status							
Never married	81.0	40.3	70.4	82.8	34.7	32.4	2,708
Ever had sex	*	*	*	*	*	*	18
Never had sex	80.9	40.5	70.6	82.8	34.8	32.5	2,691
Married	72.1	24.3	49.0	65.8	19.1	17.6	9,608
Divorced/separated/widowed	69.0	18.0	43.0	59.8	15.6	13.8	358
Residence							
Urban	84.1	43.1	72.1	84.6	38.0	34.9	1,819
Rural	72.2	25.0	50.3	66.7	19.7	18.3	10,855
Ecological zone							
Mountain	74.9	17.8	35.1	54.9	10.9	10.0	805
Hill	80.7	28.8	58.1	75.0	23.7	22.3	5,090
Terai	68.6	27.8	52.1	66.7	22.7	20.7	6,779
Development region							
Eastern	81.1	29.6	54.5	74.8	22.9	20.3	3,057
Central	65.8	26.6	49.8	64.0	21.8	20.3	4,236
Western	76.8	29.4	61.2	74.9	25.3	23.6	2,660
Mid-western	73.2	20.9	47.1	61.1	17.3	16.3	1,478
Far-western	78.3	29.9	54.1	71.5	22.6	21.6	1,242
Subregion							
Eastern mountain	82.6	19.9	43.6	68.3	14.5	13.2	229
Central mountain	76.5	20.0	39.9	54.9	12.6	12.0	258
Western mountain	67.9	14.5	25.2	45.1	6.9	6.1	319
Eastern hill	81.9	23.7	48.6	71.6	17.1	15.7	956
Central hill	84.0	39.3	68.2	83.2	34.5	32.2	1,563
Western hill	74.5	24.9	59.4	73.0	20.2	19.6	1,513
Mid-western hill	81.2	18.9	49.9	63.9	16.0	14.6	649
Far-western hill	87.9	30.5	50.4	77.1	22.5	21.7	409
Eastern terai	80.6	33.8	58.8	77.3	26.8	23.4	1,873
Central terai	52.8	19.1	39.0	52.5	14.6	13.6	2,415
Western terai	79.8	35.3	63.7	77.4	32.0	28.8	1,147
Mid-western terai	69.3	25.8	51.3	65.3	21.7	20.8	668
Far-western terai	72.3	31.6	61.6	71.1	25.9	24.8	676
Education							
No education	55.0	10.4	26.5	44.9	5.7	4.9	5,045
Primary	74.1	18.1	48.3	69.0	12.6	11.5	2,209
Some secondary	88.1	37.1	73.0	88.3	30.7	28.3	3,088
SLC and above	95.7	61.1	90.8	97.2	56.6	53.4	2,331
Wealth quintile							
Lowest	61.1	13.1	27.6	47.6	6.7	5.8	2,120
Second	65.8	15.8	39.1	57.6	12.0	11.0	2,393
Middle	67.8	21.4	47.0	64.9	15.3	14.2	2,600
Fourth	81.2	33.0	64.4	78.7	28.1	25.9	2,722
Highest	88.8	48.7	80.3	90.3	43.7	40.8	2,839
Total 15-49	73.9	27.6	53.4	69.3	22.4	20.7	12,674

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] Two most common local misconceptions: AIDS can be transmitted by mosquito bites and a person can become infected by sharing food with someone who has AIDS.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission and prevention of the AIDS virus.

Table 12.3.2 Comprehensive knowledge about AIDS: Men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission and prevention of AIDS virus, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Nepal 2011

Background characteristic	Percentage of respondents who say that: A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	A person cannot become infected by sharing food with a person who has the AIDS virus	The AIDS virus cannot be transmitted by touching someone who has AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of men
Age							
15-24	85.5	44.2	72.8	85.9	37.3	33.9	1,663
15-19	82.9	43.6	70.3	84.5	36.2	32.7	978
20-24	89.3	44.9	76.3	87.9	38.9	35.6	685
25-29	87.3	37.1	70.7	83.7	33.1	29.8	581
30-39	86.1	36.9	65.1	78.9	31.3	28.7	1,041
40-49	83.1	30.6	57.3	73.1	24.6	21.7	836
Marital status							
Never married	85.7	47.6	75.1	87.8	40.9	37.1	1,433
Ever had sex	89.8	49.3	78.0	90.6	42.6	38.3	352
Never had sex	84.4	47.0	74.1	86.9	40.4	36.7	1,081
Married	85.5	33.7	63.4	77.9	28.1	25.5	2,626
Divorced/separated/widowed	(79.0)	(37.2)	(59.4)	(71.4)	(30.4)	(24.4)	62
Residence							
Urban	87.7	51.8	80.8	90.3	45.8	40.5	717
Rural	85.0	35.8	64.6	79.3	29.9	27.2	3,404
Ecological zone							
Mountain	88.7	25.9	58.5	76.2	21.5	19.7	245
Hill	87.7	40.7	72.8	86.1	36.3	32.6	1,658
Terai	83.4	38.4	64.4	78.1	31.1	28.3	2,218
Development region							
Eastern	87.6	35.5	67.6	82.1	29.4	26.8	996
Central	82.6	38.3	64.2	78.9	31.9	28.7	1,448
Western	85.5	43.5	73.2	87.5	37.4	33.4	798
Mid-western	83.7	35.8	63.5	71.2	30.7	28.5	493
Far-western	92.6	41.0	72.1	87.5	36.6	32.9	385
Subregion							
Eastern mountain	89.0	30.3	58.2	74.1	25.3	21.4	66
Central mountain	83.4	18.5	55.6	81.3	14.2	13.0	69
Western mountain	91.7	28.0	60.6	74.3	23.9	22.9	110
Eastern hill	87.9	28.0	63.3	83.9	23.1	21.0	293
Central hill	88.2	47.5	79.2	89.9	43.2	38.4	616
Western hill	86.7	40.6	73.1	86.7	36.1	31.1	440
Mid-western hill	84.6	39.3	69.1	75.5	36.0	35.3	189
Far-western hill	92.9	38.8	67.6	86.9	33.8	32.8	120
Eastern terai	87.4	39.5	70.5	82.2	32.6	30.0	638
Central terai	78.0	32.6	52.9	69.8	24.3	22.3	763
Western terai	84.0	47.2	73.3	88.5	38.9	36.3	358
Mid-western terai	81.9	35.9	60.0	69.2	29.1	25.3	242
Far-western terai	91.5	44.1	77.1	88.3	40.2	34.5	217
Education							
No education	68.1	9.9	27.3	47.4	6.0	4.4	567
Primary	81.5	19.0	50.0	70.1	13.6	11.2	814
Some secondary	87.5	39.4	72.6	86.8	31.7	28.5	1,437
SLC and above	93.1	62.4	90.0	96.7	57.2	53.1	1,303
Wealth quintile							
Lowest	77.7	18.8	46.1	64.9	15.1	12.8	610
Second	80.9	24.5	53.5	73.3	18.7	17.2	695
Middle	84.0	32.3	61.7	77.6	24.6	22.9	830
Fourth	87.5	44.5	75.9	86.4	39.8	35.0	920
Highest	92.2	58.8	85.8	94.1	51.8	47.6	1,066
Total 15-49	85.4	38.6	67.4	81.2	32.6	29.5	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate
[1] Two most common local misconceptions: AIDS can be transmitted by mosquito bites and a person can become infected by sharing food with someone who has AIDS.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission and prevention of the AIDS virus.

Comprehensive knowledge of AIDS is lower among older men and women (age 40-49), married respondents, and rural residents than among their counterparts in the other categories. It is also lower among residents of the mountain zone, men in the Eastern region and women in the Mid-western region, men in the Central mountain subregion and women in the Western mountain subregion, women and men with no education, and those living in the poorest households.

12.3 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Increasing knowledge about prevention of mother-to-child transmission (PMTCT) of HIV and using antiretroviral medication before delivery to reduce transmission is critical. In Nepal, the PMTCT program was established in 2005, and it covers 21 sites (NCASC, 2010b). To assess PMTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to a child through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

Table 12.4 shows that 61 percent of women and 57 percent of men know that HIV can be transmitted through breastfeeding. Thirty-five percent of women and 44 percent of men know that the risk of mother-to-child transmission can be reduced if the mother takes special drugs during pregnancy. More than one in four women (27 percent) and men (29 percent) know of both ways to prevent mother-to-child transmission of HIV. Knowledge of PMTCT is higher among younger (age 15-24) than older (age 40-49) women and men and higher among married than formerly married respondents. There is little difference in women's knowledge of PMTCT by urban-rural residence; however, men in rural areas are much more likely to have knowledge of PMTCT (31 percent) than their counterparts in urban areas (21 percent). Respondents in the Far-western development region and the Far-western terai subregion are much more aware of PMTCT than their counterparts in other areas. Not surprisingly, women and men with no education and those from the poorest households are least likely to be aware of PMTCT. However, women and men with SLC and higher levels of education are also less likely to be aware about PMTCT.

Table 12.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Nepal 2011

	Women				Men			
	Percentage who know that:				Percentage who know that:			
Background characteristic	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
Age								
15-24	61.5	37.8	28.0	5,050	56.9	49.2	31.6	1,663
15-19	61.6	39.0	29.1	2,753	58.8	50.1	34.7	978
20-24	61.3	36.4	26.8	2,297	54.2	48.0	27.3	685
25-29	59.6	34.7	25.7	2,101	54.3	41.2	27.8	581
30-39	60.8	33.2	26.2	3,291	55.9	40.9	26.9	1,041
40-49	62.1	29.6	24.7	2,232	60.6	38.0	28.0	836
Marital status								
Never married	60.4	39.8	29.0	2,708	54.3	48.5	30.9	1,433
Ever had sex	*	*	*	18	56.0	49.9	33.3	352
Never had sex	60.4	39.9	29.0	2,691	53.7	48.0	30.1	1,081
Married	61.3	33.4	26.0	9,608	58.7	41.4	28.6	2,626
Divorced/separated/widowed	60.9	29.4	24.5	358	(47.4)	(31.2)	(12.7)	62
Pregnancy status								
Pregnant	60.0	34.4	27.3	621	na	na	na	na
Not pregnant or not sure	61.2	34.7	26.5	12,053	na	na	na	na
Residence								
Urban	57.1	36.5	25.1	1,819	48.3	39.0	20.9	717
Rural	61.8	34.4	26.8	10,855	58.8	44.7	30.9	3,404
Ecological zone								
Mountain	69.8	33.2	29.2	805	70.3	37.8	30.1	245
Hill	65.3	34.6	26.4	5,090	55.0	41.7	26.4	1,658
Terai	56.9	34.9	26.4	6,779	57.0	45.9	31.1	2,218
Development region								
Eastern	68.1	40.9	32.3	3,057	61.7	55.3	38.1	996
Central	54.2	28.3	21.2	4,236	53.5	39.0	25.8	1,448
Western	56.5	32.8	22.8	2,660	52.3	34.4	19.4	798
Mid-western	62.9	35.3	28.6	1,478	58.2	34.6	24.8	493
Far-western	75.2	44.5	36.3	1,242	66.2	62.5	44.4	385

Continued...

Table 12.4—*Continued*

Background characteristic	Women: Percentage who knows that: HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	Men: Percentage who knows that: HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
Subregion								
Eastern mountain	78.0	38.3	34.2	229	68.5	41.8	32.9	66
Central mountain	70.6	29.8	26.8	258	62.6	37.9	28.1	69
Western mountain	63.3	32.2	27.6	319	76.1	35.3	29.8	110
Eastern hill	74.9	38.9	32.5	956	62.5	52.8	37.0	293
Central hill	61.1	35.1	24.9	1,563	45.2	36.1	18.1	616
Western hill	57.6	26.5	18.6	1,513	54.3	36.1	21.5	440
Mid-western hill	70.4	40.0	32.9	649	64.1	45.8	36.6	189
Far-western hill	80.1	43.6	37.1	409	75.7	57.8	45.2	120
Eastern terai	63.5	42.1	32.0	1,873	60.6	57.9	39.2	638
Central terai	48.0	23.6	18.3	2,415	59.5	41.5	31.8	763
Western terai	54.9	41.2	28.4	1,147	49.8	32.3	16.9	358
Mid-western terai	57.2	32.2	25.0	668	49.4	26.5	14.7	242
Far-western terai	73.3	47.2	37.5	676	58.4	70.0	46.7	217
Education								
No education	57.6	24.8	22.0	5,045	57.3	28.8	24.3	567
Primary	68.9	37.6	31.4	2,209	63.0	38.2	29.1	814
Some secondary	66.2	42.7	30.8	3,088	61.4	50.8	34.8	1,437
SLC and above	54.5	42.6	26.2	2,331	48.3	45.9	25.1	1,303
Wealth quintile								
Lowest	63.4	25.9	22.9	2,120	60.8	34.3	27.2	610
Second	62.5	29.8	25.1	2,393	61.3	43.8	33.6	695
Middle	61.2	32.6	26.5	2,600	63.0	46.1	32.0	830
Fourth	63.9	41.5	30.3	2,722	56.1	48.1	30.8	920
Highest	55.4	40.7	27.1	2,839	48.2	43.5	23.7	1,066
Total 15-49	61.1	34.7	26.6	12,674	57.0	43.7	29.2	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
na = Not applicable

12.4 ACCEPTING ATTITUDES TOWARD THOSE LIVING WITH HIV AND AIDS

The HIV and AIDS epidemic has generated fear, anxiety, and prejudice against people living with HIV and AIDS. There is widespread stigma and discrimination against people who are HIV positive. These societal attitudes can adversely affect both people's willingness to be tested for HIV and their initiation of and adherence to antiretroviral therapy. Reducing stigma and discrimination is therefore an important factor in the prevention, management, and control of the HIV epidemic.

In the 2011 NDHS, women and men who had heard of AIDS were asked a number of questions to assess the level of stigma associated with HIV and AIDS. Tables 12.5.1 and 12.5.2 present results for women and men age 15-49, respectively. Similar proportions of women and men reported that they would be willing to take care of a family member with HIV at home (91 percent and 92 percent, respectively). However, men were slightly more likely than women to say that they would buy fresh vegetables from a shopkeeper who has HIV (75 percent versus 69 percent) and to think that a female teacher with HIV should be allowed to continue teaching (82 percent versus 79 percent). Women were much more likely than men not to want to keep secret a family member's infection with HIV (73 percent versus 65 percent).

Overall, half of women and men are likely to express accepting attitudes regarding all four situations. Accepting attitudes are generally more common among respondents in urban areas than among those in rural areas and increase with education and wealth. Women in the terai are more likely to express accepting attitudes toward people living with HIV or AIDS (54 percent) than those in the other ecological zones. Among men, those in the hill region are more likely to express accepting attitudes (52 percent) than those in the mountain and terai regions (45 percent each).

Table 12.5.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Nepal 2011

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-24	91.9	76.4	84.7	72.5	54.4	4,493
15-19	92.1	76.1	85.1	72.9	54.4	2,442
20-24	91.6	76.7	84.2	72.1	54.4	2,051
25-29	91.1	71.7	81.6	73.3	50.3	1,825
30-39	90.4	65.3	75.7	73.5	47.2	2,829
40-49	87.7	55.6	68.4	75.1	40.5	1,798
Marital status						
Never married	93.0	80.9	88.7	74.3	58.9	2,484
Ever had sex	*	*	*	*	*	18
Never had sex	93.0	81.0	88.8	74.5	59.2	2,467
Married	90.1	66.1	76.5	73.0	47.0	8,167
Divorced/separated/widowed	86.8	61.6	72.7	73.0	42.4	293
Residence						
Urban	93.4	81.6	89.3	68.9	54.6	1,722
Rural	90.2	67.0	77.3	74.1	48.6	9,222
Ecological zone						
Mountain	86.4	48.6	62.3	70.2	32.7	692
Hill	88.4	66.8	77.4	73.3	47.1	4,782
Terai	93.2	74.2	82.9	73.7	53.9	5,470
Development region						
Eastern	90.6	68.6	81.3	74.6	49.6	2,798
Central	93.3	74.1	83.4	73.7	52.6	3,335
Western	89.6	70.0	77.2	75.4	52.9	2,398
Mid-western	87.1	61.7	69.9	64.8	39.7	1,255
Far-western	89.2	64.1	76.2	74.0	44.7	1,159
Subregion						
Eastern mountain	85.0	58.4	73.6	78.4	42.4	205
Central mountain	84.1	49.9	61.8	75.3	33.3	232
Western mountain	89.5	39.6	53.7	59.0	24.5	256
Eastern hill	88.7	62.6	77.0	78.6	46.2	895
Central hill	91.4	79.5	89.0	70.8	53.6	1,494
Western hill	86.2	61.1	68.9	76.4	46.3	1,413
Mid-western hill	85.3	60.3	70.4	63.6	37.1	586
Far-western hill	88.6	58.1	75.3	74.0	41.9	393
Eastern terai	92.3	73.0	84.4	72.1	52.2	1,698
Central terai	96.4	72.6	81.3	76.2	54.4	1,608
Western terai	94.4	82.8	88.9	73.9	62.3	984
Mid-western terai	88.4	68.8	74.4	67.9	46.4	562
Far-western terai	89.8	72.6	80.6	77.0	50.4	617
Education						
No education	87.3	49.5	62.5	69.9	33.1	3,595
Primary	87.8	63.1	76.7	71.7	43.5	1,984
Some secondary	92.4	78.8	86.9	77.1	58.9	3,036
SLC and above	96.1	92.9	96.9	75.1	67.9	2,329
Wealth quintile						
Lowest	83.8	47.2	60.9	68.5	31.3	1,651
Second	89.2	57.6	68.7	72.6	39.8	1,892
Middle	90.4	66.2	77.2	75.1	48.3	2,149
Fourth	92.6	76.2	86.2	76.3	56.9	2,494
Highest	94.3	86.8	92.6	72.7	61.5	2,758
Total 15-49	90.7	69.3	79.2	73.3	49.6	10,944

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

Table 12.5.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Nepal 2011

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of men who have heard of AIDS
Age						
15-24	91.6	77.8	84.1	63.7	47.5	1,632
15-19	90.6	75.8	82.5	63.2	45.5	949
20-24	93.0	80.5	86.3	64.4	50.2	683
25-29	92.1	78.0	84.5	68.0	52.4	570
30-39	91.5	73.5	80.3	64.0	47.0	1,003
40-49	92.1	69.5	77.9	67.0	44.5	787
Marital status						
Never married	92.2	80.3	85.3	65.4	50.5	1,402
Ever had sex	92.9	83.9	84.4	63.8	53.6	350
Never had sex	92.0	79.1	85.6	66.0	49.5	1,052
Married	91.4	72.5	80.4	65.1	46.2	2,532
Divorced/separated/widowed	(93.0)	(62.5)	(71.6)	(51.7)	(28.9)	57
Residence						
Urban	94.9	83.3	91.3	69.3	56.5	711
Rural	91.0	73.3	80.0	64.1	45.5	3,280
Ecological zone						
Mountain	88.7	70.4	81.5	72.3	45.0	238
Hill	93.8	78.6	85.3	70.4	51.7	1,616
Terai	90.5	73.0	79.5	60.2	44.5	2,138
Development region						
Eastern	92.8	75.0	84.8	68.4	50.0	985
Central	88.6	71.2	80.2	63.9	44.5	1,376
Western	95.2	78.8	79.2	55.6	42.3	785
Mid-western	89.9	80.4	83.4	75.2	57.3	464
Far-western	95.1	75.4	85.0	67.4	50.6	381
Subregion						
Eastern mountain	93.7	66.4	79.2	78.4	47.5	65
Central mountain	85.4	71.8	89.9	78.3	47.1	66
Western mountain	87.7	72.0	77.7	64.9	42.2	106
Eastern hill	92.7	73.6	78.8	73.7	48.8	287
Central hill	94.7	81.6	92.5	73.7	58.5	603
Western hill	93.6	81.8	83.0	62.3	45.8	428
Mid-western hill	92.0	78.4	81.4	83.2	59.2	179
Far-western hill	94.8	64.9	78.1	55.2	34.4	119
Eastern terai	92.8	76.5	88.0	65.0	50.8	633
Central terai	83.7	62.3	68.9	54.2	32.3	707
Western terai	97.1	75.1	74.7	47.5	38.0	357
Mid-western terai	89.8	83.3	86.8	70.6	59.4	227
Far-western terai	95.9	82.9	90.2	75.8	61.8	214
Education						
No education	79.9	45.6	58.3	51.9	21.6	481
Primary	87.9	61.7	74.4	60.4	36.3	776
Some secondary	93.1	77.0	83.4	68.0	49.2	1,431
SLC and above	96.9	91.9	93.6	69.3	61.8	1,303
Wealth quintile						
Lowest	88.7	61.4	71.0	62.6	33.9	554
Second	90.1	68.5	78.5	63.2	41.0	654
Middle	86.1	68.7	75.0	65.2	44.3	809
Fourth	93.3	80.2	85.3	63.7	50.8	913
Highest	97.1	86.8	92.2	68.5	58.1	1,061
Total 15-49	91.7	75.1	82.0	65.0	47.5	3,991

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

12.5 ATTITUDES TOWARD NEGOTIATING SAFER SEX

Knowledge about HIV transmission and ways to prevent it is of little use if people feel powerless to negotiate safer sex with their partners. To gauge attitudes toward safer sex, respondents in the 2011 NDHS were asked whether they think a wife is justified in refusing to have sex with her husband and in asking that he use a condom if she knows he has an infection that can be transmitted through sexual contact.

Table 12.6 shows that 90 percent of women and 74 percent of men in Nepal believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women. Ninety-three percent of women and 96 percent of men believe that if a husband has an STI, his wife is justified in asking him to use a condom.

Table 12.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), by background characteristics, Nepal 2011

	Women			Men		
	Woman is justified in:			Woman is justified in:		
Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	89.6	93.8	5,050	71.9	95.8	1,663
15-19	90.1	93.1	2,753	70.5	94.7	978
20-24	89.0	94.7	2,297	73.8	97.5	685
25-29	90.8	94.3	2,101	74.8	96.9	581
30-39	91.0	93.8	3,291	74.6	96.2	1,041
40-49	89.9	88.5	2,232	75.3	93.7	836
Marital status						
Never married	89.4	92.6	2,708	73.3	95.9	1,433
Ever had sex	*	*	18	69.6	95.5	352
Never had sex	89.6	92.6	2,691	74.5	96.0	1,081
Married	90.4	93.1	9,608	74.0	95.6	2,626
Divorced/separated/widowed	90.7	91.2	358	(68.9)	(95.0)	62
Residence						
Urban	90.2	95.2	1,819	77.0	96.9	717
Rural	90.2	92.6	10,855	73.0	95.4	3,404
Ecological zone						
Mountain	88.0	90.1	805	83.6	98.4	245
Hill	89.3	92.9	5,090	80.3	96.1	1,658
Terai	91.2	93.3	6,779	67.6	95.1	2,218
Development region						
Eastern	91.8	94.9	3,057	74.1	97.5	996
Central	91.1	91.8	4,236	70.5	93.7	1,448
Western	90.5	92.5	2,660	76.2	96.6	798
Mid-western	87.2	91.9	1,478	79.1	94.7	493
Far-western	86.3	94.2	1,242	72.2	97.8	385
Subregion						
Eastern mountain	87.2	94.0	229	87.1	99.0	66
Central mountain	91.7	91.0	258	85.6	98.8	69
Western mountain	85.6	86.6	319	80.3	97.7	110
Eastern hill	90.0	96.2	956	79.6	97.6	293
Central hill	88.6	95.0	1,563	80.9	96.1	616
Western hill	90.3	89.3	1,513	77.4	95.4	440
Mid-western hill	87.3	91.3	649	84.8	93.4	189
Far-western hill	89.4	93.5	409	82.6	99.0	120
Eastern terai	93.3	94.3	1,873	70.3	97.3	638
Central terai	92.7	89.9	2,415	60.7	91.2	763
Western terai	90.6	96.7	1,147	74.6	98.1	358
Mid-western terai	87.0	94.1	668	75.8	95.4	242
Far-western terai	85.1	96.0	676	63.1	96.6	217
Education						
No education	88.8	87.0	5,045	60.9	85.8	567
Primary	89.7	93.3	2,209	72.7	94.7	814
Some secondary	91.4	97.7	3,088	75.1	97.8	1,437
SLC and above	92.3	99.1	2,331	78.3	98.2	1,303
Wealth quintile						
Lowest	86.5	85.4	2,120	76.5	91.8	610
Second	89.4	89.6	2,393	70.1	93.9	695
Middle	90.7	93.4	2,600	69.1	95.5	830
Fourth	92.0	96.6	2,722	73.8	97.3	920
Highest	91.6	97.6	2,839	77.7	97.8	1,066
Total 15-49	90.2	92.9	12,674	73.7	95.7	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

Differences by background characteristics are small for women. However, older men, married men, men living in urban areas, men living in the mountain zone, and men living in the Mid-western region and Eastern mountain subregion are more likely than their counterparts to say that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women. Support for a wife's right to negotiate safer sex with her husband increases with education and, in general, with wealth.

12.6 MULTIPLE SEXUAL PARTNERS

Limiting the number of sexual partners and practicing protected sex are crucial in the fight against the spread of sexually transmitted infections, including HIV. Respondents to the 2011 NDHS were asked detailed questions about their sexual behavior, including the number of partners they had in the 12 months preceding the survey and condom use during their most recent sexual encounter. Results for men age 15-49 are shown in Table 12.7. Findings for women are not shown separately since a negligible percentage of women reported having multiple sexual partners.

Table 12.7 Multiple sexual partners

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Nepal 2011

	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
Age						
15-24	3.8	1,663	45.1	63	2.6	666
15-19	1.5	978	*	14	2.1	202
20-24	7.0	685	(43.2)	48	2.8	463
25-29	5.8	581	(12.7)	33	2.7	528
30-39	3.3	1,041	(21.4)	35	2.6	1,016
40-49	2.9	836	*	25	2.3	827
Marital status						
Never married	3.0	1,433	(60.2)	43	3.2	352
Married	4.0	2,626	10.4	106	2.4	2,626
Divorced/separated/widowed	(10.3)	62	*	6	(5.5)	59
Type of union						
In polygynous union	(57.4)	44	*	25	(4.0)	44
In non-polygynous union	3.1	2,583	13.6	81	2.3	2,582
Not currently in union	3.3	1,495	(60.7)	50	3.5	411
Times slept away from home in past 12 months						
None	3.3	932	(22.0)	31	2.1	654
1-2	2.9	864	(29.1)	25	2.4	605
3-4	3.6	830	(31.5)	30	2.1	606
5+	4.7	1,495	25.4	70	3.0	1,171
Time away in past 12 months						
Away for more than 1 month	5.5	896	(30.2)	49	2.6	699
Away only for less than 1 month	3.3	2,293	25.9	76	2.6	1,684
Not away	3.3	932	(22.0)	31	2.1	654
Residence						
Urban	4.3	717	33.6	31	2.1	496
Rural	3.7	3,404	24.7	125	2.6	2,540
Ecological zone						
Mountain	2.7	245	*	7	2.4	194
Hill	3.4	1,658	34.5	56	2.3	1,224
Terai	4.2	2,218	21.8	93	2.7	1,618
Development region						
Eastern	3.0	996	(35.8)	30	2.9	707
Central	4.6	1,448	(23.0)	66	2.0	1,094
Western	3.4	798	(25.7)	27	3.1	569
Mid-western	4.0	493	(22.0)	20	2.7	390
Far-western	3.3	385	*	13	2.3	278
Subregion						
Eastern mountain	2.7	66	*	2	2.2	47
Central mountain	1.2	69	*	1	1.8	54
Western mountain	3.7	110	*	4	2.9	93
Eastern hill	2.6	293	*	8	2.1	216
Central hill	4.5	616	*	27	1.9	456
Western hill	2.4	440	*	10	3.1	315
Mid-western hill	4.0	189	*	8	2.2	153
Far-western hill	2.3	120	*	3	2.6	84
Eastern terai	3.2	638	*	20	3.3	444
Central terai	5.0	763	*	38	2.1	585
Western terai	4.6	358	*	17	3.1	253
Mid-western terai	3.7	242	*	9	2.9	182
Far-western terai	4.1	217	*	9	2.1	154

Continued…

Table 12.7—*Continued*

Background characteristic	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse[1]:	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
Education						
No education	4.2	567	*	24	2.0	537
Primary	2.5	814	*	20	2.3	701
Some secondary	3.9	1,437	38.0	57	3.1	922
SLC and above	4.2	1,303	32.7	54	2.4	877
Wealth quintile						
Lowest	0.6	610	*	4	2.1	481
Second	3.7	695	(21.0)	26	2.2	519
Middle	5.1	830	(8.2)	42	2.5	640
Fourth	3.5	920	(22.5)	32	2.4	650
Highest	4.9	1,066	(47.3)	52	3.1	747
Total 15-49	3.8	4,121	26.5	155	2.5	3,037

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 12.7 presents several indicators based on information collected from men about the number of sexual partners they had during the 12-month period before the survey and over their lifetime. The first indicator is the prevalence of multiple partners. The second indicator relates to condom use during the last sexual encounter among men with two or more partners in the past 12 months. The third indicator, the mean number of sexual partners that a man has had during his lifetime, serves as a measure of lifetime exposure to elements of higher-risk sex.

Four percent of men reported having had two or more sexual partners during the 12 months prior to the survey, and 27 percent of these men reported using a condom during their last sexual intercourse. Men in urban areas who had sexual intercourse with more than one partner in the 12 months preceding the survey were more likely than men in rural areas to report using a condom during their last sexual intercourse (34 percent and 25 percent, respectively). Men had an average of 2.5 sexual partners over their lifetime, an increase from 2 sexual partners in 2006.

12.7 Payment for Sex

Paid sex is considered a special category of higher-risk sex. Male respondents in the 2011 NDHS were asked whether they had ever paid for sexual intercourse and whether they had done so in the past 12 months. About 5 percent of men had ever paid for sexual intercourse, with those living in urban areas, those in the terai and Central region, those with an SLC and higher, and those in the highest wealth quintile more often paying for sex than their counterparts in the other categories (Table 12.8). Less than 2 percent reported that they had engaged in paid sex in the past 12 months. Thirty-eight percent of men who had engaged in paid sex in the past 12 months reported that they had used a condom the last time they had paid sex (data not shown separately). Men age 20-24; never-married men; men living in urban areas, the terai, and the Central region; highly educated men; and men from the fourth and fifth wealth quintiles were more likely than their counterparts to have engaged in paid sex in the past 12 months.

Table 12.8 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, by background characteristics, Nepal 2011

Background characteristic	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men
Age			
15-24	3.3	1.7	1,663
15-19	1.0	0.4	978
20-24	6.7	3.6	685
25-29	6.7	2.4	581
30-39	6.6	1.4	1,041
40-49	3.8	0.4	836
Marital status			
Never married	3.4	2.2	1,433
Married	5.3	0.9	2,626
Divorced/separated/widowed	(11.5)	(9.9)	62
Residence			
Urban	5.3	2.0	717
Rural	4.6	1.4	3,404
Ecological zone			
Mountain	2.7	1.1	245
Hill	4.2	1.3	1,658
Terai	5.3	1.7	2,218
Development region			
Eastern	4.7	1.6	996
Central	6.0	2.1	1,448
Western	4.5	1.0	798
Mid-western	2.5	0.8	493
Far-western	3.2	0.5	385
Education			
No education	4.1	1.0	567
Primary	3.9	1.5	814
Some secondary	4.3	1.5	1,437
SLC and above	5.9	1.6	1,303
Wealth quintile			
Lowest	3.1	0.9	610
Second	2.4	1.0	695
Middle	5.3	1.3	830
Fourth	4.5	2.0	920
Highest	6.9	1.8	1,066
Total 15-49	4.7	1.5	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

12.8 TESTING FOR HIV

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce their risk and increase safe sex practices so that they can remain disease free. For those who are HIV infected, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. Testing of pregnant women is especially important to prevent mother-to-child transmission of HIV. Where migration is common, knowing one's HIV status is particularly critical in curbing the spread of the infection and empowering women to seek preventive and curative measures to protect themselves and their children.

Knowledge of HIV status benefits both the individual and the public. As a result of advances in medical science, having HIV is not necessarily fatal, and with appropriate treatment people with HIV can live much longer and lead a relatively normal life. It is important to ensure that all people diagnosed with HIV receive such treatment, and the government of Nepal is doing all it can to establish this as a priority. If diagnosis of HIV infection is maximized, patterns of infection can be better monitored and interventions better targeted. The government of Nepal is prioritizing the provision of voluntary counseling and testing services at all levels of the health system.

Women and men in Nepal age 15-49 were asked whether they know of a place where people can go to get tested for HIV. Tables 12.9.1 and 12.9.2 show that men are more likely than women to know of a place where they can go to get an HIV test (57 percent and 38 percent, respectively). Knowledge of HIV testing facilities differs by respondents' background characteristics. Men and women age 20-24 are most likely to know of a place to get tested for HIV, and those age 40-49 are least likely to be aware of an HIV testing place. Never-married respondents, particularly never-married men who are sexually active, are more aware of a place for HIV testing than their counterparts. Also, residents of urban areas and the hill zone, women in the Far-western region, and men in the Eastern region are more aware of where to go to get an HIV test than their counterparts in other areas. Knowledge of where to go for an HIV test varies positively with education and wealth quintile for both women and men.

Table 12.9.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Nepal 2011

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	41.5	4.6	0.0	95.4	100.0	4.6	3.0	5,050
15-19	38.4	2.4	0.0	97.6	100.0	2.4	1.9	2,753
20-24	45.2	7.2	0.1	92.7	100.0	7.3	4.4	2,297
25-29	41.7	8.3	0.0	91.7	100.0	8.3	4.3	2,101
30-39	37.5	5.8	0.1	94.1	100.0	5.9	3.0	3,291
40-49	27.9	2.7	0.0	97.2	100.0	2.8	1.1	2,232
Marital status								
Never married	45.3	2.3	0.0	97.7	100.0	2.3	1.5	2,708
Ever had sex	*	*	*	*	100.0	*	*	18
Never had sex	45.4	2.2	0.0	97.8	100.0	2.2	1.5	2,691
Married	36.2	5.9	0.1	94.0	100.0	6.0	3.2	9,608
Divorced/separated/widowed	34.6	8.1	0.3	91.6	100.0	8.4	4.4	358
Residence								
Urban	53.1	7.7	0.2	92.2	100.0	7.8	3.9	1,819
Rural	35.6	4.8	0.0	95.2	100.0	4.8	2.7	10,855
Ecological zone								
Mountain	36.6	4.1	0.0	95.9	100.0	4.1	2.4	805
Hill	41.1	6.2	0.0	93.8	100.0	6.2	3.4	5,090
Terai	36.0	4.6	0.1	95.3	100.0	4.7	2.5	6,779
Development region								
Eastern	37.1	3.9	0.0	96.1	100.0	3.9	2.3	3,057
Central	31.4	2.9	0.0	97.1	100.0	2.9	1.9	4,236
Western	38.5	5.2	0.1	94.7	100.0	5.3	2.7	2,660
Mid-western	43.5	7.4	0.0	92.6	100.0	7.4	4.4	1,478
Far-western	56.2	13.6	0.1	86.3	100.0	13.7	6.4	1,242
Education								
No education	20.0	3.2	0.0	96.7	100.0	3.3	1.7	5,045
Primary	31.6	4.4	0.1	95.5	100.0	4.5	2.3	2,209
Some secondary	48.7	5.1	0.0	94.9	100.0	5.1	2.7	3,088
SLC and above	69.2	10.4	0.0	89.5	100.0	10.5	6.3	2,331
Wealth quintile								
Lowest	22.8	4.8	0.0	95.2	100.0	4.8	2.8	2,120
Second	27.7	3.5	0.0	96.5	100.0	3.5	1.9	2,393
Middle	30.4	3.4	0.1	96.5	100.0	3.5	1.8	2,600
Fourth	45.1	6.2	0.1	93.7	100.0	6.3	3.5	2,722
Highest	58.6	7.6	0.1	92.4	100.0	7.6	4.2	2,839
Total 15-49	38.1	5.2	0.0	94.8	100.0	5.2	2.9	12,674

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] Includes those who have never heard of AIDS

The vast majority of women (95 percent) and men (85 percent) have never been tested for HIV. Five percent of women and 14 percent of men have been tested and received their results; almost none of those tested reported not receiving their results. Women age 25-29; divorced, separated, and widowed women; urban women; women living in the hill zone and Far-western region; highly educated women; and women from the

wealthiest households are most likely to have been tested and to have received the results. A similar pattern is seen for men, although differences by zone, region, and subregion are not as marked.

Women and men were also asked whether they had been tested for HIV in the past 12 months and received the results from their last HIV test. Three percent of women and 8 percent of men had been tested in the past 12 months and had received the test results.

Table 12.9.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Nepal 2011

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	59.0	10.2	0.5	89.3	100.0	10.7	6.5	1,663
15-19	51.1	4.4	0.4	95.1	100.0	4.9	3.1	978
20-24	70.3	18.4	0.6	81.0	100.0	19.0	11.3	685
25-29	63.4	19.8	1.2	79.0	100.0	21.0	9.5	581
30-39	58.9	19.1	0.6	80.2	100.0	19.8	10.0	1,041
40-49	48.2	12.1	0.1	87.9	100.0	12.1	4.8	836
Marital status								
Never married	60.3	8.3	0.5	91.3	100.0	8.7	5.1	1,433
Ever had sex	72.9	19.9	1.2	78.9	100.0	21.1	12.8	352
Never had sex	56.3	4.5	0.2	95.3	100.0	4.7	2.5	1,081
Married	56.5	17.4	0.6	82.0	100.0	18.0	8.8	2,626
Divorced/separated/widowed	(26.7)	(15.8)	(0.0)	(84.2)	100.0	(15.8)	(6.9)	62
Residence								
Urban	71.8	16.5	1.1	82.4	100.0	17.6	9.7	717
Rural	54.3	13.7	0.4	85.9	100.0	14.1	7.0	3,404
Ecological zone								
Mountain	57.0	11.3	0.7	88.0	100.0	12.0	5.3	245
Hill	61.2	14.6	0.3	85.1	100.0	14.9	8.1	1,658
Terai	54.6	14.2	0.7	85.1	100.0	14.9	7.2	2,218
Development region								
Eastern	66.3	14.6	0.7	84.7	100.0	15.3	7.7	996
Central	51.6	12.8	0.9	86.3	100.0	13.7	7.3	1,448
Western	58.2	17.3	0.2	82.5	100.0	17.5	8.4	798
Mid-western	52.2	13.0	0.0	87.0	100.0	13.0	6.6	493
Far-western	61.4	13.6	0.3	86.0	100.0	14.0	6.7	385
Education								
No education	19.3	4.1	0.1	95.8	100.0	4.2	1.9	567
Primary	36.5	8.9	0.4	90.7	100.0	9.3	3.6	814
Some secondary	60.1	16.1	0.6	83.3	100.0	16.7	9.5	1,437
SLC and above	84.0	19.7	0.8	79.5	100.0	20.5	10.1	1,303
Wealth quintile								
Lowest	35.9	7.1	0.0	92.9	100.0	7.1	3.9	610
Second	40.0	8.5	0.3	91.2	100.0	8.8	3.5	695
Middle	51.8	13.4	0.5	86.2	100.0	13.8	7.9	830
Fourth	65.4	16.2	0.9	82.9	100.0	17.1	9.0	920
Highest	78.5	20.9	0.8	78.3	100.0	21.7	10.4	1,066
Total 15-49	57.4	14.2	0.6	85.3	100.0	14.7	7.5	4,121

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate
[1] Includes those who have never heard of AIDS

12.9 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

Respondents who had ever had sexual intercourse were asked whether, in the past 12 months, they had experienced an infection acquired through sexual contact or had experienced either of two symptoms associated with STIs: a bad-smelling, abnormal discharge from the vagina or penis or a genital sore or ulcer. Table 12.10 shows the self-reported prevalence of STIs and STI symptoms among both women and men. A negligible proportion of women and men reported having had an STI in the 12 months prior to the survey (less than 1 percent). It is likely that these figures, which are quite low, underestimate the actual prevalence of STIs among the sexually active population in Nepal, as many STI symptoms are not easily recognized or do not have any visible symptoms.

Table 12.10 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Nepal 2011

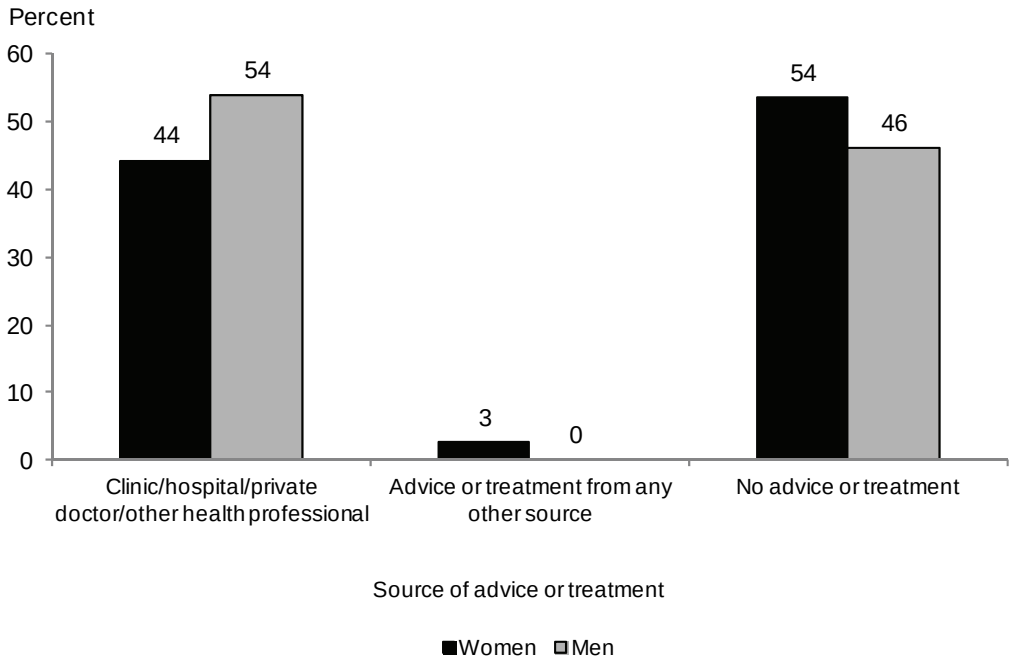
	Women					Men				
Background characteristic	STI	Bad-smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	0.4	10.3	2.1	11.4	2,577	0.4	3.4	5.4	7.1	666
15-19	0.6	8.7	1.5	9.6	799	0.0	6.2	12.3	13.6	203
20-24	0.4	11.0	2.3	12.2	1,778	0.5	2.1	2.4	4.2	463
25-29	0.6	13.3	2.3	14.1	1,955	0.4	0.8	1.3	1.6	528
30-39	0.6	12.5	2.8	13.2	3,233	0.4	0.9	1.8	2.5	1,016
40-49	0.4	10.6	2.6	11.7	2,203	0.0	0.9	2.2	2.8	830
Marital status										
Never married	*	*	*	*	18	1.3	2.9	5.9	7.8	352
Married	0.5	11.6	2.5	12.6	9,595	0.1	1.0	2.1	2.7	2,626
Divorced/separated/widowed	0.3	12.2	1.4	12.2	355	(2.9)	(8.9)	(4.9)	(9.7)	62
Residence										
Urban	0.6	11.4	3.1	12.9	1,321	0.0	1.1	2.3	3.2	497
Rural	0.5	11.7	2.4	12.6	8,647	0.3	1.5	2.7	3.4	2,543
Ecological zone										
Mountain	0.3	13.4	3.7	14.4	655	0.1	0.3	1.5	1.7	194
Hill	0.3	12.4	2.9	13.6	3,947	0.3	1.6	3.1	4.0	1,224
Terai	0.6	10.9	2.0	11.7	5,366	0.3	1.5	2.4	3.2	1,621
Development region										
Eastern	0.9	12.5	3.3	13.9	2,368	0.0	0.6	2.4	3.0	707
Central	0.6	10.8	2.2	11.8	3,315	0.6	2.4	3.8	5.1	1,097
Western	0.1	12.4	1.8	13.1	2,113	0.3	1.8	1.7	2.6	569
Mid-western	0.4	13.9	3.2	14.5	1,197	0.0	0.2	1.4	1.4	390
Far-western	0.4	8.2	1.8	8.9	975	0.0	0.4	2.1	2.1	278
Subregion										
Eastern mountain	0.4	10.7	2.9	11.8	174	0.0	0.7	0.7	1.4	47
Central mountain	0.2	17.0	5.1	18.9	196	0.3	0.3	1.1	1.1	54
Western mountain	0.4	12.7	3.2	13.0	285	0.0	0.0	2.2	2.2	93
Eastern hill	0.7	11.2	4.2	13.1	728	0.0	1.1	5.3	6.4	216
Central hill	0.4	12.3	3.7	13.9	1,144	0.4	2.2	3.5	4.9	456
Western hill	0.1	14.0	2.1	14.6	1,222	0.6	1.8	2.0	2.6	315
Mid-western hill	0.5	13.0	2.7	13.6	529	0.0	0.5	2.1	2.1	153
Far-western hill	0.0	9.3	0.7	9.6	324	0.0	0.0	1.9	1.9	84
Eastern terai	1.0	13.4	2.9	14.5	1,466	0.0	0.4	1.2	1.6	444
Central terai	0.7	9.3	1.1	9.8	1,975	0.9	2.8	4.2	5.6	587
Western terai	0.1	10.4	1.4	11.1	892	0.0	1.7	1.4	2.6	254
Mid-western terai	0.3	13.4	2.9	14.1	522	0.0	0.0	0.5	0.5	182
Far-western terai	0.6	8.3	2.9	9.2	511	0.0	0.8	2.4	2.4	154
Education										
No education	0.4	11.6	2.3	12.2	4,809	0.0	0.9	2.4	2.4	537
Primary	0.5	11.5	2.8	12.8	1,896	0.3	1.2	3.2	3.6	701
Some secondary	0.8	13.7	2.6	15.0	1,879	0.2	1.5	2.2	3.0	924
SLC and above	0.5	9.2	2.6	10.4	1,384	0.6	1.8	2.7	4.3	878
Wealth quintile										
Lowest	0.0	12.6	2.6	13.3	1,735	0.0	0.6	2.3	2.3	481
Second	0.4	11.7	2.5	12.6	1,913	0.0	2.0	3.5	3.8	519
Middle	0.8	11.6	1.7	12.2	2,094	0.3	1.5	3.0	3.5	642
Fourth	0.7	12.3	3.0	13.4	2,127	0.7	1.2	2.1	3.6	650
Highest	0.5	10.2	2.6	11.6	2,098	0.3	1.7	2.2	3.7	747
Total 15-49	0.5	11.7	2.5	12.6	9,968	0.3	1.4	2.6	3.4	3,039

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

Thirteen percent of women and 3 percent of men reported having had an STI or experiencing STI symptoms (abnormal genital discharge or genital sore or ulcer) during the 12 months preceding the survey. Differences by age, marital status, residence, and ecological zone are not pronounced. Notably, the prevalence of self-reported STIs and STI symptoms among women is much lower in the Far-western region, particularly the Far-western terai subregion. A slightly higher proportion of women and men reported STIs or STI symptoms in 2011 than in 2006.

Fifty-four percent of women and 46 percent of men did not seek any treatment or advice for STI or STI symptoms in the past 12 months while 44 percent of women and 54 percent of men sought advice or treatment from a clinic, hospital, private doctor, or other health professionals (Figure 12.1).

Figure 12.1 **Women and Men Seeking Advice or Treatment for STIs**



12.10 PREVALENCE OF MEDICAL INJECTIONS

Use of nonsterile injections in a health care setting can contribute to the transmission of blood-borne pathogens. To measure the potential risk of transmission of HIV associated with medical injections, respondents in the 2011 NDHS were asked whether they had received an injection in the past 12 months; if so, they were asked how many injections they had received and whether their last injection was given with a syringe from a newly opened package.

Table 12.11 shows the reported prevalence of injections. Thirty-three percent of women and 31 percent of men reported receiving a medical injection from a health worker during the 12-month period preceding the survey. Generally, women and men received an average of one medical injection during that period. The vast majority of women (98 percent) and men (99 percent) reported that the last injection was given with a syringe from a newly opened package.

Table 12.11 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Nepal 2011

	Women					Men				
Background characteristic	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the past 12 months	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the past 12 months
Age										
15-24	31.5	0.8	5,050	98.4	1,592	33.6	1.0	1,663	98.9	559
15-19	24.6	0.6	2,753	98.3	677	31.8	1.0	978	98.7	311
20-24	39.8	1.2	2,297	98.6	914	36.3	1.0	685	99.1	249
25-29	38.7	1.2	2,101	98.2	814	31.8	1.3	581	99.3	185
30-39	33.9	1.3	3,291	97.5	1,117	29.8	1.1	1,041	98.8	310
40-49	28.0	1.2	2,232	96.2	624	27.3	1.9	836	97.7	228
Marital status										
Never married	19.5	0.5	2,708	98.1	528	32.7	0.9	1,433	98.6	468
Ever had sex	*	*	18	*	4	37.4	1.2	352	99.5	132
Never had sex	19.5	0.5	2,691	98.0	524	31.1	0.8	1,081	98.3	337
Married	36.8	1.3	9,608	97.7	3,532	30.1	1.4	2,626	98.7	791
Divorced/separated/widowed	24.1	0.6	358	99.1	86	(38.5)	(0.8)	62	*	24
Residence										
Urban	35.8	1.2	1,819	97.5	652	34.0	1.0	717	99.3	244
Rural	32.2	1.1	10,855	97.9	3,494	30.5	1.3	3,404	98.6	1,039
Ecological zone										
Mountain	28.5	0.9	805	96.2	230	19.1	0.6	245	98.9	47
Hill	30.9	0.9	5,090	97.1	1,572	28.2	1.0	1,658	98.4	468
Terai	34.6	1.2	6,779	98.4	2,345	34.6	1.5	2,218	98.9	768
Development region										
Eastern	35.9	1.5	3,057	97.7	1,099	34.4	1.2	996	99.2	343
Central	33.6	1.0	4,236	98.4	1,425	32.9	1.5	1,448	99.0	477
Western	28.3	0.8	2,660	97.2	754	33.1	1.2	798	97.5	264
Mid-western	32.2	1.0	1,478	97.7	476	20.9	0.9	493	97.7	103
Far-western	31.7	1.0	1,242	97.4	393	24.8	0.9	385	100.0	95
Subregion										
Eastern mountain	29.4	0.9	229	96.9	67	16.2	0.4	66	(100.0)	11
Central mountain	24.3	0.8	258	97.5	63	18.7	0.4	69	(100.0)	13
Western mountain	31.4	0.9	319	94.9	100	21.1	0.8	110	(97.8)	23
Eastern hill	33.0	1.0	956	97.3	315	28.2	0.9	293	99.6	83
Central hill	36.4	1.0	1,563	97.4	569	31.5	1.2	616	99.1	194
Western hill	23.7	0.7	1,513	96.1	358	25.4	0.7	440	96.1	112
Mid-western hill	31.9	0.9	649	96.9	207	24.0	1.0	189	97.7	45
Far-western hill	30.0	0.9	409	98.1	123	28.6	1.0	120	100.0	34
Eastern terai	38.2	1.8	1,873	97.9	716	39.2	1.5	638	99.1	250
Central terai	32.8	1.0	2,415	99.1	793	35.4	1.9	763	98.8	270
Western terai	34.5	1.1	1,147	98.3	396	42.6	1.8	358	98.4	153
Mid-western terai	33.3	1.0	668	98.9	222	19.8	0.8	242	98.3	48
Far-western terai	32.2	1.1	676	97.7	217	22.1	0.8	217	100.0	48
Education										
No education	32.6	1.2	5,045	97.0	1,646	25.7	1.4	567	97.9	146
Primary	32.1	1.1	2,209	97.1	710	28.5	1.2	814	96.8	232
Some secondary	31.4	0.9	3,088	98.9	969	31.6	1.1	1,437	98.9	455
SLC and above	35.2	1.0	2,331	98.7	821	34.6	1.4	1,303	99.8	451
Wealth quintile										
Lowest	27.4	0.8	2,120	97.7	582	20.5	0.9	610	97.4	125
Second	30.4	0.9	2,393	97.1	727	28.7	1.0	695	98.7	199
Middle	34.1	1.1	2,600	97.6	886	31.8	1.1	830	98.9	264
Fourth	35.1	1.3	2,722	98.5	957	31.4	1.3	920	98.9	289
Highest	35.1	1.3	2,839	97.8	995	38.1	1.7	1,066	98.7	406
Total 15-49	32.7	1.1	12,674	97.8	4,147	31.1	1.3	4,121	98.7	1,283

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

12.11 HIV AND AIDS-RELATED KNOWLEDGE AND BEHAVIOR AMONG YOUTH

Knowledge of HIV and AIDS issues and related sexual behavior among youth age 15-24 is of particular interest because the period between sexual initiation and marriage is, for many young people, a time of sexual experimentation that may involve high-risk behaviors. This section considers a number of issues that relate to both transmission and prevention of HIV and AIDS among youth, including the extent to which youth have comprehensive knowledge of HIV and AIDS transmission and prevention modes and knowledge of a source where they can obtain condoms. Issues such as abstinence, age at sexual debut, and condom use are also covered in this section.

12.11.1 Knowledge about HIV and AIDS and of Sources for Condoms

Knowledge of how HIV is transmitted is crucial for people to avoid contracting HIV. Young people are often at greater risk because they have short relationships with more partners or engage in other risky behaviors. Table 12.12 shows the level of comprehensive knowledge of HIV and AIDS among youth and the percentage of youth who know of a source where they can obtain condoms. As noted earlier, comprehensive knowledge of HIV and AIDS is defined as knowing that condom use and having just one HIV-negative faithful partner can reduce the chances of contracting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common misconceptions about HIV transmission in Nepal (that HIV can be transmitted by mosquito bites and that it can be transmitted by sharing food with someone who has AIDS).

Table 12.12 Comprehensive knowledge about AIDS and of a source of condoms among youth

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Nepal 2011

	Women age 15-24			Men age 15-24		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents
Age						
15-19	25.0	82.8	2,753	32.7	95.8	978
15-17	22.4	79.6	1,655	30.9	95.2	616
18-19	28.8	87.5	1,098	35.8	96.8	362
20-24	26.7	88.5	2,297	35.6	97.6	685
20-22	26.6	88.4	1,445	37.9	98.1	437
23-24	27.0	88.8	853	31.4	96.7	248
Marital status						
Never married	31.8	83.2	2,475	36.7	96.9	1,281
Ever had sex	*	*	16	35.6	99.3	285
Never had sex	32.0	83.3	2,459	37.0	96.2	996
Ever married	19.9	87.5	2,575	24.5	95.3	382
Residence						
Urban	40.2	87.2	692	42.3	96.1	289
Rural	23.5	85.1	4,358	32.1	96.6	1,373
Development region						
Eastern	25.1	83.1	1,216	31.4	96.6	407
Central	25.0	79.5	1,668	33.8	94.7	556
Western	29.3	90.2	1,026	34.8	97.7	328
Mid-western	22.1	90.5	619	34.8	97.4	198
Far-western	27.3	94.2	521	37.3	99.0	174
Subregion						
Eastern mountain	16.8	90.9	92	22.0	96.6	29
Central mountain	19.3	85.9	97	21.5	96.4	23
Western mountain	7.2	93.2	127	25.3	100.0	44
Eastern hill	20.8	85.8	387	28.0	98.0	118
Central hill	38.9	84.9	603	44.7	96.3	239
Western hill	24.8	86.0	560	30.3	97.2	172
Mid-western hill	20.1	89.5	273	37.7	96.8	76
Far-western hill	26.1	94.1	172	42.4	100.0	60
Eastern terai	28.3	80.6	736	34.0	96.0	260
Central terai	16.9	75.5	968	25.8	93.3	294
Western terai	34.8	95.2	466	39.7	98.2	156
Mid-western terai	27.8	91.3	278	34.6	97.1	96
Far-western terai	31.9	93.9	290	37.0	98.2	96
Education						
No education	3.2	69.7	866	1.1	79.8	72
Primary	9.4	78.6	887	4.6	90.9	206
Some secondary	24.5	89.0	1,930	28.8	97.0	737
SLC and above	52.4	94.6	1,368	52.7	99.7	648
Total	25.8	85.4	5,050	33.9	96.5	1,663

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission and prevention of AIDS. The components of comprehensive knowledge are presented in Tables 12.2, 12.3.1, and 12.3.2.
[2] For this table, the following responses are not considered sources for condoms: friends, family members, and home.

The table shows that 26 percent of young women and 34 percent of young men age 15-24 have comprehensive knowledge of AIDS. Knowledge of HIV and AIDS has declined in the past five years, from 28 percent among female youth and 44 percent among male youth. The table also shows that comprehensive knowledge is higher among youth in urban than rural areas. Among both young men and young women, the proportion with comprehensive knowledge tends to increase with level of education. Among young women the level of comprehensive knowledge about HIV is highest in the Western region (29 percent), and among young men knowledge is highest in the Far-western region (37 percent).

Because of the important role that condoms play in combating the transmission of HIV, respondents were asked whether they know of a source of condoms. Only responses about formal sources were counted, that is, sources other than friends, family members, and home. As shown in Table 12.12, young men are more likely than young women to know where to obtain a condom (97 percent versus 85 percent). At the regional level, young women in the Far-western region (94 percent) are most likely to know a condom source, while those in the Central region (80 percent) are least likely to know where to obtain a condom. Not surprisingly, knowledge varies markedly by education, rising from 70 percent among young women with no education to 95 percent among young women with an SLC and higher education. A similar trend is seen for young men.

12.11.2 Age at First Sexual Intercourse among Youth

Age at first sex is an important indicator of both exposure to the risk of pregnancy and exposure to STIs. Young people who initiate sex at an early age are considered to be at a higher risk of becoming pregnant or contracting an STI than young people who delay initiation of sexual activity. Consistent use of condoms can reduce such risks.

Table 12.13 shows the proportion of young women and men in the 15-24 age cohort who had sex before age 15 and before age 18. Seven percent of young women and 3 percent of young men had sex by age 15. Forty percent of young women and 24 percent of young men had sex by age 18, a decrease from five years ago (47 percent and 27 percent, respectively). As expected, the proportion initiating sexual activity early was higher among ever-married young women and negligible among those who had not yet married. Forty percent of ever-married young men had initiated sexual intercourse by age 18, compared with 16 percent of never-married young men. The likelihood of early sexual debut was associated with low educational attainment among both young women and young men. Sexual debut at an early age was more common among rural than urban youth: 8 percent of rural women had initiated sex by age 15, as compared with 4 percent of urban women. Likewise, 42 percent of rural women and 24 percent of urban women had initiated sex by age 18. Analysis by region showed that women in the Central region were most likely to have had their first sexual intercourse before age 15 (9 percent).

Table 12.13 Age at first sexual intercourse among youth

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Nepal 2011

	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men	Percentage who had sexual intercourse before age 18	Number of men
Age								
15-19	4.6	2,753	na	na	3.7	978	na	na
15-17	3.3	1,655	na	na	3.3	616	na	na
18-19	6.6	1,098	37.5	1,098	4.4	362	28.5	362
20-24	9.9	2,297	40.4	2,297	2.2	685	22.2	685
20-22	9.5	1,445	39.4	1,445	2.9	437	21.2	437
23-24	10.5	853	42.2	853	0.8	248	24.0	248
Marital status								
Never married	0.1	2,475	0.4	1,084	2.8	1,281	15.9	683
Ever married	13.7	2,575	57.8	2,311	3.9	382	40.3	365
Knows condom source[1]								
Yes	6.4	4,312	38.7	2,995	3.2	1,605	24.5	1,019
No	10.7	738	45.5	401	0.0	58	*	28
Residence								
Urban	3.9	692	23.6	500	1.4	289	17.7	199
Rural	7.5	4,358	42.2	2,895	3.4	1,373	25.9	849
Development region								
Eastern	6.1	1,216	36.3	806	3.3	407	18.7	259
Central	8.6	1,668	39.2	1,123	2.8	556	24.2	376
Western	4.7	1,026	36.2	693	3.3	328	22.8	181
Mid-western	7.6	619	49.5	414	3.3	198	34.9	129
Far-western	7.8	521	42.3	359	2.5	174	28.9	102
Subregion								
Eastern mountain	5.9	92	39.2	57	2.3	29	22.8	15
Central mountain	4.8	97	34.8	58	0.0	23	(34.1)	15
Western mountain	15.3	127	63.8	88	5.7	44	57.1	32
Eastern hill	5.2	387	30.0	248	3.4	118	24.4	75
Central hill	4.3	603	22.5	439	1.2	239	20.9	188
Western hill	4.8	560	36.4	361	3.4	172	23.9	86
Mid-western hill	8.2	273	51.7	179	3.2	76	30.2	55
Far-western hill	6.5	172	50.3	121	1.3	60	25.1	35
Eastern terai	6.6	736	39.2	502	3.4	260	15.8	169
Central terai	11.7	968	51.3	626	4.3	294	27.0	173
Western terai	4.5	466	36.0	332	3.3	156	21.7	95
Mid-western terai	5.2	278	43.1	188	3.7	96	32.3	54
Far-western terai	6.9	290	33.6	196	1.5	96	24.7	55
Education								
No education	17.8	866	70.0	704	5.5	72	(38.4)	46
Primary	14.1	887	57.5	615	4.4	206	35.3	132
Some secondary	3.5	1,930	40.7	930	3.7	737	31.6	330
SLC and above	0.6	1,368	10.1	1,146	1.7	648	16.1	539
Total	7.0	5,050	39.5	3,395	3.1	1,663	24.4	1,047

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
na = Not available
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

12.11.3 Premarital Sex

The period between initiation of sexual intercourse and marriage is often a time of sexual experimentation. Table 12.14 presents information on premarital sexual intercourse and condom use among never-married youth age 15-24 in Nepal. Ninety-nine percent of never-married young women and 78 percent of never-married young men have never had sexual intercourse. Between 2006 and 2011, the percentage of never-married young men who had sexual intercourse during the 12 months preceding the survey increased from 8 percent to 15 percent. Among never-married, sexually active young men, 73 percent used a condom during their last sexual intercourse.

Table 12.14 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among men who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Nepal 2011

	Never-married women age 15-24			Never-married men age 15-24				
							Among men who had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married women	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married men	Percentage who used a condom at last sexual intercourse	Number of men
Age								
15-19	99.4	0.4	1,956	85.3	9.4	908	69.2	86
15-17	99.8	0.2	1,391	92.2	5.5	598	(75.4)	33
18-19	98.6	0.7	564	71.9	16.9	310	65.3	52
20-24	99.0	0.7	520	59.4	28.5	373	76.0	106
20-22	98.8	0.9	407	63.4	23.0	283	71.5	65
23-24	99.6	0.0	113	46.6	45.7	90	(83.1)	41
Knows condom source[1]								
Yes	99.5	0.3	2,058	77.2	15.4	1,241	73.3	191
No	98.6	1.1	417	(95.0)	(2.0)	40	*	1
Residence								
Urban	98.6	1.1	435	79.7	13.4	242	76.8	32
Rural	99.5	0.3	2,040	77.3	15.3	1,039	72.2	159
Development region								
Eastern	99.1	0.5	634	78.4	14.9	335	(73.0)	50
Central	99.3	0.6	813	77.5	14.1	417	(73.1)	59
Western	99.5	0.0	505	77.9	17.0	271	(74.3)	46
Mid-western	99.3	0.7	265	73.3	16.2	134	(58.7)	22
Far-western	99.9	0.1	258	81.4	12.1	123	(88.4)	15
Subregion								
Eastern mountain	99.8	0.2	51	81.4	15.6	22	*	3
Central mountain	98.6	0.7	58	(78.6)	(18.9)	16	*	3
Western mountain	97.0	3.0	34	(78.6)	(14.3)	21	*	3
Eastern hill	98.4	0.5	210	80.5	10.3	91	*	9
Central hill	98.7	1.3	357	77.6	19.5	185	*	36
Western hill	99.1	0.0	268	81.1	13.9	141	*	20
Mid-western hill	100.0	0.0	111	68.0	18.7	49	*	9
Far-western hill	100.0	0.0	85	81.4	11.2	43	*	5
Eastern terai	99.4	0.6	373	77.3	16.8	223	*	37
Central terai	100.0	0.0	399	77.3	9.1	215	*	20
Western terai	99.9	0.0	237	74.5	20.3	130	(71.7)	26
Mid-western terai	99.4	0.6	138	77.0	14.2	74	*	10
Far-western terai	99.8	0.2	157	80.8	12.9	70	*	9
Education								
No education	100.0	0.0	180	(74.3)	(19.3)	34	*	7
Primary	99.6	0.0	289	76.2	18.7	125	*	23
Some secondary	99.2	0.5	1,147	83.7	9.6	583	76.7	56
SLC and above	99.4	0.6	859	72.0	19.6	539	79.0	105
Total	99.4	0.4	2,475	77.8	15.0	1,281	73.0	191

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

12.11.4 Multiple Sexual Partners among Youth

Table 12.15 provides information on young men age 15-24 who had two or more sexual partners during the 12 months preceding the survey and among these men the percentage who used a condom at their last sexual intercourse. Overall, 4 percent of young men reported having sex with two or more partners in the 12 months preceding the survey and 45 percent of these men used a condom during their last sexual encounter. Men age 20-24 (7 percent) were more likely to have had two or more partners in the 12 months preceding the survey than those in the other age categories. Ever-married young men were more than twice as likely to have had two or more partners (7 percent) than never-married young men (3 percent). Young men with no education (7 percent) and those with an SLC and higher education (5 percent) are more likely to have two or more partners than other men.

Table 12.15 Multiple sexual partners in the past 12 months among young men

Among all young men age 15-24, the percentage who had sexual intercourse with two or more sexual partners in the past 12 months, and among those having two or more partners in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Nepal 2011

	Among all men age 15-24		Among men age 15-24 who had 2+ partners in the past 12 months	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom at last intercourse	Number of men
Age				
15-19	1.5	978	*	14
15-17	1.0	616	*	6
18-19	2.3	362	*	8
20-24	7.0	685	(43.2)	48
20-22	6.9	437	(44.7)	30
23-24	7.3	248	*	18
Marital status				
Never married	3.0	1,281	(61.8)	38
Ever married	6.5	382	*	25
Knows condom source[1]				
Yes	3.9	1,605	(45.7)	62
No	1.4	58	*	1
Residence				
Urban	4.1	289	*	12
Rural	3.7	1,373	(40.9)	51
Education				
No education	6.8	72	*	5
Primary	2.5	206	*	5
Some secondary	2.7	737	*	20
SLC and above	5.1	648	(52.6)	33
Total 15-24	3.8	1,663	45.1	63

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

12.11.5 Age Mixing in Sexual Relationships among Women Age 15-19

In many societies, young women have sexual relationships with men who are considerably older than they are. This practice can contribute to the spread of HIV and other STIs because older men are more likely to have been exposed to these diseases. Using preventive methods such as negotiating safer sex is more difficult when age differences are large. To examine age mixing in the 2011 NDHS, young women age 15-19 who had sex in the 12 months preceding the survey were asked whether the man was younger, about the same age, or older than they were. If older, they were asked whether they thought he was less than 10 years older or 10 or more years older.

The results presented in Table 12.16 show that, among women age 15-19 who had sexual intercourse in the 12 months preceding the survey, 11 percent had sex with a man 10 or more years older. Age mixing in sexual relationships varies little by age, knowledge of a condom source, or urban-rural residence. Although there is no clear relationship between age mixing and education, women with an SLC and higher education are twice as likely as women with no education to have had sexual intercourse with a man 10 or more years older.

Table 12.16 Age mixing in sexual relationships among women age 15-19

Among women 15-19 who had sexual intercourse in the past 12 months, percentage who had sexual intercourse with a partner who was 10 or more years older than themselves, by background characteristics, Nepal 2011

	Women 15-19 who had sexual intercourse in the past 12 months	
Background characteristic	Percentage who had sexual intercourse with a man 10+ years older	Number of women
Age		
15-17	10.7	248
18-19	10.7	491
Marital status		
Never married	*	7
Ever married	10.8	732
Knows condom source[1]		
Yes	10.8	626
No	10.2	113
Residence		
Urban	11.5	61
Rural	10.6	678
Education		
No education	10.9	172
Primary	8.1	188
Some secondary	9.0	283
SLC and above	20.4	96
Total	10.7	739

[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.
SLC = School Leaving Certificate

12.11.6 Recent HIV Tests among Youth

Table 12.17 shows the percentage of sexually active young women and men who were tested for HIV in the 12 months preceding the survey and received results, by selected background characteristics. Five percent of sexually active women and 13 percent of sexually active men age 15-24 had been tested for HIV in the past 12 months and received results. The differences by background characteristics were more pronounced among men than women. The percentage of sexually active young men who had been tested for HIV in the past 12 months and received results increased with age and education and was almost twice as high among never-married men as among ever-married men, as well as nearly twice as high in urban as in rural areas. A similar but less pronounced pattern was seen among young women.

Table 12.17 Recent HIV tests among youth

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who were tested for HIV in the past 12 months and received the results of the last test, by background characteristics, Nepal 2011

	Among women age 15-24 who have had sexual intercourse in the past 12 months:		Among men age 15-24 who have had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	4.4	739	9.0	154
15-17	3.3	248	7.0	51
18-19	4.9	491	10.0	103
20-24	5.1	1,527	14.2	415
20-22	5.2	887	13.4	219
23-24	4.9	640	15.2	196
Marital status				
Never married	*	11	18.3	191
Ever married	4.8	2,255	10.1	377
Knows condom source[1]				
Yes	5.6	1,974	13.1	550
No	0.0	291	*	19
Residence				
Urban	6.2	243	21.8	79
Rural	4.7	2,022	11.4	489
Education				
No education	1.6	608	(0.6)	43
Primary	4.2	510	4.6	103
Some secondary	4.5	679	11.7	208
SLC and above	10.4	469	20.4	215
Total	4.9	2,266	12.8	569

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

13

Key Findings:

- More than half of currently married employed women who earn cash make independent decisions about how to spend their earnings.
- Only 46 percent of currently married women participate in decisions pertaining to their own health care, major household purchases, and visits to their family or relatives.
- Contraceptive use increases with women's empowerment.
- Unmet need for family planning decreases with improvements in women's empowerment.
- Access to antenatal care, delivery assistance from a skilled provider, and postnatal care within the first two days of delivery increase with increasing women's empowerment.
- Infant, child, and under-five mortality rates decline with improvements in women's empowerment.

The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility […] are cornerstones of population and development-related programs" (United Nations, 1994). Women's empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change (United Nations Population Information Network, 1995).

Nepal is a signatory to almost all of the international conventions on human rights, women's rights, and children's rights, as well as to agreements on international goals regarding education, health, and poverty eradication. As a signatory to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), adopted in 1979 by the United Nations General Assembly, the government of Nepal promises nondiscrimination, gender equity, and social justice as mandated by the 1990 Constitution of Nepal (Ministry of Law and Justice, 1999). The 2003 national plan of action approved by the government of Nepal for the effective implementation of CEDAW and other instruments related to human rights guarantees all rights as per the CEDAW covenants; there is also a plan of action in place to implement all 12 of the Beijing Platform of Action commitments. These commitments include addressing poverty among women, increasing access to education and health resources, and establishing support for programs to bring women to decision-making levels in all political, constitutional, and administrative units (UNFPA, 2007). Currently, Nepal is ranked 113th in the world (out of 187 countries) and fifth among the South Asian Association for Regional Cooperation (SAARC) countries on the Gender Inequality Index (UNDP, 2011b).

Data from the 2011 NDHS discussed in earlier chapters show that women in Nepal are predominantly engaged in agriculture; few have skilled manual jobs, and women are much less likely than men to be engaged in the professional, technical, and managerial fields (see Table 3.6.1). Further, women lag behind men in educational attainment, literacy, and exposure to mass media, all of which are critical contributors to women's empowerment, and exert considerable influence on the development of their personality and on strengthening women's position in the household and in society in general.

This chapter presents additional data on the status of women in Nepal, including information on gender differences in employment, access to and control over cash earnings, asset ownership, participation in household decision-making, and the relative earnings of husbands and wives. The chapter also explores how demographic and health indicators vary by women's empowerment, as measured by the number of decisions in which the woman participates and her ability to negotiate safer sexual relations with her husband (see Table 12.6). The ranking of women on these indices has been found to be associated with demographic and health outcomes, including contraceptive use, unmet need for family planning, and access to reproductive health care, as well as with child survival.

13.1 EMPLOYMENT AND FORM OF EARNINGS

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women and men. Table 13.1 shows the percentage of currently married women and men age 15-49 who were employed at any time in the 12 months before the survey and the percent distribution of employed women and men by the type of earnings they received (cash only, cash and in-kind, in-kind only), if any. The table shows that 77 percent of currently married women age 15-49 were employed in the 12 months preceding the survey and that almost all currently married men were employed (98 percent). Women age 15-29 are less likely than older women to be employed, while there is no such variation by age among currently married men. The proportion of currently married women who are employed has declined over the past five years (from 83 percent in 2006 to 77 percent in 2011); by contrast, the decline in employment among currently married men has been minimal (from 99 percent in 2006 to 98 percent in 2011). Employed men and women differ greatly in the type of earnings they receive for their work. Eighty-one percent of men receive cash only or cash and in-kind payment, compared with only 30 percent of women. Sixty-one percent of women are not paid for their work at all, compared with only 12 percent of men. Thus, not only are currently married women much less likely than currently married men to be employed, they are also much less likely to be paid for the work they perform.

Table 13.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Nepal 2011

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					
Age	Percentage employed	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of employed respondents
				WOMEN				
15-19	63.0	792	12.1	3.5	8.2	76.2	100.0	499
20-24	68.9	1,761	22.2	3.8	7.1	66.9	100.0	1,213
25-29	73.0	1,914	28.9	6.0	9.6	55.5	100.0	1,397
30-34	80.3	1,659	27.2	8.5	8.1	56.2	100.0	1,331
35-39	84.5	1,461	25.4	8.1	9.9	56.6	100.0	1,234
40-44	84.7	1,190	21.1	8.0	11.3	59.6	100.0	1,007
45-49	83.6	832	15.4	7.4	9.5	67.7	100.0	695
Total 15-49	76.8	9,608	23.5	6.7	9.1	60.8	100.0	7,378
				MEN				
15-19	95.3	67	45.4	13.9	1.7	39.0	100.0	64
20-24	96.6	306	63.2	12.8	4.9	19.2	100.0	296
25-29	99.1	471	68.5	13.1	8.2	10.2	100.0	467
30-34	98.1	459	75.6	12.0	5.0	7.4	100.0	450
35-39	99.0	516	68.1	14.3	8.7	9.0	100.0	511
40-44	98.7	423	62.3	18.3	9.4	10.0	100.0	418
45-49	97.3	384	54.8	20.6	9.4	15.2	100.0	374
Total 15-49	98.2	2,626	65.5	15.1	7.6	11.9	100.0	2,579

Table 13.2 shows the percent distribution of currently married women who were not employed by reason for not being employed, according to background characteristics. The results show that the most common reason given by women for not working is having small children to look after (32 percent). The next most common reasons are that women's family does not allow them to work (19 percent), they have a heavy workload at home (18 percent), and they do not need to work (16 percent). Only 4 percent of currently married unemployed women reported that lack of education or training prevents them from working, with another 4 percent reporting lack of opportunity.

Women age 30-49 are more likely than younger women to cite "no need to work" and "workload at home" as their main reason for not being employed. As expected, younger women are more likely than women in the oldest age group to report having young children to look after as their primary reason for not working. Almost one in two women (46 percent) age 15-19 and less than one in five older women said that they are not working because their family does not allow them to work.

Urban women are more likely to report no need to work than rural women, and rural women are much more likely to cite having small children to look after and family disapproval as their reason for not being employed. Unemployed women in the Central terai (34 percent) and those with no education (25 percent) are more likely to report that their family does not allow them to work than other women.

Table 13.2 Reasons for women not being employed in the past 12 months

Percent distribution of currently married women age 15-49 who were not employed in the past 12 months by reason for not being employed, according to background characteristics, Nepal 2011

	Reasons for not being employed									
Background characteristic	No need to work	Workload at home	Small children to look after	Family does not allow	Looking for work	Lack education/ training	No opportunity	Other	Total	Number of women
Age										
15-19	12.9	7.4	20.9	45.9	3.8	3.2	2.2	3.7	100.0	293
20-24	13.0	10.6	45.3	18.7	3.0	2.0	3.5	3.8	100.0	548
25-29	12.1	15.3	47.7	12.2	3.8	3.4	4.5	1.2	100.0	517
30-34	16.5	22.2	32.7	12.4	1.5	4.2	6.3	4.2	100.0	327
35-39	18.5	28.5	16.8	13.7	3.1	8.6	5.3	5.4	100.0	226
40-44	24.5	32.2	5.3	16.3	2.0	7.9	4.0	7.8	100.0	183
45-49	35.1	26.6	2.3	16.2	3.4	4.1	2.6	9.7	100.0	137
Number of living children										
0	26.5	7.9	0.0	36.8	7.1	4.4	5.8	11.5	100.0	337
1-2	14.5	15.4	44.0	13.4	2.9	3.4	3.7	2.5	100.0	1,231
3-4	13.8	26.3	26.8	19.3	1.4	5.1	3.6	3.7	100.0	526
5+	14.5	26.8	22.4	23.8	0.0	5.4	5.6	1.6	100.0	136
Residence										
Urban	21.2	19.6	25.7	13.5	3.1	7.3	5.1	4.5	100.0	510
Rural	14.7	16.9	33.9	20.6	3.0	3.1	3.8	4.0	100.0	1,720
Ecological zone										
Mountain	12.3	13.5	41.9	4.5	1.6	7.6	2.4	16.1	100.0	21
Hill	18.7	17.8	35.0	7.5	3.3	5.4	5.0	7.2	100.0	510
Terai	15.4	17.5	31.0	22.6	2.9	3.6	3.9	3.0	100.0	1,699
Development region										
Eastern	12.9	21.3	33.9	15.2	4.0	1.9	7.1	3.6	100.0	588
Central	17.5	13.8	27.5	27.2	3.2	3.2	3.6	4.0	100.0	987
Western	19.2	17.4	35.1	11.5	2.2	7.3	2.8	4.5	100.0	398
Mid-western	13.1	21.5	41.4	9.6	1.9	7.5	0.6	4.5	100.0	174
Far-western	15.6	26.8	37.9	3.2	0.3	7.4	2.8	6.0	100.0	83
Subregion										
Eastern mountain	(12.7)	(23.1)	(28.0)	(5.7)	(4.4)	(13.1)	(0.0)	(13.1)	100.0	8
Central mountain	*	*	*	*	*	*	*	*	100.0	5
Western mountain	*	*	*	*	*	*	*	*	100.0	8
Eastern hill	24.3	7.3	44.8	4.8	4.0	0.0	2.5	12.3	100.0	42
Central hill	19.2	17.9	29.7	9.6	4.3	5.6	6.9	6.8	100.0	270
Western hill	20.5	18.6	40.2	2.7	2.3	4.7	3.5	7.4	100.0	122
Mid-western hill	11.2	21.8	40.4	10.0	1.1	9.7	1.5	4.4	100.0	71
Far-western hill	*	*	*	*	*	*	*	*	100.0	5
Eastern terai	12.1	22.4	33.2	16.2	4.0	1.9	7.6	2.8	100.0	539
Central terai	16.8	12.4	26.4	34.1	2.8	2.2	2.4	2.8	100.0	712
Western terai	18.5	16.9	32.8	15.4	2.1	8.5	2.4	3.3	100.0	276
Mid-western terai	14.8	21.4	41.9	9.3	2.6	6.3	0.0	3.8	100.0	97
Far-western terai	16.1	27.7	37.7	3.5	0.3	8.1	1.6	4.8	100.0	76
Education										
No education	13.9	21.1	28.4	25.2	0.7	3.7	2.3	4.8	100.0	840
Primary	12.0	17.0	31.1	23.1	4.1	6.1	4.9	1.7	100.0	408
Some secondary	19.1	16.6	34.1	15.9	2.0	5.4	3.4	3.5	100.0	494
SLC and above	20.7	12.7	36.8	8.0	7.3	1.8	7.4	5.5	100.0	487
Wealth quintile										
Lowest	3.9	16.0	39.5	25.7	0.0	1.3	3.9	9.7	100.0	100
Second	8.5	15.7	48.4	17.2	0.7	1.8	2.1	5.6	100.0	231
Middle	4.3	16.7	33.7	33.2	3.2	2.7	3.7	2.5	100.0	452
Fourth	16.8	19.4	30.7	18.7	3.8	3.1	3.7	3.8	100.0	593
Highest	25.5	17.3	26.7	11.4	3.3	6.5	5.2	4.1	100.0	854
Total	16.2	17.5	32.0	19.0	3.0	4.1	4.1	4.1	100.0	2,230

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

The most common reason for not working among women in all wealth quintiles is having young children to look after. Among the other reasons, the most common one given by women in the highest wealth quintile is no need to work, while the most common reason given by women in the lowest and middle quintiles is family disapproval.

13.2 WOMEN'S CONTROL OVER THEIR OWN EARNINGS AND RELATIVE MAGNITUDE OF WOMEN'S AND THEIR HUSBANDS' EARNINGS

Control over cash earnings is another dimension of empowerment. Currently married women who earn cash for their work were asked who the main decision-maker is regarding the use of their earnings. They were also asked about the relative magnitude of their earnings compared with their husband's earnings. This information provides insight into women's empowerment within the family and the extent of their control over resources. It is expected that women who are employed and who receive cash earnings are more likely to have control over household resources.

Table 13.3.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who controls their earnings and their perception of the magnitude of their earnings relative to those of their husband. More than half of currently married women who earn cash said that they themselves mainly decide how their cash earnings are used; two in five indicated that the decision is made jointly with their husbands, and only 5 percent said that the decision is made mainly by their husbands. The proportion of currently married women who earn cash for their work and decide mainly alone on the use of their cash earnings has increased from 31 percent in 2006 to 53 percent in 2011, whereas the proportion of women who say that they jointly decide with their husbands on the use of their own earnings has decreased, from 56 percent to 40 percent. Overall, the proportion of women who participate alone or jointly with their husbands in decisions about the use of their earnings has increased from 86 percent in 2006 to 93 percent in 2011.

Decision-making alone about the use of their earnings does not vary consistently with women's age, although joint decision-making tends to increase with age. Women with five or more children are less likely to decide on how to use their cash earnings than women with one to four children and those with no children. Women's participation in the use of their own earnings varies little by urban-rural residence. The proportion of women deciding alone about the use of their earnings declines somewhat with education; however, this decline is accompanied by a sharp increase with education in the proportion who decide jointly with their husbands on the use of their earnings. A similar pattern of variation in who decides about the use of women's earnings is observed according to wealth index, except in the fourth quintile.

There is substantial regional variation in who makes decisions on how women's earnings are used. The proportion of employed women who mainly decide on the use of their earnings is highest in the terai region (55 percent); however, within this region, the proportion varies from a low of 39 percent in the Far-western terai to a high of 68 percent in the Western terai. Joint decision-making on the use of women's earnings is most common in the mountain zone, at 47 percent, and ranges from 40 percent in the Eastern mountain subregion to 52 percent in the Central and Western mountain subregions. Notably, among 16 percent of employed women with earnings in the Western mountain subregion, the main decision-maker regarding the use of the women's earnings is the husband.

Table 13.3.1 also shows women's perception of their cash earnings relative to their husbands' earnings. Among currently married women who earn cash, 74 percent say that they earn less than their husbands, 8 percent say that they earn more than their husbands, and 15 percent say that they earn about the same amount as their husbands. Thus, almost one in four women who have cash earnings in Nepal earn about the same as or more than their husbands.

The proportion of currently married women who are employed for cash and earn about the same as or more than their husbands generally increases with age, number of children, education, and wealth and is higher among urban than rural women. Notably, among the most educated women who are employed for cash and among those in the highest wealth quintile, almost 30 percent earn about the same as or more than their husbands. Women in the hill ecological zone, particularly the Mid-western and Central hill regions, are more likely than their counterparts in other regions to earn the same as or more than their husbands.

Table 13.3.1 Control over women's cash earnings and relative magnitude of women's cash earnings: Women

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how their cash earnings are used and by whether women earned more or less than their husband, according to background characteristics, Nepal 2011

	Person who decides how the wife's cash earnings are used:					Wife's cash earnings compared with husband's cash earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	More	Less	About the same	Husband has no earnings	Don't know/ missing	Total	Number of women
Age												
15-19	44.5	33.4	6.7	15.3	100.0	7.5	85.1	5.1	1.2	1.1	100.0	78
20-24	52.2	37.5	5.7	4.6	100.0	5.6	80.3	10.6	3.5	0.0	100.0	316
25-29	56.5	35.9	5.0	2.6	100.0	4.7	81.1	10.7	3.1	0.4	100.0	488
30-34	54.6	40.7	4.5	0.1	100.0	8.8	74.1	13.7	2.7	0.6	100.0	475
35-39	55.9	41.1	2.3	0.8	100.0	9.0	66.7	20.2	3.1	1.1	100.0	413
40-44	43.5	47.7	8.8	0.0	100.0	10.8	66.4	17.7	2.7	2.4	100.0	293
45-49	48.2	47.4	4.5	0.0	100.0	6.1	60.9	24.4	5.8	2.8	100.0	159
Number of living children												
0	52.3	37.8	3.6	6.3	100.0	8.0	77.4	9.3	5.4	0.0	100.0	199
1-2	52.2	40.5	5.4	1.9	100.0	7.4	73.1	15.0	3.3	1.2	100.0	1,188
3-4	55.1	39.8	4.0	1.1	100.0	7.7	73.7	15.8	2.1	0.6	100.0	686
5+	44.8	46.2	9.0	0.0	100.0	7.0	71.9	16.0	3.5	1.6	100.0	148
Residence												
Urban	55.0	39.7	4.3	1.0	100.0	10.3	69.1	15.2	4.9	0.5	100.0	459
Rural	52.0	40.6	5.2	2.2	100.0	6.8	74.7	14.7	2.7	1.1	100.0	1,764
Ecological zone												
Mountain	37.9	47.3	11.6	3.2	100.0	8.7	72.0	14.7	4.4	0.1	100.0	86
Hill	50.3	43.4	4.8	1.5	100.0	10.8	65.7	17.0	4.8	1.7	100.0	772
Terai	54.9	38.3	4.7	2.1	100.0	5.6	78.1	13.6	2.1	0.6	100.0	1,365
Development region												
Eastern	52.4	42.4	4.2	1.0	100.0	5.2	73.4	18.3	2.6	0.5	100.0	712
Central	55.2	38.6	4.8	1.4	100.0	9.3	75.9	11.8	2.6	0.5	100.0	850
Western	56.4	35.5	5.0	3.1	100.0	7.7	70.4	13.9	4.9	3.2	100.0	370
Mid-western	40.0	48.7	7.3	4.0	100.0	7.1	66.4	20.6	4.8	1.0	100.0	161
Far-western	41.8	45.5	8.1	4.6	100.0	8.8	77.4	11.2	2.4	0.2	100.0	129
Subregion												
Eastern mountain	51.4	40.0	8.3	0.3	100.0	10.0	74.5	12.1	3.1	0.3	100.0	33
Central mountain	30.1	52.3	9.8	7.8	100.0	7.8	77.0	9.3	5.9	0.0	100.0	21
Western mountain	29.0	51.6	16.1	3.2	100.0	8.1	66.1	21.0	4.8	0.0	100.0	32
Eastern hill	47.4	49.2	2.6	0.8	100.0	4.3	70.7	18.6	6.4	0.0	100.0	134
Central hill	55.0	39.3	5.2	0.4	100.0	14.4	66.0	16.4	2.8	0.4	100.0	378
Western hill	43.4	46.7	6.9	3.0	100.0	8.0	63.3	14.9	7.6	6.1	100.0	173
Mid-western hill	49.3	44.4	1.2	5.2	100.0	8.7	58.9	26.5	4.8	1.2	100.0	67
Far-western hill	(42.1)	(49.4)	(5.7)	(2.8)	100.0	(17.1)	(71.3)	(4.9)	(6.7)	(0.0)	100.0	21
Eastern terai	53.7	40.8	4.4	1.1	100.0	5.1	74.0	18.6	1.7	0.6	100.0	545
Central terai	56.6	37.3	4.2	2.0	100.0	5.0	84.1	8.0	2.3	0.6	100.0	451
Western terai	67.8	25.7	3.3	3.2	100.0	7.4	76.6	12.9	2.5	0.6	100.0	197
Mid-western terai	39.5	48.5	8.5	3.4	100.0	4.8	75.8	14.1	4.1	1.1	100.0	75
Far-western terai	39.4	46.5	9.1	5.1	100.0	7.6	78.0	12.4	1.8	0.3	100.0	97
Education												
No education	54.9	37.2	6.2	1.8	100.0	6.5	76.0	13.5	3.0	1.1	100.0	901
Primary	55.3	35.7	6.6	2.4	100.0	6.4	76.1	12.1	3.8	1.6	100.0	401
Some secondary	51.7	40.7	5.2	2.3	100.0	6.6	72.3	17.9	2.7	0.5	100.0	421
SLC and above	47.3	49.7	1.5	1.6	100.0	11.2	68.2	16.8	3.2	0.7	100.0	500
Wealth quintile												
Lowest	58.5	29.5	8.8	3.3	100.0	7.3	80.9	4.9	4.6	2.4	100.0	193
Second	51.5	40.5	4.4	3.5	100.0	4.5	82.7	9.6	2.4	0.8	100.0	348
Middle	51.1	40.3	6.9	1.6	100.0	5.9	81.6	8.9	2.2	1.4	100.0	373
Fourth	56.3	37.5	4.1	2.1	100.0	7.9	70.0	17.9	3.3	0.9	100.0	572
Highest	49.5	45.5	4.1	0.9	100.0	9.5	66.1	20.4	3.5	0.5	100.0	737
Total	52.6	40.4	5.0	1.9	100.0	7.5	73.6	14.8	3.1	1.0	100.0	2,223

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

13.3 CONTROL OVER HUSBANDS' EARNINGS

Currently married men age 15-49 who receive cash earnings were asked who—the men themselves, their wife, the husband and wife jointly, or someone else—decides how their own cash earnings are used. In addition, currently married women were asked who decides how their husbands' cash earnings are used. Table 13.3.2 shows that 47 percent of currently married men age 15-49 who receive cash earnings report that they decide jointly with their wives how their earnings will be used, while 39 percent say they mainly make these decisions themselves. Eight percent of men say that decisions on how their earnings are used are mainly made by their wives.

Table 13.3.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Nepal 2011

	Men						Women					
	Person who decides how husband's cash earnings are used:						Person who decides how husband's cash earnings are used:					
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of men	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of women
Age												
15-19	(3.1)	(18.7)	(41.7)	(36.5)	100.0	38	7.4	30.4	27.6	34.6	100.0	747
20-24	3.2	33.4	43.4	20.0	100.0	225	12.8	40.2	23.2	23.8	100.0	1,697
25-29	8.6	43.0	40.6	7.8	100.0	381	18.6	48.9	22.4	10.2	100.0	1,870
30-34	8.8	52.0	33.9	5.3	100.0	394	18.2	56.5	21.0	4.4	100.0	1,618
35-39	8.6	50.9	38.3	2.2	100.0	420	20.5	56.5	21.1	2.0	100.0	1,420
40-44	8.8	54.7	35.3	1.2	100.0	337	16.4	55.4	27.0	1.2	100.0	1,143
45-49	11.6	42.7	45.5	0.1	100.0	282	13.5	57.5	28.8	0.3	100.0	781
Number of living children												
0	6.8	29.8	44.7	18.6	100.0	232	7.2	38.1	26.2	28.5	100.0	1,009
1-2	8.7	50.0	34.9	6.3	100.0	992	16.3	50.7	20.5	12.5	100.0	4,308
3-4	7.3	48.0	42.4	2.3	100.0	652	19.2	51.6	25.1	4.0	100.0	3,000
5+	12.2	45.3	41.2	1.3	100.0	201	14.9	52.7	30.2	2.2	100.0	959
Residence												
Urban	10.3	52.4	33.1	4.3	100.0	400	16.3	57.2	22.1	4.4	100.0	1,214
Rural	7.9	45.3	40.4	6.3	100.0	1,677	16.1	48.7	23.8	11.3	100.0	8,063
Ecological zone												
Mountain	4.5	37.9	53.2	4.5	100.0	101	9.5	51.0	29.4	10.1	100.0	590
Hill	8.1	54.0	34.4	3.5	100.0	781	14.3	54.4	23.3	7.9	100.0	3,615
Terai	8.9	42.6	40.8	7.6	100.0	1,195	18.2	46.4	23.2	12.2	100.0	5,072
Development region												
Eastern	9.7	53.8	31.0	5.5	100.0	529	14.7	53.1	25.5	6.6	100.0	2,225
Central	8.8	43.3	42.0	5.9	100.0	799	19.0	48.8	22.7	9.5	100.0	3,147
Western	9.4	50.8	32.4	7.4	100.0	349	15.8	50.2	20.6	13.5	100.0	1,965
Mid-western	6.5	38.7	50.7	4.1	100.0	229	13.5	49.6	25.7	11.1	100.0	1,090
Far-western	2.7	42.8	47.5	6.9	100.0	170	13.2	44.6	26.2	15.9	100.0	849
Subregion												
Eastern mountain	6.8	58.6	27.8	6.8	100.0	30	6.8	52.6	35.8	4.8	100.0	162
Central mountain	3.4	30.2	66.3	0.0	100.0	29	15.5	48.2	27.6	8.7	100.0	181
Western mountain	3.6	28.6	61.9	6.0	100.0	42	6.8	52.1	26.5	14.6	100.0	247
Eastern hill	7.9	58.3	28.0	5.7	100.0	146	8.6	55.0	31.8	4.5	100.0	664
Central hill	9.1	57.4	32.0	1.5	100.0	327	18.6	56.9	21.2	3.3	100.0	1,076
Western hill	7.4	51.8	36.9	3.8	100.0	176	10.5	59.0	20.1	10.5	100.0	1,115
Mid-western hill	9.4	40.7	47.3	2.6	100.0	92	17.9	48.7	23.2	10.2	100.0	496
Far-western hill	0.0	50.8	36.1	13.0	100.0	40	20.7	34.7	24.1	20.5	100.0	265
Eastern terai	10.7	51.6	32.5	5.3	100.0	353	18.5	52.3	21.4	7.8	100.0	1,400
Central terai	9.0	33.7	47.7	9.6	100.0	443	19.6	44.2	23.2	13.1	100.0	1,890
Western terai	11.4	49.7	28.0	10.9	100.0	174	22.7	38.6	21.2	17.5	100.0	850
Mid-western terai	5.1	39.2	50.3	5.4	100.0	111	10.6	49.7	27.8	11.9	100.0	462
Far-western terai	3.2	42.3	50.0	4.5	100.0	114	10.7	48.7	27.8	12.9	100.0	470
Education												
No education	7.5	37.0	49.9	5.6	100.0	392	17.5	47.4	27.2	8.0	100.0	4,417
Primary	10.8	46.4	37.8	4.9	100.0	484	17.3	46.9	23.8	12.0	100.0	1,797
Some secondary	9.1	45.2	38.2	7.5	100.0	627	15.4	50.1	19.2	15.2	100.0	1,754
SLC and above	6.1	55.1	33.4	5.4	100.0	573	10.8	61.8	17.2	10.2	100.0	1,309
Wealth quintile												
Lowest	7.4	40.5	48.6	3.5	100.0	236	16.7	42.1	30.8	10.4	100.0	1,558
Second	5.8	46.4	44.7	3.1	100.0	325	14.4	48.4	26.1	11.1	100.0	1,789
Middle	8.6	40.5	41.2	9.7	100.0	482	16.4	45.9	24.5	13.2	100.0	1,965
Fourth	9.8	46.6	37.2	6.4	100.0	457	18.2	50.4	19.4	12.0	100.0	1,998
Highest	8.9	54.6	31.5	5.0	100.0	577	14.8	60.6	19.2	5.4	100.0	1,966
Total 15-49	8.4	46.7	39.0	5.9	100.0	2,077	16.1	49.8	23.6	10.4	100.0	9,276

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

The proportion of currently married employed men who have earnings and who say that they make decisions about the use of their earnings jointly with their wives is highest among men age 40-44 (55 percent); younger (age 20-24) and older (age 45-49) men are more likely to make these decisions alone. Notably, younger men (age 20-24) are more likely than older men to say that other family members decide how their earnings are used. The proportion of men making decisions alone about the use of their income is higher in rural than in urban areas and decreases with education, from 50 percent among men with no education to 33 percent among men with a School Leaving Certificate (SLC) or higher education. This proportion also declines with wealth. Notably, more than half (55 percent) of the most educated men and men in the highest wealth quintile say that they make decisions about the use of their earnings jointly with their wives.

The main decision-maker regarding the use of men's own earnings varies greatly by region. Decision-making by the man alone is highest in the mountain ecological zone. Also, it is higher in the Central and

Western mountain subregions, where about two-thirds of currently married employed men with earnings decide by themselves how their earnings are used, than in other subregions. Decision-making about the man's earnings mainly by the wife is most common in the terai zone, particularly the Western and Central terai.

Table 13.3.2 also shows women's responses on who makes the decision about their husbands' earnings. Only currently married women whose husbands had cash earnings are included. Half of currently married women whose husbands receive cash earnings say that they decide jointly with their husband about the use of his cash earnings, 16 percent say that they decide by themselves, 24 percent say that their husband alone decides, and 10 percent say that someone else decides.

A comparison between women's responses about the main decision-maker regarding the use of their husbands' earnings and men's responses about the use of their own earnings shows both similarities and differences. Whereas a similar proportion of women and men (50 percent and 47 percent) say that they jointly make the decision with their spouse, women are twice (16 percent) as likely as men (8 percent) to say that the wife is the main decision maker. Further, men are much more likely to say that they themselves are the main decision makers regarding the use of their own earnings than women are to say that the husband is the main decision maker (39 percent versus 24 percent).

The pattern of variation by background characteristics in women's responses about the use of their husbands' earnings is similar to that of men's responses to the use of their earnings. In general, joint decision-making increases with age, education, and wealth and is higher in the hill region and in urban areas. Decision-making alone by the husband is generally higher in the youngest and oldest age groups. Similar to younger men, a much higher proportion of younger women report that someone else makes the decision about the use of their husbands' earnings.

The level of women's earnings relative to their husbands' earnings is expected to be associated with women's control over their own and their husbands' earnings. To examine this association, Table 13.4 shows the percent distribution of currently married women with cash earnings by the person who has the main say in the use of their earnings and the distribution of currently married women by the person who has the main say in the use of their husbands' earnings, according to women's perception of the size of their own earnings relative to their husbands' earnings.

Table 13.4 Woman's control over their earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the past 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Nepal 2011

	Person who decides how wife's cash earnings are used:						Person who decides how husband's cash earnings are used:					
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
More than husband	59.2	36.1	3.6	1.1	100.0	167	31.0	43.3	23.1	2.6	100.0	167
Less than husband	57.0	36.0	4.8	2.2	100.0	1,635	20.6	56.2	19.8	3.4	100.0	1,635
Same as husband	29.0	63.9	6.8	0.3	100.0	329	15.0	73.4	10.9	0.7	100.0	329
Husband has no cash earnings or did not work	49.3	42.7	2.7	5.3	100.0	70	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	14.3	48.7	25.2	11.8	100.0	4,932
Woman did not work	na	na	na	na	na	0	16.1	44.6	24.7	14.5	100.0	2,191
Total	52.6	40.4	5.0	1.9	100.0	2,223	16.1	49.8	23.6	10.4	100.0	9,276

Note: Total includes cases where a woman does not know whether she earned more or less than her husband.
na = Not applicable

The table shows that women's participation in the use of their own and their husbands' earnings does vary by their relative earnings; however, the variation is not necessarily as expected. The most consistent finding is that women who earn about the same as their husbands are most likely to jointly decide about the use of both their own earnings (64 percent) and their husbands' earnings (73 percent). Women who earn more than their husbands are more likely than other women to be the main decision-maker about the use of their husbands'

earnings (31 percent), but women who earn more and women who earn less than their husbands are about equally likely to be the main decision-makers about their own earnings (59 percent versus 57 percent).

13.4 WOMEN'S AND MEN'S OWNERSHIP OF SELECTED ASSETS

Ownership of assets, particularly high-value assets, has many beneficial effects for households, including protection against financial ruin. Women's individual ownership of assets enables their economic empowerment and provides protection in the case of marital dissolution or abandonment. The 2011 NDHS collected information on women's and men's ownership (alone, jointly, and alone and jointly) of two high-value assets, namely, land and a house.

Table 13.5.1 shows that 93 percent of women age 15-49 do not own a house and 90 percent do not own any land. Six percent of women own a house alone, and 10 percent own land alone. Notably, women who own either of these assets appear to own them mostly alone as opposed to jointly with someone else.

Women's ownership of a house and land increases with age and wealth but does not vary consistently with education. Married women are more likely to own a house (7 percent) and land (11 percent) than women who have never been married. Women who are divorced, separated, or widowed more often own a house (27 percent) and land (29 percent) alone. Urban women, those from the Eastern region, and those from the terai are more likely than rural women and women in other regions to own a house and land by themselves.

A higher proportion of men than women own a house or land. As shown in Table 13.5.2, 25 percent of men age 15-49 own a house alone and/or jointly, and 27 percent own land alone and/or jointly (as compared with 8 percent and 10 percent of women, respectively). Women's disadvantage relative to men in asset ownership is evident in every demographic and socioeconomic category.

As was the case for women, ownership of land and a house among men increases sharply with age. However, the proportions of older women and older men owning these high-value assets alone are vastly different. For example, only 15 percent of women age 45-49 own a house alone and 24 percent own land alone, compared with 63 percent and 59 percent of men age 45-49, respectively. Never-married men are slightly more likely to own a house and land than never-married women. In contrast to women, rural men are more likely than urban men to own either asset. Men's ownership of a house declines sharply with education, from 47 percent among men with no education to 18 percent among men with an SLC and higher education. Ownership of land also declines with education, but the differential is much smaller (from 36 percent among men with no education to 25 percent among men with an SLC or higher education). Surprisingly, ownership of a house declines with wealth, and ownership of land varies minimally and inconsistently with wealth. Men in the mountain zone are more likely than men in other areas to own a house and land. In particular, house and land ownership among men is highest (40 percent and 46 percent, respectively) in the Central mountain region.

Table 13.5.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of a house and land, according to background characteristics, Nepal 2011

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number of women
Age											
15-19	0.3	0.1	0.1	99.5	100.0	0.8	0.2	0.1	98.9	100.0	2,753
20-24	1.4	0.3	0.0	98.2	100.0	2.9	0.3	0.1	96.8	100.0	2,297
25-29	5.4	0.7	0.3	93.6	100.0	7.9	0.5	0.2	91.4	100.0	2,101
30-34	8.7	0.8	0.4	90.1	100.0	13.6	0.6	0.1	85.8	100.0	1,734
35-39	12.3	0.6	0.8	86.4	100.0	16.3	0.4	0.5	82.8	100.0	1,557
40-44	14.1	0.9	1.6	83.4	100.0	20.3	0.7	1.1	78.0	100.0	1,285
45-49	14.8	1.1	1.0	83.1	100.0	23.8	0.3	1.0	74.9	100.0	947
Marital status											
Never married	0.4	0.2	0.1	99.3	100.0	1.1	0.3	0.1	98.5	100.0	2,708
Married	7.4	0.7	0.5	91.4	100.0	11.4	0.4	0.4	87.8	100.0	9,608
Divorced/separated/widowed	26.7	0.7	0.8	71.9	100.0	28.6	0.8	0.6	69.9	100.0	358
Residence											
Urban	9.6	0.7	0.5	89.1	100.0	12.5	0.7	0.5	86.3	100.0	1,819
Rural	5.9	0.5	0.4	93.1	100.0	9.2	0.3	0.3	90.1	100.0	10,855
Ecological zone											
Mountain	3.4	0.2	0.2	96.2	100.0	7.2	0.1	0.0	92.7	100.0	805
Hill	5.2	0.5	0.2	94.0	100.0	8.9	0.5	0.2	90.4	100.0	5,090
Terai	7.7	0.6	0.7	91.0	100.0	10.6	0.4	0.4	88.6	100.0	6,779
Development region											
Eastern	9.0	0.5	0.8	89.7	100.0	13.0	0.4	0.7	86.0	100.0	3,057
Central	5.9	0.7	0.5	92.9	100.0	9.9	0.5	0.3	89.3	100.0	4,236
Western	6.8	0.5	0.4	92.3	100.0	9.7	0.3	0.2	89.8	100.0	2,660
Mid-western	4.7	0.5	0.0	94.7	100.0	7.1	0.3	0.0	92.5	100.0	1,478
Far-western	3.3	0.3	0.2	96.2	100.0	4.1	0.2	0.1	95.5	100.0	1,242
Subregion											
Eastern mountain	5.0	0.1	0.2	94.7	100.0	11.6	0.1	0.0	88.3	100.0	229
Central mountain	2.2	0.2	0.0	97.6	100.0	7.8	0.2	0.0	92.0	100.0	258
Western mountain	3.2	0.3	0.3	96.2	100.0	3.7	0.0	0.0	96.3	100.0	319
Eastern hill	6.5	0.1	0.1	93.3	100.0	11.4	0.5	0.2	87.9	100.0	956
Central hill	5.4	0.8	0.4	93.4	100.0	8.6	0.7	0.5	90.2	100.0	1,563
Western hill	5.7	0.5	0.3	93.5	100.0	10.2	0.4	0.1	89.3	100.0	1,513
Mid-western hill	4.6	0.7	0.0	94.7	100.0	7.3	0.5	0.0	92.2	100.0	649
Far-western hill	1.1	0.2	0.1	98.6	100.0	1.6	0.1	0.0	98.2	100.0	409
Eastern terai	10.8	0.6	1.2	87.3	100.0	13.9	0.4	1.0	84.7	100.0	1,873
Central terai	6.6	0.7	0.7	92.0	100.0	10.9	0.5	0.2	88.4	100.0	2,415
Western terai	8.2	0.6	0.5	90.7	100.0	9.0	0.1	0.3	90.5	100.0	1,147
Mid-western terai	5.1	0.4	0.0	94.5	100.0	7.5	0.3	0.1	92.1	100.0	668
Far-western terai	4.7	0.4	0.2	94.7	100.0	5.8	0.4	0.2	93.6	100.0	676
Education											
No education	7.3	0.6	0.7	91.5	100.0	10.3	0.3	0.4	89.0	100.0	5,045
Primary	6.3	0.7	0.0	93.0	100.0	10.3	0.3	0.0	89.4	100.0	2,209
Some secondary	5.1	0.5	0.5	93.9	100.0	7.9	0.6	0.3	91.3	100.0	3,088
SLC and above	6.6	0.4	0.4	92.6	100.0	10.3	0.4	0.5	88.8	100.0	2,331
Wealth quintile											
Lowest	2.6	0.3	0.2	96.9	100.0	3.9	0.1	0.0	96.0	100.0	2,120
Second	4.1	0.4	0.2	95.3	100.0	5.2	0.3	0.2	94.4	100.0	2,393
Middle	5.0	0.4	0.7	93.9	100.0	8.7	0.4	0.6	90.3	100.0	2,600
Fourth	8.0	0.8	0.3	90.9	100.0	12.9	0.6	0.2	86.3	100.0	2,722
Highest	11.2	0.9	0.7	87.2	100.0	15.6	0.5	0.6	83.2	100.0	2,839
Total	6.4	0.6	0.5	92.5	100.0	9.7	0.4	0.3	89.6	100.0	12,674

SLC = School Leaving Certificate

Table 13.5.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of a house and land, according to background characteristics, Nepal 2011

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number
Age											
15-19	1.6	0.4	0.2	97.8	100.0	2.9	0.3	0.2	96.5	100.0	978
20-24	5.4	3.5	0.0	91.2	100.0	6.6	2.2	0.3	90.9	100.0	685
25-29	13.9	1.2	0.2	84.7	100.0	17.4	1.4	0.0	81.1	100.0	581
30-34	27.1	1.8	0.1	71.0	100.0	34.5	1.2	0.3	63.9	100.0	499
35-39	38.7	2.8	1.2	57.2	100.0	41.2	3.3	0.7	54.8	100.0	542
40-44	47.3	5.0	0.2	47.6	100.0	48.4	4.6	0.8	46.1	100.0	438
45-49	62.6	2.0	0.3	35.1	100.0	59.0	3.1	1.4	36.5	100.0	399
Marital status											
Never married	1.7	1.5	0.2	96.7	100.0	4.6	1.0	0.3	94.1	100.0	1,433
Married	33.9	2.5	0.4	63.1	100.0	35.5	2.6	0.6	61.4	100.0	2,626
Divorced/separated/widowed	31.1	0.0	0.0	68.9	100.0	32.4	0.0	0.0	67.6	100.0	62
Residence											
Urban	15.3	2.8	0.4	81.4	100.0	20.1	2.0	0.6	77.3	100.0	717
Rural	24.2	2.0	0.3	73.5	100.0	25.6	2.0	0.4	71.9	100.0	3,404
Ecological zone											
Mountain	33.2	2.2	0.0	64.6	100.0	37.3	2.9	0.0	59.8	100.0	245
Hill	22.9	2.4	0.0	74.6	100.0	26.2	2.3	0.3	71.1	100.0	1,658
Terai	21.3	1.9	0.6	76.2	100.0	22.1	1.7	0.6	75.5	100.0	2,218
Development region											
Eastern	25.7	4.2	0.6	69.5	100.0	28.8	2.8	1.1	67.2	100.0	996
Central	21.6	2.2	0.3	76.0	100.0	23.9	2.2	0.3	73.7	100.0	1,448
Western	20.0	0.3	0.2	79.5	100.0	21.2	0.8	0.4	77.5	100.0	798
Mid-western	27.8	2.0	0.0	70.2	100.0	27.9	2.5	0.0	69.6	100.0	493
Far-western	18.0	0.8	0.3	80.9	100.0	20.2	1.3	0.0	78.6	100.0	385
Subregion											
Eastern mountain	34.1	1.0	0.0	64.9	100.0	39.3	1.0	0.0	59.7	100.0	66
Central mountain	37.9	2.4	0.0	59.7	100.0	43.8	2.6	0.0	53.6	100.0	69
Western mountain	29.8	2.8	0.0	67.4	100.0	32.1	4.1	0.0	63.8	100.0	110
Eastern hill	30.1	4.2	0.1	65.6	100.0	35.5	3.3	1.0	60.2	100.0	293
Central hill	20.2	3.7	0.0	76.1	100.0	23.7	3.5	0.0	72.8	100.0	616
Western hill	19.4	0.0	0.0	80.6	100.0	22.5	0.4	0.4	76.6	100.0	440
Mid-western hill	34.5	2.7	0.0	62.8	100.0	35.7	2.7	0.0	61.6	100.0	189
Far-western hill	13.8	0.0	0.0	86.2	100.0	15.7	0.0	0.0	84.3	100.0	120
Eastern terai	22.8	4.5	0.9	71.8	100.0	24.7	2.8	1.3	71.2	100.0	638
Central terai	21.2	1.0	0.5	77.3	100.0	22.2	1.0	0.6	76.2	100.0	763
Western terai	20.6	0.7	0.4	78.3	100.0	19.7	1.2	0.4	78.7	100.0	358
Mid-western terai	20.6	0.7	0.0	78.8	100.0	19.5	1.1	0.0	79.4	100.0	242
Far-western terai	19.4	1.4	0.6	78.7	100.0	21.3	2.3	0.0	76.4	100.0	217
Education											
No education	45.9	0.9	0.2	52.9	100.0	34.0	1.6	0.0	64.4	100.0	567
Primary	31.9	2.2	0.0	65.9	100.0	32.5	2.0	0.2	65.3	100.0	814
Some secondary	16.2	1.5	0.5	81.8	100.0	20.3	1.2	0.3	78.2	100.0	1,437
SLC and above	14.0	3.3	0.4	82.3	100.0	20.5	3.1	1.1	75.3	100.0	1,303
Wealth quintile											
Lowest	31.1	1.3	0.0	67.6	100.0	28.4	1.8	0.0	69.8	100.0	610
Second	26.6	0.7	0.2	72.5	100.0	25.2	0.7	0.0	74.2	100.0	695
Middle	25.4	2.0	0.0	72.5	100.0	24.0	1.3	0.2	74.6	100.0	830
Fourth	18.3	1.5	0.5	79.7	100.0	21.4	2.5	1.4	74.8	100.0	920
Highest	17.0	4.1	0.6	78.2	100.0	25.6	3.2	0.5	70.7	100.0	1,066
Total	22.7	2.1	0.3	74.9	100.0	24.7	2.0	0.5	71.8	100.0	4,121

SLC = School Leaving Certificate

13.5 WOMEN'S PARTICIPATION IN DECISION-MAKING

The ability of women to make decisions that affect their personal circumstances is an essential element of their empowerment and serves as an important contributor to their overall development. To assess currently married women's decision-making autonomy, the 2011 NDHS collected information on their participation in three types of decisions: their own health care, making major household purchases, and visits to family or relatives. To provide an understanding of gender differences in household decision-making, currently married men were asked the same questions about their participation in decisions about their own health care and major household purchases. Table 13.6 shows the percent distribution of currently married women and men according to the person in the household who usually makes decisions concerning these matters. Women are considered to participate in decision-making if they make decisions alone or jointly with their husbands.

Table 13.6 shows that 65 percent of women participate in making decisions regarding their own health care. By contrast, the vast majority of men (87 percent) are involved in decisions about their own health care. One-third of women and the same proportion of men say that they alone make decisions about major household purchases. Only 28 percent of women decide on their own regarding visits to their family or relatives.

Table 13.6 Participation in decision-making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Nepal 2011

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number
WOMEN							
Own health care	25.7	39.7	21.8	12.4	0.4	100.0	9,608
Major household purchases	33.5	23.7	19.8	22.3	0.7	100.0	9,608
Visits to her family or relatives	27.7	33.3	17.0	21.5	0.6	100.0	9,608
MEN							
Own health care	6.8	31.6	55.4	5.6	0.6	100.0	2,626
Major household purchases	22.4	27.2	33.5	15.6	1.3	100.0	2,626

Table 13.7.1 shows how currently married women's participation (alone or jointly) in decision-making varies by background characteristics. The table presents the results for the three specific types of decisions asked about, namely the woman's own health care, making major household purchases, and visits to her family or relatives. In addition, the table includes two summary indicators: the proportion of women involved in making all three decisions and the proportion not involved in making any of the three decisions.

Table 13.7.1 shows that 57 percent to 65 percent of women participate in the three decisions asked about, but less than half (46 percent) report taking part in all three decisions and about one in four (24 percent) report not participating in any of the three decisions. The percentage of women participating in all three decisions tends to increase with age and wealth. Fifty-seven percent of women in the highest wealth quintile participate in all three decisions, as compared with 40 percent of women in the lowest wealth quintile. Participation in all three decisions varies minimally and inconsistently with education. More women who are employed for cash take part in all three decisions (60 percent) than women who are employed but do not earn cash (41 percent) and women who are not employed (42 percent). Women who belong to a community group and those in urban areas are more likely to participate in all three decisions than women who do not belong to a community group and those from rural areas. Women's participation in all three decisions ranges from a low of 29 percent in the Far-western hill region to a high of 52 percent in the Central hill and Eastern terai regions.

Table 13.7.2 presents data on currently married men's participation (alone or jointly) in two types of decisions—their own health care and making major household purchases—by background characteristics. The table shows that 87 percent of men participate in decisions about their own health care, and 61 percent participate in decisions about major household purchases. Overall, 57 percent of currently married men age 15-49 participate in both of these decisions and only 9 percent do not participate in either. The proportion of currently married men participating in both decisions increases sharply with age but tends to decline with education and wealth. Men's participation in both decisions is higher in rural than in urban areas and in the mountain zone than in other zones. By specific subregion, participation in both decisions ranges from 46 percent in the Eastern terai region to 75 percent in the Central mountain region.

Table 13.7.1 Women's participation in decision-making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Nepal 2011

Background characteristic	Percentage who usually make specific decisions alone or jointly with their husband			Percentage who participate in all three decisions	Percentage who participate in none of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	35.2	18.1	21.7	12.9	60.1	792
20-24	53.1	35.4	39.3	26.8	39.4	1,761
25-29	68.0	57.9	61.6	46.1	21.0	1,914
30-34	73.8	69.7	69.0	54.7	15.7	1,659
35-39	75.1	73.8	76.7	59.8	11.2	1,461
40-44	72.7	68.8	76.1	56.8	13.4	1,190
45-49	70.0	68.1	77.5	54.8	12.6	832
Employment (last 12 months)						
Not employed	57.6	52.8	53.5	41.8	32.4	2,230
Employed for cash	79.8	74.1	74.9	59.8	9.2	2,223
Employed not for cash	62.5	51.8	58.2	40.9	25.8	5,155
Belongs to a community group						
Belongs to a group	74.2	67.9	70.3	54.7	14.1	4,466
Does not belong to any group	57.7	47.9	52.9	37.5	31.7	5,141
Number of living children						
0	45.4	25.5	31.2	19.0	48.6	1,075
1-2	67.2	56.0	59.4	45.5	23.8	4,442
3-4	70.2	68.4	71.0	53.9	15.7	3,091
5+	64.1	61.9	68.9	48.0	19.2	999
Residence						
Urban	73.2	65.8	70.5	52.4	14.5	1,261
Rural	64.2	55.9	59.5	44.4	24.9	8,346
Ecological zone						
Mountain	59.8	52.2	59.4	40.2	25.4	630
Hill	69.9	57.4	63.9	46.3	19.1	3,784
Terai	62.8	57.6	59.0	45.5	26.4	5,193
Development region						
Eastern	70.4	61.1	64.6	48.6	18.9	2,293
Central	64.4	61.4	62.8	49.2	24.2	3,210
Western	69.3	54.1	59.5	44.3	22.0	2,031
Mid-western	59.2	54.8	62.2	43.3	26.1	1,149
Far-western	55.7	42.4	47.3	30.2	32.5	925
Subregion						
Eastern mountain	65.2	54.5	62.2	45.4	22.6	169
Central mountain	60.4	58.0	64.5	44.1	21.1	190
Western mountain	56.0	46.8	54.1	34.3	30.1	271
Eastern hill	67.1	53.1	65.1	42.5	19.7	702
Central hill	72.9	67.0	69.7	52.0	13.9	1,103
Western hill	75.8	54.7	63.8	45.9	15.3	1,164
Mid-western hill	65.2	59.5	64.6	50.8	25.1	510
Far-western hill	50.9	38.7	39.5	28.8	41.5	305
Eastern terai	72.6	65.8	64.7	52.0	18.0	1,421
Central terai	59.9	58.5	58.7	48.0	30.5	1,918
Western terai	60.5	53.3	53.8	42.1	30.9	867
Mid-western terai	53.5	51.0	59.8	35.0	25.8	499
Far-western terai	59.0	45.0	52.7	33.4	27.7	488
Education						
No education	62.4	58.4	63.2	46.3	24.5	4,580
Primary	63.2	56.4	58.0	43.8	25.2	1,844
Some secondary	66.9	55.6	57.7	43.8	24.1	1,833
SLC and above	76.6	56.3	62.0	47.2	17.0	1,350
Wealth quintile						
Lowest	59.0	50.7	56.4	39.9	29.0	1,664
Second	62.0	52.3	59.8	41.3	25.6	1,846
Middle	61.5	53.8	57.3	43.2	27.9	2,022
Fourth	66.4	58.6	58.7	45.2	23.2	2,052
Highest	76.6	68.9	71.8	56.5	13.0	2,023
Total	65.4	57.2	61.0	45.5	23.5	9,608

SLC = School Leaving Certificate

Table 13.7.2 Men's participation in decision-making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Nepal 2011

Background characteristic	Percentage who usually make specific decisions alone or jointly with their wife		Percentage who participate in both decisions	Percentage who participate in neither of the two decisions	Number of men
	Man's own health care	Making major household purchases			
Age					
15-19	51.9	33.1	26.5	41.6	67
20-24	83.4	47.4	45.3	14.5	306
25-29	83.8	51.8	48.2	12.6	471
30-34	88.2	60.6	58.1	9.2	459
35-39	90.9	63.3	59.2	5.0	516
40-44	89.9	72.5	67.8	5.4	423
45-49	90.5	70.6	66.8	5.6	384
Employment (last 12 months)					
Not employed	(82.4)	(43.6)	(43.6)	(17.6)	47
Employed for cash	87.2	59.4	55.4	8.8	2,077
Employed not for cash	87.0	67.6	65.1	10.5	502
Number of living children					
0	76.1	39.2	35.8	20.4	310
1-2	87.2	56.8	53.7	9.7	1,200
3-4	90.3	68.6	65.2	6.3	821
5+	89.0	77.3	70.7	4.3	295
Residence					
Urban	89.3	51.5	49.5	8.6	425
Rural	86.6	62.5	58.5	9.4	2,201
Ecological zone					
Mountain	89.3	75.5	71.4	6.6	179
Hill	88.4	55.7	53.0	8.9	1,057
Terai	85.8	62.5	58.3	10.0	1,390
Development region					
Eastern	83.6	55.8	50.2	10.8	607
Central	88.9	61.6	59.3	8.8	950
Western	86.0	62.0	57.2	9.2	482
Mid-western	86.1	63.3	59.9	10.5	340
Far-western	91.9	63.0	61.0	6.1	247
Subregion					
Eastern mountain	82.1	69.9	65.1	13.2	42
Central mountain	95.8	76.9	75.2	2.5	50
Western mountain	89.0	77.5	72.3	5.8	87
Eastern hill	80.6	61.2	54.3	12.6	191
Central hill	94.3	48.7	48.7	5.7	385
Western hill	89.8	54.1	51.8	8.0	270
Mid-western hill	82.9	64.2	57.9	10.9	133
Far-western hill	83.4	68.8	67.2	15.1	77
Eastern terai	85.3	51.4	46.4	9.7	374
Central terai	84.2	69.8	65.7	11.7	515
Western terai	81.3	72.0	64.2	10.8	211
Mid-western terai	88.3	60.0	59.5	11.2	157
Far-western terai	97.2	53.5	52.2	1.5	133
Education					
No education	86.4	72.2	68.8	10.2	504
Primary	85.7	62.9	57.7	9.1	640
Some secondary	85.3	55.2	52.2	11.7	799
SLC and above	90.8	56.6	53.5	6.0	684
Wealth quintile					
Lowest	88.5	70.3	66.5	7.8	439
Second	87.5	68.1	64.1	8.6	452
Middle	80.2	58.3	53.9	15.4	569
Fourth	88.1	55.9	53.1	9.1	541
Highest	91.2	54.9	51.6	5.5	626
Total 15-49	87.1	60.7	57.1	9.3	2,626

Note: Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

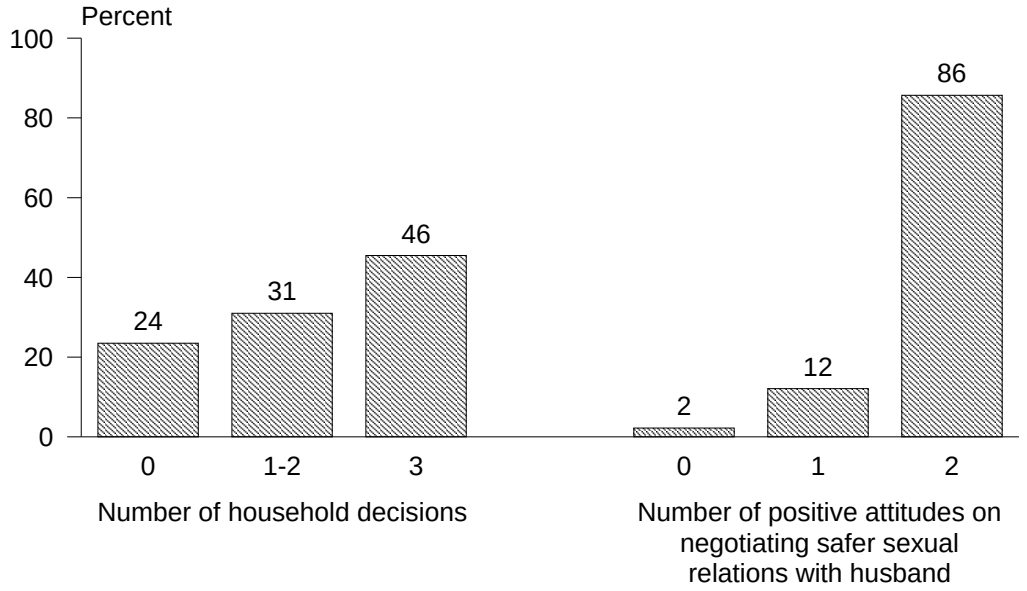
13.6 WOMEN'S EMPOWERMENT INDICATORS

Women's empowerment has important implications for demographic and health outcomes, including women's use of family planning and maternal health care services. Two summary indices of women's empowerment were used to assess the relationship of selected demographic and health outcomes with women's empowerment. The first index is the number of decisions that currently married women participate in alone or jointly. This index, which ranges from 0 (participates in none of the three decisions asked about) to 3

(participates in all three decisions), provides insight into women's control over their daily lives. The second index is based on the information presented in Table 12.6 on women's attitudes toward negotiating safer sexual relations with their husbands. Specifically, women were asked whether they think that a wife who knows her husband has a disease that she can get during sexual intercourse would be justified in asking that they use a condom when having sex and whether a wife is justified in refusing to have sex with her husband when she knows he has sex with other women. Women's responses to these two questions were summarized to form the second empowerment index, number of positive attitudes toward negotiating safer sexual relations with the husband. Women were given a score of 0 on this index if they answered `no' to both questions, a score of 1 if they answered `yes' to one of the questions and 'no' to the other, and a score of 2 if they answered `yes' to both questions.[1] By measuring attitudes toward women refusing sex to their husbands or negotiating safer sex, this index provides insight into women's perceptions of gender equality in sexual roles and should relate positively to women's self-esteem.

Figure 13.1 shows the percent distribution of currently married women across the values of each of these indices. Twenty-four percent of women participate in no decisions, 31 percent of women participate in one or two decisions, and the remaining women (46 percent) participate in all three decisions. The percent distribution of women by their score on the negotiating safer sexual relations empowerment index is more skewed toward attitudes that support women's ability to negotiate safe sex: 86 percent of women have the highest score of 2 on this index, with 12 percent having a score of 1 and only 2 percent having a score of 0.

Figure 13.1 **Percent Distribution of Currently Married Women with their Score on Each of the Two Women's Empowerment Indices**



NDHS 2011

[1] The index on women's attitudes toward wife beating used as an indicator of women's empowerment in the 2006 NDHS was not used in the 2011 NDHS since information was collected differently in the two surveys. Specifically, instead of asking women directly whether a husband was justified in beating his wife under specific scenarios, as was done in the 2006 NDHS, the 2011 NDHS initially asked women whether they agreed with wife beating for any reason. Only if they answered 'yes' to this question were they asked the questions about wife beating in specific scenarios. Because less than 1 percent of women responded `yes' to the filter question, the data on women's responses to questions on specific scenarios cannot be meaningfully used.

Table 13.8 examines the relationship between the two empowerment indices by showing how the percentage of women with a score of 2 on the negotiating safer sexual relations index varies by the number of decisions in which they participate and how the percentage of women who participate in all three decisions varies by their score on the negotiating safer sexual relations index.

As expected, the table shows a positive association between the two empowerment indices. The percentage of women who have positive attitudes toward negotiating safer sexual relations with their husband increases with the score on the decision-making index, from 89 percent among women who do not participate in any of the three decisions to 95 percent among women who participate in all three decisions. Similarly, the percentage of women who participate in all three household decisions increases from 35 percent among those with a score of 0 on the negotiating safer sexual relations index to 47 percent among those with a score of 2 on the index.

Table 13.8 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision-making and the percentage with positive attitudes toward negotiating safer sexual relations with their husband, by value on each of the indices of women's empowerment, Nepal 2011

Empowerment indices	Percentage who participate in all decision-making	Percentage who agree with both items in the negotiating sexual relations index	Number of women
Number of decisions in which women participate[1]			
0	na	88.8	2,258
1-2	na	92.5	2,979
3	na	95.4	4,371
Number of positive attitudes on negotiating safer sexual relations with husband[2]			
0	34.6	na	208
1	39.3	na	1,166
2	46.6	na	8,234

na = Not applicable
[1] See Table 13.7.1 for the list of decisions.
[2] Attitudes include "A wife is justified in asking that they use a condom when she knows that her husband has a disease that she can get during sexual intercourse" and "A wife is justified in refusing to have sex with her husband when she knows he has sex with other women."

13.7 CURRENT USE OF CONTRACEPTION BY WOMEN'S STATUS

A currently married woman's ability to have only the number of children she wants, as well as her use and choice of contraceptive methods, will be affected by her control over her own life, including her sexual relationship with her husband. A woman who is unable to control other aspects of her life may be less able to make decisions regarding her fertility. She may also feel the need to choose contraceptive methods that are less obvious or do not need the approval or knowledge of her husband. Table 13.9 shows the relationship of each of the empowerment indices with current use of contraceptive methods for currently married women.

As expected, contraceptive use is positively associated with both indices of women's empowerment. Use of any contraceptive method and any modern method is higher among women who participate in one or more decisions and increases with the number of positive attitudes toward safer sexual relations increases. For example, the percentage of women using any method increases from 34 percent among those who do not participate in any decisions to 54-55 percent among women who participate in one or more decisions. Similarly, use of any method increases from 34 percent among women with a score of 0 on the negotiating safer sexual relations empowerment index to 51 percent among those with a score of 2.

Women's use of sterilization, both female and male, as well as their use of traditional methods, is positively associated with their score on the number of decisions index. Use of temporary (female and male) methods is also higher among women who participate in any decisions than among women who participate in none; however, use of temporary methods is higher (25 percent) among women who participate in one or two decisions than among women who participate in all three decisions (20 percent). In contrast, use of temporary

Table 13.9 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, by the indices of women's empowerment, Nepal 2011

Empowerment indices	Any method	Any modern method	Modern methods: Female sterilization	Male sterilization	Temporary modern female methods[1]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[2]										
0	34.4	29.2	10.7	3.8	10.8	3.8	5.2	65.6	100.0	2,258
1-2	54.5	47.6	14.5	8.1	19.8	5.2	6.9	45.5	100.0	2,979
3	54.3	47.3	18.0	9.7	15.6	4.0	7.0	45.7	100.0	4,371
Number of positive attitudes on negotiating safer sexual relations with husband[3]										
0	34.3	33.1	15.5	6.4	10.7	0.5	1.2	65.7	100.0	208
1	43.4	36.9	13.8	5.8	14.5	2.8	6.5	56.6	100.0	1,166
2	51.0	44.3	15.4	8.2	16.1	4.7	6.7	49.0	100.0	8,234
Total	49.7	43.1	15.2	7.8	15.8	4.3	6.5	50.3	100.0	9,608

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, and implants
[2] See Table 13.7.1 for the list of decisions.
[3] Attitudes include "A wife is justified in asking that they use a condom when she knows that her husband has a disease that she can get during sexual intercourse" and "A wife is justified in refusing to have sex with her husband when she knows he has sex with other women."

(female and male) methods increases with women's score on the second empowerment index, from 11 percent to 21 percent, but use of sterilization does not vary consistently with this index. This suggests that use of temporary methods is more dependent on women's attitudes toward sexual relations than is women's use of sterilization.

13.8 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

Table 13.10 shows how currently married women's ideal family size and their unmet need for family planning vary by the two women's empowerment indices. Women who want to delay their next birth for two or more years (space their next birth) or have no more births (limit their births), but who are not using family planning, are considered to have an unmet need for family planning.

Table 13.10 shows that mean ideal family size varies only marginally with both indices of women's empowerment. Notably, however, more empowered women have a somewhat smaller ideal family size than those who are least empowered (i.e., those with a score of 0 on each index).

Table 13.10 Women's empowerment and ideal number of children and unmet need for family planning

Mean ideal number of children for women 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by the indices of women's empowerment, Nepal 2011

Empowerment indices	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]: For spacing	For limiting	Total	Number of women
Number of decisions in which women participate[3]						
0	2.3	2,253	18.3	13.2	31.6	2,258
1-2	2.2	2,971	9.5	15.1	24.6	2,979
3	2.2	4,355	5.2	21.1	26.3	4,371
Number of attitudes on negotiating safer sexual relations with husband[4]						
0	2.3	293	3.7	20.1	23.7	208
1	2.3	1,526	9.7	18.4	28.1	1,166
2	2.1	10,811	9.8	17.1	26.9	8,234
Total	2.1	12,630	9.6	17.4	27.0	9,608

[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.12.1 for the definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 13.7.1 for the list of decisions.
[4] Attitudes include "A wife is justified in asking that they use a condom when she knows that her husband has a disease that she can get during sexual intercourse" and "A wife is justified in refusing to have sex with her husband when she knows he has sex with other women."

Unmet need varies inconsistently with the two empowerment indicators. Whereas total unmet need tends to decline with women's participation in decision-making, it tends to increase with the number of positive attitudes toward negotiating safer sexual relations. Notably, there is greater variation in unmet need by the decision-making index than by the negotiating safer sexual relations index.

The decision-making index is negatively related to unmet need for spacing and positively related to unmet need for limiting. The negotiating safer sexual relations index has the opposite relationship with the two types of unmet need: unmet need for spacing increases with women's score on this index, whereas unmet need for limiting declines.

13.9 REPRODUCTIVE HEALTH CARE AND WOMEN'S EMPOWERMENT

Table 13.11 shows use of antenatal, delivery, and postnatal care services by women's scores on the two empowerment indices. It is expected that empowered women will be more likely to seek out health care services that better meet their reproductive health goals, including safe motherhood.

The results in Table 13.11 show that women's empowerment, as expected, is positively associated with women's access to and use of reproductive health services. The relationship appears much stronger for the negotiating safer sexual relations index than for the decision-making index, although the relationship is positive for both. Among women with a score of 0 on the negotiating safer sexual relations index, only 29 percent received antenatal care from a skilled provider, only 8 percent received assistance from a skilled provider at delivery, and only 15 percent received postnatal care from a health care provider within the first two days after delivery; by contrast, the corresponding proportions among women with a score of 2 on the index were 60 percent, 41 percent, and 43 percent.

Table 13.11 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from a skilled provider for the most recent birth, by the indices of women's empowerment, Nepal 2011

Empowerment indices	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Percentage of women with a postnatal checkup in the first two days after birth[2]	Number of women with a child born in the last five years
Number of decisions in which women participate[3]				
0	55.3	33.0	35.7	1,239
1-2	60.4	42.0	42.5	1,292
3	59.0	41.7	44.6	1,573
Number of attitudes on negotiating safer sexual relations with husband[4]				
0	29.3	7.9	15.2	103
1	49.8	36.0	37.5	539
2	60.4	40.6	42.6	3,506
Total	58.3	39.1	41.2	4,148

[1] Skilled provider includes doctor, nurse, and midwife.
[2] Includes women who received a postnatal checkup from a doctor, nurse, midwife, health assistant, auxiliary health worker, maternal and child health worker, village health workers or FCHV in the first two days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility
[3] Restricted to currently married women. See Table 13.7.1 for the list of decisions.
[4] Attitudes include "A wife is justified in asking that they use a condom when she knows that her husband has a disease that she can get during sexual intercourse" and "A wife is justified in refusing to have sex with her husband when she knows he has sex with other women."

13.10 INFANT AND CHILD MORTALITY AND WOMEN'S EMPOWERMENT

A recent study conducted in Nepal indicated that there is an association between a mother's decision-making power and the chances of survival of her children (Adhikari and Sawangdee, 2011). The ability of women to access information, make decisions, and act effectively in their own interests or in the interests of those who depend on them is essential to their empowerment. Table 13.12 shows that infant and under-five mortality rates decline as women's empowerment index scores increase. For example, in the case of women who make no decisions, infant mortality is 67 deaths per 1,000 live births and under-five mortality is 76 deaths per 1,000 live births, compared with 46 deaths and 55 deaths per 1,000 live births, respectively, for women who make all three decisions. The sample is not large enough to reliably assess infant mortality and child mortality among women with a score of 0 on the negotiating safer sexual relations index. Even so, the relationship appears to be strongly negative since all three mortality indicators included in the table are much lower for women with a score of 2 than for women with a score of 1.

Table 13.12 Early childhood mortality rates by indicators of women's empowerment

Infant, child, and under-five mortality rates for the 10-year period preceding the survey, by the indices of women's empowerment, Nepal 2011

Empowerment indices	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Number of decisions in which women participate[1]			
0	67	10	76
1-2	52	10	62
3	46	9	55
Number of attitudes on negotiating safer sexual relations with husband[2]			
0	(90)	(18)	(106)
1	66	12	78
2	50	9	58

Note: Figures in parentheses are based on 250-499 unweighted exposed persons.
[1] Restricted to currently married women. See Table 13.7.1 for the list of decisions.
[2] Attitudes include "A wife is justified in asking that they use a condom when she knows that her husband has a disease that she can get during sexual intercourse" and "A wife is justified in refusing to have sex with her husband when she knows he has sex with other women."

These data clearly show that empowerment among women is important for their use of family planning and reproductive care as well as for the survival of their children.

DOMESTIC VIOLENCE 14

Key Findings:

- Twenty-two percent of women age 15-49 have experienced physical violence at least once since age 15, and 9 percent experienced physical violence within the 12 months prior to the survey.
- Twelve percent of women age 15-49 report having experienced sexual violence at least once in their lifetime.
- Overall, one-third of ever-married women age 15-49 report ever having experienced emotional, physical, or sexual violence from their spouse, and 17 percent report having experienced one or more of these forms of violence in the past 12 months.
- Among ever-married women who had experienced spousal violence (physical or sexual) in the past 12 months, more than two in five reported experiencing physical injuries.
- It is not common for women in Nepal to seek assistance from any source for violence they have experienced. Nearly two in three women have never told anyone about the violence they have experienced.

Various population-based studies in Nepal have indicated domestic violence as a reason for poor health, insecurity, and inadequate social mobilization among women (Women's Rehabilitation Centre Nepal, 2009). For the first time in 2011, a domestic violence module was included in the NDHS, recognizing the seriousness of the problem of gender-based violence in Nepal.

Gender-based violence is defined as any act that results in, or is likely to result in, physical, sexual, or psychological harm or suffering among women, including threats of such acts and coercion or arbitrary deprivations of liberty, whether occurring in public or in private life (United Nations, 1993; United Nations, 1995). Domestic violence, one form of gender-based violence, is defined in Nepal as any form of physical, mental, sexual, or economic harm perpetrated by one person on another with whom he or she has a family relationship, including acts of reprimand or emotional harm (Ministry of Law and Justice, Nepal, 2009). Domestic violence has negative health consequences for victims, especially with respect to the reproductive health of women and the physical, emotional, and mental health of their children.

In addition to ratifying a number of international and regional conventions on women's rights, gender equality, and social inclusion, Nepal has implemented the Domestic Violence (Offence and Punishment) Act (2066 BS) of 2009 and the Domestic Violence (Offence and Punishment) Regulation (2067 BS) of 2010. It has also implemented a national action plan (2010) against gender-based violence with the Prime Minister's declaration of 2010 as the gender-based violence free year (Office of the Prime Minister and Council of Minister, 2009) and introduced a hospital-based one-stop crisis management center in 15 selected districts (Ministry of Health and Population [MOHP], 2010d), with service centers established for victims of gender-based violence (Department of Women's Development, 2009).

The Domestic Violence (Offence and Punishment) Act emphasizes respect for the right of every person to live in a secure and dignified manner, prevention and control of violence occurring within the family or outside, making such violence punishable, and providing protection to the victims of violence. Further, it gives authority to the individuals to file complaints, provide legal remedies (including interim protection orders and compensation), and create service centers for counseling and rehabilitation, as well as defining penalties for perpetrators (Nepal Law Commission, 2009). The Three-Year Plan of Nepal (2010/2011–2012/2013) also includes as an objective elimination of various types of gender-based violence and discrimination against women and promotion of gender equality and women's empowerment (National Planning Commission, 2011).

14.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on domestic violence poses particular challenges because what constitutes violence or abuse varies across cultures and individuals and a culture of silence usually surrounds domestic violence and can affect reporting. The sensitivity of the topic is another issue. Assuring the safety of respondents and interviewers when asking about domestic violence in a familial setting and protecting women who disclose violence and the risk of double-victimization of respondents as they relive their experience while reporting raise specific ethical concerns. The responses to these challenges by the 2011 NDHS are described below.

14.1.1 Use of Valid Measures of Violence

In the 2011 NDHS, information was obtained from ever-married women on violence committed by their current and former spouses and by others, and information was collected from never-married women on violence by anyone, including boyfriends. Since international research shows that intimate partner violence is one of the most common forms of violence against women, information on spousal violence was measured in more detail than violence by other perpetrators. This was done by using a shortened and modified version of the Conflict Tactics Scale (Strauss, 1990). Specifically, spousal violence by the most current husband/partner for currently married women and the most recent husband/partner for formerly married women was measured by asking all ever-married women the following set of questions.

(Does/did) your (last) (husband/partner) ever:

(a) Push you, shake you, or throw something at you?

(b) Slap you?

(c) Twist your arm or pull your hair?

(d) Punch you with his fist or with something that could hurt you?

(e) Kick you, drag you, or beat you up?

(f) Try to choke you or burn you on purpose?

(g) Threaten or attack you with a knife, gun, or any other weapon?

(h) Physically force you to have sexual intercourse with him even when you did not want to?

(i) Force you to perform any sexual acts you did not want to?

For every question that a woman answered ‘yes,’ she was asked about the frequency of the act in the 12 months preceding the survey. A ‘yes’ answer to one or more of items (a) to (g) above constitutes evidence of physical violence, and a ‘yes’ answer to item (h) or (i) constitutes evidence of sexual violence.

Similarly, emotional violence among ever-married women was measured by the following questions.

(Does/did) your (last) (husband/partner) ever:

(a) Say or do something to humiliate you in front of others?

(b) Threaten to hurt or harm you or someone close to you?

(c) Insult you or make you feel bad about yourself?

This approach of asking about specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what constitutes a summary term such as “violence.” By

including a wide range of acts, this approach has the additional advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these questions that were asked only of ever-married women, all women were asked about physical violence from persons other than the current or most recent spouse/partner.[1] Respondents who answered yes to this question were asked who committed violence against them and the frequency of such violence during the 12 months preceding the survey. Women who reported experiencing different forms of violence were asked for the perpetrators of the violence.

Although this approach to questioning is generally considered to be optimal, the possibility of underreporting of violence, particularly sexual violence, cannot be entirely ruled out in any survey, and this survey is no exception.

14.1.2 Ethical Considerations in the 2011 NDHS

In recognition of the challenges in collecting data on violence, the interviewers in the 2011 NDHS were given special training. The training focused on how to ask sensitive questions, ensure privacy, and build rapport between interviewer and respondent. Rapport with the interviewer, confidentiality, and privacy are all keys to building respondents' confidence that they can safely share their experiences with the interviewer. Placement of the violence questions at the end of the questionnaire also provides time for the interviewer to develop a certain degree of intimacy that should further encourage respondents to share their experiences of violence, if any. In addition, the following protections were built into the survey or the questionnaire in keeping with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001):

1. Only one woman per household was administered the questions on violence to maintain confidentiality. One in every two households was preselected for an interview on violence, and in the selected household one female respondent was randomly selected to receive the questions on domestic violence. The random selection of one woman was done through a simple selection procedure based on the Kish Grid, which was built into the Household Questionnaire (Kish, 1965).

2. As a means of obtaining additional consent, beyond the initial consent at the start of the interview, the respondent was informed that the questions could be sensitive and was reassured regarding the confidentiality of her responses.

3. The violence module was implemented only if privacy could be obtained. The interviewers were instructed to skip the module, thank the respondent, and end the interview if they could not maintain privacy during the implementation of this module.

4. A brochure that included information on domestic violence and contact information for service centers across the country was provided to all eligible women after the interview was completed, irrespective of whether they were selected for the module or not. This was done to safeguard against identifying the woman selected for the module and to provide information to all women so that they could access the services and be informed about what to do in the event of domestic violence.

14.1.3 Subsample for the Violence Module

The domestic violence module was implemented only in the subsample of households selected for the men's survey. Further, in keeping with ethical requirements, as mentioned above, only one woman per household was selected for the module. These restrictions resulted in a total of 4,210 women being eligible for the module, of whom 4,197 were successfully interviewed. Thirteen eligible women were not interviewed because, in their case, complete privacy could not be obtained. Specially constructed weights were used to

[1] As none of the women selected for the domestic violence module were living together with a partner who was not their husband, the following sections refer to husbands only, as necessary.

adjust for the selection of only one woman per household and to ensure that the domestic violence subsample is nationally representative.

14.2 EXPERIENCE OF PHYSICAL VIOLENCE

Table 14.1 shows that more than one in five (22 percent) women age 15-49 have experienced physical violence since age 15 and that 9 percent experienced physical violence in the 12 months prior to the survey. Overall, 2 percent of women reported that they had experienced physical violence often in the past 12 months, and 7 percent said they had experienced physical violence sometimes during the past 12 months.

The experience of physical violence varies substantially by background characteristics. The percentage of women who have experienced physical violence since age 15 increases with age from 10 percent among women age 15-19 to 30 percent among women age 40-49. Women age 20-39 are more likely than other women to have experienced physical violence during the 12 months prior to the survey. Women who are employed for cash are more likely than other women to have experienced physical violence since age 15 as well as during the 12 months preceding the survey (28 percent and 11 percent, respectively).

Ever-married women are more likely than never-married women to have experienced physical violence, indicating that in Nepal violence perpetrated by spouses is more prevalent than violence perpetrated by other individuals. Twenty-eight percent of women who are divorced, separated, or widowed and 26 percent of currently married women have experienced physical violence since age 15, as compared with 6 percent of never-married women. Currently married women are more likely to have experienced physical violence in the past 12 months (12 percent) than formerly married women (5 percent).

Table 14.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who experienced physical violence during the 12 months preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes	
Current age					
15-19	9.6	1.4	4.3	5.7	988
20-24	18.2	2.5	8.3	10.7	817
25-29	24.2	2.4	8.4	10.8	646
30-39	28.2	1.8	8.7	10.5	988
40-49	29.6	1.9	7.5	9.4	758
Employment (past 12 months)					
Not employed	19.4	2.5	7.0	9.5	976
Employed for cash	28.2	2.8	8.4	11.2	932
Employed not for cash	19.7	1.4	7.0	8.4	2,289
Marital status					
Never married	5.8	0.5	2.3	2.7	972
Married	26.1	2.4	9.1	11.5	3,084
Divorced/separated/widowed	28.4	1.4	3.9	5.3	140
Number of living children					
0	9.2	1.1	3.6	4.7	1,342
1-2	23.1	1.9	8.4	10.3	1,466
3-4	29.8	3.1	9.1	12.2	1,055
5+	37.7	1.7	11.7	13.4	334
Residence					
Urban	19.3	1.5	7.4	8.8	1,075
Rural	22.3	2.1	7.3	9.4	3,122
Ecological zone					
Mountain	17.4	0.6	5.4	6.0	442
Hill	16.8	1.4	6.4	7.7	2,038
Terai	28.1	2.9	9.0	11.9	1,717
Education					
No education	32.5	3.2	10.3	13.5	1,654
Primary	20.2	2.1	8.4	10.5	690
Some secondary	14.8	1.3	5.1	6.5	1,030
SLC and above	9.1	0.1	3.2	3.2	823
Wealth quintile					
Lowest	20.9	1.7	8.2	9.9	884
Second	25.1	3.0	7.3	10.3	716
Middle	28.2	3.4	9.7	13.0	750
Fourth	23.5	1.4	7.7	9.0	885
Highest	12.3	0.8	4.4	5.1	962
Total	21.5	1.9	7.3	9.3	4,197

SLC = School Leaving Certificate
[1] Includes in the past 12 months

Experience of physical violence among women increases with the number of living children. While 9 percent of women with no children report having ever experienced physical violence, this percentage increases to 38 percent among women with five or more children. Experience of physical violence in the past 12 months follows a similar pattern, ranging from 5 percent among women with no children to 13 percent among women with five or more children.

Rural women (22 percent) are more likely to have ever experienced physical violence than urban women (19 percent). However, experience of physical violence in the 12 months prior to the survey is similar in urban and rural areas (9 percent each). Women in the terai are more likely to have ever experienced physical violence (28 percent) than women in the other ecological zones (17 percent). Twice as many women in the terai (12 percent) as in the mountain zone (6 percent) experienced physical violence in the 12 months prior to the survey.

Experience of physical violence decreases with education, from 33 percent among women with no education to 9 percent among women with a School Leaving Certificate (SLC) and higher education. Similarly, only 3 percent of women with an SLC and higher education reported experiencing physical violence in the 12 months preceding the survey, compared with 14 percent of women with no education.

The relationship between wealth and experience of physical violence is less clear. Experience of physical violence increases from 21 percent among women in the lowest wealth quintile to 28 percent among women in the middle quintile and then declines sharply to 12 percent among women in the highest wealth quintile. Women's experience of physical violence in the past 12 months varies similarly with wealth.

14.3 PERPETRATORS OF PHYSICAL VIOLENCE

Table 14.2 shows perpetrators of physical violence, according to women's marital status, among those who have experienced physical violence since age 15. The most commonly reported perpetrator of physical violence among ever-married women is the current husband (84 percent), indicating a high level of spousal violence. Former husbands and in-laws are cited as perpetrators of physical violence by 7 percent and 6 percent, respectively, of ever-married women.

Among never-married women who have experienced physical violence since age 15, the most common perpetrators of violence are siblings (38 percent), fathers or stepfathers (36 percent), and mothers or stepmothers (30 percent).

Table 14.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to their marital status, Nepal 2011

	Marital status		
Person	Ever married	Never married	Total
Current husband	84.3	na	79.0
Former husband	6.9	na	6.4
Father/stepfather	3.2	(36.3)	5.3
Mother/stepmother	3.6	(30.1)	5.2
Sister/brother	2.3	(38.2)	4.6
Other relative	4.3	(11.2)	4.8
Mother-in-law	4.6	na	4.3
Father-in-law	4.2	na	3.9
Other in-law	5.9	na	5.5
Teacher	0.3	(7.7)	0.7
Employer/someone at work	0.5	0.0	0.5
Police/soldier	0.1	0.0	0.1
Other	1.5	(1.7)	1.5
Number of women	846	57	903

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

14.4 EXPERIENCE OF SEXUAL VIOLENCE

Table 14.3 shows the percentage of women age 15-49 who have ever experienced sexual violence according to background characteristics. The results show that 12 percent of women have ever experienced sexual violence. There is notable variation in the experience of sexual violence by age. Younger women (age 15-19) are less likely to report sexual violence than older women (age 30-49). Women who are employed for cash are more likely to have ever experienced sexual violence (18 percent) than women who are employed but not for cash and women who are not employed (11 percent each).

Women who are divorced, separated, or widowed are more likely to have ever experienced sexual violence (22 percent) than currently married women (15 percent) and never-married women (2 percent). Differences in the experience of sexual violence are also seen by residence and region. Rural women are somewhat more likely to have experienced sexual violence (13 percent) than urban women (11 percent). Women in the terai are more likely to have experienced sexual violence (15 percent) than women in the mountain (13 percent) and hill (10 percent) zones.

Table 14.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, by background characteristics, Nepal 2011

Background characteristic	Percentage who have experienced sexual violence[1]		Number of women
	Ever[2]	In the past 12 months	
Current age			
15-19	4.6	2.8	988
20-24	10.9	7.4	817
25-29	14.2	7.4	646
30-39	17.3	8.3	988
40-49	16.1	6.7	758
Employment (past 12 months)			
Not employed	10.5	5.8	976
Employed for cash	18.4	7.7	932
Employed not for cash	10.6	6.1	2,289
Marital status			
Never married	1.9	0.3	972
Married	15.2	8.5	3,084
Divorced/separated/widowed	22.4	3.4	140
Residence			
Urban	10.7	6.4	1,075
Rural	12.9	6.4	3,122
Ecological zone			
Mountain	13.1	6.8	442
Hill	9.8	5.4	2,038
Terai	15.2	7.5	1,717
Education			
No education	17.1	8.9	1,654
Primary	12.1	7.1	690
Some secondary	8.8	4.6	1,030
SLC and above	7.3	3.1	823
Wealth quintile			
Lowest	12.1	6.9	884
Second	14.2	7.2	716
Middle	15.0	7.9	750
Fourth	12.0	5.9	885
Highest	9.4	4.6	962
Total	12.3	6.4	4,197

SLC = School Leaving Certificate
[1] Excludes women who experienced forced sexual initiation but no other forms of sexual violence
[2] Includes in the past 12 months

The experience of sexual violence decreases with education from 17 percent among women with no education to 7 percent among women with an SLC and higher education. There is no clear relationship between sexual violence and wealth, although women in the highest wealth quintile are less likely to report sexual violence than women in the other quintiles.

Six percent of women report having experienced sexual violence in the 12 months preceding the survey. The variation by background characteristics among women who experienced sexual violence in the past 12 months is similar to the variation among women who have ever experienced sexual violence.

14.5 PERPETRATORS OF SEXUAL VIOLENCE

Table 14.4 shows the percentage of women, by marital status, who have ever experienced sexual violence according to specific persons who committed the violence. Among ever-married women, the current husband is the most commonly reported perpetrator of sexual violence (87 percent). The next most common perpetrator is a former husband (6 percent). Among all women, 3 percent have experienced sexual violence perpetrated by a stranger and 2 percent by a relative.

Table 14.4 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to their marital status, Nepal 2011

Person	Marital status		Total
	Ever married	Never married	
Current husband	86.8	na	83.7
Former husband	5.5	na	5.3
Current/former boyfriend	0.3	*	1.5
Other relative	1.8	*	2.3
Own friend/acquaintance	0.7	*	0.9
Family friend	0.4	*	0.5
Teacher	0.0	*	0.2
Stranger	2.2	*	2.9
Other	0.3	*	0.7
Number of women	499	18	517

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

14.6 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 14.5 presents information on the experience of various forms of violence among women age 15-49. Overall, 26 percent of women reported that they have experienced either physical or sexual violence. Fourteen percent have experienced physical violence only, 5 percent have experienced sexual violence only, and 8 percent have experienced both physical and sexual violence. As discussed earlier, the percentage of women who have ever experienced violence increases with age, and this pattern is consistent for most forms of violence.

Table 14.5 Experience of different forms of violence

Percentage of women age 15-49 who have experienced different forms of violence, by current age, Nepal 2011

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	7.7	2.7	1.9	12.3	988
15-17	5.2	1.1	1.2	7.5	587
18-19	11.4	4.9	2.9	19.3	401
20-24	11.2	3.9	7.0	22.0	817
25-29	15.1	5.1	9.1	29.3	646
30-39	16.4	5.4	11.9	33.6	988
40-49	19.3	5.8	10.2	35.4	758
Total	13.7	4.5	7.8	26.0	4,197

14.7 FORCED AT SEXUAL INITIATION

In the 2011 NDHS, all women who had ever had sex were asked "The first time you had sexual intercourse, would you say that you had it because you wanted to, or because you were forced to have it against your will?" Table 14.6 shows that 29 percent of women who had ever had sex reported that their sexual initiation was forced.

Table 14.6 Forced sexual initiation

Percentage of women age 15-49 who have ever had sexual intercourse who say that their first experience of sexual intercourse was forced against their will, by age at first sexual intercourse, and whether the first sexual intercourse was at the time of first marriage or before, Nepal 2011

	Percentage whose first sexual intercourse was forced against their will	Number of women who have ever had sex
Age at first sexual intercourse		
<15	46.5	539
15-19	28.6	1,912
20-24	19.2	618
25-29	16.3	76
30-49	*	16
First sexual intercourse was:		
At the time of first marriage/ first cohabitation	29.3	3,041
Before first marriage/first cohabitation[1]	32.1	119
Total	29.4	3,225

Note: Total includes 65 women for whom the age at first sex was missing. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes never-married women

Forced sexual initiation varies by age at first sexual intercourse. Almost half of women (47 percent) who first had sex before age 15 said that they were forced against their will, compared with 16 percent of women who had sex at age 25 or later. For most women in Nepal, first sexual intercourse occurs at the time of first marriage. Even so, forced sexual initiation is only somewhat higher among women whose first sexual intercourse took place before marriage than among women whose first intercourse occurred after their marriage.

14.8 VIOLENCE DURING PREGNANCY

Respondents who had ever been pregnant were asked specifically whether they had ever experienced physical violence while pregnant and, if so, who the perpetrators of the violence were.

Table 14.7 shows that 6 percent of women experienced physical violence during a pregnancy. Although there is no clear pattern between current age and violence during pregnancy, younger women (age 15-19) are more likely than older women to report having experienced violence during pregnancy. Women who are divorced, separated, or widowed are more likely to report experiencing violence during pregnancy (10 percent) than women who are currently married (6 percent).

Women with one or two children are only half as likely to report violence during pregnancy (4 percent) as women with three or more children and women with no children (8 percent each). The proportion of women experiencing violence during pregnancy is higher in rural areas (7 percent) than in urban areas (4 percent) and higher in the terai (9 percent) than in the other ecological zones (4-5 percent).

The experience of violence during pregnancy declines with education, from 8 percent among women with no education to 2 percent among women with an SLC and higher education. Women in the lowest wealth quintile are more likely than those in the highest wealth quintile to have experienced violence during pregnancy.

Table 14.7 Violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Nepal 2011

Background characteristic	Percentage who have ever experienced physical violence during pregnancy	Number of women who have ever been pregnant
Current age		
15-19	8.6	155
20-24	6.8	542
25-29	5.1	585
30-39	5.8	959
40-49	6.4	740
Marital status		
Never married	*	1
Married	6.0	2,857
Divorced/separated/widowed	9.9	123
Number of living children		
0	8.4	127
1-2	4.4	1,466
3-4	7.7	1,055
5+	8.1	334
Residence		
Urban	3.8	722
Rural	6.9	2,260
Ecological zone		
Mountain	5.3	306
Hill	4.2	1,421
Terai	8.6	1,255
Education		
No education	7.5	1,508
Primary	7.4	538
Some secondary	4.7	519
SLC and above	1.7	417
Wealth quintile		
Lowest	8.3	631
Second	6.6	497
Middle	7.1	579
Fourth	6.1	622
Highest	2.9	653
Total	6.2	2,982

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SLC = School Leaving Certificate

14.9 MARITAL CONTROL BY HUSBAND

Close control and monitoring of their wives' behavior by husbands is known to be an important warning sign and correlate of violence in a relationship. A series of questions were included in the 2011 NDHS to elicit the degree of marital control exercised by husbands over wives. Controlling behaviors most often manifest themselves in terms of extreme possessiveness, jealousy, attempts to isolate the wife from her family and friends, and not trusting her with money. To determine the degree of marital control husbands exercise over their wives, ever-married women were asked whether their current or former husband exhibited each of the following controlling behaviors: (1) is jealous or gets angry if she talks to other men, (2) frequently accuses her of being unfaithful, (3) does not permit meetings with female friends, (4) tries to limit contact with her family, (5) insists on knowing where she is at all times, and (6) does not trust her with any money. Because the concentration of such behaviors is more significant than the display of any single behavior, the proportion of women whose husbands display at least three of the specified behaviors is highlighted. Table 14.8 presents the percentage of ever-married women whose husbands display each of the listed behaviors, by selected background characteristics.

The main controlling behaviors women experienced from their husbands were jealousy or anger if they talked to other men and husbands insisting on knowing where they are at all times (17 percent each). The next most common behaviors were husbands not trusting them with money (10 percent), trying to limit their contact with their families (8 percent), frequently accusing them of being unfaithful (7 percent), and not permitting them to meet female friends (6 percent).

Eight percent of ever-married women say that their husbands display three or more of these controlling behaviors. Women who have been married more than once are most likely to report that their husbands display at least three controlling behaviors (25 percent), followed by women who are divorced, separated, or widowed (23 percent). In general, having a husband who displays at least three controlling behaviors varies minimally and inconsistently by background characteristics.

Table 14.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husband ever demonstrates specific types of controlling behaviors, according to background characteristics, Nepal 2011

Background characteristic	Percentage of women whose husband: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Does not trust her with any money	Displays three or more of the specific behaviors	Displays none of the specific behaviors	Number of women
Current age									
15-19	19.2	4.7	6.8	10.1	13.8	6.4	9.1	66.1	261
20-24	19.3	8.9	5.3	7.7	18.4	11.7	8.8	64.1	634
25-29	18.8	8.0	6.4	10.9	20.6	8.2	9.5	63.8	603
30-39	17.8	7.9	5.9	7.2	16.4	9.2	8.7	67.7	974
40-49	12.9	6.1	6.4	6.8	14.3	10.7	6.6	68.8	754
Employment (past 12 months)									
Not employed	17.1	7.2	7.5	8.9	18.1	10.9	10.3	64.1	668
Employed for cash	19.2	8.9	6.8	9.9	18.8	11.4	10.4	63.1	768
Employed not for cash	16.5	6.9	5.2	7.1	15.6	8.4	6.8	68.6	1,789
Number of living children									
0	19.2	8.4	8.3	11.3	20.3	9.6	11.2	62.3	370
1-2	16.1	6.6	5.3	7.9	16.8	8.2	7.4	68.0	1,466
3-4	16.9	7.7	5.2	7.3	15.0	12.0	8.3	66.6	1,055
5+	21.5	9.4	9.9	8.5	19.1	8.6	9.9	63.2	334
Marital status and duration									
Currently married	16.9	6.6	5.6	7.7	16.6	9.0	7.7	66.8	3,084
Married only once	16.1	6.0	5.0	7.1	16.1	8.2	6.8	67.8	2,922
0-4 years	16.5	4.6	3.7	9.3	15.7	6.4	6.5	69.2	641
5-9 years	17.6	7.4	4.9	4.7	18.7	8.2	6.9	67.0	588
10+ years	15.4	6.0	5.5	7.2	15.4	8.8	6.8	67.6	1,693
Married more than once	32.7	18.7	17.0	17.6	25.9	23.7	24.7	48.9	162
Divorced/separated/widowed	24.4	25.0	16.0	17.9	22.0	23.7	22.8	56.9	140
Residence									
Urban	18.2	7.1	5.2	7.3	19.8	7.3	7.2	63.9	778
Rural	17.0	7.6	6.3	8.4	15.9	10.4	8.8	67.2	2,447
Ecological zone									
Mountain	14.6	5.3	3.6	6.5	23.6	7.7	7.5	66.5	335
Hill	18.3	6.8	5.9	7.9	16.4	8.0	7.7	68.5	1,520
Terai	16.8	8.7	6.9	8.8	15.7	11.9	9.4	64.0	1,370
Education									
No education	19.4	9.6	7.8	8.7	16.7	11.6	10.1	64.1	1,572
Primary	18.6	6.4	5.7	7.3	16.3	11.1	9.1	65.8	587
Some secondary	16.9	6.5	4.7	10.2	18.9	6.7	7.8	66.1	582
SLC and above	9.0	2.9	2.6	4.7	15.6	4.8	2.5	75.0	483
Wealth quintile									
Lowest	20.9	8.1	7.3	9.4	18.1	10.6	10.5	64.5	672
Second	20.0	9.1	6.7	7.9	15.1	10.5	9.8	66.8	551
Middle	19.1	8.2	5.9	9.5	14.9	12.6	7.6	62.1	624
Fourth	18.4	8.0	6.2	8.6	17.9	8.4	8.6	66.2	678
Highest	8.8	4.4	4.4	5.4	17.8	6.5	5.7	71.8	698
Total	17.3	7.4	6.1	8.1	16.9	9.6	8.4	66.4	3,225

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
SLC = School Leaving Certificate

14.10 FORMS OF SPOUSAL VIOLENCE

Different types of violence are not mutually exclusive, and women may report multiple forms of violence. Research suggests that physical violence in intimate relationships is often accompanied by psychological abuse and, in one-third to more than one-half of cases, by sexual abuse (Krug et al., 2002). Table 14.9 shows the percentage of ever-married women age 15-49 who have experienced various forms of violence by their husband, over the course of the marriage and in the 12 months preceding the survey. Note that women who are currently married reported on violence by their current husband, and women who are widowed, divorced, or separated reported on violence by their most recent husband.

Table 14.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence committed by their husband, ever or in the 12 months preceding the survey, Nepal 2011

Type of violence	Ever	In the past 12 months		
		Often	Sometimes	Often or sometimes
Physical violence				
Any	23.1	2.0	8.4	10.4
Pushed her, shook her, or threw something at her	15.5	1.6	6.0	7.6
Slapped her	20.1	1.2	7.0	8.2
Twisted her arm or pulled her hair	9.3	0.9	3.5	4.3
Punched her with his fist or with something that could hurt her	7.8	0.8	2.8	3.6
Kicked her, dragged her, or beat her up	9.6	1.3	3.2	4.5
Tried to choke her or burn her on purpose	2.6	0.4	1.0	1.4
Threatened her or attacked her with a knife, gun, or any other weapon	1.6	0.2	0.9	1.0
Sexual violence[1]				
Any	14.3	1.3	6.4	7.7
Physically forced her to have sexual intercourse with him even when she did not want to	13.9	1.2	6.3	7.6
Forced her to perform any sexual acts she did not want to	3.5	0.5	1.6	2.0
Emotional violence				
Any	16.4	2.2	7.4	9.6
Said or did something to humiliate her in front of others	8.8	1.4	3.8	5.2
Threatened to hurt or harm her or someone close to her	4.4	0.7	2.1	2.8
Insulted her or made her feel bad about herself	13.5	1.4	6.5	8.0
Any form of physical and/or sexual violence	28.2	3.1	11.2	14.3
Any form of physical and sexual violence	9.2	0.5	3.0	3.4
Any form of emotional, physical, and/or sexual violence	31.5	3.7	13.3	17.0
Any form of emotional, physical, and sexual violence	6.4	0.3	2.0	2.3
Number of ever-married women	3,225	3,225	3,225	3,225

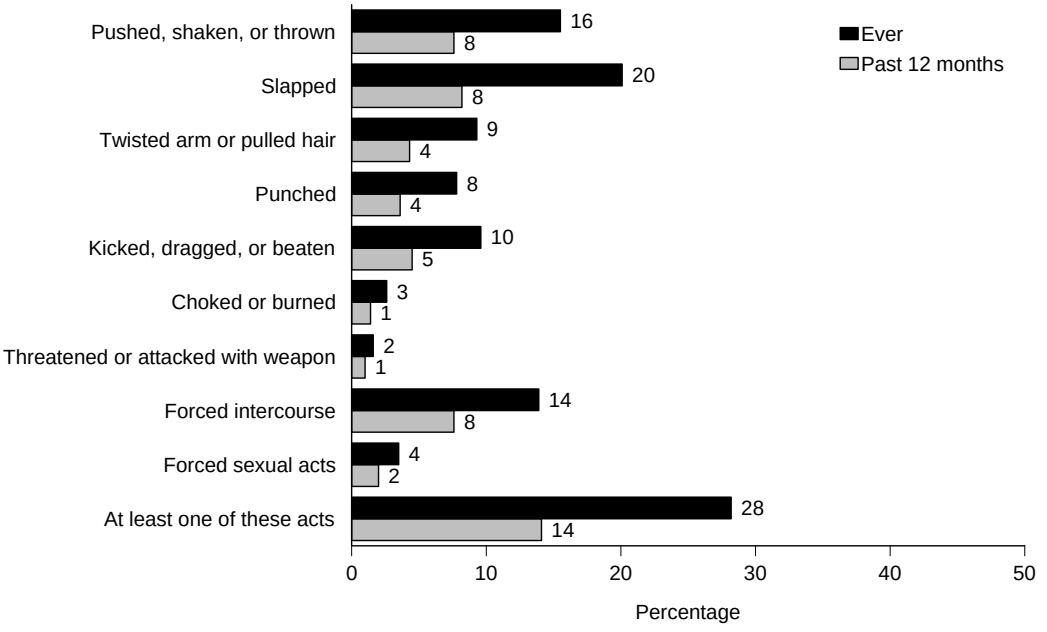
Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
[1] Does not include forced sexual initiation

The results show that 23 percent of ever-married women report ever experiencing physical violence from their husband, 14 percent report sexual violence, and 16 percent report emotional violence. Overall, more than a quarter of ever-married women (28 percent) have experienced physical and/or sexual violence from their husband, while nearly one-third have experienced (32 percent) physical, sexual, and/or emotional violence. Nine percent of ever-married women have experienced both physical and sexual violence, and 6 percent have experienced all three forms of spousal violence.

The most common form of spousal violence, experienced by 20 percent of ever-married women, is being slapped (Table 14.9 and Figure 14.1). Sixteen percent of ever-married women report having been pushed, shaken, or had something thrown at them; 14 percent have been physically forced to have sexual intercourse by their husbands even when they did not want to; and 14 percent report that their husbands have insulted them or made them feel bad about themselves.

Fourteen percent of ever-married women reported experiencing spousal physical and/or sexual violence in the past 12 months, with 11 percent having experienced violence sometimes and 3 percent having experienced it often. In general, half or more of women who have ever experienced any form of spousal violence have experienced the violence in the past 12 months.

Figure 14.1 **Specific Forms of Physical and Sexual Violence Committed by Husbands**



NDHS 2011

14.11 SPOUSAL VIOLENCE BY BACKGROUND CHARACTERISTICS

Table 14.10 shows the percentage of ever-married women age 15-49 who have experienced spousal emotional, physical, or sexual violence by selected background characteristics. One in three ever-married women have experienced at least one form of spousal violence (emotional, physical, or sexual).

Women's experience of each type of spousal violence increases with age and with number of children. Women who are employed for cash are more likely than other women to have ever experienced any of the three forms of violence. One possible explanation for this finding is that working women who have an independent source of income pose a challenge to the established norm of a woman being resource dependent on her husband, and hence these women may be more at risk of spousal violence.

Women who have been married more than once are most likely to have experienced one or more of the three forms of spousal violence (54 percent), followed by women who are divorced, separated, or widowed (40 percent). Among currently married women, the likelihood of having experienced each form of violence increases with marital duration. There is not much variation in women's experience of violence by urban-rural residence; however, women in the terai are more likely to experience spousal emotional, physical, or sexual violence (38 percent) than women in the other ecological zones (26-30 percent).

Women's experience of most forms of violence declines sharply with education. For example, 36 percent of women with no education have experienced spousal physical or sexual violence, compared with 13 percent of women who have an SLC and higher education. The relationship between women's experience of violence and wealth is not consistent. Most forms of violence are higher among women in the middle quintiles than among women in the higher or lower quintiles. Nonetheless, it is notable that women in the highest quintile are consistently less likely than women in any other quintile to experience any form of spousal violence.

It is often stated that violence perpetuates violence. As can be seen in Table 14.10, a family history of domestic violence is associated with a respondent's own experience of domestic violence. Among women whose fathers beat their mothers, 47 percent have experienced emotional, physical, or sexual violence, compared with 29 percent of women whose fathers did not beat their mothers.

Table 14.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 by whether they have ever experienced emotional, physical, or sexual violence committed by their husband, according to background characteristics, Nepal 2011

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of ever-married women
Current age						
15-19	10.1	16.1	11.8	21.4	23.4	261
20-24	15.2	20.0	12.7	25.1	26.7	634
25-29	16.4	22.9	13.6	27.4	31.2	603
30-39	17.6	24.4	15.4	29.2	33.5	974
40-49	17.9	26.7	15.5	32.4	35.8	754
Employment (past 12 months)						
Not employed	15.7	22.8	13.4	27.3	30.0	668
Employed for cash	21.7	27.5	19.5	32.6	36.7	768
Employed not for cash	14.3	21.4	12.4	26.6	29.8	1,789
Number of living children						
0	14.9	15.0	12.0	19.7	22.2	370
1-2	13.2	19.9	12.2	24.5	27.2	1,466
3-4	17.8	26.8	15.4	32.8	36.5	1,055
5+	27.6	34.4	22.3	39.0	44.3	334
Marital status and duration						
Currently married	15.8	23.0	14.0	28.0	31.1	3,084
Married only once	14.7	21.6	13.3	26.8	29.8	2,922
0-4 years	9.8	12.0	8.5	17.0	19.6	641
5-9 years	14.1	20.0	12.1	24.6	26.8	588
10+ years	16.8	25.8	15.4	31.2	34.7	1,693
Married more than once	35.4	47.4	27.5	50.3	54.2	162
Divorced/separated/widowed	29.1	26.5	20.1	32.2	39.8	140
Residence						
Urban	17.2	20.7	12.4	25.4	30.5	778
Rural	16.1	23.9	14.9	29.1	31.7	2,447
Ecological zone						
Mountain	12.1	18.0	14.0	26.5	29.6	335
Hill	15.4	17.6	11.0	22.1	26.1	1,520
Terai	18.5	30.5	18.0	35.4	37.8	1,370
Education						
No education	19.9	30.6	17.2	36.1	39.5	1,572
Primary	16.9	19.7	12.2	24.1	28.2	587
Some secondary	11.9	18.2	13.3	23.8	26.2	582
SLC and above	9.7	8.9	8.5	12.9	15.6	483
Wealth quintile						
Lowest	18.4	23.7	14.4	30.4	34.2	672
Second	18.5	26.8	17.2	31.3	34.8	551
Middle	17.5	30.2	16.1	35.8	38.2	624
Fourth	18.1	24.4	14.2	28.6	32.0	678
Highest	10.0	12.1	10.3	16.5	19.6	698
Respondent's father beat her mother						
Yes	24.2	36.4	23.8	42.6	47.4	501
No	15.0	20.6	12.6	25.6	28.6	2,593
Do not know	14.4	22.1	11.5	23.6	26.7	130
Total	16.4	23.1	14.3	28.2	31.5	3,225

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
SLC = School Leaving Certificate

14.12 VIOLENCE BY SPOUSAL CHARACTERISTICS AND WOMEN'S EMPOWERMENT INDICATORS

Table 14.11 presents information on ever-married women age 15-49 who have experienced emotional, physical, or sexual violence committed by their husband according to spousal characteristics and empowerment indicators. The table shows that spousal violence decreases with increasing education of the husband. For example, 45 percent of women whose spouse has no education have experienced one or more forms of violence, compared with 21 percent of women whose spouse has an SLC and higher education. Spousal violence is much higher among couples in which both partners are uneducated than among couples in which both partners have the same level of education.

Table 14.11 Spousal violence by husband's characteristics and women's empowerment indicators

Percentage of ever-married women age 15-49 who have ever suffered emotional, physical, or sexual violence committed by their husband, according to his characteristics, marital characteristics, and empowerment indicators, Nepal 2011

	Emotional violence	Physical violence	Sexual violence	Physical or sexual violence	Emotional, physical, or sexual violence	Number of ever-married women
Husband's education						
No education	23.5	37.7	23.5	42.3	45.2	655
Primary	19.1	26.7	15.2	32.5	36.7	730
Some secondary	14.4	20.1	12.8	25.5	27.8	915
SLC and above	11.0	12.7	8.4	17.5	21.2	897
Husband's alcohol consumption						
Does not drink	11.1	15.3	10.1	20.4	23.0	1,531
Drinks/never gets drunk	14.2	17.5	10.1	21.6	26.2	540
Gets drunk sometimes	18.0	28.3	17.0	33.6	37.4	909
Gets drunk very often	48.7	65.1	39.7	71.3	73.7	245
Spousal education difference[1]						
Husband better educated	14.9	21.0	12.2	26.5	29.7	1,881
Wife better educated	15.1	20.8	17.0	26.3	30.1	326
Both equally educated	12.4	10.9	8.5	15.2	19.1	390
Neither educated	24.2	39.1	23.3	43.5	46.3	599
Spousal age difference[2]						
Wife older	12.5	20.8	13.0	27.7	29.6	232
Wife is same age	22.7	26.5	21.2	33.6	35.3	209
Wife's 1-4 years younger	14.7	22.0	14.0	27.8	30.7	1,366
Wife's 5-9 years younger	16.4	24.8	13.0	28.2	31.5	934
Wife's 10+ years younger	16.6	21.1	13.0	25.1	29.8	343
Number of marital control behaviors displayed by husband[3]						
0	5.2	12.3	6.4	15.7	17.4	2,141
1-2	28.9	36.2	23.1	45.1	51.1	814
3-4	59.5	64.7	46.9	72.7	79.0	197
5-6	87.4	81.3	58.1	87.2	97.2	73
Number of decisions in which women participate[1]						
0	13.0	22.6	13.8	27.4	29.3	772
1-2	18.0	22.0	14.9	28.2	32.3	952
3	15.8	23.9	13.5	28.2	31.3	1,360
Total	16.4	23.1	14.3	28.2	31.5	3,225

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women. Total includes 28 women for whom information on husband's education is not known or is missing.
SLC = School Leaving Certificate
[1] Excludes women for whom information on husband's education is not known
[2] Includes only currently married women
[3] See Table 14.8 for list of marital control behaviors.

There is a very strong relationship between the experience of emotional, physical, or sexual violence and husband's alcohol use. Women whose husbands get drunk often are more than three times as likely to experience each of the three types of spousal violence as women whose husbands do not drink. Women who are the same age as their spouse are more likely (35 percent) than women who are younger or older than their spouse to report emotional, physical, or sexual violence (30-32 percent).

Spousal violence increases linearly with the number of controlling behaviors displayed by the husband. Among women whose husbands exhibit five or six types of controlling behaviors, almost all (97 percent) have experienced one or more forms of violence. In contrast, among women whose husbands display none of the six controlling behaviors, less than one-fifth have experienced any form of spousal violence (17 percent). Women's experience of violence does not vary by the number of decisions they participate in.

14.13 Frequency of Spousal Violence

Table 14.12 shows the percent distribution of ever-married women who have experienced emotional violence and those who have experienced physical or sexual violence perpetrated by their current or most recent husband, according to how often the violence occurred in the 12 months preceding the survey. Among women who experienced spousal emotional violence in the past 12 months, 45 percent experienced it sometimes, 13 percent experienced it often, and the rest (41 percent) did not experience it at all.

Among ever-married women who have experienced physical or sexual violence, 40 percent experienced such violence sometimes in the past 12 months, and 10 percent experienced it often. Overall, 50 percent of women who have ever experienced spousal physical or sexual violence did not experience the violence in the 12 months prior to the survey.

Table 14.12 Frequency of spousal violence among those who report violence

Percent distribution of ever-married women age 15-49 who have ever suffered emotional violence committed by their husband by frequency of violence in the 12 months preceding the survey and percent distribution of those who have ever suffered physical or sexual violence committed by their husband by frequency of violence in the 12 months preceding the survey, according to background characteristics, Nepal 2011

	Frequency of emotional violence in the past 12 months					Frequency of physical or sexual violence in the past 12 months				
	Often	Sometimes	Not at all	Total	Number of women	Often	Sometimes	Not at all	Total	Number of women
Current age										
15-19	(36.8)	(44.4)	(18.7)	100.0	26	(10.0)	(62.5)	(27.5)	100.0	56
20-24	13.8	57.9	28.3	100.0	96	14.6	52.2	33.2	100.0	159
25-29	15.2	39.7	45.1	100.0	99	13.0	36.9	50.0	100.0	165
30-39	10.3	46.9	42.8	100.0	172	9.0	38.8	52.1	100.0	284
40-49	11.1	39.0	49.8	100.0	135	6.6	30.0	63.4	100.0	243
Employment (past 12 months)										
Not employed	16.3	39.1	44.6	100.0	105	8.7	42.9	48.5	100.0	182
Employed for cash	12.3	39.8	47.9	100.0	166	13.0	34.2	52.8	100.0	250
Employed not for cash	12.9	51.6	35.5	100.0	257	9.2	41.8	49.0	100.0	475
Number of living children										
0	24.2	52.5	23.3	100.0	55	12.3	56.1	31.6	100.0	73
1-2	12.5	48.6	38.9	100.0	193	9.3	42.0	48.7	100.0	360
3-4	14.5	45.9	39.6	100.0	188	11.9	36.6	51.5	100.0	347
5+	6.4	33.6	60.0	100.0	92	6.7	33.9	59.4	100.0	128
Marital status and duration										
Currently married	14.2	48.2	37.6	100.0	487	10.4	41.5	48.2	100.0	862
Married only once	11.9	48.6	39.5	100.0	430	9.5	41.0	49.5	100.0	781
0-4 years	10.2	58.3	31.4	100.0	63	9.6	57.2	33.2	100.0	109
5-9 years	12.4	56.8	30.7	100.0	83	13.1	54.1	32.7	100.0	144
10+ years	12.1	44.0	43.9	100.0	284	8.5	34.1	57.4	100.0	527
Married more than once	31.6	45.3	23.2	100.0	57	18.4	46.0	35.7	100.0	82
Divorced/separated/widowed	(3.3)	(12.3)	(84.4)	100.0	41	6.2	10.0	83.8	100.0	45
Residence										
Urban	12.8	51.6	35.6	100.0	134	10.3	49.1	40.6	100.0	198
Rural	13.6	43.3	43.1	100.0	394	10.1	37.4	52.5	100.0	709
Ecological zone										
Mountain	8.3	50.6	41.1	100.0	40	4.3	43.9	51.8	100.0	89
Hill	12.2	48.5	39.3	100.0	234	11.1	43.4	45.5	100.0	335
Terai	15.3	41.8	43.0	100.0	254	10.6	36.8	52.7	100.0	483
Education										
No education	16.3	43.4	40.2	100.0	313	10.0	38.4	51.6	100.0	565
Primary	10.8	45.5	43.8	100.0	99	13.7	42.1	44.2	100.0	142
Some secondary	11.7	51.3	37.0	100.0	69	9.1	41.4	49.5	100.0	138
SLC and above	(1.5)	(49.8)	(48.7)	100.0	47	6.1	45.1	48.9	100.0	62
Wealth quintile										
Lowest	12.1	50.4	37.4	100.0	124	11.1	46.3	42.7	100.0	204
Second	14.0	42.6	43.4	100.0	102	15.4	31.2	53.4	100.0	172
Middle	19.9	38.4	41.8	100.0	109	10.9	37.6	51.4	100.0	223
Fourth	8.4	45.1	46.5	100.0	123	5.0	42.6	52.4	100.0	192
Highest	13.3	52.2	34.5	100.0	70	7.8	41.6	50.7	100.0	115
Total	13.4	45.4	41.2	100.0	528	10.2	39.9	49.9	100.0	907

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

Women's experience of emotional violence and physical or sexual violence in the past 12 months declines with age and with number of children. Further, although women employed for cash are more likely than women in the other employment categories to have ever experienced physical or sexual violence, they are less likely to have experienced it in the past 12 months. Urban women are more likely than rural women to have experienced emotional and physical or sexual violence in the past 12 months. Women in the terai who have ever experienced emotional violence are more likely than women in the other ecological zones to have experienced the violence often in the past 12 months; notably, however, experience of emotional violence in the past 12 months does not vary much by zone. Experience of physical or sexual violence in the past 12 months is lower in the hill zone than in the other zones. Frequency of emotional and physical or sexual spousal violence in the past 12 months among those who have ever experienced such violence does not vary consistently with education and wealth.

14.14 ONSET OF SPOUSAL VIOLENCE

To obtain information on the onset of marital violence, the 2011 NDHS asked ever-married women how long after marriage spousal violence first began, if ever. Table 14.13 shows the interval between marriage and the first episode of physical or sexual violence by the most recent husband. Seventy-two percent of ever-married women have never experienced spousal physical or sexual violence by their current or most recent husband, 19 percent experienced violence in the first one to two years of marriage, and another 6 percent experienced it within the first three to five years of marriage. These data clearly suggest that, for the majority of women who have experienced spousal physical or sexual violence, the violence began early in their marriage, within one or two years.

Table 14.13 Onset of marital violence

Percent distribution of ever-married women by number of years between marriage and first experience of physical or sexual violence by their husband, if ever, according to marital status and duration, Nepal 2011

	Years between marriage[1] and first experience of violence									
Marital status and duration	Experienced no violence	Before marriage	<1 year	1-2 years	3-5 years	6-9 years	10+ years	Don't know/ missing[1]	Total	Number of women
Currently married	71.7	0.1	10.0	8.6	5.4	2.1	1.6	0.5	100.0	3,084
Married only once	72.9	0.1	9.5	8.0	5.2	2.2	1.6	0.5	100.0	2,922
<1 year	89.7	0.0	10.1	na	na	na	na	0.2	100.0	139
1-2 years	84.1	0.7	12.2	3.0	na	na	na	0.0	100.0	259
3-5 years	76.2	0.0	10.8	11.1	1.5	na	na	0.5	100.0	377
6-9 years	75.8	0.0	8.1	8.7	6.6	0.6	na	0.2	100.0	454
10+ years	68.4	0.0	9.1	8.5	6.9	3.7	2.7	0.7	100.0	1,693
Married more than once	49.7	0.0	18.5	19.4	9.6	0.4	1.9	0.4	100.0	162
Divorced/separated/widowed	67.3	0.0	18.1	5.2	6.3	1.1	2.0	0.0	100.0	140
Total	71.5	0.1	10.3	8.4	5.5	2.1	1.6	0.5	100.0	3,225

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
[1] Includes women for whom the timing of the first experience of violence and duration of marriage are inconsistent
na = Not applicable

14.15 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2011 NDHS, ever-married women age 15-49 were asked whether they had sustained some form of injury as a result of physical or sexual violence inflicted by their husband. More than one-third of women (37 percent) who reported ever having experienced spousal physical or sexual violence suffered cuts, bruises, or aches; 10 percent had eye injuries, sprains, dislocations, or burns; and 10 percent had deep wounds, broken bones, broken teeth, or other serious injuries (Table 14.14). Overall, 38 percent of women who had ever experienced spousal physical or sexual violence suffered one or more of these injuries. The prevalence of all forms of injuries was higher among women who had experienced violence in the past 12 months than among women who had ever experienced spousal violence.

Table 14.14 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from what their husband did to them, according to the type of violence and whether they have experienced the violence ever and in the 12 months preceding the survey, Nepal 2011

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women
Experienced physical violence[1]					
Ever[2]	44.1	12.3	11.6	44.9	746
In the past 12 months	52.8	16.9	14.5	53.5	337
Experienced sexual violence					
Ever[2]	32.7	11.5	11.0	33.0	460
In the past 12 months	38.6	13.9	13.6	38.9	250
Experienced physical or sexual violence[1]					
Ever[2]	36.8	10.1	9.7	37.5	909
In the past 12 months	42.3	13.2	11.7	42.9	454

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
[1] Excludes women who experienced physical violence only during pregnancy
[2] Includes in the past 12 months

14.16 VIOLENCE BY WOMEN AGAINST THEIR HUSBANDS

In cases of domestic violence, either person (husband or wife) can be the perpetrator of violence. In the 2011 NDHS, ever-married women were asked about instances when they were the instigator of spousal violence. Specifically, each ever-married woman was asked whether she had ever tried to initiate physical violence against her husband when he was not already hitting or beating her. Table 14.15 shows the percentage of ever-married women age 15-49 who reported initiating physical violence against their husbands ever and in the 12 months prior to the survey, by background characteristics. Overall, 3 percent of ever-married women reported that they had initiated physical violence against their husbands, and 1 percent had done so in the past 12 months.

Women who have been physically abused by their husband are more likely to have initiated spousal physical abuse than women who have never been abused (8 percent versus 2 percent). Women's use of violence against their husbands increases somewhat with age and is higher among women who earn cash, women who are older than their husbands, urban women, and women in the terai than among most other women. Notably, 13 percent of women whose husbands get drunk very often have initiated violence against their husbands, much higher than any other category of women. The proportion of women who have initiated spousal violence varies inconsistently with the woman's own education, her husband's education, and wealth.

Table 14.15 Violence by women against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their husband when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and their own and husband's characteristics, Nepal 2011

Background characteristic	Percentage who have committed physical violence against their husband		Number of ever-married women
	Ever	In the past 12 months	
Woman's experience of spousal physical violence			
Ever	8.2	4.1	746
In the past 12 months	9.7	8.3	344
Never	1.6	0.4	2,479
Current age			
15-19	0.4	0.4	261
20-24	2.9	1.8	634
25-29	3.3	1.4	603
30-39	4.0	1.4	974
40-49	3.1	0.9	754
Employment (past 12 months)			
Not employed	1.9	0.9	668
Employed for cash	6.4	2.8	768
Employed not for cash	2.2	0.8	1,789
Number of living children			
0	2.1	1.7	370
1-2	3.0	0.9	1,466
3-4	3.6	1.9	1,055
5+	3.1	0.7	334
Residence			
Urban	4.0	2.3	778
Rural	2.9	1.0	2,447
Ecological zone			
Mountain	1.8	0.5	335
Hill	2.6	1.2	1,520
Terai	4.1	1.5	1,370
Wealth quintile			
Lowest	2.3	1.0	672
Second	2.4	0.6	551
Middle	3.6	1.2	624
Fourth	2.8	1.3	678
Highest	4.3	2.1	698
Marital status and duration			
Currently married	3.1	1.3	3,084
Married only once	2.9	1.2	2,922
0-4 years	1.9	1.3	641
5-9 years	2.3	1.3	588
10+ years	3.5	1.0	1,693
Married more than once	7.3	4.3	162
Divorced/separated/widowed	3.6	0.5	140
Education			
No education	3.2	1.0	1,572
Primary	3.5	2.0	587
Some secondary	3.9	2.1	582
SLC and above	1.5	0.4	483
Husband's education			
No education	3.9	1.3	655
Primary	3.6	1.5	730
Some secondary	2.5	0.8	915
SLC and above	2.9	1.7	897
Husband's alcohol consumption			
Does not drink	1.5	0.4	1,531
Drinks/never gets drunk	2.4	0.6	540
Gets drunk sometimes	3.6	1.8	909
Gets drunk very often	13.2	6.4	245
Spousal age difference[1]			
Wife older	6.7	1.9	232
Wife is same age	3.3	1.6	209
Wife's 1-4 years younger	2.3	1.0	1,366
Wife's 5-9 years younger	3.0	1.9	934
Wife's 10+ years younger	4.0	0.5	343
Spousal education difference[2]			
Husband better educated	3.2	1.4	1,881
Wife better educated	4.9	2.5	326
Both equally educated	0.6	0.3	390
Neither educated	3.5	1.0	599
Total	3.1	1.3	3,225

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women. Total includes 28 women for whom information on husband's education is not known or is missing.
SLC = School Leaving Certificate
[1] Includes only currently married women
[2] Excludes women for whom information on husband's education is not known

14.17 HELP-SEEKING BEHAVIOR BY WOMEN WHO EXPERIENCE VIOLENCE

This final section of this chapter describes help-seeking behavior by women age 15-49 who have ever experienced physical or sexual violence. Table 14.16 shows the percent distribution of women who have ever experienced physical or sexual violence committed by anyone, according to whether they ever sought help to stop the violence and, among those who did not seek help, whether or not they told anyone about the violence. Overall, three in four women (77 percent) who have experienced any type of physical or sexual violence from anyone have never sought help, including 64 percent who have never told anyone about the violence. Thus, in Nepal only one in four women who have ever experienced any form of physical or sexual violence have sought help from any source.

Table 14.16 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by whether they have told anyone about the violence and whether they have ever sought help from any source to stop the violence, according to type of violence and background characteristics, Nepal 2011

Background characteristic	Never sought help: Never told anyone	Never sought help: Told someone	Have sought help from any source	Total	Number of women
Type of violence experienced					
Physical only	65.5	11.8	22.7	100.0	574
Sexual only	84.7	8.3	7.0	100.0	188
Both physical and sexual	48.5	19.5	32.1	100.0	329
Current age					
15-19	68.9	8.4	22.8	100.0	122
20-24	63.1	15.7	21.2	100.0	180
25-29	64.9	17.6	17.5	100.0	189
30-39	63.1	10.4	26.5	100.0	332
40-49	61.6	15.3	23.0	100.0	268
Employment (past 12 months)					
Not employed	64.6	11.5	23.9	100.0	227
Employed for cash	56.8	17.6	25.6	100.0	309
Employed not for cash	67.2	12.0	20.8	100.0	555
Number of living children					
0	56.9	13.8	29.3	100.0	154
1-2	63.6	15.2	21.2	100.0	412
3-4	67.8	9.4	22.8	100.0	384
5+	60.4	19.2	20.4	100.0	140
Marital status and duration					
Never married	(60.4)	(15.2)	(24.4)	100.0	69
Currently married	65.0	13.4	21.6	100.0	974
Married only once	65.9	13.4	20.7	100.0	879
0-4 years	71.6	11.7	16.8	100.0	129
5-9 years	71.4	14.8	13.9	100.0	161
10+ years	63.1	13.4	23.5	100.0	589
Married more than once	57.3	13.3	29.4	100.0	94
Divorced/separated/widowed	41.5	13.2	45.3	100.0	49
Residence					
Urban	60.6	12.9	26.4	100.0	256
Rural	64.6	13.7	21.7	100.0	836
Ecological zone					
Mountain	73.7	10.5	15.8	100.0	111
Hill	58.7	14.3	26.9	100.0	431
Terai	65.6	13.4	21.0	100.0	549
Education					
No education	67.5	13.8	18.7	100.0	626
Primary	57.6	14.2	28.2	100.0	172
Some secondary	64.7	12.5	22.8	100.0	187
SLC and above	49.4	12.6	38.1	100.0	106
Wealth quintile					
Lowest	68.2	12.6	19.2	100.0	236
Second	64.4	11.3	24.3	100.0	206
Middle	68.6	11.0	20.4	100.0	250
Fourth	57.3	15.4	27.3	100.0	242
Highest	58.1	18.9	23.1	100.0	157
Total	63.7	13.5	22.8	100.0	1,091

Note: Women who experienced forced sexual initiation but no other forms of physical or sexual violence were not asked the questions about seeking help and are not included. Figures in parentheses are based on 25-49 unweighted cases.
SLC = School Leaving Certificate

Women who have experienced only sexual violence are less likely (7 percent) than women who have experienced physical violence (23 percent) to seek help; help seeking is most common among women who have experienced both physical and sexual violence (32 percent). Help-seeking behavior varies inconsistently with age; however, women with no children are more likely than women with children to have sought help. A much higher proportion of divorced, separated, or widowed women (45 percent) than never-married and currently married women (22-24 percent) have ever sought help.

Help seeking is higher among urban than rural women and higher among women in the hill zone (27 percent) than among women in the terai (21 percent) and mountain zone (16 percent). Highly educated women are more likely than less educated women to seek help if they are abused; however, help seeking does not vary consistently with wealth.

Table 14.17 shows the percentage of abused women who reported seeking help, by sources from which help was sought. The most common sources of help are the woman's own family or her friends and neighbors: 52 percent of abused women who sought help did so from their own family, and 53 percent did so from their friends and neighbors. In-laws are a source for 7 percent of abused women seeking help. Few women seek help from the police (4 percent), doctor/medical personnel (3 percent), or social service organizations (3 percent). Thus, despite the efforts of the Ministry of Women, Children, and Social Welfare and nongovernmental organizations to cater to victims of violence, the data suggest that few abused women are accessing these services.

Table 14.17 Sources from where help was sought

Percentage of women age 15-49 who have ever experienced only physical or both physical and sexual violence and sought help according to source from which help was sought, by type of violence experienced, Nepal 2011

	Type of violence		
Source of help	Physical only	Both physical and sexual	Physical or sexual
Own family	50.7	52.1	51.9
In-laws	9.7	5.0	7.2
Husband/boyfriend	0.9	0.9	0.8
Friend/neighbor	45.7	61.2	52.9
Religious leader	0.0	0.4	0.2
Doctor/medical personnel	5.4	0.4	3.0
Police	5.7	2.8	4.2
Lawyer	0.5	1.2	1.5
Social service organization	1.5	4.1	2.5
Other	7.3	8.0	7.2
Number of women	130	106	249

Note: Women who experienced forced sexual initiation but no other forms of physical or sexual violence were not asked the questions about seeking help and are not included. Total includes 13 women who experienced only sexual violence not shown separately.

REFERENCES

Adhikari, R., and Y. Sawangdee. 2011. Influence of women's autonomy on infant mortality in Nepal. *Reproductive Health* 8: 7.

Basic Support for Institutionalizing Child Survival Project (BASICS II), The MOST Project, and United States Agency for International Development (USAID). 2004. *Nepal Child Survival Case Study: Technical report.* Report published by BASICS II for USAID.

Centers for Disease Control and Prevention (CDC). 1998. Recommendations to prevent and control iron deficiency in the United States. *Morbidity and Mortality Weekly Report* 47 (RR-3): 1-29.

Central Bureau of Statistics (CBS) [Nepal]. 2003. *Population monograph of Nepal.* Vol. 1. Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2006a. *Statistical pocket book.* Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2006b. *Nepal in figures*. Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2010. *Nepal in figures*. Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2011a. *Preliminary results of National Population Census 2011*. Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2011b. *Poverty in Nepal: A brief report based on third Nepal Living Standard Survey 2010/2011*. Kathmandu, Nepal: Central Bureau of Statistics.

Central Bureau of Statistics (CBS) [Nepal]. 2011c. *Nepal Living Standard Survey2010-2011: Statistical Report Vol. 1 and 2.* Kathmandu, Nepal: Central Bureau of Statistics.

Coates, J., A. Swindale, and P. Bilinsky. 2007. *Household Food Insecurity Access Scale (HFIAS) for measurement of household food access: Indicator guide (version 3).*Washington, DC: Food and Nutrition Technical Assistance Project, Academy for Educational Development.

Dahal, D.R. 2008. *Current political situation in Nepal*. Friedrich Ebert Stiftung (FES-Nepal). http://www.fesnepal.org/reports/2008/seminar_reports/paper_drd_berlin.htm.

DeMaeyer, E.M., P. Dallman, J.M. Gurney, L. Hallberg, S.K. Sood, and S.G. Srikantia. 1989. *Preventing and controlling iron deficiency anemia through primary health care: A guide for health administrators and program managers*. Geneva, Switzerland: World Health Organization.

Department of Education (DOE) [Nepal]. 2004. *School level educational statistics of Nepal: Flash report I, 2004.* Kathmandu, Nepal: Department of Education.

Department of Education (DOE) [Nepal]. 2006. *Scholarship regulations, 2006.* Kathmandu, Nepal: Department of Education.

Department of Women's Development [Nepal]. 2009. *Women's Development Program, operational manual, 2066/67.* Kathmandu, Nepal: Department of Women's Development.

Engender Health. 2011. *Improving access to family planning for postpartum women.* www.engenderhealth.org/our-countries/asia-near-east/nepal.php.

Food and Agriculture Organization of the United Nations (FAO). 2002. *The state of food insecurity in the world 2001.* 3rd ed. Rome, Italy: Food and Agriculture Organization of the United Nations.

GoN/DoHS/FHD/WHO/CREHPA (2006). *Unsafe abortion, Nepal country profile 2006.* Kathmandu, Nepal: GoN/DoHS/FHD/WHO/CREHPA.

Hunt, P. 2009. World food crisis worsens. *Irish Independent.* http://www.gorta.org/pdf/InTuition_13Oct09_Irish_Independent.pdf.

ICCIDD, UNICEF, and WHO. 2001. *Assessment of iodine deficiency disorders and monitoring their elimination: A guide for program managers.* 2nd ed. Geneva, Switzerland: World Health Organization. WHO/NHD/01.1.

Institute of Medicine [Nepal]. 2006. *Status of reproductive morbidities in Nepal: A reproductive morbidity report on clinic based study.* Kathmandu, Nepal: Tribhuvan University.

Ipas. 2010a. *The impact of U.S. foreign policy on safe abortion in Nepal.* http://www.ipas.org/Publications/asset_upload_file928_5644.pdf.

Ipas. 2010b. *Providing medical abortion without technology in Nepal.* http://www.ipas.org/Library/News/News_Items/Providing_medical_abortion_without_technology_in_Nepal.aspx.

ITECO. 2011. *Developing small scale hydropower in Nepal.* Affoltern, Switzerland: ITECO Engineering Limited.

Johns Hopkins University Center for Communication Programs. 2011. *Nepal Family Health Program (NFHP).* http://www.jhuccp.org/whatwedo/projects/nepal-family-health-program-nfhp.

Joint United Nations Programme on HIV/AIDS (UNAIDS). 2010. *Getting to zero 2011-2015: UNAIDS strategy.* Geneva, Switzerland: Joint United Nations Programme on HIV/AIDS.

Karki, Y.B., P.L. Joshi, P.B. Karki, and K.B. Karki. 2010. *Midterm survey of community based newborn care program, Bardiya district.* Kathmandu, Nepal: Save the Children/CB-NCP TWG Secretariat, Child Health Division, Ministry of Health and Population, and The Population, Health and Development (PHD) Group.

KC, B.K. 2003. *Internal migration in Nepal.* Population Monograph, Vol. 1. Kathmandu, Nepal: Central Bureau of Statistics.

Khanal, D.R., and H. Dahal. 2010. *Food security and climate change adaptation framework: Issues and challenges.* Presented at the Second Stakeholders Workshop on NAPA in Agriculture Sector, Kathmandu.

Kish, L. 1965. *Survey sampling.* New York: John Wiley and Sons Inc.

Krug, E.G., L. Dahlberg, J. Mercy, A. Zwi, and R. Lozano, eds. 2002. *World report on violence and health.* Geneva, Switzerland: World Health Organization.

MacDonald, V., and S. Mitchell. 2009. *Introducing zinc through the private sector in Nepal for the treatment of childhood diarrhea: Results and lessons learned.* Bethesda, Maryland: Abt Associates Inc. (in collaboration with PSI/USAID).

Mathai, M., A.M. Gulmezoglu, and S. Hill. 2007. *WHO recommendations for the prevention of postpartum haemorrhage.* Geneva, Switzerland: World Health Organization. WHO/MPS/07.06.

Ministry of Health and Population (MOHP), New ERA, and ORC Macro. 2002. *Nepal Demographic and Health Survey 2001*. Calverton, Maryland: Ministry of Health and Population, New ERA, and ORC Macro.

Ministry of Health and Population (MOHP) [Nepal]. 2004a. *Nepal National Newborn Health Strategy-2004.* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2004b. *National Nutrition Policy and Strategy.* Kathmandu, Nepal: Nutrition Section, Child Health Division, Ministry of Health and Population.

Ministry of Health and Population (MOHP), New ERA, and Micronutrient Initiative (MI). 2005. *Iodine Deficiency Status Survey*. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and Micronutrient Initiative.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and Macro International Inc. 2007. *Nepal Demographic Health Survey 2006.* Kathmandu, Nepal: Ministry of Health and Population, New ERA, and Macro International Inc.

Ministry of Health and Population (MOHP) [Nepal]. 2009. *Annual report 2009/2010.* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2010a. *Nepal Health Sector Program II (NHSP-IP II, 2010-2015).* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2010b. *Population Perspective Plan (PPP) 2010-2031.* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2010c. *National Policy on HIV and STI,* Kathmandu, Nepal: National Centre for AIDS and STD Control, Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2010d. *Hospital Based One-stop Crisis Management Center (OCMC) operational manual 2067.* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2011a. *Annual report: Department of Health Services 2066/67 (2009/2010).* Kathmandu, Nepal: Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2011b. *National Immunization Program: Reaching every child, comprehensive multi-year plan, 2068-2072 (2011-2016).* Kathmandu, Nepal: Child Health Division, Department of Health Services, Ministry of Health and Population.

Ministry of Health and Population (MOHP) [Nepal]. 2011c. *Nepal population report.* Kathmandu, Nepal: Population Division, Ministry of Health and Population.

Ministry of Law and Justice (MOLJ) [Nepal]. 1999. *The Constitution of the Kingdom of Nepal.* Kathmandu, Nepal: Ministry of Law and Justice.

Ministry of Law and Justice (MOLJ) [Nepal]. 2009. *Domestic Violence (Offence and Punishment) Act, 2009.* Kathmandu, Nepal: Ministry of Law and Justice.

Ministry of Population and Environment (MOPE) [Nepal] and Central Bureau of Statistics (CBS). 2003. *Population projections for Nepal, 2001-2021.* Kathmandu, Nepal: Ministry of Population and Environment and Central Bureau of Statistics.

National Centre for AIDS and STD Control (NCASC) [Nepal]. 2010a. *The national estimates of HIV infections for Nepal 2009.* Kathmandu, Nepal: National Centre for AIDS and STD Control, Ministry of Health and Population.

National Centre for AIDS and STD Control (NCASC) [Nepal]. 2010b. *Factsheet No.5: Prevention of Mother-to-Child Transmission (PMTCT) of HIV Services in Nepal, as of July 2010.* Kathmandu, Nepal: National Centre for AIDS and STD Control, Ministry of Health and Population.

National Planning Commission (NPC) [Nepal]. 1970. *Fourth Plan (1970-1975).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 1975. *The Fifth Plan (1975-1980).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 1985. *The Seventh Plan (1985-1990).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 1992. *The Eighth Plan (1992-1997).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 1997. *Ninth Plan (1997-2002).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 2002. *Tenth Plan (2002-2007).* Kathmandu, Nepal: His Majesty's Government of Nepal, National Planning Commission.

National Planning Commission (NPC) [Nepal]. 2007. *Three-year Interim Plan (2007/08-2009/10).* Kathmandu, Nepal: National Planning Commission.

National Planning Commission (NPC) [Nepal]. 2010a. *Nepal Millennium Development Goals progress report 2010*. Kathmandu, Nepal: National Planning Commission.

National Planning Commission (NPC) [Nepal]. 2010b. *Three-year interim development plan 2010/11-2012/13.* Kathmandu, Nepal: National Planning Commission

National Planning Commission (NPC) [Nepal]. 2011. *Three Year Plan (2010-2013).* Kathmandu, Nepal: National Planning Commission.

National Planning Council [Nepal]. 1965. *The Third Plan (1965-1970).* Kathmandu, Nepal: His Majesty's Government of Nepal, Ministry of Economic Planning, National Planning Council.

Nepal CRS Company. 2011. *Sangini (Depo-Provera): Three monthly injectable contraceptives (DMPA) through pharmacies in Nepal.* Kathmandu, Nepal: Nepal CRS Company.

Nepal Law Commission, 2006. *Nepal laws and documents*. http://www.lawcommission.gov.np/en/documents/prevailing- laws/prevailing-rules/func-startdown/1091/.

Nepal Law Commission. 2009. *Nepal laws and documents.* http://www.lawcommission.gov.np/en/documents/prevailing-laws/prevailing-acts/Prevailing%20Laws/Statues---Acts/English/Domestic-Violence-(Crime-and-Punishment)-Act-2066-(2009)/.

Nepal Law Commission. 2011. Birth, Death and Other Personal Events (Registration) Act, 2033 (1976). http://www.lawcommission.gov.np/en/documents/prevailing-laws/prevailing-acts/func-startdown/678/.

New ERA. 2006. *Nepal Population Perspective Plan 2002-2007*. Kathmandu, Nepal: Ministry of Health and Population and United Nations Population Fund.

Office of Prime Minister and Council of Minister (OPMCM) [Nepal]. 2009. *National Action Plan Against Gender Based Violence (2010).* Kathmandu, Nepal: Office of Prime Minister and Council Minister.

Ojha, N., and D.S. Malla. (2007). Active management of third stage of labour by oxytocin: Umbilical vein versus intramuscular use. *Nepal Journal of Obstetrics and Gynaecology* 2: 13-16.

Pan American Health Organization/World Health Organization (PAHO/WHO). 2004. *Guiding principles for complementary feeding of the breastfed child.* Washington, DC: Pan American Health Organization/World Health Organization, Division of Health Promotion and Protection, Food and Nutrition Program.

Pradhan, A., R.H. Aryal, G. Regmi, B. Ban, and P. Govindasamy. 1997. *Nepal Family Health Survey 1996*. Kathmandu, Nepal, and Calverton, Maryland: Ministry of Health [Nepal], New ERA, and Macro International Inc.

Rai, K. 2010. *Rural electrification in Nepal: Experiences of an integrative social contextual approach.* London, England: Household Energy Network (HEDON).

Rutstein, S. 1999. *Wealth versus expenditure: Comparison between the DHS wealth index and household expenditures in four departments of Guatemala*. Calverton, Maryland: ORC Macro.

Rutstein, S., K. Johnson, and D. Gwatkin. 2000. *Poverty, health inequality, and its health and demographic effects.* Presented at the annual meeting of the Population Association of America, Los Angeles, California.

Rutstein, S., and G. Rojas. 2006.*Guide to DHS statistics.* Calverton, Maryland: ORC Macro.

Save the Children. 2009. *Community Based Newborn Care Program, Nepal (CB-NCP).* http://cbncp.org.np/.

Strauss, M.A. 1990. Measuring intra-family conflict and violence: The Conflict Tactics Scale. In *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families*. New Brunswick, New Jersey: Transaction Publications.

The Himalayan. (2010). *Dozen districts food insecure, top stories.* http://www.thehimalayantimes.com/fullNews.php?headline=Dozen+districts+food+insecure.

Thingo, T.T., and S. von der Heide. 1997. *Changing faces of Nepal—The glory of Asia's past.* Kathmandu, Nepal: UNESCO Division of Cultural Heritage and Himal Asia.

United Nations (UN). 1993. *Declaration on the elimination of violence against women*. New York: United Nations.

United Nations (UN). 1994. *Program of action adopted at the International Conference on Population and Development.* New York: United Nations.

United Nations (UN). 1995. *Beijing declaration and platform for action at the Fourth World Conference on Women*. http://www.unesco.org/education/information/nfsunesco/pdf/BEIJIN_E.PDF (cited from *Malawi Demographic and Health Survey 2010*, National Statistical Office, Zomba Malawi, and ICF Macro, Calverton, Maryland).

United Nations Children's Fund (UNICEF). 2006. *Decentralized Action for Children and Women (DACAW) update survey 2003: Consolidated report of seven districts.* Kathmandu, Nepal: UNICEF Nepal.

United Nations Children's Fund (UNICEF). 2009. *Tracking progress on child and maternal nutrition: A survival and development priority.* New York: United Nations Children's Fund.

United Nations Development Program (UNDP). 2011a. *The Millennium Development Goals report 2011*. http://www.beta.undp.org/undp/en/home/librarypage/mdg/MDG_Report_2011.html.

United Nations Development Program (UNDP). 2011b. *World human development report 2011*. New York: United Nations Development Program.

United Nations Population Fund (UNFPA). 2007. *Gender equity and empowerment in Nepal*. Kathmandu, Nepal: United Nations Population Fund.

United Nations Population Information Network (POPIN). 1995. *Guidelines on women's empowerment for the UN Resident Coordinator System.* New York: United Nations Inter-Agency Task Force on the Implementation of ICPD Program of Action.

United States Agency for International Development (USAID). 2004. *Nepal child survival case study: Technical report*. Report published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development.

United States Agency for International Development (USAID)/Nepal. 2010. *Nepal Family Health Program II: Background/program overview*. http://nepal.usaid.gov/our-work/program-area/health-and-family-planning/371-nepal-family-health-program-ii.html.

United States Agency for International Development, New ERA, and Nepal Family Health Program. 2010. *Family planning, maternal, newborn and child health situation in rural Nepal: A mid-term survey for NFHP.* Kathmandu, Nepal: USAID, New ERA, and NFHP.

U.S. Department of Health and Human Services. 2006. *The health consequences of involuntary exposure to tobacco smoke: A report of the surgeon general*. Rockville, Maryland: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

Wang, W., V.M. MacDonald, M. Paudel, and K.K. Banke. 2011. National scale-up of zinc promotion in Nepal: Results from a post-project population-based survey. *Journal of Health, Population and Nutrition* 29: 207-217.

Windham, G.C., A. Eaton, and B. Hopkins. 1999. Evidence for an association between environmental tobacco smoke exposure and birth weight: a meta-analysis and new data. *Paediatric and Perinatal Epidemiology* 13: 35-37.

Witter, S., S. Khadka, H. Nath, and S. Tiwari (2011). The national free delivery policy in Nepal: Early evidence of its effects on health facilities. *Health Policy and Planning* 26: ii84-ii91.

Women's Rehabilitation Centre Nepal (WOREC). 2009. *Violence against women.* Balkumari, Lalitpur, Nepal: Women's Rehabilitation Centre Nepal.

World Health Organization (WHO)/National Center for Health Statistics. *The growth chart*. Geneva, Switzerland: World Health Organization.

World Health Organization (WHO). 2001. *Putting women first: Ethical and safety recommendations for research on domestic violence against women.* Geneva, Switzerland: Department of Gender and Women's Health, World Health Organization.

World Health Organization (WHO)/United Nations Children's Fund (UNICEF). 2002. *Infant and young child feeding strategy*. Geneva, Switzerland: World Health Organization.

World Health Organization (WHO). 2006. *WHO child growth standards: Length/height-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development.* Geneva, Switzerland: World Health Organization.

World Health Organization (WHO). 2011. *Guideline: Vitamin A supplementation in postpartum women.* Geneva, Switzerland: World Health Organization.

SAMPLE DESIGN AND IMPLEMENTATION *Appendix* A

A.1 INTRODUCTION

The 2011 Nepal Demographic and Health Survey (NDHS) is the fourth DHS survey following the 1996 Nepal Family Health Survey, the 2001 Nepal Demographic and Health Survey, and the 2006 Nepal Demographic and Health Survey. The sample was designed to yield representative information for most indicators for the country as a whole, for urban and rural areas, for the three ecological zones (mountain, hill, and terai), and for each of the 13 domains obtained by cross-classifying the three ecological zones and the five development regions (Eastern, Central, Western, Mid-western, and Far-western). Due to the small population size in the Western, Mid-western and Far-western mountain subregions, these were combined to represent a single domain.

The primary objective of the 2011 NDHS was to provide estimates with an acceptable level of precision for important population characteristics such as fertility, contraceptive prevalence, and selected health indicators and infant mortality. The survey was designed to target a sample of 11,095 households and it was expected to interview a total of 13,200 women age 15-49 in the sample households and all men age 15-49 in a sub-sample of one in every two households selected for the woman's interview. Women and men were considered eligible for interview if they were usual members of the household or if they stayed in the household the night before the survey. Height and weight measurements and anemia testing were conducted for all women eligible for the interview in the subsample of households selected for the men's survey. Additionally, height and weight were measured for all children age under five years and anemia testing was conducted for children 6-59 months in the households selected for the men's survey. A domestic violence module was administered to only one selected woman in the same subsample of households selected for the men's survey.

A.2 SAMPLING FRAME

Nepal is divided into seventy-five districts and each district is sub-divided into smaller administrative units. For the census purpose each district, as well as each of the other administrative units, were sub-divided into wards in the rural areas and sub-wards in urban areas. Thus, an enumeration area (EA) is defined as a ward in the rural areas and a sub-ward in the urban areas. The last population census before the 2011 NDHS fieldwork was carried out by the Central Bureau of Statistics in 2001. The distribution of EAs and population is shown in Tables A.1 and A.2. Although the next census was planned for 2011, the sampling frame from which to draw the sample for the 2011 NDHS was not going to be available in time for the fielding of the 2011 NDHS. As such the survey had to rely on the 2001 Census for its sampling frame. However, the long gap between the 2001 Census and the fielding of the 2011 NDHS, necessitated an updating of the 2001 sampling frame to take into account not only population growth, but also mass internal and external migration due to the decade long political conflict in the country. Therefore, it was necessary to conduct a partial updating of the 2001 census frame through a quick count of dwellings at the first level by taking into consideration a large sample (about five times larger than the sample required for each of the 13 domains). This sample at the first level was selected with equal probability. The results of the quick count of dwellings served as the actual sample frame for the 2011 NDHS sample design. The sample for the 2011 NDHS is selected from this updated frame with probability proportional to the number of updated dwellings. Weights were calculated for each stage of the selection probability and the final weight is the product of each of the compound weights.

Table A.1 Enumeration areas

Distribution of the enumeration areas in the sampling frame of the 2001 Census, by region and residence, Nepal

Region	Number of enumeration areas in frame		
	Urban	Rural	Total
Eastern mountain	13	1,053	1,066
Central mountain	13	1,244	1,257
Western mountain	0	2,043	2,043
Eastern hill	35	3,554	3,589
Central hill	183	4,163	4,346
Western hill	105	5,543	5,648
Mid-western hill	21	2,569	2,590
Far-western hill	38	1,863	1,901
Eastern terai	134	3,382	3,516
Central terai	112	5,292	5,404
Western terai	55	1,971	2,026
Mid-western terai	53	1,043	1,096
Far-western terai	42	547	589
Nepal	804	34,267	35,071

Table A.2 Population

Distribution of the census population in the sampling frame by region and residence, Nepal

Region	Population in frame			Percent of total population	Percent urban
	Urban	Rural	Total		
Eastern mountain	21,789	378,739	400,528	1.8	5.4
Central mountain	21,916	490,462	512,378	2.3	4.3
Western mountain	0	586,041	586,041	2.6	0.0
Eastern hill	92,196	1,546,269	1,638,465	7.2	5.6
Central hill	1,171,385	2,340,464	3,511,849	15.5	33.4
Western hill	343,073	2,442,622	2,785,695	12.3	12.3
Mid-western hill	50,827	1,245,839	1,296,666	5.7	3.9
Far-western hill	58,796	737,591	796,387	3.5	7.4
Eastern terai	510,625	2,726,783	3,237,408	14.3	15.8
Central terai	411,963	3,513,962	3,925,925	17.3	10.5
Western terai	177,753	1,570,426	1,748,179	7.7	10.2
Mid-western terai	180,548	1,047,116	1,227,664	5.4	14.7
Far-western terai	187,008	804,554	991,562	4.4	18.9
Nepal	3,227,879	19,430,868	22,658,747	100.0	14.3

Domains

The cross classification of the three zones by the five development regions yields 15 possible domains for the 2011 NDHS. However, the Western, Mid-western, and Far-western mountain domains were combined to form a single domain because of their small population size, resulting in a total of 13 domains. In order to provide an adequate sample to calculate most of the key indicators (with the exception of mortality) with acceptable level of precision, a minimum of about 600 households were selected for each domain.

The EAs were stratified by urban and rural areas within each domain from the 2001 census frame. The 2011 NDHS used the same urban-rural stratification as in the 2001 census frame.

A.3 Sample Design and Implementation

The EAs in each of the 13 domains were not allocated proportional to their total population due to the need to provide estimates with acceptable levels of statistical precision for each domain, and for urban and rural domains of the country as a whole. The vast majority (about 90 percent) of the population in Nepal resides in rural areas. In order to provide for national urban estimates, urban areas of the country were oversampled. Table A.3 shows the sample distribution by the 13 domains and Table A.4 shows the expected number of completed interviews with women and men age 15-49 by domain.

Table A.3 Sample allocation of clusters and households

Sample allocation of clusters and households by region, according to residence, Nepal, 2011

	Allocation of clusters			Allocation of households		
Region	Urban	Rural	Total	Urban	Rural	Total
Eastern mountain	3	14	17	105	560	665
Central mountain	2	15	17	70	600	670
Western mountain	0	14	14	0	560	560
Eastern hill	4	19	23	140	760	900
Central hill	16	14	30	560	560	1,120
Western hill	11	16	27	385	640	1,025
Mid-western hill	3	18	21	105	720	825
Far-western hill	4	13	17	140	520	660
Eastern terai	14	15	29	490	600	1,090
Central terai	9	18	27	315	720	1,035
Western terai	8	17	25	280	680	960
Mid-western terai	10	13	23	350	520	870
Far-western terai	11	8	19	385	320	705
Nepal	95	194	289	3,325	7,760	11,085

Table A.4 Sample allocation of expected number of completed interviews

Sample allocation of expected number of completed interviews with women and men by region, according to residence, Nepal, 2011

	Women 15-49			Men 15-49		
Region	Urban	Rural	Total	Urban	Rural	Total
Eastern mountain	126	685	811	49	235	284
Central mountain	84	734	818	33	252	285
Western mountain	0	685	685	0	235	235
Eastern hill	168	930	1098	65	319	384
Central hill	671	685	1357	262	235	497
Western hill	462	783	1245	180	269	449
Mid-western hill	126	881	1007	49	303	352
Far-western hill	168	637	804	65	219	284
Eastern terai	587	734	1322	229	252	481
Central terai	378	881	1259	147	303	450
Western terai	336	832	1168	131	286	417
Mid-western terai	420	637	1056	163	219	382
Far-western terai	462	392	853	180	134	314
Nepal	3,986	9,499	13,485	1,553	3,261	4,814

Results from the 2006 NDHS showed an average of 1.199 completed women per selected household in the urban area, and 1.224 in the rural area. With a targeted sample of 11,085 selected households in the 2011 NDHS, it was expected that interviews would be completed for a total of 13,485 women, assuming a similar response rate as in the 2006 NDHS. In order to achieve the target sample size in each domain, the number of EAs allocated to the urban and rural areas of each domain was roughly in the ratio of 1 urban to 2 rural EAs to provide for 95 urban and 194 rural EAs and a total of 289 EAs for the country (Table A.3). In order to achieve the target sample size by the allocated EAs, 35 households were randomly selected in each urban EA and 40 households in each rural EA.

Sample Selection

Following the quick count, the 2011 NDHS sample was selected using a stratified two-stage cluster design. In each domain (region), the number of allocated EAs was selected with probability proportional to size (with household size updated from the quick count). The selection was done using the following formula:

$$P_{1i} = (b * M_i) / (\Sigma M_i)$$

where

b: is the number of clusters in the DHS sample for a given domain by urban (or rural) stratification,

M_i: is the number of households of the ith EA derived from the quick count sample frame update,

ΣM_i: is the number of households in the given domain, and urban (or rural) stratification derived from the quick count.

If a selected EA is large, say more than 300 households, a segmentation process was recommended to be done, with only one segment chosen with equal probability, among all segments and a complete household listing process implemented in the selected segment. For all other selected EAs a complete household listing operation was carried out and households were selected to achieve a self-weighted sampling fraction within each EA.

If s_{2i} is the number of segments in each EA, then the sampling probability for the selected segment is given as

$$P_{1i} * (1/ s_{2i})$$

Finally for the ith cluster, if c_i is the number of households selected out of the total households (L_i) -found in the listing process, then the overall sampling fraction in the EA can be expressed as

$$f = P_{1i} * (1/ s_{2i}) * (c_i / L_i)$$

where the number of households in the ith cluster is either c_i (35 for urban, or 40 for rural), with the household selection interval for the ith cluster given as

$$I_i = L_i / c_i$$
$$I_i = (P_{1i} * (1/(s_{2i})) / f$$

Sample Implementation

Tables A.5 and A.6 present response rates, for women and men, respectively, by urban and rural areas, and by the three ecological zones. The male subsample constituted one in two of the households selected for the woman's sample.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Nepal 2011

	Residence		Ecological zone			
Result	Urban	Rural	Mountain	Hill	Terai	Total
Selected households						
Completed (C)	94.5	95.7	96.1	94.5	95.9	95.4
Household present but no competent respondent at home (HP)	0.2	0.2	0.3	0.1	0.2	0.2
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.8	0.2	0.0	0.6	0.3	0.4
Dwelling not found (DNF)	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	1.5	0.8	0.5	1.2	1.0	1.0
Dwelling vacant/address not a dwelling (DV)	2.5	2.7	2.8	3.2	2.1	2.7
Dwelling destroy (DD)	0.3	0.1	0.1	0.1	0.3	0.2
Other (O)	0.2	0.3	0.3	0.3	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	3,331	8,022	1,981	4,647	4,725	11,353
Household response rate (HRR)[1]	98.9	99.6	99.7	99.3	99.5	99.4
Eligible women						
Completed (EWC)	96.8	98.6	99.1	97.7	98.2	98.1
Not at home (EWNH)	1.0	0.6	0.3	0.8	0.7	0.7
Postponed (EWP)	0.2	0.0	0.0	0.1	0.0	0.1
Refused (EWR)	1.3	0.1	0.0	0.7	0.4	0.5
Partly completed (EWPC)	0.2	0.0	0.0	0.1	0.1	0.1
Incapacitated (EWI)	0.3	0.5	0.6	0.4	0.5	0.5
Other (EWO)	0.1	0.1	0.0	0.2	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,822	9,096	2,052	5,093	5,773	12,918
Eligible women response rate (EWRR)[2]	96.8	98.6	99.1	97.7	98.2	98.1
Overall women response rate (ORR)[3]	95.8	98.3	98.8	97.0	97.6	97.6

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).
[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR / 100$$

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall men response rates, according to urban-rural residence and region (unweighted), Nepal 2011

	Residence		Ecological zone			
Result	Urban	Rural	Mountain	Hill	Terai	Total
Selected households						
Completed (C)	93.6	95.1	95.0	93.6	95.6	94.7
Household present but no competent respondent at home (HP)	0.1	0.2	0.4	0.1	0.1	0.2
Postponed (P)	0.1	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.9	0.3	0.0	0.7	0.4	0.5
Household absent (HA)	2.1	0.8	0.2	1.6	1.2	1.2
Dwelling vacant/address not a dwelling (DV)	2.7	3.2	3.7	3.6	2.2	3.0
Dwelling destroy (DD)	0.3	0.1	0.2	0.0	0.3	0.2
Other (O)	0.2	0.4	0.5	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,616	3,973	977	2,288	2,324	5,589
Household response rate (HRR)[1]	98.9	99.5	99.6	99.1	99.5	99.3
Eligible men						
Completed (EMC)	93.1	96.4	98.4	93.8	95.6	95.3
Not at home (EMNH)	3.5	2.1	0.3	3.4	2.6	2.6
Refused (EMR)	2.0	0.3	0.2	1.5	0.6	0.9
Partly completed (EMPC)	0.1	0.1	0.0	0.1	0.1	0.1
Incapacitated (EMI)	0.9	0.8	0.5	0.9	0.8	0.8
Other (EMO)	0.3	0.3	0.6	0.2	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,451	2,872	628	1,686	2,009	4,323
Eligible men response rate (EMRR)[2]	93.1	96.4	98.4	93.8	95.6	95.3
Overall men response rate (ORR)[3]	92.1	96.0	98.0	93.0	95.1	94.7

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)
[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR / 100$$

A.4 SAMPLE PROBABILITIES AND SAMPLE WEIGHTS

Sampling weights are adjustment factors applied to adjust for differences in the probability of selection and interview between cases in a sample, either due to design or happenstance. In the 2011 NDHS the sample is selected with unequal probability to expand the number of cases available (and hence reduce sampling variability) for certain areas or subgroups for which statistics are needed. In this case, weights need to be applied when tabulations are made of statistics to produce the proper representation. When weights are calculated because of sample design, corrections for differential response rates are also made.

There are two main sampling weights in the 2011 NDHS: household weights and individual weights. The household weight for a particular household is the inverse of its household selection probability multiplied by the inverse of the household response rate of its household response rate group. The individual weight of a respondent's case is the household weight multiplied by the inverse of the individual response rate of their individual response rate group. There are additional sampling weights for sample subsets, such as domestic violence. The initial weights are standardized by dividing each weight by the average of the initial weights (equal to the sum of the initial weight divided by the sum of the number of cases) so that the sum of the standardized weights equals the sum of the cases over the entire sample. The standardization is done separately for each weight.

Due to the non-proportional allocation of the sample to different domains and to their urban and rural areas and the possible differences in response rates, sampling weights are required for any analysis using the 2011 NDHS data to ensure the actual representativeness of the survey results at the national level as well as at the urban-rural level, ecological zone level, development regions level, and the thirteen subregions. Since the 2011 NDHS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. We use the following notations:

P_{1hi}: first-stage sampling probability of the ith cluster in stratum h
P_{2hi}: second -stage sampling probability within the ith cluster (households)

Let a_h be the number of EAs selected in stratum h, M_{hi} the number of households according to the sampling frame in the ith EA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the ith EA in the NDHS 2011 sample is calculated as follows:

$$\frac{a_h \; M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected cluster compared to the total number of households in EA i in stratum h if the EA is segmented, otherwise $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h \; M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the production of the two stages selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weight. Design weight was adjusted for household non-response and as well as for individual non-response to get the sampling weights for households, for women, and for men, respectively. The differences of the household sampling weight and the individual sampling weights are introduced by individual non-response. The final sampling weights were normalized in order to give the total number of unweighted cases equal to the total number of weighted cases at national level, for both household weight and individual weight, respectively. The normalized weights are relative weights which are valid for estimating means, proportions and ratios, but not valid for estimating population totals and for pooled data. No special weights were calculated for data collected on children, since all children under five in the selected households were eligible for the survey. Therefore, for child indicators tabulated at the household level, household weights were used; for child indicators tabulated at the individual level, the mother's weight was used.

ESTIMATES OF SAMPLING ERRORS *Appendix* B

The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2011 Nepal Demographic and Health Survey (2011 NDHS) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2011 NDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2011 NDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2011 NDHS is ISSA Sampling Error Module, a program developed by MEASURE DHS. This program used the Taylor linearization method of variance estimation for survey estimates that are means, proportions or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the weighted values of variable y in the ith cluster in the hth stratum,
x_{hi} is the sum of the weighted number of cases in the ith cluster in the hth stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2011 NDHS, there were 289 non-empty clusters. Hence, 289 replications were created. The variance of a rate *r* is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 289 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 288 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2011 NDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, three ecological zones, and for five development regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.12 present the value of the statistic (R), its standard error (SE), the number of un-weighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The sampling errors for mortality rates are presented for the five year period preceding the survey for the whole country and for the ten year period preceding the survey by residence, ecological zones, and development regions. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women age 40-49*) can be interpreted as follows: the estimated proportion from the national sample is 4.250 and its standard error is 0.083. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 4.250±2×0.083. There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 40 to 49 is between 4.083 and 4.417.

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions values. The relative error for the total fertility rate is 3.8 percent. However for the mortality rates, the average relative standard error for the five-year period mortality rates is much higher, about 10 percent.

There are differentials in the relative standard error for estimates of sub-populations of women, for example for the variable *children ever born to women 40-49*, the relative standard error as percent of the estimated value for the whole country, for the urban area, and for the rural area are 2 percent, 2.8 percent, and 2.2 percent, respectively.

For the total women sample, the value of the DEFT, averaged over all variables, is 1.86. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.86 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Nepal, 2011

Variable	Estimate	Base population
	WOMEN	
Urban residence	Proportion	All women 15-49
Literacy	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary education or higher	Proportion	All women 15-49
Net attendance ratio	Ratio	Household population [6-10] years
Never married	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 20	Proportion	All women 20-49
Had sexual intercourse before age 18	Proportion	All women 20-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	All women 40-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last five years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Had diarrhea in the past 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5 with diarrhea in past 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Received all vaccinations	Proportion	Children 12-23 months
Height-for-age (-2SD)	Proportion	Children under 5 who are measured
Weight-for-height (-2SD)	Proportion	Children under 5 who are measured
Weight-for-age (-2SD)	Proportion	Children under 5 who are measured
Body Mass Index (BMI) <18.5	Proportion	All women 15-49 who were measured
Prevalence of anemia (children 6-59 months)	Proportion	All children 6-59 months who were tested
Prevalence of anemia (women 15-49)	Proportion	All women 15-49 who were tested
Had an HIV test and received results in past 12 months	Proportion	All women 15-49
Accepting attitudes towards people with HIV	Proportion	All women who have heard of HIV/AIDS
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Post-neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-five mortality rate[1]	Rate	Children exposed to the risk of mortality
	MEN	
Urban residence	Proportion	All men 15-49
Literacy	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary education or higher	Proportion	All men 15-49
Never married/in union	Proportion	All men 15-49
Currently married/in union	Proportion	All men 15-49
Had sexual intercourse before age 18	Proportion	All men 20-49
Know any contraceptive method	Proportion	Currently married men 15-49
Know a modern method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	All men 15-49
Abstinence among youth (never had sex)	Proportion	Men 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49
Had an HIV test and received results in past 12 months	Proportion	All men 15-49
Accepting attitudes towards people with HIV	Proportion	All men who have heard of HIV/AIDS

[1] The mortality rates are calculated for 5 years and 10 years before the survey for the national sample and regional samples, respectively.

Table B.2 Sampling errors for national sample, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.144	0.003	12674	12674	1.028	0.022	0.137	0.150
Literacy	0.667	0.017	12674	12674	4.089	0.026	0.632	0.701
No education	0.398	0.015	12674	12674	3.475	0.038	0.368	0.428
Secondary education or higher	0.428	0.014	12674	12674	3.292	0.034	0.399	0.457
Net attendance ratio	0.893	0.012	6153	6087	2.647	0.013	0.870	0.917
Never married	0.214	0.006	12674	12674	1.672	0.028	0.202	0.226
Currently married/in union	0.758	0.006	12674	12674	1.612	0.008	0.746	0.770
Married before age 20	0.705	0.010	9884	9921	2.286	0.015	0.684	0.726
Had sexual intercourse before age 18	0.506	0.012	9884	9921	2.450	0.024	0.482	0.531
Currently pregnant	0.049	0.003	12674	12674	1.535	0.060	0.043	0.055
Children ever born	2.117	0.039	12674	12674	2.172	0.019	2.038	2.195
Children surviving	1.913	0.034	12674	12674	2.155	0.018	1.845	1.981
Children ever born to women 40-49	4.250	0.083	2216	2232	1.826	0.020	4.083	4.417
Know any contraceptive method	1.000	0.000	9460	9608	0.792	0.000	1.000	1.000
Know a modern method	1.000	0.000	9460	9608	0.792	0.000	1.000	1.000
Currently using any method	0.497	0.011	9460	9608	2.075	0.021	0.476	0.518
Currently using a modern method	0.432	0.011	9460	9608	2.085	0.025	0.410	0.453
Currently using a traditional method	0.065	0.004	9460	9608	1.685	0.066	0.056	0.074
Currently using pill	0.041	0.003	9460	9608	1.536	0.076	0.035	0.048
Currently using condom	0.043	0.003	9460	9608	1.381	0.067	0.038	0.049
Currently using injectables	0.092	0.005	9460	9608	1.578	0.051	0.082	0.101
Currently using female sterilization	0.152	0.009	9460	9608	2.322	0.056	0.135	0.169
Current using withdrawal	0.054	0.004	9460	9608	1.714	0.074	0.046	0.061
Currently using rhythm	0.011	0.002	9460	9608	1.395	0.133	0.008	0.015
Used public sector source	0.690	0.014	4193	4206	1.999	0.021	0.661	0.718
Want no more children	0.727	0.008	9460	9608	1.818	0.011	0.711	0.744
Want to delay next birth at least 2 years	0.140	0.005	9460	9608	1.264	0.032	0.131	0.149
Ideal number of children	2.133	0.028	12637	12630	4.113	0.013	2.076	2.190
Mothers protected against tetanus for last birth	0.815	0.013	4079	4148	2.210	0.016	0.789	0.842
Births with skilled attendant at delivery	0.360	0.017	5306	5391	2.360	0.047	0.326	0.395
Had diarrhea in the past 2 weeks	0.138	0.007	5054	5140	1.377	0.049	0.125	0.152
Treated with ORS	0.390	0.027	679	711	1.420	0.070	0.336	0.445
Sought medical treatment	0.380	0.028	679	711	1.495	0.073	0.324	0.436
Vaccination card seen	0.339	0.026	945	1000	1.704	0.076	0.287	0.390
Received BCG vaccination	0.965	0.008	945	1000	1.310	0.008	0.950	0.980
Received DPT vaccination (3 doses)	0.917	0.015	945	1000	1.670	0.016	0.888	0.946
Received polio vaccination (3 doses)	0.925	0.014	945	1000	1.730	0.016	0.896	0.954
Received measles vaccination	0.880	0.021	945	1000	2.003	0.024	0.839	0.922
Received all vaccinations	0.870	0.021	945	1000	1.942	0.024	0.828	0.911
Height-for-age (-2SD)	0.405	0.014	2430	2475	1.917	0.035	0.377	0.433
Weight-for-height (-2SD)	0.109	0.008	2430	2475	1.833	0.074	0.093	0.125
Weight-for-age (-2SD)	0.288	0.013	2430	2475	1.947	0.045	0.262	0.314
Body Mass Index (BMI) < 18.5	0.182	0.010	5794	5800	1.959	0.055	0.162	0.202
Prevalence of anemia (children 6-59 months)	0.462	0.017	2180	2198	2.265	0.037	0.428	0.497
Prevalence of anemia (women 15-49)	0.350	0.012	6086	6088	1.976	0.035	0.326	0.374
Accepting attitudes towards people with HIV	0.496	0.013	11295	10944	2.666	0.025	0.471	0.521
Had an HIV test and received result in past 12 months	0.029	0.002	12674	12674	1.594	0.082	0.024	0.034
Ever experience of sexual violence	0.123	0.008	4197	4197	1.561	0.064	0.107	0.139
Physical or sexual violence by any husband	0.282	0.016	3505	3225	2.042	0.055	0.251	0.313
Physical/sexual violence by husband in 12 months	0.143	0.008	3505	3225	1.335	0.055	0.127	0.159
Total fertility rate (TFR) 3 years	2.604	0.100	na	249357	2.173	0.038	2.404	2.804
Neonatal Mortality rate (5 years)	32.910	3.293	5352	5430	1.288	0.100	26.324	39.495
Post-neonatal Mortality rate (5 years)	13.014	1.789	5360	5435	1.119	0.137	9.437	16.592
Infant Mortality rate (0-4)	45.924	3.685	5361	5437	1.223	0.080	38.555	53.293
Child Mortality rate (5 years)	8.870	1.567	5376	5452	1.247	0.177	5.735	12.004
Under-five mortality rate (0-4)	54.386	3.995	5386	5462	1.237	0.073	46.396	62.377
MEN								
Urban residence	0.174	0.006	4121	4121	0.987	0.033	0.162	0.186
Literacy	0.870	0.011	4121	4121	2.189	0.013	0.847	0.893
No education	0.138	0.012	4121	4121	2.287	0.089	0.113	0.162
Secondary education or higher	0.665	0.015	4121	4121	2.000	0.022	0.635	0.694
Never married	0.348	0.010	4121	4121	1.327	0.028	0.328	0.367
Currently married/in union	0.637	0.010	4121	4121	1.328	0.016	0.617	0.657
Had sexual intercourse before age 18	0.188	0.011	3112	3143	1.634	0.061	0.165	0.211
Know any contraceptive method	0.998	0.001	2628	2626	1.105	0.001	0.997	1.000
Know any modern method	0.998	0.001	2628	2626	1.105	0.001	0.997	1.000
Want no more children	0.691	0.013	2628	2626	1.419	0.019	0.665	0.717
Want to delay next birth at least 2 years	0.171	0.010	2628	2626	1.312	0.056	0.151	0.190
Ideal number of children	2.261	0.026	4117	4119	1.930	0.012	2.209	2.314
Had 2+ sexual partners in past 12 months	0.038	0.004	4121	4121	1.228	0.097	0.030	0.045
Condom use at last sex	0.265	0.041	145	155	1.121	0.156	0.183	0.347
Abstinence among youth (Never had sex)	0.778	0.016	1301	1281	1.410	0.021	0.745	0.810
Sexually active in past 12 months among never-married youth	0.150	0.013	1301	1281	1.298	0.086	0.124	0.175
Paid for sexual intercourse in past 12 months	0.015	0.002	4121	4121	1.309	0.167	0.010	0.020
Had an HIV test and received results in past 12 months	0.075	0.006	4121	4121	1.573	0.086	0.062	0.087
Accepting attitudes towards people with HIV	0.475	0.014	4013	3991	1.766	0.029	0.447	0.503

na = Not applicable

Table B.3 Sampling errors for urban sample, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	1.000	0.000	3701	1819	na	0.000	1.000	1.000
Literacy	0.828	0.012	3701	1819	1.884	0.014	0.804	0.851
No education	0.220	0.012	3701	1819	1.755	0.054	0.196	0.244
Secondary education or higher	0.637	0.017	3701	1819	2.100	0.026	0.604	0.670
Net attendance ratio	0.938	0.009	1531	713	1.314	0.010	0.920	0.956
Never married	0.277	0.012	3701	1819	1.653	0.044	0.253	0.301
Currently married (in union)	0.693	0.012	3701	1819	1.620	0.018	0.669	0.718
Married before age 20	0.577	0.017	2906	1452	1.814	0.029	0.544	0.611
Had sexual intercourse before age 18	0.397	0.016	2906	1452	1.770	0.040	0.365	0.429
Currently pregnant	0.040	0.004	3701	1819	1.181	0.095	0.033	0.048
Children ever born	1.614	0.045	3701	1819	1.684	0.028	1.524	1.704
Children surviving	1.493	0.039	3701	1819	1.634	0.026	1.414	1.572
Children ever born to women 40-49	3.263	0.091	625	305	1.316	0.028	3.081	3.445
Knowing any contraceptive method	1.000	0.000	2584	1261	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	2584	1261	na	0.000	1.000	1.000
Currently using any contraceptive method	0.596	0.015	2584	1261	1.558	0.025	0.566	0.626
Currently using a modern method	0.498	0.016	2584	1261	1.653	0.033	0.466	0.531
Currently using a traditional method	0.097	0.008	2584	1261	1.411	0.085	0.080	0.113
Currently using pill	0.061	0.006	2584	1261	1.336	0.103	0.048	0.074
Currently using condom	0.094	0.009	2584	1261	1.546	0.095	0.076	0.111
Currently using injectable	0.104	0.007	2584	1261	1.241	0.072	0.089	0.118
Currently using female sterilization	0.135	0.011	2584	1261	1.686	0.084	0.113	0.158
Current using withdrawal	0.079	0.007	2584	1261	1.230	0.082	0.066	0.093
Currently using rhythm	0.017	0.004	2584	1261	1.412	0.209	0.010	0.025
Used public sector source	0.454	0.021	1285	637	1.507	0.046	0.412	0.496
Want no more children	0.727	0.011	2584	1261	1.290	0.016	0.705	0.750
Want to delay next birth at least 2 years	0.129	0.008	2584	1261	1.203	0.062	0.113	0.145
Ideal number of children	1.896	0.025	3689	1811	2.021	0.013	1.846	1.945
Mothers protected against tetanus for last birth	0.908	0.010	897	418	1.021	0.011	0.888	0.929
Births with skilled attendant at delivery	0.727	0.022	1091	503	1.440	0.031	0.682	0.772
Had diarrhea in the past 2 weeks	0.134	0.015	1049	483	1.373	0.114	0.103	0.165
Treated with ORS packets	0.442	0.052	136	65	1.171	0.117	0.339	0.546
Sought medical treatment	0.432	0.047	136	65	1.109	0.110	0.337	0.527
Vaccination card seen	0.387	0.043	197	97	1.226	0.110	0.302	0.472
Received BCG vaccination	0.980	0.014	197	97	1.361	0.014	0.953	1.007
Received DPT vaccination (3 doses)	0.949	0.019	197	97	1.245	0.020	0.910	0.988
Received polio vaccination (3 doses)	0.967	0.015	197	97	1.215	0.016	0.936	0.998
Received measles vaccination	0.918	0.022	197	97	1.104	0.024	0.874	0.961
Received all vaccinations	0.900	0.024	197	97	1.116	0.026	0.852	0.948
Height-for-age (-2SD)	0.267	0.023	501	216	1.512	0.085	0.222	0.312
Weight-for-height (-2SD)	0.082	0.016	501	216	1.780	0.198	0.049	0.114
Weight-for-age (-2SD)	0.165	0.018	501	216	1.501	0.111	0.128	0.202
Body Mass Index (BMI) < 18.5	0.141	0.012	1651	808	1.425	0.087	0.117	0.166
Prevalence of anemia (children 6-59 months)	0.412	0.032	444	188	1.802	0.077	0.348	0.475
Prevalence of anemia (women 15-49)	0.276	0.015	1709	836	1.428	0.056	0.245	0.307
Accepting attitudes towards people with HIV	0.546	0.015	3484	1722	1.719	0.027	0.517	0.575
Had an HIV test and received result in past 12 months	0.039	0.004	3701	1819	1.340	0.110	0.030	0.047
Ever experience of sexual violence	0.107	0.013	1161	1075	1.433	0.121	0.081	0.133
Physical or sexual violence by any husband	0.254	0.025	944	778	1.785	0.100	0.204	0.305
Physical/sexual violence by husband in 12 months	0.156	0.017	944	778	1.428	0.108	0.122	0.190
Total fertility rate (TFR) 3 years	1.578	0.102	na	36192	1.525	0.065	1.374	1.782
Neonatal Mortality rate	25.262	3.661	2460	1153	1.103	0.145	17.939	32.585
Post-neonatal Mortality rate	13.213	2.470	2460	1153	1.041	0.187	8.273	18.152
Infant Mortality rate	38.475	4.134	2460	1153	1.018	0.107	30.208	46.742
Child Mortality rate	6.910	2.135	2465	1156	1.321	0.309	2.639	11.181
Under-five mortality rate	45.119	4.905	2465	1156	1.164	0.109	35.310	54.928
MEN								
Urban residence	1.000	0.000	1351	717	na	0.000	1.000	1.000
Literacy	0.951	0.007	1351	717	1.217	0.008	0.937	0.965
No education	0.060	0.009	1351	717	1.332	0.144	0.042	0.077
Secondary education or higher	0.792	0.018	1351	717	1.621	0.023	0.756	0.828
Never married	0.404	0.016	1351	717	1.230	0.041	0.371	0.436
Currently married/in union	0.593	0.017	1351	717	1.246	0.028	0.559	0.626
Had sexual intercourse before age 18	0.104	0.010	1027	562	1.013	0.093	0.085	0.123
Knows any contraceptive method	1.000	0.000	802	425	na	0.000	1.000	1.000
Know any modern method	1.000	0.000	802	425	na	0.000	1.000	1.000
Want no more children	0.666	0.023	802	425	1.362	0.034	0.620	0.711
Want to delay birth at least 2 years	0.196	0.019	802	425	1.328	0.095	0.159	0.233
Ideal family size	2.027	0.020	1348	716	1.306	0.010	1.986	2.067
Had 2+ sexual partners in past 12 months	0.043	0.007	1351	717	1.323	0.170	0.028	0.057
Condom use at last sex	0.336	0.074	51	31	1.109	0.220	0.188	0.484
Abstinence among youth (Never had sex)	0.797	0.020	472	242	1.106	0.026	0.756	0.838
Sexually active in past 12 months among never-married youth	0.134	0.017	472	242	1.081	0.126	0.100	0.168
Paid for sexual intercourse in last 12 months	0.020	0.005	1351	717	1.403	0.268	0.009	0.031
Had HIV test and received result in past 12 months	0.097	0.011	1351	717	1.333	0.111	0.076	0.119
Accepting attitudes towards people with HIV	0.565	0.023	1334	711	1.661	0.040	0.520	0.611

na = Not applicable

Table B.4 Sampling errors for rural sample, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.000	0.000	8973	10855	na	na	0.000	0.000
Literacy	0.640	0.020	8973	10855	3.916	0.031	0.600	0.679
No education	0.428	0.017	8973	10855	3.342	0.041	0.393	0.463
Secondary education or higher	0.392	0.017	8973	10855	3.214	0.042	0.359	0.426
Net attendance ratio	0.887	0.013	4622	5374	2.478	0.015	0.861	0.914
Never married	0.203	0.007	8973	10855	1.603	0.034	0.189	0.217
Currently married (in union)	0.769	0.007	8973	10855	1.539	0.009	0.755	0.783
Married before age 20	0.727	0.012	6978	8469	2.240	0.016	0.703	0.751
Had sexual intercourse before age 18	0.525	0.014	6978	8469	2.374	0.027	0.497	0.554
Currently pregnant	0.051	0.003	8973	10855	1.460	0.067	0.044	0.057
Children ever born	2.201	0.045	8973	10855	2.052	0.020	2.111	2.292
Children surviving	1.983	0.039	8973	10855	2.042	0.020	1.905	2.062
Children ever born to women 40-49	4.406	0.096	1591	1927	1.755	0.022	4.215	4.597
Knowing any contraceptive method	1.000	0.000	6876	8346	0.724	0.000	1.000	1.000
Know a modern method	1.000	0.000	6876	8346	0.724	0.000	1.000	1.000
Currently using any contraceptive method	0.482	0.012	6876	8346	1.987	0.025	0.458	0.506
Currently using a modern method	0.421	0.012	6876	8346	2.000	0.028	0.398	0.445
Currently using a traditional method	0.060	0.005	6876	8346	1.658	0.079	0.051	0.070
Currently using pill	0.038	0.003	6876	8346	1.502	0.091	0.031	0.045
Currently using condom	0.036	0.003	6876	8346	1.354	0.085	0.030	0.042
Currently using injectable	0.090	0.005	6876	8346	1.525	0.059	0.079	0.100
Currently using female sterilization	0.154	0.010	6876	8346	2.229	0.063	0.135	0.174
Current using withdrawal	0.050	0.004	6876	8346	1.701	0.090	0.041	0.059
Currently using rhythm	0.011	0.002	6876	8346	1.357	0.158	0.007	0.014
Used public sector source	0.732	0.016	2908	3569	1.961	0.022	0.700	0.764
Want no more children	0.727	0.009	6876	8346	1.756	0.013	0.708	0.746
Want to delay next birth at least 2 years	0.142	0.005	6876	8346	1.199	0.036	0.131	0.152
Ideal number of children	2.173	0.033	8948	10819	4.004	0.015	2.107	2.238
Mothers protected against tetanus for last birth	0.805	0.015	3182	3730	2.058	0.018	0.775	0.834
Births with skilled attendant at delivery	0.323	0.018	4215	4888	2.212	0.055	0.287	0.359
Had diarrhea in the past 2 weeks	0.139	0.007	4005	4656	1.284	0.053	0.124	0.154
Treated with ORS packets	0.385	0.029	543	646	1.333	0.077	0.326	0.444
Sought medical treatment	0.375	0.030	543	646	1.407	0.081	0.314	0.436
Vaccination card seen	0.334	0.028	748	903	1.606	0.084	0.278	0.390
Received BCG vaccination	0.964	0.008	748	903	1.203	0.009	0.947	0.980
Received DPT vaccination (3 doses)	0.914	0.016	748	903	1.545	0.017	0.882	0.945
Received polio vaccination (3 doses)	0.920	0.016	748	903	1.589	0.017	0.889	0.952
Received measles vaccination	0.876	0.023	748	903	1.867	0.026	0.831	0.922
Received all vaccinations	0.866	0.023	748	903	1.817	0.026	0.820	0.912
Height-for-age (-2SD)	0.418	0.015	1929	2259	1.789	0.036	0.388	0.448
Weight-for-height (-2SD)	0.112	0.009	1929	2259	1.695	0.078	0.094	0.129
Weight-for-age (-2SD)	0.300	0.014	1929	2259	1.798	0.046	0.272	0.328
Body Mass Index (BMI) < 18.5	0.188	0.011	4143	4992	1.868	0.060	0.166	0.211
Prevalence of anemia (children 6-59 months)	0.467	0.019	1736	2011	2.118	0.040	0.430	0.504
Prevalence of anemia (women 15-49)	0.362	0.014	4377	5252	1.884	0.038	0.334	0.389
Accepting attitudes towards people with HIV	0.486	0.015	7811	9222	2.605	0.030	0.457	0.516
Had an HIV test and received result in past 12 months	0.027	0.003	8973	10855	1.557	0.098	0.022	0.033
Ever experience of sexual violence	0.129	0.010	3036	3122	1.590	0.075	0.110	0.148
Physical or sexual violence by any husband	0.291	0.019	2561	2447	2.096	0.065	0.253	0.328
Physical/sexual violence by husband in 12 months	0.139	0.009	2561	2447	1.298	0.064	0.121	0.156
Total fertility rate (TFR) 3 years	2.782	0.112	na	212377	2.021	0.040	2.557	3.007
Neonatal Mortality rate	36.333	2.615	8787	10121	1.215	0.072	31.102	41.564
Post-neonatal Mortality rate	18.648	1.586	8798	10134	1.039	0.085	15.476	21.820
Infant Mortality rate	54.981	3.042	8799	10136	1.133	0.055	48.897	61.065
Child Mortality rate	9.945	1.223	8812	10141	1.057	0.123	7.499	12.391
Under-five mortality rate	64.380	3.375	8825	10157	1.169	0.052	57.630	71.129
MEN								
Urban residence	0.000	0.000	2770	3404	na	na	0.000	0.000
Literacy	0.853	0.014	2770	3404	2.055	0.016	0.825	0.880
No education	0.154	0.015	2770	3404	2.161	0.096	0.124	0.184
Secondary education or higher	0.638	0.017	2770	3404	1.913	0.027	0.603	0.673
Never married	0.336	0.011	2770	3404	1.277	0.034	0.313	0.359
Currently married/in union	0.647	0.012	2770	3404	1.274	0.018	0.624	0.670
Had sexual intercourse before age 18	0.206	0.014	2085	2582	1.555	0.067	0.178	0.233
Knows any contraceptive method	0.998	0.001	1826	2201	1.005	0.001	0.996	1.000
Know any modern method	0.998	0.001	1826	2201	1.005	0.001	0.996	1.000
Want no more children	0.696	0.015	1826	2201	1.359	0.021	0.667	0.725
Want to delay birth at least 2 years	0.166	0.011	1826	2201	1.256	0.066	0.144	0.188
Ideal family size	2.310	0.032	2769	3402	1.825	0.014	2.247	2.374
Had 2+ sexual partners in past 12 months	0.037	0.004	2770	3404	1.158	0.113	0.028	0.045
Condom use at last sex	0.247	0.048	94	125	1.063	0.192	0.152	0.343
Abstinence among youth (Never had sex)	0.773	0.019	829	1039	1.338	0.025	0.734	0.812
Sexually active in past 12 months among never-married youth	0.153	0.015	829	1039	1.225	0.100	0.122	0.184
Paid for sexual intercourse in last 12 months	0.014	0.003	2770	3404	1.250	0.203	0.008	0.019
Had HIV test and received result in past 12 months	0.070	0.007	2770	3404	1.540	0.107	0.055	0.085
Accepting attitudes towards people with HIV	0.455	0.016	2679	3280	1.689	0.036	0.423	0.488

na = Not applicable

Table B.5 Sampling errors for Mountain region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.027	0.001	2033	805	0.358	0.047	0.025	0.030
Literacy	0.579	0.026	2033	805	2.359	0.045	0.527	0.631
No education	0.520	0.026	2033	805	2.307	0.049	0.469	0.571
Secondary education or higher	0.307	0.021	2033	805	2.081	0.069	0.265	0.350
Net attendance ratio	0.932	0.008	1133	469	1.073	0.008	0.917	0.948
Never married	0.188	0.010	2033	805	1.152	0.053	0.168	0.208
Currently married (in union)	0.783	0.012	2033	805	1.257	0.015	0.760	0.806
Married before age 20	0.766	0.013	1562	623	1.194	0.017	0.741	0.792
Had sexual intercourse before age 18	0.552	0.017	1562	623	1.379	0.031	0.517	0.587
Currently pregnant	0.057	0.006	2033	805	1.203	0.108	0.045	0.070
Children ever born	2.501	0.069	2033	805	1.362	0.028	2.362	2.639
Children surviving	2.178	0.052	2033	805	1.216	0.024	2.075	2.281
Children ever born to women 40-49	4.846	0.175	399	157	1.466	0.036	4.495	5.197
Knowing any contraceptive method	0.999	0.001	1558	630	0.919	0.001	0.998	1.001
Know a modern method	0.999	0.001	1558	630	0.919	0.001	0.998	1.001
Currently using any contraceptive method	0.483	0.023	1558	630	1.808	0.047	0.438	0.529
Currently using a modern method	0.431	0.022	1558	630	1.763	0.051	0.386	0.475
Currently using a traditional method	0.053	0.008	1558	630	1.448	0.155	0.036	0.069
Currently using pill	0.030	0.006	1558	630	1.445	0.210	0.017	0.042
Currently using condom	0.030	0.006	1558	630	1.476	0.211	0.018	0.043
Currently using injectable	0.123	0.013	1558	630	1.571	0.106	0.097	0.149
Currently using female sterilization	0.030	0.006	1558	630	1.414	0.205	0.017	0.042
Current using withdrawal	0.038	0.007	1558	630	1.445	0.185	0.024	0.051
Currently using rhythm	0.015	0.004	1558	630	1.164	0.237	0.008	0.022
Used public sector source	0.849	0.020	674	273	1.470	0.024	0.808	0.889
Want no more children	0.749	0.010	1558	630	0.931	0.014	0.728	0.769
Want to delay next birth at least 2 years	0.138	0.009	1558	630	1.019	0.064	0.121	0.156
Ideal number of children	2.194	0.033	2032	805	2.002	0.015	2.128	2.259
Mothers protected against tetanus for last birth	0.696	0.033	742	306	1.994	0.047	0.630	0.762
Births with skilled attendant at delivery	0.189	0.028	1020	428	2.100	0.151	0.132	0.246
Had diarrhea in the past 2 weeks	0.134	0.018	959	400	1.634	0.134	0.098	0.170
Treated with ORS packets	0.352	0.067	126	54	1.573	0.191	0.217	0.486
Sought medical treatment	0.355	0.060	126	54	1.403	0.169	0.235	0.475
Vaccination card seen	0.259	0.041	181	75	1.268	0.157	0.178	0.340
Received BCG vaccination	0.937	0.025	181	75	1.385	0.026	0.887	0.986
Received DPT vaccination (3 doses)	0.904	0.041	181	75	1.907	0.045	0.822	0.986
Received polio vaccination (3 doses)	0.911	0.035	181	75	1.688	0.039	0.840	0.981
Received measles vaccination	0.909	0.033	181	75	1.589	0.037	0.843	0.976
Received all vaccinations	0.882	0.043	181	75	1.829	0.049	0.796	0.968
Height-for-age (-2SD)	0.529	0.029	466	195	1.765	0.055	0.471	0.587
Weight-for-height (-2SD)	0.109	0.019	466	195	1.907	0.176	0.070	0.147
Weight-for-age (-2SD)	0.359	0.031	466	195	1.850	0.086	0.298	0.421
Body Mass Index (BMI) < 18.5	0.165	0.015	930	371	1.220	0.090	0.135	0.194
Prevalence of anemia (children 6-59 months)	0.477	0.031	428	179	1.859	0.066	0.414	0.540
Prevalence of anemia (women 15-49)	0.269	0.021	1000	399	1.529	0.079	0.226	0.312
Accepting attitudes towards people with HIV	0.327	0.020	1773	692	1.823	0.062	0.287	0.368
Had an HIV test and received result in past 12 months	0.024	0.006	2033	805	1.794	0.254	0.012	0.036
Ever experience of sexual violence	0.131	0.022	711	442	1.726	0.166	0.088	0.175
Physical or sexual violence by any husband	0.265	0.028	590	335	1.561	0.107	0.208	0.322
Physical/sexual violence by husband in 12 months	0.128	0.018	590	335	1.274	0.137	0.093	0.164
Total fertility rate (TFR) 3 years	3.445	0.267	na	16086	2.066	0.078	2.910	3.980
Neonatal Mortality rate	45.798	7.158	2162	905	1.473	0.156	31.482	60.113
Post-neonatal Mortality rate	26.940	3.864	2165	906	1.072	0.143	19.211	34.669
Infant Mortality rate	72.737	7.282	2165	906	1.223	0.100	58.173	87.302
Child Mortality rate	15.645	3.241	2171	909	1.150	0.207	9.164	22.126
Under-five mortality rate	87.245	8.831	2174	911	1.364	0.101	69.582	104.907
MEN								
Urban residence	0.027	0.005	618	245	0.792	0.193	0.016	0.037
Literacy	0.865	0.018	618	245	1.343	0.021	0.828	0.902
No education	0.148	0.020	618	245	1.406	0.136	0.107	0.188
Secondary education or higher	0.576	0.026	618	245	1.307	0.045	0.524	0.628
Never married	0.259	0.018	618	245	1.038	0.071	0.222	0.295
Currently married/in union	0.731	0.019	618	245	1.046	0.026	0.693	0.768
Had sexual intercourse before age 18	0.194	0.024	466	188	1.305	0.123	0.146	0.242
Knows any contraceptive method	0.997	0.003	436	179	1.105	0.003	0.992	1.003
Know any modern method	0.997	0.003	436	179	1.105	0.003	0.992	1.003
Want no more children	0.732	0.024	436	179	1.148	0.033	0.684	0.781
Want to delay birth at least 2 years	0.181	0.019	436	179	1.026	0.105	0.143	0.219
Ideal family size	2.361	0.041	618	245	1.479	0.017	2.279	2.443
Had 2+ sexual partners in past 12 months	0.027	0.005	618	245	0.814	0.196	0.016	0.038
Condom use at last sex	0.254	0.109	16	7	0.970	0.429	0.036	0.473
Abstinence among youth (Never had sex)	0.796	0.033	164	59	1.057	0.042	0.729	0.863
Sexually active in past 12 months among never-married youth	0.160	0.030	164	59	1.037	0.186	0.101	0.220
Paid for sexual intercourse in last 12 months	0.011	0.004	618	245	1.010	0.393	0.002	0.019
Had HIV test and received result in past 12 months	0.053	0.011	618	245	1.245	0.213	0.030	0.075
Accepting attitudes towards people with HIV	0.450	0.033	601	238	1.637	0.074	0.384	0.517

na = Not applicable

Table B.6 Sampling errors for Hill region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.182	0.007	4974	5090	1.213	0.036	0.169	0.195
Literacy	0.732	0.014	4974	5090	2.173	0.019	0.705	0.759
No education	0.355	0.015	4974	5090	2.174	0.042	0.325	0.384
Secondary education or higher	0.460	0.017	4974	5090	2.437	0.037	0.425	0.494
Net attendance ratio	0.907	0.009	2423	2391	1.546	0.010	0.888	0.926
Never married	0.225	0.008	4974	5090	1.285	0.034	0.210	0.241
Currently married (in union)	0.744	0.007	4974	5090	1.180	0.010	0.729	0.758
Married before age 20	0.657	0.014	3893	4004	1.817	0.021	0.629	0.684
Had sexual intercourse before age 18	0.452	0.013	3893	4004	1.657	0.029	0.425	0.478
Currently pregnant	0.047	0.003	4974	5090	1.098	0.070	0.040	0.054
Children ever born	2.109	0.054	4974	5090	1.806	0.025	2.002	2.216
Children surviving	1.909	0.045	4974	5090	1.739	0.024	1.819	1.999
Children ever born to women 40-49	4.236	0.123	886	946	1.633	0.029	3.989	4.482
Knowing any contraceptive method	1.000	0.000	3675	3784	0.830	0.000	0.999	1.000
Know a modern method	1.000	0.000	3675	3784	0.830	0.000	0.999	1.000
Currently using any contraceptive method	0.482	0.015	3675	3784	1.769	0.030	0.453	0.511
Currently using a modern method	0.406	0.015	3675	3784	1.847	0.037	0.376	0.436
Currently using a traditional method	0.075	0.007	3675	3784	1.573	0.091	0.062	0.089
Currently using pill	0.041	0.004	3675	3784	1.164	0.092	0.034	0.049
Currently using condom	0.050	0.005	3675	3784	1.258	0.090	0.041	0.059
Currently using injectable	0.106	0.007	3675	3784	1.464	0.070	0.091	0.121
Currently using female sterilization	0.071	0.008	3675	3784	1.820	0.108	0.056	0.087
Current using withdrawal	0.062	0.006	3675	3784	1.575	0.101	0.049	0.075
Currently using rhythm	0.013	0.003	3675	3784	1.438	0.204	0.008	0.019
Used public sector source	0.689	0.021	1518	1557	1.746	0.030	0.648	0.731
Want no more children	0.758	0.010	3675	3784	1.380	0.013	0.738	0.777
Want to delay next birth at least 2 years	0.144	0.007	3675	3784	1.254	0.050	0.129	0.158
Ideal number of children	2.043	0.022	4953	5064	2.214	0.011	1.998	2.088
Mothers protected against tetanus for last birth	0.730	0.028	1656	1669	2.502	0.038	0.675	0.785
Births with skilled attendant at delivery	0.304	0.027	2135	2130	2.411	0.088	0.251	0.358
Had diarrhea in the past 2 weeks	0.127	0.011	2034	2033	1.429	0.087	0.105	0.149
Treated with ORS packets	0.403	0.040	261	258	1.242	0.100	0.323	0.484
Sought medical treatment	0.386	0.041	261	258	1.327	0.106	0.304	0.469
Vaccination card seen	0.351	0.029	387	402	1.202	0.083	0.293	0.410
Received BCG vaccination	0.963	0.012	387	402	1.222	0.012	0.940	0.986
Received DPT vaccination (3 doses)	0.934	0.018	387	402	1.449	0.019	0.897	0.970
Received polio vaccination (3 doses)	0.935	0.019	387	402	1.513	0.020	0.897	0.972
Received measles vaccination	0.904	0.020	387	402	1.286	0.022	0.864	0.943
Received all vaccinations	0.895	0.021	387	402	1.295	0.023	0.853	0.936
Height-for-age (-2SD)	0.421	0.019	994	989	1.590	0.045	0.383	0.458
Weight-for-height (-2SD)	0.106	0.012	994	989	1.683	0.114	0.082	0.130
Weight-for-age (-2SD)	0.266	0.017	994	989	1.644	0.066	0.231	0.301
Body Mass Index (BMI) < 18.5	0.124	0.009	2261	2316	1.303	0.073	0.106	0.142
Prevalence of anemia (children 6-59 months)	0.410	0.023	901	902	1.895	0.056	0.364	0.456
Prevalence of anemia (women 15-49)	0.269	0.014	2386	2436	1.509	0.051	0.242	0.296
Accepting attitudes towards people with HIV	0.471	0.016	4699	4782	2.201	0.034	0.439	0.503
Had an HIV test and received result in past 12 months	0.034	0.004	4974	5090	1.570	0.118	0.026	0.043
Ever experience of sexual violence	0.098	0.011	1684	2038	1.485	0.110	0.076	0.119
Physical or sexual violence by any husband	0.221	0.018	1386	1520	1.604	0.081	0.185	0.256
Physical/sexual violence by husband in 12 months	0.123	0.012	1386	1520	1.322	0.095	0.099	0.146
Total fertility rate (TFR) 3 years	2.558	0.124	na	14220	1.601	0.049	2.310	2.806
Neonatal Mortality rate	33.380	3.259	4470	4460	1.126	0.098	26.861	39.898
Post-neonatal Mortality rate	16.838	2.109	4474	4465	1.053	0.125	12.621	21.056
Infant Mortality rate	50.218	3.926	4475	4467	1.087	0.078	42.366	58.070
Child Mortality rate	7.912	1.481	4478	4464	1.114	0.187	4.950	10.874
Under-five mortality rate	57.732	4.255	4484	4472	1.111	0.074	49.223	66.241
MEN								
Urban residence	0.231	0.011	1582	1658	1.023	0.047	0.209	0.253
Literacy	0.927	0.010	1582	1658	1.527	0.011	0.907	0.947
No education	0.098	0.012	1582	1658	1.540	0.118	0.075	0.121
Secondary education or higher	0.694	0.019	1582	1658	1.662	0.028	0.656	0.733
Never married	0.347	0.016	1582	1658	1.322	0.046	0.316	0.379
Currently married/in union	0.637	0.016	1582	1658	1.327	0.025	0.605	0.669
Had sexual intercourse before age 18	0.189	0.018	1205	1276	1.636	0.098	0.152	0.226
Knows any contraceptive method	0.997	0.002	1015	1057	1.183	0.002	0.994	1.001
Know any modern method	0.997	0.002	1015	1057	1.183	0.002	0.994	1.001
Want no more children	0.702	0.017	1015	1057	1.155	0.024	0.669	0.736
Want to delay birth at least 2 years	0.169	0.014	1015	1057	1.169	0.082	0.141	0.196
Ideal family size	2.215	0.034	1582	1658	1.436	0.015	2.147	2.283
Had 2+ sexual partners in past 12 months	0.034	0.005	1582	1658	1.109	0.149	0.024	0.044
Condom use at last sex	0.345	0.074	55	56	1.148	0.215	0.196	0.493
Abstinence among youth (Never had sex)	0.785	0.024	495	510	1.288	0.030	0.737	0.832
Sexually active in past 12 months among never-married youth	0.155	0.022	495	510	1.327	0.139	0.112	0.198
Paid for sexual intercourse in last 12 months	0.013	0.003	1582	1658	1.114	0.248	0.006	0.019
Had HIV test and received result in past 12 months	0.081	0.012	1582	1658	1.679	0.142	0.058	0.104
Accepting attitudes towards people with HIV	0.517	0.018	1546	1616	1.377	0.034	0.482	0.552

na = Not applicable

Table B.7 Sampling errors for Terai region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.128	0.003	5667	6779	0.705	0.024	0.122	0.135
Literacy	0.628	0.030	5667	6779	4.683	0.048	0.568	0.688
No education	0.416	0.026	5667	6779	3.939	0.062	0.365	0.468
Secondary education or higher	0.418	0.024	5667	6779	3.610	0.057	0.370	0.465
Net attendance ratio	0.877	0.021	2597	3227	2.733	0.024	0.836	0.919
Never married	0.208	0.010	5667	6779	1.811	0.047	0.188	0.228
Currently married (in union)	0.766	0.010	5667	6779	1.771	0.013	0.746	0.786
Married before age 20	0.734	0.017	4429	5294	2.510	0.023	0.701	0.767
Had sexual intercourse before age 18	0.542	0.021	4429	5294	2.775	0.038	0.501	0.584
Currently pregnant	0.050	0.005	5667	6779	1.685	0.098	0.040	0.059
Children ever born	2.077	0.061	5667	6779	2.347	0.029	1.956	2.199
Children surviving	1.885	0.054	5667	6779	2.335	0.029	1.777	1.992
Children ever born to women 40-49	4.179	0.126	931	1128	1.905	0.030	3.927	4.432
Knowing any contraceptive method	1.000	0.000	4227	5193	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	4227	5193	na	0.000	1.000	1.000
Currently using any contraceptive method	0.510	0.016	4227	5193	2.145	0.032	0.477	0.542
Currently using a modern method	0.450	0.016	4227	5193	2.118	0.036	0.418	0.483
Currently using a traditional method	0.059	0.006	4227	5193	1.655	0.102	0.047	0.071
Currently using pill	0.043	0.005	4227	5193	1.625	0.118	0.033	0.053
Currently using condom	0.040	0.004	4227	5193	1.372	0.103	0.032	0.048
Currently using injectable	0.078	0.007	4227	5193	1.585	0.084	0.065	0.091
Currently using female sterilization	0.225	0.015	4227	5193	2.285	0.065	0.196	0.255
Current using withdrawal	0.049	0.006	4227	5193	1.695	0.114	0.038	0.061
Currently using rhythm	0.010	0.002	4227	5193	1.309	0.204	0.006	0.014
Used public sector source	0.672	0.021	2001	2376	2.019	0.032	0.630	0.714
Want no more children	0.702	0.013	4227	5193	1.900	0.019	0.676	0.729
Want to delay next birth at least 2 years	0.137	0.006	4227	5193	1.203	0.046	0.124	0.150
Ideal number of children	2.193	0.050	5652	6761	4.599	0.023	2.093	2.293
Mothers protected against tetanus for last birth	0.898	0.011	1681	2174	1.537	0.012	0.876	0.919
Births with skilled attendant at delivery	0.428	0.026	2151	2833	2.298	0.060	0.377	0.480
Had diarrhea in the past 2 weeks	0.148	0.009	2061	2707	1.246	0.064	0.129	0.167
Treated with ORS packets	0.387	0.040	292	400	1.429	0.103	0.307	0.467
Sought medical treatment	0.380	0.041	292	400	1.502	0.108	0.297	0.462
Vaccination card seen	0.341	0.043	377	523	1.901	0.127	0.254	0.427
Received BCG vaccination	0.971	0.011	377	523	1.374	0.011	0.949	0.993
Received DPT vaccination (3 doses)	0.906	0.023	377	523	1.642	0.025	0.860	0.952
Received polio vaccination (3 doses)	0.919	0.023	377	523	1.740	0.025	0.874	0.965
Received measles vaccination	0.858	0.035	377	523	2.102	0.041	0.788	0.928
Received all vaccinations	0.848	0.035	377	523	2.034	0.041	0.778	0.918
Height-for-age (-2SD)	0.374	0.022	970	1291	2.037	0.059	0.330	0.419
Weight-for-height (-2SD)	0.112	0.012	970	1291	1.810	0.108	0.088	0.136
Weight-for-age (-2SD)	0.295	0.020	970	1291	2.034	0.069	0.254	0.335
Body Mass Index (BMI) < 18.5	0.227	0.017	2603	3112	2.085	0.075	0.193	0.261
Prevalence of anemia (children 6-59 months)	0.502	0.027	851	1118	2.371	0.055	0.447	0.557
Prevalence of anemia (women 15-49)	0.420	0.020	2700	3252	2.089	0.047	0.381	0.460
Accepting attitudes towards people with HIV	0.539	0.020	4823	5470	2.756	0.037	0.499	0.578
Had an HIV test and received result in past 12 months	0.025	0.003	5667	6779	1.503	0.124	0.019	0.032
Ever experience of sexual violence	0.152	0.013	1802	1717	1.492	0.083	0.126	0.177
Physical or sexual violence by any husband	0.354	0.028	1529	1370	2.303	0.080	0.298	0.410
Physical/sexual violence by husband in 12 months	0.169	0.012	1529	1370	1.283	0.073	0.144	0.193
Total fertility rate (TFR) 3 years	2.542	0.160	na	18578	2.390	0.063	2.222	2.862
Neonatal Mortality rate	34.953	3.696	4615	5909	1.364	0.106	27.562	42.344
Post-neonatal Mortality rate	17.685	2.200	4619	5916	1.145	0.124	13.284	22.085
Infant Mortality rate	52.638	4.261	4619	5916	1.261	0.081	44.117	61.159
Child Mortality rate	10.037	1.741	4628	5923	1.119	0.173	6.555	13.519
Under-five mortality rate	62.147	4.738	4632	5930	1.293	0.076	52.671	71.624
MEN								
Urban residence	0.148	0.007	1921	2218	0.842	0.046	0.134	0.161
Literacy	0.828	0.020	1921	2218	2.295	0.024	0.788	0.867
No education	0.166	0.021	1921	2218	2.472	0.126	0.124	0.208
Secondary education or higher	0.653	0.023	1921	2218	2.116	0.035	0.607	0.699
Never married	0.358	0.014	1921	2218	1.257	0.038	0.330	0.385
Currently married/in union	0.627	0.014	1921	2218	1.256	0.022	0.599	0.655
Had sexual intercourse before age 18	0.186	0.016	1441	1679	1.555	0.086	0.154	0.218
Knows any contraceptive method	0.999	0.001	1177	1390	0.838	0.001	0.998	1.001
Know any modern method	0.999	0.001	1177	1390	0.838	0.001	0.998	1.001
Want no more children	0.677	0.020	1177	1390	1.494	0.030	0.636	0.718
Want to delay birth at least 2 years	0.171	0.015	1177	1390	1.338	0.086	0.142	0.200
Ideal family size	2.285	0.041	1917	2215	2.168	0.018	2.202	2.367
Had 2+ sexual partners in past 12 months	0.042	0.006	1921	2218	1.224	0.134	0.031	0.053
Condom use at last sex	0.218	0.050	74	93	1.031	0.229	0.118	0.317
Abstinence among youth (Never had sex)	0.771	0.024	642	712	1.426	0.031	0.724	0.818
Sexually active in past 12 months among never-married youth	0.145	0.017	642	712	1.217	0.117	0.111	0.178
Paid for sexual intercourse in last 12 months	0.017	0.004	1921	2218	1.326	0.233	0.009	0.024
Had HIV test and received result in past 12 months	0.072	0.008	1921	2218	1.387	0.114	0.056	0.088
Accepting attitudes towards people with HIV	0.445	0.022	1866	2138	1.925	0.050	0.401	0.490

na = Not applicable

Table B.8 Sampling errors for Eastern region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.122	0.004	3019	3057	0.657	0.032	0.115	0.130
Literacy	0.719	0.039	3019	3057	4.804	0.055	0.640	0.797
No education	0.310	0.034	3019	3057	3.987	0.108	0.243	0.378
Secondary education or higher	0.503	0.034	3019	3057	3.688	0.067	0.436	0.570
Net attendance ratio	0.916	0.015	1434	1452	1.976	0.017	0.885	0.946
Never married	0.227	0.014	3019	3057	1.829	0.061	0.199	0.255
Currently married (in union)	0.750	0.013	3019	3057	1.707	0.018	0.723	0.777
Married before age 20	0.598	0.028	2327	2386	2.782	0.047	0.542	0.655
Had sexual intercourse before age 18	0.393	0.033	2327	2386	3.230	0.083	0.327	0.458
Currently pregnant	0.055	0.008	3019	3057	1.883	0.142	0.039	0.070
Children ever born	1.929	0.086	3019	3057	2.420	0.045	1.757	2.101
Children surviving	1.776	0.078	3019	3057	2.444	0.044	1.620	1.932
Children ever born to women 40-49	4.025	0.159	552	533	1.695	0.040	3.707	4.344
Knowing any contraceptive method	1.000	0.000	2213	2293	0.575	0.000	1.000	1.000
Know a modern method	1.000	0.000	2213	2293	0.575	0.000	1.000	1.000
Currently using any contraceptive method	0.464	0.020	2213	2293	1.877	0.043	0.424	0.503
Currently using a modern method	0.362	0.022	2213	2293	2.163	0.061	0.318	0.406
Currently using a traditional method	0.101	0.013	2213	2293	1.953	0.124	0.076	0.126
Currently using pill	0.058	0.008	2213	2293	1.691	0.145	0.041	0.075
Currently using condom	0.034	0.007	2213	2293	1.748	0.197	0.021	0.048
Currently using injectable	0.120	0.010	2213	2293	1.512	0.087	0.099	0.141
Currently using female sterilization	0.109	0.023	2213	2293	3.495	0.213	0.062	0.155
Current using withdrawal	0.078	0.012	2213	2293	2.028	0.148	0.055	0.101
Currently using rhythm	0.023	0.004	2213	2293	1.321	0.184	0.014	0.031
Used public sector source	0.671	0.042	814	841	2.530	0.062	0.587	0.754
Want no more children	0.697	0.010	2213	2293	1.026	0.014	0.677	0.717
Want to delay next birth at least 2 years	0.169	0.010	2213	2293	1.313	0.062	0.148	0.190
Ideal number of children	2.115	0.065	3013	3054	4.613	0.031	1.985	2.245
Mothers protected against tetanus for last birth	0.836	0.017	958	999	1.463	0.021	0.802	0.871
Births with skilled attendant at delivery	0.420	0.038	1207	1269	2.439	0.090	0.345	0.495
Had diarrhea in the past 2 weeks	0.116	0.010	1153	1210	1.139	0.090	0.095	0.137
Treated with ORS packets	0.454	0.068	134	140	1.586	0.150	0.318	0.591
Sought medical treatment	0.400	0.058	134	140	1.402	0.145	0.285	0.516
Vaccination card seen	0.407	0.055	218	229	1.689	0.136	0.297	0.518
Received BCG vaccination	0.981	0.011	218	229	1.230	0.011	0.959	1.004
Received DPT vaccination (3 doses)	0.938	0.020	218	229	1.236	0.021	0.899	0.978
Received polio vaccination (3 doses)	0.941	0.020	218	229	1.261	0.021	0.901	0.980
Received measles vaccination	0.879	0.042	218	229	1.914	0.047	0.796	0.962
Received all vaccinations	0.877	0.041	218	229	1.892	0.047	0.794	0.960
Height-for-age (-2SD)	0.370	0.031	563	596	2.214	0.085	0.307	0.433
Weight-for-height (-2SD)	0.102	0.017	563	596	1.927	0.164	0.069	0.136
Weight-for-age (-2SD)	0.254	0.027	563	596	2.147	0.106	0.200	0.308
Body Mass Index (BMI) < 18.5	0.162	0.025	1365	1376	2.521	0.156	0.111	0.212
Prevalence of anemia (children 6-59 months)	0.472	0.045	510	534	2.885	0.094	0.383	0.562
Prevalence of anemia (women 15-49)	0.374	0.030	1452	1465	2.371	0.081	0.314	0.435
Accepting attitudes towards people with HIV	0.496	0.025	2780	2798	2.659	0.051	0.445	0.546
Had an HIV test and received result in past 12 months	0.023	0.004	3019	3057	1.647	0.197	0.014	0.032
Ever experience of sexual violence	0.157	0.018	1017	954	1.566	0.114	0.121	0.193
Physical or sexual violence by any husband	0.322	0.040	817	714	2.447	0.124	0.242	0.402
Physical/sexual violence by husband in 12 months	0.152	0.020	817	714	1.569	0.130	0.113	0.192
Total fertility rate (TFR) 3 years	2.463	0.188	na	8486	2.096	0.076	2.087	2.840
Neonatal Mortality rate	30.102	4.038	2524	2607	1.060	0.134	22.026	38.178
Post-neonatal Mortality rate	17.307	3.508	2525	2608	1.350	0.203	10.291	24.323
Infant Mortality rate	47.409	6.259	2525	2608	1.298	0.132	34.891	59.927
Child Mortality rate	7.737	2.161	2530	2614	1.175	0.279	3.415	12.058
Under-five mortality rate	54.778	7.297	2531	2614	1.424	0.133	40.185	69.372
MEN								
Urban residence	0.136	0.009	978	996	0.844	0.068	0.118	0.155
Literacy	0.908	0.021	978	996	2.309	0.024	0.865	0.951
No education	0.086	0.022	978	996	2.500	0.261	0.041	0.131
Secondary education or higher	0.721	0.030	978	996	2.117	0.042	0.661	0.782
Never married	0.379	0.020	978	996	1.318	0.054	0.338	0.419
Currently married/in union	0.609	0.019	978	996	1.187	0.030	0.572	0.646
Had sexual intercourse before age 18	0.154	0.019	730	766	1.431	0.124	0.116	0.192
Knows any contraceptive method	0.998	0.002	595	607	0.985	0.002	0.995	1.002
Know any modern method	0.998	0.002	595	607	0.985	0.002	0.995	1.002
Want no more children	0.677	0.027	595	607	1.392	0.039	0.623	0.730
Want to delay birth at least 2 years	0.183	0.021	595	607	1.318	0.114	0.141	0.224
Ideal family size	2.242	0.050	978	996	2.304	0.022	2.141	2.342
Had 2+ sexual partners in past 12 months	0.030	0.007	978	996	1.351	0.246	0.015	0.045
Condom use at last sex	0.358	0.094	26	30	0.981	0.263	0.170	0.546
Abstinence among youth (Never had sex)	0.784	0.030	338	335	1.344	0.038	0.724	0.844
Sexually active in past 12 months among never-married youth	0.149	0.023	338	335	1.177	0.153	0.104	0.195
Paid for sexual intercourse in last 12 months	0.016	0.006	978	996	1.409	0.355	0.005	0.027
Had HIV test and received result in past 12 months	0.077	0.015	978	996	1.705	0.189	0.048	0.106
Accepting attitudes towards people with HIV	0.500	0.029	966	985	1.814	0.058	0.441	0.558

na = Not applicable

Table B.9 Sampling errors for Central region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.202	0.009	3009	4236	1.177	0.043	0.185	0.219
Literacy	0.596	0.037	3009	4236	4.105	0.062	0.523	0.670
No education	0.450	0.033	3009	4236	3.628	0.073	0.384	0.516
Secondary education or higher	0.390	0.029	3009	4236	3.271	0.075	0.332	0.448
Net attendance ratio	0.841	0.031	1399	1994	2.713	0.036	0.780	0.902
Never married	0.218	0.013	3009	4236	1.694	0.059	0.192	0.243
Currently married (in union)	0.758	0.013	3009	4236	1.706	0.018	0.731	0.785
Married before age 20	0.710	0.019	2377	3340	2.065	0.027	0.671	0.748
Had sexual intercourse before age 18	0.534	0.023	2377	3340	2.272	0.044	0.487	0.580
Currently pregnant	0.051	0.006	3009	4236	1.461	0.115	0.039	0.062
Children ever born	2.137	0.087	3009	4236	2.336	0.041	1.963	2.311
Children surviving	1.934	0.076	3009	4236	2.292	0.039	1.783	2.086
Children ever born to women 40-49	4.159	0.175	566	776	1.940	0.042	3.809	4.508
Knowing any contraceptive method	1.000	0.000	2232	3210	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	2232	3210	na	0.000	1.000	1.000
Currently using any contraceptive method	0.547	0.022	2232	3210	2.082	0.040	0.503	0.591
Currently using a modern method	0.499	0.020	2232	3210	1.919	0.041	0.459	0.540
Currently using a traditional method	0.048	0.006	2232	3210	1.337	0.127	0.035	0.060
Currently using pill	0.034	0.005	2232	3210	1.290	0.145	0.024	0.044
Currently using condom	0.040	0.005	2232	3210	1.239	0.129	0.029	0.050
Currently using injectable	0.090	0.009	2232	3210	1.520	0.102	0.072	0.109
Currently using female sterilization	0.204	0.015	2232	3210	1.719	0.072	0.175	0.233
Current using withdrawal	0.037	0.005	2232	3210	1.330	0.144	0.026	0.048
Currently using rhythm	0.011	0.003	2232	3210	1.355	0.277	0.005	0.017
Used public sector source	0.653	0.024	1168	1625	1.688	0.036	0.606	0.700
Want no more children	0.726	0.021	2232	3210	2.223	0.029	0.684	0.768
Want to delay next birth at least 2 years	0.114	0.008	2232	3210	1.122	0.066	0.098	0.129
Ideal number of children	2.178	0.065	2993	4209	4.180	0.030	2.048	2.308
Mothers protected against tetanus for last birth	0.845	0.023	854	1293	1.891	0.027	0.800	0.890
Births with skilled attendant at delivery	0.359	0.034	1123	1717	2.221	0.095	0.291	0.427
Had diarrhea in the past 2 weeks	0.149	0.012	1075	1639	1.109	0.081	0.125	0.173
Treated with ORS packets	0.360	0.052	152	244	1.337	0.143	0.257	0.463
Sought medical treatment	0.277	0.050	152	244	1.376	0.180	0.178	0.377
Vaccination card seen	0.262	0.050	216	345	1.752	0.190	0.163	0.362
Received BCG vaccination	0.961	0.015	216	345	1.230	0.016	0.930	0.991
Received DPT vaccination (3 doses)	0.891	0.032	216	345	1.620	0.036	0.827	0.956
Received polio vaccination (3 doses)	0.909	0.032	216	345	1.739	0.035	0.845	0.973
Received measles vaccination	0.846	0.046	216	345	1.956	0.055	0.754	0.939
Received all vaccinations	0.831	0.046	216	345	1.870	0.055	0.739	0.923
Height-for-age (-2SD)	0.382	0.025	500	767	1.692	0.066	0.331	0.433
Weight-for-height (-2SD)	0.116	0.017	500	767	1.796	0.148	0.082	0.150
Weight-for-age (-2SD)	0.295	0.023	500	767	1.648	0.077	0.250	0.340
Body Mass Index (BMI) < 18.5	0.202	0.019	1345	1895	1.726	0.093	0.165	0.240
Prevalence of anemia (children 6-59 months)	0.439	0.025	449	674	1.646	0.057	0.389	0.489
Prevalence of anemia (women 15-49)	0.328	0.021	1406	1980	1.650	0.063	0.286	0.369
Accepting attitudes towards people with HIV	0.526	0.026	2539	3335	2.588	0.049	0.475	0.577
Had an HIV test and received result in past 12 months	0.019	0.003	3009	4236	1.185	0.157	0.013	0.024
Ever experience of sexual violence	0.133	0.014	982	1375	1.313	0.107	0.105	0.162
Physical or sexual violence by any husband	0.288	0.030	823	1074	1.907	0.105	0.227	0.348
Physical/sexual violence by husband in 12 months	0.134	0.013	823	1074	1.067	0.095	0.108	0.159
Total fertility rate (TFR) 3 years	2.502	0.236	na	11794	2.533	0.094	2.030	2.974
Neonatal Mortality rate	36.439	5.322	2474	3672	1.443	0.146	25.794	47.084
Post-neonatal Mortality rate	15.125	2.661	2477	3677	1.056	0.176	9.803	20.448
Infant Mortality rate	51.565	5.586	2477	3677	1.200	0.108	40.392	62.737
Child Mortality rate	8.383	2.199	2476	3673	1.167	0.262	3.985	12.780
Under-five mortality rate	59.515	6.046	2479	3678	1.223	0.102	47.423	71.607
MEN								
Urban residence	0.258	0.013	1002	1448	0.935	0.050	0.232	0.284
Literacy	0.826	0.026	1002	1448	2.135	0.031	0.775	0.877
No education	0.174	0.027	1002	1448	2.270	0.156	0.120	0.228
Secondary education or higher	0.631	0.030	1002	1448	1.960	0.047	0.572	0.691
Never married	0.328	0.018	1002	1448	1.223	0.055	0.292	0.365
Currently married/in union	0.656	0.019	1002	1448	1.289	0.030	0.617	0.695
Had sexual intercourse before age 18	0.173	0.020	792	1139	1.504	0.117	0.132	0.213
Knows any contraceptive method	0.998	0.002	654	950	1.094	0.002	0.994	1.002
Know any modern method	0.998	0.002	654	950	1.094	0.002	0.994	1.002
Want no more children	0.678	0.025	654	950	1.390	0.038	0.627	0.728
Want to delay birth at least 2 years	0.155	0.018	654	950	1.244	0.114	0.120	0.190
Ideal family size	2.242	0.054	1002	1448	2.235	0.024	2.134	2.349
Had 2+ sexual partners in past 12 months	0.046	0.007	1002	1448	1.084	0.157	0.031	0.060
Condom use at last sex	0.230	0.069	40	66	1.022	0.299	0.093	0.368
Abstinence among youth (Never had sex)	0.775	0.031	288	417	1.249	0.040	0.713	0.836
Sexually active in past 12 months among never-married youth	0.141	0.025	288	417	1.209	0.176	0.092	0.191
Paid for sexual intercourse in last 12 months	0.021	0.005	1002	1448	1.135	0.245	0.011	0.031
Had HIV test and received result in past 12 months	0.073	0.011	1002	1448	1.398	0.158	0.050	0.096
Accepting attitudes towards people with HIV	0.445	0.027	964	1376	1.672	0.060	0.391	0.498

na = Not applicable

Table B.10 Sampling errors for Western region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.112	0.004	2304	2660	0.672	0.039	0.103	0.121
Literacy	0.770	0.027	2304	2660	3.040	0.035	0.716	0.823
No education	0.323	0.023	2304	2660	2.351	0.071	0.277	0.369
Secondary education or higher	0.481	0.026	2304	2660	2.451	0.053	0.430	0.532
Net attendance ratio	0.909	0.018	959	1120	1.837	0.020	0.872	0.945
Never married	0.204	0.009	2304	2660	1.044	0.043	0.187	0.222
Currently married (in union)	0.764	0.008	2304	2660	0.910	0.011	0.747	0.780
Married before age 20	0.722	0.017	1809	2087	1.652	0.024	0.688	0.757
Had sexual intercourse before age 18	0.499	0.018	1809	2087	1.501	0.035	0.464	0.535
Currently pregnant	0.035	0.004	2304	2660	1.031	0.113	0.027	0.043
Children ever born	2.041	0.049	2304	2660	1.252	0.024	1.942	2.140
Children surviving	1.882	0.040	2304	2660	1.136	0.021	1.801	1.963
Children ever born to women 40-49	4.017	0.152	409	503	1.540	0.038	3.713	4.320
Knowing any contraceptive method	1.000	0.000	1721	2031	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	1721	2031	na	0.000	1.000	1.000
Currently using any contraceptive method	0.461	0.024	1721	2031	2.034	0.053	0.412	0.510
Currently using a modern method	0.387	0.025	1721	2031	2.117	0.064	0.337	0.437
Currently using a traditional method	0.074	0.009	1721	2031	1.471	0.126	0.055	0.092
Currently using pill	0.039	0.006	1721	2031	1.237	0.149	0.027	0.050
Currently using condom	0.039	0.006	1721	2031	1.173	0.140	0.028	0.050
Currently using injectable	0.058	0.007	1721	2031	1.197	0.117	0.044	0.071
Currently using female sterilization	0.135	0.015	1721	2031	1.839	0.112	0.104	0.165
Current using withdrawal	0.066	0.009	1721	2031	1.504	0.136	0.048	0.084
Currently using rhythm	0.008	0.002	1721	2031	1.193	0.330	0.003	0.013
Used public sector source	0.690	0.027	719	801	1.552	0.039	0.637	0.744
Want no more children	0.761	0.015	1721	2031	1.446	0.020	0.731	0.791
Want to delay next birth at least 2 years	0.148	0.011	1721	2031	1.288	0.075	0.126	0.170
Ideal number of children	2.026	0.033	2300	2654	2.500	0.016	1.961	2.092
Mothers protected against tetanus for last birth	0.788	0.041	643	818	2.666	0.052	0.706	0.870
Births with skilled attendant at delivery	0.378	0.042	782	1007	2.348	0.112	0.293	0.462
Had diarrhea in the past 2 weeks	0.157	0.022	751	965	1.664	0.138	0.113	0.200
Treated with ORS packets	0.299	0.053	117	151	1.241	0.177	0.194	0.405
Sought medical treatment	0.425	0.067	117	151	1.538	0.157	0.291	0.559
Vaccination card seen	0.406	0.052	139	187	1.325	0.127	0.303	0.509
Received BCG vaccination	0.973	0.014	139	187	1.107	0.014	0.945	1.001
Received DPT vaccination (3 doses)	0.940	0.030	139	187	1.602	0.032	0.880	1.000
Received polio vaccination (3 doses)	0.946	0.030	139	187	1.690	0.032	0.886	1.006
Received measles vaccination	0.912	0.031	139	187	1.393	0.034	0.850	0.974
Received all vaccinations	0.912	0.031	139	187	1.393	0.034	0.850	0.974
Height-for-age (-2SD)	0.374	0.031	361	463	1.633	0.082	0.313	0.435
Weight-for-height (-2SD)	0.104	0.020	361	463	1.818	0.188	0.065	0.143
Weight-for-age (-2SD)	0.232	0.036	361	463	2.207	0.155	0.160	0.304
Body Mass Index (BMI) < 18.5	0.140	0.019	1089	1265	1.849	0.138	0.101	0.179
Prevalence of anemia (children 6-59 months)	0.455	0.045	316	408	2.241	0.099	0.365	0.545
Prevalence of anemia (women 15-49)	0.345	0.022	1128	1314	1.568	0.064	0.301	0.389
Accepting attitudes towards people with HIV	0.529	0.026	2108	2398	2.413	0.050	0.476	0.581
Had an HIV test and received result in past 12 months	0.027	0.005	2304	2660	1.461	0.182	0.017	0.037
Ever experience of sexual violence	0.064	0.010	747	445	1.167	0.163	0.043	0.085
Physical or sexual violence by any husband	0.203	0.021	616	335	1.316	0.105	0.160	0.246
Physical/sexual violence by husband in 12 months	0.105	0.015	616	335	1.225	0.144	0.075	0.136
Total fertility rate (TFR) 3 years	2.493	0.163	na	1079	1.507	0.065	2.167	2.819
Neonatal Mortality rate	36.942	5.350	1679	2067	1.143	0.145	26.241	47.643
Post-neonatal Mortality rate	15.808	2.737	1681	2071	0.936	0.173	10.334	21.282
Infant Mortality rate	52.751	5.690	1682	2073	1.025	0.108	41.370	64.131
Child Mortality rate	4.016	1.723	1679	2067	1.183	0.429	0.571	7.461
Under-five mortality rate	56.555	5.783	1683	2074	1.000	0.102	44.988	68.121
MEN								
Urban residence	0.130	0.009	706	798	0.723	0.071	0.111	0.148
Literacy	0.909	0.019	706	798	1.754	0.021	0.871	0.947
No education	0.106	0.020	706	798	1.716	0.188	0.066	0.145
Secondary education or higher	0.694	0.031	706	798	1.808	0.045	0.632	0.757
Never married	0.376	0.023	706	798	1.266	0.061	0.330	0.423
Currently married/in union	0.604	0.024	706	798	1.289	0.039	0.556	0.651
Had sexual intercourse before age 18	0.248	0.032	516	585	1.676	0.129	0.184	0.312
Knows any contraceptive method	1.000	0.000	423	482	na	0.000	1.000	1.000
Know any modern method	1.000	0.000	423	482	na	0.000	1.000	1.000
Want no more children	0.714	0.027	423	482	1.240	0.038	0.660	0.769
Want to delay birth at least 2 years	0.167	0.023	423	482	1.271	0.138	0.121	0.213
Ideal family size	2.308	0.063	702	796	1.248	0.027	2.182	2.434
Had 2+ sexual partners in past 12 months	0.034	0.007	706	798	1.082	0.218	0.019	0.049
Condom use at last sex	0.257	0.087	28	27	1.037	0.339	0.083	0.432
Abstinence among youth (Never had sex)	0.779	0.035	250	271	1.348	0.045	0.708	0.850
Sexually active in past 12 months among never-married youth	0.170	0.030	250	271	1.262	0.177	0.110	0.230
Paid for sexual intercourse in last 12 months	0.010	0.004	706	798	1.012	0.381	0.002	0.017
Had HIV test and received result in past 12 months	0.084	0.015	706	798	1.394	0.173	0.055	0.113
Accepting attitudes towards people with HIV	0.423	0.030	697	785	1.588	0.070	0.363	0.482

na = Not applicable

Table B.11 Sampling errors for Mid-western region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.090	0.005	2275	1478	0.831	0.055	0.080	0.100
Literacy	0.622	0.030	2275	1478	2.934	0.048	0.562	0.681
No education	0.478	0.029	2275	1478	2.754	0.060	0.420	0.536
Secondary education or higher	0.356	0.028	2275	1478	2.774	0.078	0.300	0.412
Net attendance ratio	0.923	0.013	1228	816	1.704	0.015	0.896	0.950
Never married	0.191	0.013	2275	1478	1.588	0.069	0.165	0.217
Currently married (in union)	0.777	0.013	2275	1478	1.487	0.017	0.751	0.803
Married before age 20	0.789	0.020	1758	1145	2.079	0.026	0.749	0.830
Had sexual intercourse before age 18	0.578	0.024	1758	1145	2.061	0.042	0.529	0.626
Currently pregnant	0.065	0.006	2275	1478	1.169	0.093	0.053	0.077
Children ever born	2.371	0.091	2275	1478	1.946	0.038	2.188	2.554
Children surviving	2.057	0.072	2275	1478	1.867	0.035	1.913	2.201
Children ever born to women 40-49	5.036	0.192	333	214	1.567	0.038	4.652	5.420
Knowing any contraceptive method	0.999	0.001	1755	1149	1.107	0.001	0.998	1.001
Know a modern method	0.999	0.001	1755	1149	1.107	0.001	0.998	1.001
Currently using any contraceptive method	0.469	0.024	1755	1149	1.988	0.051	0.421	0.516
Currently using a modern method	0.428	0.022	1755	1149	1.859	0.051	0.384	0.472
Currently using a traditional method	0.040	0.006	1755	1149	1.361	0.158	0.028	0.053
Currently using pill	0.031	0.005	1755	1149	1.281	0.172	0.020	0.041
Currently using condom	0.054	0.007	1755	1149	1.230	0.123	0.041	0.067
Currently using injectable	0.093	0.011	1755	1149	1.567	0.117	0.071	0.115
Currently using female sterilization	0.115	0.015	1755	1149	1.955	0.129	0.086	0.145
Current using withdrawal	0.034	0.006	1755	1149	1.395	0.177	0.022	0.046
Currently using rhythm	0.006	0.002	1755	1149	0.977	0.291	0.003	0.010
Used public sector source	0.743	0.028	781	499	1.765	0.037	0.688	0.798
Want no more children	0.722	0.012	1755	1149	1.168	0.017	0.697	0.747
Want to delay next birth at least 2 years	0.151	0.009	1755	1149	1.106	0.063	0.132	0.170
Ideal number of children	2.216	0.049	2266	1473	2.851	0.022	2.119	2.313
Mothers protected against tetanus for last birth	0.721	0.042	896	598	2.844	0.058	0.637	0.805
Births with skilled attendant at delivery	0.287	0.033	1193	793	2.357	0.116	0.220	0.353
Had diarrhea in the past 2 weeks	0.146	0.016	1139	760	1.499	0.110	0.114	0.178
Treated with ORS packets	0.458	0.050	167	111	1.238	0.109	0.358	0.558
Sought medical treatment	0.439	0.054	167	111	1.336	0.123	0.331	0.547
Vaccination card seen	0.282	0.043	210	138	1.355	0.150	0.197	0.368
Received BCG vaccination	0.914	0.027	210	138	1.415	0.030	0.860	0.969
Received DPT vaccination (3 doses)	0.877	0.035	210	138	1.545	0.040	0.808	0.947
Received polio vaccination (3 doses)	0.875	0.037	210	138	1.612	0.042	0.802	0.948
Received measles vaccination	0.874	0.033	210	138	1.435	0.037	0.808	0.939
Received all vaccinations	0.847	0.038	210	138	1.552	0.045	0.770	0.924
Height-for-age (-2SD)	0.503	0.035	557	373	2.366	0.070	0.433	0.574
Weight-for-height (-2SD)	0.113	0.014	557	373	1.550	0.125	0.085	0.141
Weight-for-age (-2SD)	0.369	0.031	557	373	2.023	0.085	0.307	0.432
Body Mass Index (BMI) < 18.5	0.193	0.015	1019	661	1.221	0.078	0.163	0.223
Prevalence of anemia (children 6-59 months)	0.478	0.033	504	336	2.042	0.069	0.412	0.544
Prevalence of anemia (women 15-49)	0.362	0.023	1083	704	1.560	0.063	0.316	0.407
Accepting attitudes towards people with HIV	0.397	0.025	1922	1255	2.260	0.064	0.347	0.448
Had an HIV test and received result in past 12 months	0.044	0.007	2275	1478	1.638	0.160	0.030	0.058
Ever experience of sexual violence	0.125	0.017	772	665	1.441	0.137	0.090	0.159
Physical or sexual violence by any husband	0.315	0.026	674	526	1.435	0.082	0.263	0.366
Physical/sexual violence by husband in 12 months	0.161	0.016	674	526	1.152	0.101	0.129	0.194
Total fertility rate (TFR) 3 years	3.180	0.213	na	4121	1.750	0.067	2.754	3.606
Neonatal Mortality rate	33.766	5.066	2442	1614	1.371	0.150	23.635	43.898
Post-neonatal Mortality rate	23.973	3.384	2445	1616	1.079	0.141	17.204	30.741
Infant Mortality rate	57.739	5.984	2445	1616	1.282	0.104	45.771	69.707
Child Mortality rate	16.048	3.167	2454	1622	1.140	0.197	9.714	22.383
Under-five mortality rate	72.861	6.910	2457	1624	1.287	0.095	59.040	86.682
MEN								
Urban residence	0.101	0.008	781	493	0.777	0.083	0.084	0.117
Literacy	0.841	0.023	781	493	1.754	0.027	0.795	0.887
No education	0.194	0.025	781	493	1.791	0.131	0.144	0.245
Secondary education or higher	0.588	0.030	781	493	1.727	0.052	0.527	0.649
Never married	0.295	0.017	781	493	1.032	0.057	0.261	0.328
Currently married/in union	0.690	0.018	781	493	1.061	0.025	0.655	0.726
Had sexual intercourse before age 18	0.210	0.024	598	375	1.461	0.116	0.161	0.259
Knows any contraceptive method	0.996	0.003	538	340	1.042	0.003	0.990	1.002
Know any modern method	0.996	0.003	538	340	1.042	0.003	0.990	1.002
Want no more children	0.711	0.025	538	340	1.277	0.035	0.661	0.761
Want to delay birth at least 2 years	0.218	0.021	538	340	1.197	0.098	0.176	0.261
Ideal family size	2.324	0.041	781	493	1.582	0.018	2.242	2.407
Had 2+ sexual partners in past 12 months	0.040	0.008	781	493	1.140	0.201	0.024	0.056
Condom use at last sex	0.220	0.074	31	20	0.982	0.338	0.071	0.368
Abstinence among youth (Never had sex)	0.733	0.047	211	134	1.539	0.064	0.639	0.827
Sexually active in past 12 months among never-married youth	0.162	0.029	211	134	1.123	0.176	0.105	0.219
Paid for sexual intercourse in last 12 months	0.008	0.003	781	493	1.002	0.398	0.002	0.014
Had HIV test and received result in past 12 months	0.066	0.012	781	493	1.380	0.187	0.041	0.090
Accepting attitudes towards people with HIV	0.573	0.036	737	464	1.985	0.063	0.500	0.645

na = Not applicable

Table B.12 Sampling errors for Far-western region, Nepal 2011

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.127	0.007	2067	1242	0.977	0.056	0.113	0.142
Literacy	0.612	0.027	2067	1242	2.475	0.043	0.559	0.665
No education	0.503	0.025	2067	1242	2.240	0.049	0.453	0.552
Secondary education or higher	0.342	0.032	2067	1242	3.081	0.094	0.277	0.406
Net attendance ratio	0.937	0.012	1133	705	1.743	0.013	0.912	0.961
Never married	0.214	0.015	2067	1242	1.673	0.070	0.184	0.245
Currently married (in union)	0.744	0.016	2067	1242	1.627	0.021	0.713	0.776
Married before age 20	0.813	0.014	1613	963	1.439	0.017	0.785	0.840
Had sexual intercourse before age 18	0.625	0.022	1613	963	1.839	0.035	0.580	0.669
Currently pregnant	0.040	0.004	2067	1242	0.933	0.100	0.032	0.048
Children ever born	2.372	0.075	2067	1242	1.575	0.032	2.221	2.522
Children surviving	2.073	0.061	2067	1242	1.513	0.029	1.951	2.195
Children ever born to women 40-49	4.934	0.165	356	204	1.547	0.033	4.604	5.264
Knowing any contraceptive method	0.999	0.001	1539	925	0.988	0.001	0.998	1.001
Know a modern method	0.999	0.001	1539	925	0.988	0.001	0.998	1.001
Currently using any contraceptive method	0.519	0.026	1539	925	2.003	0.049	0.468	0.570
Currently using a modern method	0.471	0.027	1539	925	2.139	0.058	0.417	0.526
Currently using a traditional method	0.048	0.008	1539	925	1.376	0.156	0.033	0.063
Currently using pill	0.045	0.012	1539	925	2.185	0.256	0.022	0.068
Currently using condom	0.075	0.008	1539	925	1.254	0.113	0.058	0.091
Currently using injectable	0.101	0.015	1539	925	1.988	0.151	0.070	0.131
Currently using female sterilization	0.160	0.024	1539	925	2.585	0.151	0.111	0.208
Current using withdrawal	0.047	0.008	1539	925	1.409	0.162	0.032	0.062
Currently using rhythm	0.002	0.001	1539	925	1.329	0.848	0.000	0.004
Used public sector source	0.800	0.032	711	441	2.154	0.040	0.735	0.864
Want no more children	0.739	0.016	1539	925	1.451	0.022	0.706	0.771
Want to delay next birth at least 2 years	0.128	0.012	1539	925	1.442	0.096	0.104	0.153
Ideal number of children	2.152	0.030	2065	1240	1.906	0.014	2.091	2.213
Mothers protected against tetanus for last birth	0.859	0.020	728	440	1.554	0.023	0.819	0.899
Births with skilled attendant at delivery	0.307	0.035	1001	605	2.096	0.113	0.237	0.376
Had diarrhea in the past 2 weeks	0.114	0.014	936	565	1.340	0.122	0.086	0.141
Treated with ORS packets	0.463	0.046	109	64	0.934	0.099	0.372	0.555
Sought medical treatment	0.520	0.060	109	64	1.244	0.116	0.400	0.640
Vaccination card seen	0.397	0.052	162	101	1.386	0.132	0.292	0.502
Received BCG vaccination	1.000	0.000	162	101	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.971	0.015	162	101	1.168	0.016	0.941	1.001
Received polio vaccination (3 doses)	0.971	0.015	162	101	1.168	0.016	0.941	1.001
Received measles vaccination	0.949	0.018	162	101	1.090	0.019	0.912	0.986
Received all vaccinations	0.937	0.021	162	101	1.122	0.022	0.895	0.979
Height-for-age (-2SD)	0.464	0.033	449	277	1.860	0.071	0.399	0.530
Weight-for-height (-2SD)	0.109	0.016	449	277	1.513	0.145	0.078	0.141
Weight-for-age (-2SD)	0.326	0.026	449	277	1.688	0.080	0.274	0.377
Body Mass Index (BMI) < 18.5	0.239	0.017	976	603	1.256	0.071	0.205	0.273
Prevalence of anemia (children 6-59 months)	0.494	0.040	401	246	2.342	0.082	0.413	0.574
Prevalence of anemia (women 15-49)	0.359	0.042	1017	624	2.841	0.118	0.274	0.443
Accepting attitudes towards people with HIV	0.447	0.028	1946	1159	2.513	0.063	0.390	0.503
Had an HIV test and received result in past 12 months	0.064	0.014	2067	1242	2.521	0.211	0.037	0.092
Ever experience of sexual violence	0.096	0.019	679	759	1.663	0.196	0.058	0.133
Physical or sexual violence by any husband	0.238	0.031	575	576	1.753	0.131	0.176	0.301
Physical/sexual violence by husband in 12 months	0.152	0.022	575	576	1.479	0.146	0.108	0.197
Total fertility rate (TFR) 3 years	2.796	0.210	na	3461	1.627	0.075	2.376	3.216
Neonatal Mortality rate	40.890	6.341	2128	1314	1.373	0.155	28.207	53.572
Post-neonatal Mortality rate	24.341	4.790	2130	1315	1.354	0.197	14.761	33.920
Infant Mortality rate	65.230	7.739	2130	1315	1.372	0.119	49.752	80.709
Child Mortality rate	18.369	3.316	2138	1322	1.096	0.180	11.738	25.000
Under-five mortality rate	82.401	8.543	2140	1323	1.348	0.104	65.315	99.486
MEN								
Urban residence	0.144	0.013	654	385	0.973	0.093	0.118	0.171
Literacy	0.890	0.019	654	385	1.511	0.021	0.853	0.927
No education	0.128	0.020	654	385	1.522	0.155	0.089	0.168
Secondary education or higher	0.682	0.023	654	385	1.245	0.033	0.637	0.728
Never married	0.349	0.026	654	385	1.370	0.073	0.298	0.401
Currently married/in union	0.642	0.025	654	385	1.317	0.038	0.593	0.692
Had sexual intercourse before age 18	0.184	0.027	476	278	1.524	0.147	0.130	0.239
Knows any contraceptive method	1.000	0.000	418	247	na	0.000	1.000	1.000
Know any modern method	1.000	0.000	418	247	na	0.000	1.000	1.000
Want no more children	0.703	0.026	418	247	1.178	0.037	0.651	0.756
Want to delay birth at least 2 years	0.144	0.019	418	247	1.099	0.131	0.107	0.182
Ideal family size	2.206	0.032	654	385	1.310	0.014	2.142	2.269
Had 2+ sexual partners in past 12 months	0.033	0.008	654	385	1.115	0.237	0.017	0.048
Condom use at last sex	0.313	0.135	20	13	1.267	0.430	0.044	0.583
Abstinence among youth (Never had sex)	0.814	0.049	214	123	1.834	0.060	0.716	0.911
Sexually active in past 12 months among never-married youth	0.121	0.041	214	123	1.842	0.341	0.038	0.203
Paid for sexual intercourse in last 12 months	0.005	0.003	654	385	0.880	0.469	0.000	0.010
Had HIV test and received result in past 12 months	0.067	0.017	654	385	1.782	0.259	0.032	0.102
Accepting attitudes towards people with HIV	0.506	0.021	649	381	1.078	0.042	0.464	0.548

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Nepal 2011

	Women		Men	
Age	Number	Percent	Number	Percent
0	550	2.1	566	2.6
1	480	1.9	490	2.2
2	508	2.0	561	2.6
3	558	2.2	587	2.7
4	490	1.9	547	2.5
5	552	2.2	562	2.6
6	567	2.2	554	2.5
7	626	2.4	644	2.9
8	584	2.3	635	2.9
9	534	2.1	638	2.9
10	651	2.5	654	3.0
11	600	2.3	640	2.9
12	638	2.5	707	3.2
13	698	2.7	690	3.1
14	594	2.3	579	2.6
15	587	2.3	503	2.3
16	524	2.0	450	2.1
17	573	2.2	472	2.2
18	602	2.3	472	2.2
19	489	1.9	321	1.5
20	489	1.9	304	1.4
21	516	2.0	301	1.4
22	525	2.0	356	1.6
23	439	1.7	219	1.0
24	463	1.8	270	1.2
25	430	1.7	267	1.2
26	443	1.7	267	1.2
27	448	1.7	245	1.1
28	419	1.6	265	1.2
29	387	1.5	223	1.0
30	383	1.5	244	1.1
31	348	1.4	234	1.1
32	376	1.5	301	1.4
33	326	1.3	176	0.8
34	311	1.2	213	1.0
35	398	1.6	300	1.4
36	345	1.3	228	1.0
37	331	1.3	202	0.9
38	232	0.9	217	1.0
39	291	1.1	240	1.1
40	315	1.2	233	1.1
41	267	1.0	165	0.8
42	300	1.2	215	1.0
43	235	0.9	181	0.8
44	192	0.7	162	0.7
45	278	1.1	244	1.1
46	195	0.8	158	0.7
47	188	0.7	185	0.8
48	166	0.6	182	0.8
49	152	0.6	147	0.7
50	193	0.8	204	0.9
51	303	1.2	201	0.9
52	274	1.1	188	0.9
53	201	0.8	151	0.7
54	207	0.8	171	0.8
55	205	0.8	160	0.7
56	194	0.8	192	0.9
57	129	0.5	142	0.6
58	137	0.5	176	0.8
59	146	0.6	150	0.7
60	210	0.8	192	0.9
61	121	0.5	142	0.7
62	145	0.6	116	0.5
63	124	0.5	98	0.4
64	111	0.4	105	0.5
65	161	0.6	147	0.7
66	75	0.3	90	0.4
67	103	0.4	92	0.4
68	87	0.3	90	0.4
69	77	0.3	88	0.4
70+	872	3.4	795	3.6
Total	25,667	100.0	21,903	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49; and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Nepal 2011

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	3,181	na	na	na
15-19	2,775	2,725	21.5	98.2
20-24	2,431	2,387	18.8	98.2
25-29	2,126	2,088	16.4	98.2
30-34	1,744	1,711	13.5	98.1
35-39	1,597	1,554	12.2	97.3
40-44	1,309	1,281	10.1	97.9
45-49	979	953	7.5	97.3
50-54	1,178	na	na	na
15-49	12,961	12,699	100.0	98.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-54, interviewed men age 15-49 and percent of eligible men who were interviewed (weighted), by five-year age groups, Nepal 2011

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of eligible men interviewed
		Number	Percentage	
10-14	1,598	na	na	na
15-19	1,006	980	24.2	97.5
20-24	691	654	16.2	94.6
25-29	614	584	14.4	95.1
30-34	509	472	11.6	92.6
35-39	585	540	13.3	92.3
40-44	452	435	10.7	96.1
45-49	408	386	9.5	94.6
50-54	471	na	na	na
15-49	4,265	4,051	100.0	95.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of men and interviewed men are household weights. Age is based on the household schedule.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Nepal 2011

Subject	Reference group	Percentage with information missing	Number of cases
Birth date			
Month only	Births in the 15 years preceding the survey	0.02	17,280
Month and year	Births in the 15 years preceding the survey	0.00	17,280
Age at Death	Deceased children born in the 15 years preceding the survey	0.00	1,189
Age/date at first union[1]	Ever married women age 15-49	0.20	9,966
	Ever married men age 15-49	0.27	2,688
Respondent's education	All women age 15-49	0.00	12,674
	All men age 15-49	0.00	4,121
Diarrhea in last 2 weeks	Living children 0-59 months	0.56	5,140
Anthropometry			
Height	Living children age 0-59 months (from the household questionnaire)	2.58	2,582
Weight		2.33	2,582
Height or weight		2.58	2,582
Anemia			
Children	Living children age 6-59 months (from the household questionnaire)	5.70	2,340
Women	All women from the household questionnaire	3.47	6,349

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Nepal 2011

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	L	D	T	L	D	T	L	D	T	L	D	T
2068	26	2	29	100.0	100.0	100.0	123.2	0.0	103.1	na	na	na
2067	1,011	38	1,049	100.0	100.0	100.0	103.6	94.4	103.3	na	na	na
2066	989	35	1,025	100.0	100.0	100.0	100.6	238.0	103.5	97.8	62.5	95.9
2065	1,013	75	1,088	100.0	100.0	100.0	107.5	133.2	109.1	96.9	166.1	99.8
2064	1,101	55	1,156	100.0	100.0	100.0	104.6	70.7	102.7	109.8	89.6	108.6
2063	994	48	1,042	100.0	100.0	100.0	115.1	78.7	113.1	93.2	85.1	92.8
2062	1,032	57	1,089	100.0	100.0	100.0	101.2	150.7	103.3	98.4	87.5	97.8
2061	1,102	83	1,186	99.8	99.4	99.7	109.1	70.5	105.8	101.7	119.1	102.8
2060	1,136	83	1,219	100.0	100.0	100.0	103.8	162.8	106.9	101.3	96.1	100.9
2059	1,142	89	1,231	100.0	100.0	100.0	104.2	121.9	105.4	105.6	103.1	105.4
2064-2068	4,141	206	4,347	100.0	100.0	100.0	104.2	112.7	104.6	na	na	na
2059-2063	5,406	360	5,767	100.0	99.9	99.9	106.4	111.8	106.8	na	na	na
2054-2058	5,488	516	6,004	100.0	100.0	100.0	109.9	111.7	110.1	na	na	na
2049-2053	4,628	561	5,189	99.9	99.8	99.9	106.3	103.0	105.9	na	na	na
<2049	4,582	942	5,524	99.8	99.4	99.8	102.4	111.6	103.9	na	na	na
All	24,245	2,586	26,831	99.9	99.7	99.9	106.0	109.8	106.4	na	na	na

na = Not applicable
[1] Both year and month of birth given
[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Nepal 2011

Age at death (days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	65	79	113	86	342
1	28	23	31	15	97
2	12	12	16	5	46
3	18	14	15	19	66
4	13	19	19	8	58
5	7	20	5	15	47
6	5	2	5	15	27
7	7	3	14	7	31
8	1	3	6	7	17
9	3	3	3	3	12
10	2	2	5	5	14
11	1	2	5	5	13
12	1	3	6	4	13
13	1	3	2	4	9
14	0	2	2	2	7
15	3	5	2	7	16
16	0	1	0	1	3
17	1	2	2	0	5
18	0	5	4	2	10
19	1	1	0	2	4
20	1	1	2	4	8
21	1	1	2	3	7
22	1	4	6	4	16
23	1	2	0	1	3
24	0	0	2	2	5
25	4	2	1	3	10
26	0	2	0	0	2
27	1	1	2	1	4
28	2	0	0	1	4
29	0	0	0	2	2
31+	0	0	0	0	1
Total 0-30	176	217	271	230	895
Percentage early neonatal[1]	84.4	77.4	74.9	70.8	76.3

[1] ≤6 days / ≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Nepal 2011

Age at death (months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	176	217	271	230	895
1	15	31	33	30	108
2	13	6	11	21	50
3	6	17	18	10	51
4	9	12	9	8	38
5	4	17	22	14	57
6	2	18	10	17	47
7	2	5	11	6	24
8	2	8	10	9	28
9	3	5	8	12	27
10	2	2	6	10	21
11	1	6	12	6	26
12	2	4	10	6	22
13	3	5	4	4	16
14	0	1	4	1	6
15	1	2	3	7	13
16	0	2	1	1	5
17	0	1	3	2	6
18	1	3	2	14	19
19	1	0	0	0	2
20	0	0	0	2	2
21	0	0	0	6	6
22	0	0	0	1	1
23	0	1	0	1	2
24+	2	4	4	9	20
Total 0-11	235	344	420	374	1,373
Percentage neonatal[1]	74.9	63.2	64.6	61.6	65.2

[a] Includes deaths under one month reported in days
[1] Under one month / under one year

Table C.7 Nutritional status of children based on NCHS/CDC/WHO International Reference Population

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Nepal 2011

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	1.7	13.6	-0.6	1.1	3.8	4.8	-0.0	0.5	6.3	1.2	-0.4	223
6-8	3.2	13.0	-0.7	0.0	7.0	1.2	-0.5	3.0	15.1	2.9	-0.9	136
9-11	3.2	11.7	-1.0	1.7	18.3	1.8	-1.0	6.9	39.5	0.0	-1.6	111
12-17	9.2	27.6	-1.4	0.9	19.0	0.0	-1.2	7.7	44.8	0.0	-1.8	266
18-23	13.5	40.4	-1.6	5.4	23.7	0.6	-1.3	14.5	48.8	0.0	-1.8	222
24-35	13.4	36.7	-1.6	0.1	7.5	1.1	-0.8	9.0	40.7	0.6	-1.7	503
36-47	17.1	45.4	-1.9	0.5	6.2	0.2	-0.8	7.7	37.7	0.1	-1.7	526
48-59	16.4	41.6	-1.7	0.6	5.8	0.5	-0.7	6.8	35.4	0.7	-1.6	494
Sex												
Male	11.3	34.8	-1.5	0.9	9.8	0.7	-0.8	7.2	35.7	0.4	-1.5	1,271
Female	13.3	34.0	-1.5	1.1	9.6	1.3	-0.8	7.8	35.5	0.7	-1.5	1,210
Birth interval in months[3]												
First birth[4]	8.8	27.8	-1.3	1.2	8.4	1.8	-0.7	4.3	28.8	0.7	-1.4	938
<24	20.4	41.7	-1.8	2.0	11.8	0.0	-0.9	10.7	45.0	0.0	-1.7	322
24-47	13.4	41.5	-1.6	0.4	9.9	0.6	-0.9	10.0	40.5	0.2	-1.7	729
48+	9.6	29.8	-1.4	0.9	10.4	0.7	-0.8	7.2	34.1	1.1	-1.5	395
Size at birth[3]												
Very small	18.2	47.6	-1.8	0.9	13.1	1.3	-1.1	11.6	54.0	0.0	-2.0	93
Small	16.8	42.3	-1.8	1.6	14.4	0.3	-1.0	12.4	49.7	0.4	-1.9	329
Average or larger	10.8	32.2	-1.4	1.0	8.7	1.1	-0.7	6.4	32.2	0.6	-1.5	1,957
Missing	0.0	43.6	-1.3	0.0	0.0	0.0	-1.1	0.0	43.6	0.0	-1.6	4
Mother's interview status												
Interviewed	11.9	34.2	-1.5	1.0	9.7	1.0	-0.8	7.4	35.5	0.5	-1.5	2,383
Not interviewed but in household	26.9	34.9	-1.5	0.0	10.5	0.0	-0.8	6.3	47.5	0.0	-1.5	35
Not interviewed, and not in the household[5]	17.8	41.6	-1.7	0.0	9.5	0.9	-0.6	10.1	34.2	1.6	-1.5	62
Mother's nutritional status[6]												
Thin (BMI<18.5)	12.9	40.2	-1.7	1.9	18.9	0.5	-1.2	14.5	48.9	0.0	-1.9	467
Normal (BMI 18.5-24.9)	12.6	34.1	-1.5	0.8	7.8	0.8	-0.7	6.0	34.0	0.3	-1.5	1,707
Overweight/ obese (BMI≥25)	4.1	21.5	-0.9	1.1	4.5	3.8	-0.3	2.1	17.0	3.0	-0.9	224
Residence												
Urban	3.7	20.1	-1.0	0.9	8.4	1.6	-0.7	4.4	23.5	1.0	-1.2	216
Rural	13.1	35.8	-1.5	1.0	9.8	0.9	-0.8	7.7	36.7	0.5	-1.6	2,265
Ecological zone												
Mountain	16.7	46.0	-1.9	0.5	8.8	0.2	-0.8	8.8	46.2	0.4	-1.8	196
Hill	12.3	35.4	-1.5	0.5	9.5	1.2	-0.7	6.7	34.7	0.5	-1.5	990
Terai	11.5	31.9	-1.4	1.5	9.9	0.9	-0.8	7.8	34.7	0.6	-1.5	1,294
Development region												
Eastern	9.1	31.5	-1.4	0.4	9.5	1.3	-0.8	6.2	31.9	0.7	-1.5	599
Central	13.9	33.5	-1.4	1.7	10.2	0.9	-0.8	8.5	34.9	0.7	-1.5	768
Western	9.7	30.6	-1.4	0.2	8.0	1.4	-0.7	4.8	32.7	0.8	-1.4	464
Mid-western	17.3	42.9	-1.8	1.1	9.3	0.2	-0.9	9.2	43.1	0.1	-1.7	371
Far-western	12.2	38.2	-1.6	1.6	11.9	1.0	-0.9	9.4	40.3	0.1	-1.7	279
Subregion												
Eastern mountain	10.1	38.6	-1.6	0.0	5.1	0.7	-0.6	4.1	32.6	0.7	-1.4	47
Central mountain	12.4	34.6	-1.7	1.0	7.1	0.0	-0.9	5.7	42.9	1.0	-1.7	44
Western mountain	21.5	54.1	-2.1	0.5	11.2	0.0	-0.9	12.2	53.7	0.0	-2.0	105
Eastern hill	11.1	39.7	-1.7	0.2	7.8	1.6	-0.7	5.3	35.1	0.0	-1.6	191
Central hill	9.5	25.8	-1.2	0.7	15.1	2.0	-0.8	6.3	32.2	2.2	-1.4	214
Western hill	8.4	28.9	-1.3	0.2	6.4	1.3	-0.6	3.0	27.5	0.0	-1.3	295
Mid-western hill	19.8	45.2	-1.9	0.5	6.2	0.5	-0.7	9.8	40.6	0.0	-1.7	171
Far-western hill	18.7	48.1	-2.0	1.2	14.7	0.0	-1.0	14.5	47.6	0.0	-2.0	118
Eastern terai	7.9	26.2	-1.3	0.6	10.9	1.2	-0.8	6.9	30.0	1.1	-1.4	361
Central terai	15.9	36.6	-1.5	2.1	8.5	0.5	-0.8	9.7	35.4	0.0	-1.5	510
Western terai	11.9	33.6	-1.6	0.2	10.7	1.4	-0.8	7.9	41.9	2.1	-1.6	169
Mid-western terai	11.1	34.6	-1.5	2.4	12.5	0.0	-1.0	7.0	39.0	0.2	-1.7	140
Far-western terai	3.6	22.5	-1.1	2.1	9.2	2.4	-0.8	3.4	30.7	0.2	-1.3	115
Mother's education												
No education	17.6	42.2	-1.8	1.2	11.4	0.2	-1.0	11.4	45.2	0.0	-1.8	1,152
Primary	9.8	32.9	-1.4	1.3	10.4	1.2	-0.8	6.4	32.9	0.5	-1.5	480
Some secondary	5.8	26.0	-1.2	0.3	6.8	2.5	-0.6	2.1	25.7	1.4	-1.2	466
SLC and above	5.1	19.5	-0.9	1.0	6.7	1.4	-0.6	2.2	19.8	1.1	-1.0	320
Wealth quintile												
Lowest	18.4	49.0	-1.9	0.9	11.7	0.9	-0.8	9.8	47.5	0.0	-1.8	642
Second	16.2	38.0	-1.7	0.8	9.4	0.3	-0.9	8.4	39.2	0.1	-1.8	508
Middle	10.4	29.9	-1.4	1.4	11.2	1.3	-0.9	7.8	36.1	0.5	-1.5	582
Fourth	7.6	26.2	-1.2	1.8	7.2	0.6	-0.7	6.4	26.5	0.7	-1.3	417
Highest	3.5	18.7	-0.9	0.0	6.7	2.2	-0.5	2.2	17.6	2.3	-1.0	331
Total	12.3	34.4	-1.5	1.0	9.7	1.0	-0.8	7.5	35.6	0.5	-1.5	2,480

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.
SLC = School Leaving Certificate
[1] Includes children who are below -3 standard deviations (SD) from the International Reference Population median
[2] Excludes children whose mothers were not interviewed
[3] First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval
[4] Includes children whose mothers are deceased
[5] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10
[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

PERSONS INVOLVED IN THE 2011 NEPAL DEMOGRAPHIC AND HEALTH SURVEY

Appendix **D**

TECHNICAL AND ADMINISTRATIVE STAFF NEW ERA

Project Director
Anjushree Pradhan
(January 2010-September 2011)

Technical Advisor
Yogendra Prasai

Senior Technical Staff
Kshitiz Shrestha, Research Officer
Jyoti Manandhar, Research Officer
Sachin Shrestha, Senior Research Assistant

Senior Data Processing Staff
Rajendra Lal Dangol
Sarita Vaidya

Data Supervisor
Gehendra Pradhan
Babu Raja Dangol
Pradhumna Shah

Administrative Staff
Niru Shrestha
Sujan Shrestha
Kishor Shrestha
Rajendra Kumar Shrestha

Word Processing
Sanu Raja Shakya
Geeta Shrestha Amatya

Staff for Quick Count of Dwelling Units

Amir Rai
Anil Kumar Bhattarai
Anuj Kunwar
Arjun Bahadur Saud
Badri Nepal
Bikkim Shrestha
Bimal Poudel
Bishnu Prasad Adhikari
Bishwash Neupane
Braj Kishor Shah
Chetan Nidhi wagle
Ganesh Wagle
Harishankar Prasad Chaudhary
Jagadish Khatiwada
Jibesh Dulal
Jitendra Kumar Yadav
Kailash Awasthi
Kamal Raj Kharel
Kamal Tamang
Keshar Dhakal
Khagendra Prasai
Kajiman Mahatara
Kumar Shrestha
Manoj Bikram Kathet
Mohan Baniya
Mohan Singh Dhami
Naveen Khatiwada
Naveen Kunwar
Navin Kumar Chaudhary
Nawa Raj Tiwari
Om Thapa
Pawan Kumar Yadav
Peshal Parajuli
Pom Narayan Panthi
Prem Kumar Shrestha
Prithivi Bahadur Khadka
Radheshyam Chaudhary
Rakesh Prasad Chaudhary
Ram Balak Ray
Ram Chandra Rimal
Ramesh Shrestha
Saman Shrestha
Santosh Magar
Santu Yadav
Sanu Bhai Thapa
Satish Dangi
Shankar Prasad Neupane
Shiva Hari Ghimire
Shree Bhakta Adhikari
Shree Ram Dahal
Shreedesh Bhujel
Shreedhar Pandey
Shyam Sundsar Prasad Tharu
Sita Ram Rijal
Sujan Shrestha
Sushil Khattri
Tej Prasad Sapkota
Tek Bahadur Lama
Tek Nath Dahal
Utsav Kandel
Vijaya Kumar Yadav

Listing Staff

Amir Rai
Ananda Panta
Anish Shrestha
Ashok Khanal
Badri Nepal
Balram Pant
Bimal Poudel
Bishnu Prasad Adhikari
Bishwash Neupane
Buddhi Narayan Shrestha
Damber Prasad Upadhya
Dipendra Maharjan
Hari Prasad Pyakurel
Harka Bahadur Karki
Himalaya Awasthi
Jagadish Khatiwada
Jibesh Dulal
Jitendra Kumar Yadav
Kajiman Mahatara
Keshar Dhakal
Krishna Shrestha
Kumar Shrestha
Lal Babu Shah
Manoj Bikram Kathet
Mohan Singh Dhami
Nabin Raj Bista
Naveen Khatiwada
Nawa Raj Tiwari
Pankaj Sharma
Pawan Kumar Yadav
Peshal Parajuli
Rabin Bista
Radheshyam Chaudhary
Rakesh Prasad Chaudhary
Ram Balak Ray
Ram Chandra Rimal
Rudra Prasad Mishra
Santosh Bista
Sanu Bhai Thapa
Shankar Prasad Neupane
Shree Bhakta Adhikari
Shree Ram Dahal
Shyam sundar Prasad Tharu
Sita Ram Rijal
Sushil Dhungel
Sushil Khattri
Tej Prasad Sapkota
Tirtha Gautam
Uttsav Kandel
Vijaya Kumar Yadav
Yubaraj Dangi

Field Coordinator

Mahendra Dulal
Tara Shrestha

Quality Control

Namrata Karki
Ramesh Lawati
Shanti Ram Dahal
Surekha Bohara
Surendra Kumar Mahato
Sushila Shrestha

Field Supervisors

Badri Nepal
Dipendra Maharjan
Durga Prasad Phuyal
Harishankar Prasad Chaudhary
Harka Bdr. Karki
Jitendra Kumar Yadav
Ramesh Shrestha
Rudra Shrestha
Saman Shrestha
Santu Yadav
Sujan Shrestha
Sushil Dhungel
Tej Prasad Sapkota
Tirtha Gautam
Umesh Prasad Mahato
Utsav Kandel

Interviewers

Ajay Kumar Ray
Anish Shrestha
Anu Kumari Karna
Anuradha Parajuli
Archana Jha
Babita Bhattarai
Babita Kumari Shah
Babita Shrestha
Badri Prasad Mainali
Bhagwati Dahal
Bhawana Shrestha
Bimala Guragain
Bishnu Maya Pandey
Eva Puri
Guna Prasad Bhattarai
Hari Bhakta Saud
Hem Raj Ojha
Indira Rijal
Isworee Pandey
Kajiman Mahatara
Keshab Shrestha
Khagendra Bahadur Lamjel
Laxmi Acharya
Laxmi Gurung
Laxmi Prajapati
Luna Chitrakar
Manita Koirala
Manju Pathak
Meena Neupane
Menuka Kumari Dhungel
Mina Dhakal
Mira Kharel
Nani Kumari Maharjan
Nirmal Chhettri
Nisha Ghimire
Pavitra Bhatta
Pinkee Kumari Siwakoti
Pramada Mishra
Priya Ghimire
Rabindra Prasad Tharu
Rajani Gupta
Ranjana Kumari Rana Magar
Ranjit Kumar Jha
Renuka Neupane
Rita Acharya
Ritu Shrestha
Runa Chaudhary
Rupa Basnet
Rusan Yonjan Tamang
Sabina Shrestha
Samir Bhattarai
Sampurna Shresrtha
Sarita Rizal
Satish Rayamajhi
Shanta Bogati (Baniya)
Shila Shrestha
Shobha Ghimire
Shova Koirala
Shrijana Maharjan
Sita Lama
Sudha Giri
Sujata Karanjit
Surendra Prasad Joshi
Sushila Baral
Yasoda Uprety

ICF International Staff

Pav Govindasamy, Regional Coordinator for Anglophone Africa and Asia
Anjushree Pradhan, Country Manager (October 2011-March 2012)
Alfredo Aliaga, Sampling Specialist
Albert Themme, Data Processing Specialist
Alexander Izmukhambetov, Data Processing Specialist
Anne Cross, Deputy Director, Technical Reviewer
Joy Fishel, Survey Specialist
Sunita Kishore, Senior Gender Specialist
Sri Poedjastoeti, Survey Specialist
Clara Burgert, GIS Specialist
Thea Roy, GIS Research Assistant
Nancy Johnson, Senior Editor
Greg Edmondson, Editor
Christopher Gramer, Graphics/Desktop Publishing Specialist
Kaye Mitchell, Document Production Specialist
Erica Nybro, Senior Communications Associate
Sarah Schneider, Dissemination Specialist

QUESTIONNAIRES

Appendix **E**

4 November 2010

NEPAL DEMOGRAPHIC AND HEALTH SURVEY 2011
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

NAME AND CODE OF DISTRICT _____ [ ][ ]

NAME AND CODE OF VILLAGE/MUNICIPALITY _____ [ ][ ][ ]

WARD NUMBER . . . . . [ ][ ]

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME OF HOUSEHOLD HEAD _____

NAME OF RESPONDENT _____

HOUSEHOLD SELECTED FOR MALE SURVEY (YES=1; NO=2) [ ]

ALTITUDE . . . . . [ ][ ][ ][ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ] MONTH [ ][ ] YEAR 2 0 6 [ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER [ ][ ][ ]
RESULT*	_____	_____	_____	RESULT [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____
(SPECIFY)

TOTAL PERSONS IN HOUSEHOLD [ ][ ]

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE MEN [ ][ ]

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE [ ][ ]

SUPERVISOR	OFFICE EDITOR	KEYED BY
NAME _____		
DATE _____ [ ][ ][ ]	[ ][ ][ ]	[ ][ ][ ]

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with MINISTRY OF HEALTH AND POPULATION. We are conducting a survey about health all over Nepal. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. No part of this interview is being recorded in tape or video. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER:_____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

HOUSEHOLD SCHEDULE

							IF AGE 10 OR OLDER				
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY			
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**9A**	**10**	**11**
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE QUESTIONS IN Q. 31	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
			M F	Y N	Y N	IN YEARS					
01			1 2	1 2	1 2			01	01	01	01
02			1 2	1 2	1 2			02	02	02	02
03			1 2	1 2	1 2			03	03	03	03
04			1 2	1 2	1 2			04	04	04	04
05			1 2	1 2	1 2			05	05	05	05
06			1 2	1 2	1 2			06	06	06	06
07			1 2	1 2	1 2			07	07	07	07
08			1 2	1 2	1 2			08	08	08	08
09			1 2	1 2	1 2			09	09	09	09
10			1 2	1 2	1 2			10	10	10	10

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW OR SISTER-IN-LAW
10 = NIECE/NEPHEW
11 = CO-WIFE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 3 YEARS OR OLDER			IF AGE 3-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL			CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGIS-TRATION
	12	13	14	15	16	16A	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	Has (NAME) ever partici-pated in a literacy program or any other program that in-volves learning to read and write (not including primary school)?	What is the highest grade (NAME) has completed? SEE CODES BELOW.	Did (NAME) attend school at any time during the (2067)/ (2068) school year?	During this/that school year, what grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the VDC/ municipality? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 17	Y N 1 2 GO TO 20	GRADE	Y N 1 2 GO TO 20	GRADE	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		

CODES FOR Qs. 17 AND 19: EDUCATION

GRADE

00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)
01-10 = GRADE 1 - GRADE 10
11 = GRADE 11 AND ABOVE
94 = SCHOOL BASED PRE-PRIMARY CENTERS
95 = INFORMAL PRESCHOOL
98 = DON'T KNOW

							IF AGE 10 OR OLDER				
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY			
1	2	3	4	5	6	7	8	9	9A	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE QUESTIONS IN Q. 31	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
			M F	Y N	Y N	IN YEARS					
11			1 2	1 2	1 2			11	11	11	11
12			1 2	1 2	1 2			12	12	12	12
13			1 2	1 2	1 2			13	13	13	13
14			1 2	1 2	1 2			14	14	14	14
15			1 2	1 2	1 2			15	15	15	15
16			1 2	1 2	1 2			16	16	16	16
17			1 2	1 2	1 2			17	17	17	17
18			1 2	1 2	1 2			18	18	18	18
19			1 2	1 2	1 2			19	19	19	19
20			1 2	1 2	1 2			20	20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW OR SISTER-IN-LAW
10 = NIECE/NEPHEW
11 = CO-WIFE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 3 YEARS OR OLDER			IF AGE 3-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL			CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGIS-TRATION
	12	13	14	15	16	16A	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	Has (NAME) ever partici-pated in a literacy program or any other program that in-volves learning to read and write (not including primary school)?	What is the highest grade (NAME) has completed? SEE CODES BELOW.	Did (NAME) attend school at any time during the (2067)/ (2068) school year?	During this/that school year, what grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the VDC/ municipality? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
	Y N DK		Y N DK		Y N		GRADE	Y N	GRADE	
11	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 GO TO 20		1 2 GO TO 20		

CODES FOR Qs. 17 AND 19: EDUCATION

GRADE

00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)

01-10 = GRADE 1 - GRADE 10

11 = GRADE 11 AND ABOVE

94 = SCHOOL BASED PRE-PRIMARY CENTERS

95 = INFORMAL PRESCHOOL

98 = DON'T KNOW

MIGRATION

21	Now I would like to ask you about members of this household who lived here in the past 10 years but have since moved away. Are there any members of your household who lived here in the past 10 years but who have since moved away?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . 8	→ 30

LINE NO.	MIGRANTS	SEX	MONTH AND YEAR MOVED AWAY	AGE	REASON FOR MOVING	PLACE TRAVELLED TO
22	23	24	25	26	27	28
	Please give me the names of the persons who are living outside of this household? AFTER LISTING THE NAMES AND RECORDING 'THE SEX FOR EACH PERSON, ASK QUESTIONS 25-28 FOR EACH PERSON	Is (NAME) male or female?	In what month and year did (NAME) move away?	How old was (NAME) when s/he moved away? IF AGE 95 OR MORE, RECORD 95'. IF AGE LESS THAN 1 YEAR RECORD '00'	What was the main reason that (NAME) moved away?	Where has (NAME) travelled to? IF 'INDIA' AND `NEPAL ASK FOR NAME OF THE CITY AND CODE; IF OTHER THAN INDIA OR NEPAL ASK FOR NAME OF THE COUNTRY. RECORD THE CODES AS PROVIDED.
01		M F 1 2	MONTH YEAR	YEARS	WORK . . . . . 1 STUDY . . . . . 2 MARRIAGE . . . . . 3 FAMILY . . . . . 4 SECURITY . . . . . 5 OTHER _____ 6 (SPECIFY) DON"T KNOW 8	NEPAL . . . . . 1 INDIA . . . . . 2 OTHER COUNTRY . . . 3 DON'T KNOW 998
02		M F 1 2	MONTH YEAR	YEARS	WORK . . . . . 1 STUDY . . . . . 2 MARRIAGE . . . . . 3 FAMILY . . . . . 4 SECURITY . . . . . 5 OTHER _____ 6 (SPECIFY) DON"T KNOW 8	NEPAL . . . . . 1 INDIA . . . . . 2 OTHER COUNTRY . . . 3 DON'T KNOW 998
03		M F 1 2	MONTH YEAR	YEARS	WORK . . . . . 1 STUDY . . . . . 2 MARRIAGE . . . . . 3 FAMILY . . . . . 4 SECURITY . . . . . 5 OTHER _____ 6 (SPECIFY) DON"T KNOW 8	NEPAL . . . . . 1 INDIA . . . . . 2 OTHER COUNTRY . . . 3 DON'T KNOW 998
04		M F 1 2	MONTH YEAR	YEARS	WORK . . . . . 1 STUDY . . . . . 2 MARRIAGE . . . . . 3 FAMILY . . . . . 4 SECURITY . . . . . 5 OTHER _____ 6 (SPECIFY) DON"T KNOW 8	NEPAL . . . . . 1 INDIA . . . . . 2 OTHER COUNTRY . . . 3 DON'T KNOW 998
05		M F 1 2	MONTH YEAR	YEARS	WORK . . . . . 1 STUDY . . . . . 2 MARRIAGE . . . . . 3 FAMILY . . . . . 4 SECURITY . . . . . 5 OTHER _____ 6 (SPECIFY) DON"T KNOW 8	NEPAL . . . . . 1 INDIA . . . . . 2 OTHER COUNTRY . . . 3 DON'T KNOW 998
Q.29	TOTAL NUMBER OF MIGRANTS					
	TICK HERE IF CONTINUATION SHEET USED					

30	CHECK THE FRONT COVER OF HOUSEHOLD QUESTIONNAIRE. IS HOUSEHOLD SELECTED FOR MALE SURVEY? HOUSEHOLD SELECTED ☐ ↓ HOUSEHOLD NOT SELECTED ☐ →	101

31. TABLE FOR SELECTION OF RESPONDENTS FOR SECTION ON DOMESTIC VIOLENCE

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE FEMALE RESPONDENTS ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE. FOR EACH NON-ZERO NUMBER, THIS IS THE COLUMN

CIRCLE THE LINE NUMBER FOR THIS WOMAN IN COLUMN 9A

FOR EXAMPLE, IF THE HOUSEHOLD NUMBER IS ‘16’, GO TO ROW ‘6’. IF THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD, GO TO COLUMN ‘3’. FIND THE NUMBER IN THE BOX WHERE THE ROW MEETS THE COLUMN (‘2’). NOW GO TO THE HOUSEHOLD SCHEDULE AND CIRCLE THE LINE NUMBER OF THE SELECTED WOMAN

LAST DIGIT OF THE HOUSEHOLD NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN 15-49 IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS THAN MONTHLY . . . . . 4 NEVER 5	
102	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 TUBE WELL OR BOREHOLE . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 71 STONE TAP/DHARA . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	104A 105
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	104A
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
104A	Do you use the main water source all year or only part of the year?	ALL YEAR . . . . . 1 PART OF THE YEAR 2	105

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 107
106	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE/ PIYUSH/WATER GUARD . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ BIOSAND/COLLOIDAL FILTER) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
107	What kind of toilet facility do members of your household usually use?	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 NO FACILITY/BUSH/FIELD . . . . . 51 OTHER _____ 96 (SPECIFY)	→ 110
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 110
109	How many households in total use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
110	Does your household have: Electricity? A radio? A television? A mobile telephone? A non-mobile telephone? A refrigerator? A table? A chair? A bed? A sofa? A cupboard? A computer? A clock? A fan? A dhiki/janto?	YES NO ELECTRICITY . . . . . 1 2 RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 MOBILE TELEPHONE . . . . . 1 2 NON-MOBILE TELEPHONE . . . 1 2 REFRIGERATOR . . . . . 1 2 TABLE . . . . . 1 2 CHAIR . . . . . 1 2 BED . . . . . 1 2 SOFA . . . . . 1 2 CUPBOARD . . . . . 1 2 COMPUTER . . . . . 1 2 CLOCK . . . . . 1 2 FAN . . . . . 1 2 DHIKI/JANTO 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 BIOGAS . . . . . 04 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 114
112	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 114
113	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
114	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND . . . . . 11 DUNG . . . . . 12 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 PALM/BAMBOO . . . . . 22 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
115	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF . . . . . 11 THATCH/PALM LEAF . . . . . 12 RUDIMENTARY ROOFING RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 FINISHED ROOFING GALVANIZED SHEET . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER . . . . . 33 CERAMIC TILES . . . . . 34 CEMENT . . . . . 35 ROOFING SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	NATURAL WALLS NO WALLS . . . . . 11 CANE/PALM/TRUNKS . . . . . 12 MUD/SAND . . . . . 13 RUDIMENTARY WALLS BAMBOO WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 PLYWOOD . . . . . 23 CARDBOARD . . . . . 24 REUSED WOOD . . . . . 25 FINISHED WALLS CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 WOOD PLANKS/SHINGLES . . . . . 35 OTHER _____ 96 (SPECIFY)	
117	How many rooms in this household are used for sleeping?	ROOMS . . . . . [ ][ ]	
118	Does any member of this household own: A watch? A bicycle/rickshaw? A motorcycle or motor scooter? A three wheel tempo? An animal-drawn cart? A car or truck?	YES NO WATCH . . . . . 1 2 BICYCLE/RICKSHAW . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 THREE WHEEL TEMPO . . . . . 1 2 ANIMAL-DRAWN CART . . . . . 1 2 CAR/TRUCK 1 2	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many bigha/ropani of agricultural land do members of this household own? IF 95 OR MORE, CIRCLE '995'. IF LESS THAN 1 RECORD `00'	BIGHA . . . . . 1 [ ][ ] ROPANI . . . . . 2 [ ][ ] 95 OR MORE BIGHA/ROPANI . . . . . 995 DON'T KNOW 998	
121	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 123
122	How many of the following animals does this household own? IF NONE, ENTER '00'. IF 95 OR MORE, ENTER '95'. IF UNKNOWN, ENTER '98'. Buffalo? Milk cows or bulls? Horses, donkeys, or mules? Goats? Sheep? Chickens? Ducks? Pigs? Yaks?	BUFFALO . . . . . [ ][ ] COWS/BULLS . . . . . [ ][ ] HORSES/DONKEYS/MULES . . . . . [ ][ ] GOATS . . . . . [ ][ ] SHEEP . . . . . [ ][ ] CHICKENS . . . . . [ ][ ] DUCKS . . . . . [ ][ ] PIGS . . . . . [ ][ ] YAKS . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
123	Does any member of this household have a bank account/cooperative/or other savings account?	YES . . . . . 1 NO 2	
124	Does your household have any mosquito nets that can be used while sleeping?	YES . . . . . 1 NO 2	→ 126
125	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . [ ]	
126	Please show me where members of your household most often wash their hands.	OBSERVED . . . . . 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 2 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 3 NOT OBSERVED, OTHER REASON . . . 4	→ 129
127	OBSERVATION ONLY: OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
128	OBSERVATION ONLY: OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . A ASH, MUD, SAND . . . . . B NONE C	
129	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT. TEST SALT FOR IODINE.	NO IODINE . . . . . 1 <15 PPM . . . . . 2 ≥15 PPM . . . . . 3 SALT NOT TESTED _____ 6 (SPECIFY REASON)	

HOUSEHOLD FOOD SECURITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
130	In the past 12 months, how frequently did you worry that your household would not have enough food?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
131	In the past 12 months, how often were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
132	In the past 12 months, how often did you or any household member have to eat a limited variety of foods due to a lack of resources?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
133	In the past 12 months, how often did you or any household member have to eat a smaller meal than you felt you felt you needed because there was not enough food?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
134	In the past 12 months, how often did you or any household member eat fewer meals in a day because of resources to get food?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
135	In the past 12 months, how often was there with no food to eat of any kind in your household because of lack of resources to get food?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
136	In the past 12 months, how often did you or any household member go to sleep at night hungry because there was not enough food?	NEVER . . . . . 1 RARELY . . . . . 2 SOMETIMES . . . . . 3 OFTEN 4	
137	CHECK Qs.130-136 ALL CODE `1' NOT CIRCLED ☐ ↓ ALL CODE `1' CIRCLED ☐ →		201
138	Did your household have to adopt the following to meet the household food need in the last 12 months? Take loan? Collect wild food? Consume seed stock for next season? Sell household assets? Sell livestock? Sell land? Probe: Any other steps taken? If yes, specify.	YES NO TAKE LOAN . . . . . 1 2 COLLECT WILD FOOD . . . . . 1 2 CONSUME SEED . . . . . 1 2 SELL ASSETS . . . . . 1 2 SELL LIVESTOCK . . . . . 1 2 SELL LAND . . . . . 1 2 OTHER _____ 1 2 (SPECIFY)	
139	What was the cause of food deficiency in your household in the last 12 months?	SHOCK FACTORS DROUGHT . . . . . A LANDSLIDE . . . . . B CROP FAILURE . . . . . C FLOOD . . . . . D TEMPORAL FACTORS FINANCIAL PROBLEM . . . . . E NOT AVAILABLE IN MARKET . . . . . F OTHER _____ X (SPECIFY)	

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]
204	CHECK 203: CHILD BORN IN BAISAKH 2062 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2062 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD/NAMES OF CHILDREN) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . .994 REFUSED . . . . . .995 OTHER 996	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 214.			

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]
204	CHECK 203: CHILD BORN IN BAISAKH 2062 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ]. [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . 9994 (GO TO 212) REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2062 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD/NAMES OF CHILDREN) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ]. [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 214.			

WEIGHT, HEIGHT, AND HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

214	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 215. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
215	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
216	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
217	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 (GO TO 226) ↵ REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 (GO TO 226) ↵ REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 (GO TO 226) ↵ REFUSED . . . . . 9995 OTHER 9996
218	AGE: CHECK COLUMN 7.	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵
219	MARITAL STATUS: CHECK COLUMN 8.	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵
220	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]
221	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 220 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF ADOLESCENT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test for (NAME OF ADOLESCENT), or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to take the anemia test?		
222	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)

		WOMAN 1	WOMAN 2	WOMAN 3
	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
223	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you take the anemia test?		
224	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 226)
225	PREGNANCY STATUS: CHECK 234 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
226	RECORD HEMO-GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
227	GO BACK TO 216 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, THEN END HERE.			

4 November 2010

NEPAL DEMOGRAPHIC AND HEALTH SURVEY 2011
WOMAN'S QUESTIONNAIRE

IDENTIFICATION

NAME AND CODE OF DISTRICT _____

NAME AND CODE OF VILLAGE/MUNICIPALITY _____

WARD NUMBER . . . . . .

CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

NAME AND LINE NUMBER OF WOMAN _____

NAME OF HOUSEHOLD HEAD _____

WOMAN SELECTED FOR DOMESTIC VIOLENCE MODULE (YES=1; NO=2)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2 0 6
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE ENGLISH 5

LANGUAGE OF INTERVIEW _____

NATIVE LANGUAGE OF RESPONDENT _____

TRANSLATOR USED (YES=1; NO=2) . . . . . .

LANGUAGE CODES: NEPALI=1; BHOJPURI=2; MAITHILI=3; OTHER=6

SUPERVISOR	OFFICE EDITOR	KEYED BY
NAME _____		
DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with MINISTRY OF HEALTH AND POPULATION. We are conducting a survey about health all over Nepal. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. No part of this interview is being recorded in tape or video. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
101A	COLLECT ANY RELEVANT DOCUMENTS THAT MAY HAVE INFORMATION ON THE RESPONDENT'S AGE AND HER CHILDREN'S AGE AND IMMUNISATIONS.		
102	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 107
105	What is the highest grade you completed? IF COMPLETED LESS THAN ONE GRADE, RECORD '00'.	GRADE . . . . . [ ][ ]	
106	CHECK 105: GRADE 5 OR LOWER [ ] ↓ GRADE 6 OR HIGHER [ ] →		110

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
108	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)?	YES . . . . . 1 NO 2	
109	CHECK 107: CODE '2', '3' OR '4' CIRCLED ☐ → CODE '1' OR '5' CIRCLED ☐ → 111		
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	What is your religion?	HINDU . . . . . 1 BUDDHIST . . . . . 2 MUSLIM . . . . . 3 KIRAT . . . . . 4 CHRISTIAN . . . . . 5 OTHER _____ 6 (SPECIFY)	
114	What is your caste/ethnicity? WRITE CASTE/ETHNICITY ON LINE PROVIDED.	☐☐ _____ (CASTE/ETHNICITY)	
115	In the last 12 months, how many times have you been away from your home community for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE 00	→ 201
116	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	Now I would like to ask you about all the pregnancies that you have had during your life. By this I mean all the children born to you whether they were born alive or dead, whether they are still living or not, whether they live with you or somewhere else, and all the pregnancies that you have had that did not result in a live birth. I understand that it is not easy to talk about children who have died, or pregnancies that ended before full term, but it is important that you tell us about all of them, so that the government can develop programs to improve children's health.		
201	First I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	Women sometimes have pregnancies that do not result in a live born child. That is, a pregnancy can end in a miscarriage, or the child can be born dead. Have you ever had a pregnancy that did not end in a live birth?	YES . . . . . 1 NO 2	→ 210
209	How many pregnancies have you had that did not end in a live birth?	PREGNANCY LOSSES . . . . . [ ][ ]	
210	SUM ANSWERS TO 203, 205, 207 AND 209, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL PREGNANCIES . . . . . [ ][ ]	
211	CHECK 210: Just to make sure that I have this right: you have had in TOTAL _____ pregnancies during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-210 AS NECESSARY.		
212	CHECK 210: ONE OR MORE PREGNANCIES [ ] ↓ NO PREGNANCY [ ] →		234

213	Now I would like to record all your pregnancies, whether born alive, born dead, or lost before full term, starting with the first one you had. RECORD ALL THE PREGNANCIES IN 215. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. (IF THERE ARE MORE THAN 12 PREGNANCIES, USE AN ADDITIONAL QUESTIONNAIRE STARTING WITH THE SECOND ROW).						
214 PREGNANCY HISTORY NUMBER	215 Think back to your first pregnancy. Was that a single or multiple pregnancy?	216 Was the baby born alive, born dead, or lost before birth?	217 Did that baby cry, move, or breathe when it was born?	218 What name was given to the child?	219 Is (NAME) a boy or a girl?	220 In what month and year was (NAME) born? PROBE: When is his/her birthday?	221 Is (NAME) still alive?
01	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
02	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
03	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
04	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
05	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
06	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
07	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225

214 PREGNANCY HISTORY NUMBER	215 Think back to your first pregnancy. Was that a single or multiple pregnancy?	216 Was the baby born alive, born dead, or lost before birth?	217 Did that baby cry, move, or breathe when it was born?	218 What name was given to the child?	219 Is (NAME) a boy or a girl?	220 In what month and year was (NAME) born? PROBE: When is his/her birthday?	221 Is (NAME) still alive?
08	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
09	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
10	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
11	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225
12	SING . . . . . 1 MULT 2	BORN ALIVE ..... 1 (SKIP TO 218) BORN DEAD ..... 2 LOST BEFORE FULL TERM ..... 3 (SKIP TO 226)	YES . . . . 1 NO . . . . 2 → 226	_____ NAME	BOY . . . . 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . . . 1 NO . . . . 2 → 225

222	223	224	225	226	227	228	229
IF BORN ALIVE AND STILL LIVING:			IF DEAD:	IF BORN DEAD OR LOST BEFORE BIRTH:			
How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	Is (NAME) living with you?	RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	In what month and year did this pregnancy end?	How many months did this pregnancy last? RECORD IN COM-PLETED MONTHS.	Did you or someone else do something to end this pregnancy?	Were there any other pregnancies between the previous pregnancy and this pregnancy?
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (NEXT PREGNANCY)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (NEXT PREGNANCY)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY

222	223	224	225	226	227	228	229
IF BORN ALIVE AND STILL LIVING:			IF DEAD:	IF BORN DEAD OR LOST BEFORE BIRTH:			
How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	Is (NAME) living with you?	RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	In what month and year did this pregnancy end?	How many months did this pregnancy last? RECORD IN COM-PLETED MONTHS.	Did you or someone else do something to end this pregnancy?	Were there any other pregnancies between the previous pregnancy and this pregnancy?
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] → (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] → (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] → (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] → (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY
AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER [ ][ ] → (GO TO 229)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ] (GO TO 229)	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	MONTHS [ ][ ]	YES . . . . 1 NO 2	YES . . . . 1 ADD PREGNANCY NO . . . . . 2 NEXT PREGNANCY

230	Have you had any pregnancy since the last pregnancy mentioned? IF YES, RECORD PREGNANCY(S) IN TABLE.	YES . . . . . 1 NO 2
231	COMPARE 210 WITH NUMBER OF PREGNANCIES IN HISTORY ABOVE AND MARK: NUMBERS ARE SAME [ ] ↓ NUMBERS ARE DIFFERENT [ ] → (PROBE AND RECONCILE)	
232	CHECK 220 AND ENTER THE NUMBER OF BIRTHS IN 2062 OR LATER. NUMBER OF BIRTHS . . . . . [ ] NONE . . . . . 0 → 234	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
233	**C** FOR EACH BIRTH SINCE BAISAKH 2062, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) CHECK 227 FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH. CHECK 228. IF YES (CODE '1' CIRCLED), ENTER 'A' FOR ABORTION OR 'C' (IF CODE '2' CIRCLED) FOR MISCARRIAGE OR `S' FOR STILLBIRTH, IN CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY.		
234	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 237A
235	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . [ ][ ]	
236	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 237A
237	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
237A	CHECK 226 AND 228: HAD ABORTION SINCE 2062 (1 CIRCLED IN 228) → ↓ DID NOT HAVE ABORTION SINCE 2062 (2 CIRCLE IN 228 OR NOT ASKED) →		→ 238
237B	What was the main reason you decided to have this (last) abortion?	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . . 02 NO MONEY TO TAKE CARE OF BABY . 03 TOO YOUNG TO HAVE CHILD . . . . . 04 NOT READY TO BE A MOTHER . . . . . 05 WANTED TO CONTINUE SCHOOLING . . 06 DID NOT LOVE THE FATHER . . . . . 07 WANTED TO DELAY CHILDBEARING . . 08 WANTED TO CONTINUE WORKING . . . . 09 WANTED TO SPACE CHILD . . . . . 10 PARTNER DID NOT WANT CHILD . . . . . 11 CHILD'S SEX . . . . . 12 BECAUSE OF RAPE . . . . . 13 TO AVOID SHAME . . . . . 14 AFRAID OF PARENTS . . . . . 15 NO ONE TO HELP LOOK AFTER CHILD . 16 PARENTS INSISTED . . . . . 17 FATHER OF CHILD DIED . . . . . 18 OTHER _____ 96 (SPECIFY)	
237C	What did you do to end this pregnancy?	DRANK MILK/COFFEE/OTHER LIQUID WITH LOTS OF SUGAR . . . . . 01 DRANK HERBAL CONCOCTION . . . . . 02 DRANK OTHER HOME REMEDIES . . . . 03 USED ANY HERBAL ANEMA . . . . . 04 INSERTED HERB/OTHER SUBSTANCE IN THE VAGINA . . . . . 05 TOOK TABLETS (UNSPECIFIED) . . . . . 06 HEAVY MASSAGE . . . . . 07 D & C . . . . . 08 MANUAL VACUUM ASPIRATION . . . . 09 INJECTION . . . . . 10 SALINE INSTILLATION . . . . . 11 MEDICAL ABORTION . . . . . 12 OXYTOCIN . . . . . 13 CATHETER . . . . . 14 EXCESSIVE PHYSICAL ACTIVITY . . . . 15 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
237D	Who did you see to get this done? PROBE: Anyone else? CIRCLE ALL MENTIONED.	HEALTH PROFESSIONAL DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B HEALTH ASST/HLTH. WKR . . . . . C MCH WORKER . . . . . D VHW . . . . . E OTHER PERSON PHARMACIST/CHEMICAL SELLER F TRADITIONAL BIRTH ATTENDANT G FCHV . . . . . H RELATIVE/FRIEND . . . . . I TRADITIONAL PRACTITIONER . . . J OTHER _____ X (SPECIFY) NO ONE . . . . . Y	
237E	Where did you go to get this done?	HOME YOUR HOME . . . . . A OTHER HOME . . . . . B GOVT. SECTOR GOVT. HOSPITAL . . . . . C PHC CENTER _____ D (SPECIFY) HEALTH POST . . . . . E SUB-HEALTH . . . . . F PHC OUTREACH . . . . . G OTHER GOVT. _____ H (SPECIFY) NON-GOVT. (NGO) MARIE STOPES . . . . . I FPAN _____ J (SPECIFY) OTHER NGO _____ K SPECIFY PRIVATE MED. SECTOR PVT. HOSPITAL/CLINIC NURSING HOME _____ L (SPECIFY) OTHER PRIVATE MED. _____ M SPECIFY OTHER _____ X SPECIFY	
237F	Did you have any complications when you had this abortion?	YES . . . . . 1 NO 2	
237G	In the first one month after the abortion, did you have any health problems because of the abortion?	YES . . . . . 1 NO 2	
237H	How much did you pay for the following services? Abortion service? Post abortion service? RECORD 9995 IF SERVICE NOT TAKEN.	ABORTION [ ][ ][ ][ ] POST ABORTION [ ][ ][ ][ ]	
237I	Did anyone talk to you about family planning methods during your post abortion visit?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 241A
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
241A	Is abortion legal in Nepal?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 241C
241B	What are the conditions under which a woman can have an abortion in Nepal?	PREGNANCY OF 12 WEEKS OR LESS GESTATION FOR ANY WOMAN . . . A PREGNANCY OF 18 WEEKS IF IT IS A RESULT OF RAPE OR INCEST . . . B PREGNANCY OF ANY DURATION IF LIFE OF MOTHER IS AT RISK . . . . . C PREGNANCY OF ANY DURATION IF MOTHER'S PHYSICAL AND MENTAL HEALTH AT RISK . . . . . D FETUS IS DEFORMED . . . . . E OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
241C	Do you know of a place where a woman can go to get a safe abortion?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 301
241D	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . . . C SUB-HEALTH POST . . . . . D PHC OUTREACH . . . . . E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECTOR MARIE STOPES . . . . . H FPAN . . . . . I OTHER NGO _____ J (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . K PHARMACY . . . . . L PRIVATE DOCTOR . . . . . M OTHER PRIVATE MEDICAL _____ N (SPECIFY) OTHER SOURCE TBA . . . . . O OTHER _____ X (SPECIFY)	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD** PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Rhythm Method**. PROBE: Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2	
09	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
10	**Emergency Contraception**. PROBE: As an emergency measure, within three/five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
11	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 234: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ → 311		
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 311

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	→ 307 → 308A → 306 → 308A
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	NILOCON WHITE . . . . . 01 SUNAULO GULAPH . . . . . 02 FEMINYL . . . . . 03 FEMICON . . . . . 04 OK PILLS . . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	DHAAL . . . . . 01 PANTHER . . . . . 02 BLACK COBRA . . . . . 03 KAMASUTRA . . . . . 04 JODI . . . . . 05 NUMBER 1 . . . . . 06 MOHP-NO BRAND . . . . . 07 LILY . . . . . 08 VEGA . . . . . 09 SKINLESS SKIN . . . . . 10 SAFETY . . . . . 11 GOLD . . . . . 12 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . 11 PHC CENTER . . . . . 12 MOBILE CLINIC . . . . . 13 OTHER GOVT. _____ 16 (SPECIFY) NON-GOVT (NGO) SECTOR FPAN . . . . . 21 MARIE STOPES . . . . . 22 ADRA . . . . . 23 NEPAL RED CROSS . . . . . 24 UMN . . . . . 25 OTHER NGO _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . 31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed?		
308A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
309	CHECK 308/308A, 220 AND 226: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES ☐ → GO BACK TO 308/308A NO ☐ ↓	
310	CHECK 308/308A: YEAR IS 2062 OR LATER ☐ → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2061 OR EARLIER ☐ → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO BAISAKH 2062. THEN SKIP TO → 322		
311	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO BAISAKH 2062. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **C** **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: * Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? * IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ; ANY METHOD USED ☐ →		314
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	 324
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	324 317A 326 315A 326
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . 11 PHC CENTER . . . . . 12 HEALTH POST . . . . . 13 SUB-HEALTH POST . . . . . 14 PHC OUTREACH . . . . . 15 MOBILE CLINIC . . . . . 17 FCHV . . . . . 18 CONDOM BOX 19	
315A	Where did you learn how to use the rhythm method?	OTHER GOVT. _____ 16 (SPECIFY)	
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	NON-GOVT. (NGO) SECTOR FPAN . . . . . 21 MARIE STOPES . . . . . 22 ADRA . . . . . 23 NEPAL RED CROSS . . . . . 24 UMN . . . . . 25 OTHER NGO. _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . 31 PHARMACY . . . . . 32 SANGINI OUTLET . . . . . 33 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER SOURCE SHOP . . . . . 41 FRIEND/RELATIVE . . . . . 42 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 RHYTHM METHOD 12	 → 323 → 320 → 326
317	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	 → 326 → 326 → 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR		
		GOVT. HOSPITAL/CLINIC	11	
		PHC CENTER	12	
		HEALTH POST	13	
		SUB-HEALTH POST	14	
		PHC OUTREACH	15	
		MOBILE CLINIC	17	
		FCHV	18	
		CONDOM BOX	19	
		OTHER GOVT. _____ (SPECIFY)	16	
		NON-GOVT. (NGO) SECTOR		
		FPAN	21	
		MARIE STOPES	22	
		ADRA	23	
		NEPAL RED CROSS	24	
		UMN	25	→ 326
		OTHER NGO. _____ (SPECIFY)	26	
		PRIVATE MEDICAL SECTOR		
		PRIVATE HOSPITAL/CLINIC/ NURSING HOME	31	
		PHARMACY	32	
		SANGINI OUTLET	33	
		OTHER PRIVATE MEDICAL _____ (SPECIFY)	36	
		OTHER SOURCE		
		SHOP	41	
		FRIEND/RELATIVE	42	
		OTHER _____ (SPECIFY)	96	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . . . C SUB-HEALTH POST . . . . . D PHC OUTREACH . . . . . E MOBILE CLINIC . . . . . F FCHV . . . . . G CONDOM BOX . . . . . H OTHER GOVT. _____ I (SPECIFY) NON-GOVT. (NGO) SECTOR FPAN . . . . . J MARIE STOPES . . . . . K ADRA . . . . . L NEPAL RED CROSS . . . . . M UMN . . . . . N OTHER NGO. _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . P PHARMACY . . . . . Q SANGINI OUTLET . . . . . R OTHER PRIVATE MEDICAL _____ S (SPECIFY) OTHER SOURCE SHOP . . . . . T FRIEND/RELATIVE . . . . . U OTHER _____ X (SPECIFY)	
326	In the last 12 months, were you visited by a fieldworker (FCHV or RFHV) who talked to you about family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 232: ONE OR MORE BIRTHS IN 2062 OR LATER ☐		NO BIRTHS IN 2062 OR LATER ☐ → 542	
402	CHECK 220: ENTER IN THE TABLE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2062 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)			
403	PREGNANCY HISTORY NUMBER FROM 214 IN PREGNANCY HISTORY	LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	NEXT-TO-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐
404	FROM 218 AND 221	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) NO 2	YES . . . . . 1 (SKIP TO 424) NO 2	YES . . . . . 1 (SKIP TO 424) NO 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 408)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 424)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 424)
407	How much longer did you want to wait?	MONTHS . . . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414B)		
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED. IF FCHV NOT MENTIONED PROBE	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B HEALTH ASST./ AHW . . . . . C MCH WORKER . . . D VHW . . . . . E OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . F FCHV . . . . . G OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 414B)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY TYPE(S) OF SOURCE(S). IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	HOME YOUR HOME . . . A OTHER HOME . . . B GOVT. SECTOR GOVT. HOSPITAL C PHC CENTER . . . D HEALTH POST . E SUB-HEALTH . . . F PHC OUTREACH . G OTHER GOVT. _____ H (SPECIFY) NON-GOVT. (NGO) FPAN . . . . . I MARIE STOPES . J ADRA . . . . . K UMN . . . . . L OTHER NGO _____ M (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/NURSING HOME . . . . . N OTHER PRIVATE MED. _____ O (SPECIFY) OTHER _____ X (SPECIFY)		
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . [ ][ ] DON'T KNOW 98		
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES [ ][ ] DON'T KNOW 98		
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 URINE . . . . . 1 2 BLOOD 1 2		
413A	During (any of) your antenatal care visit(s), were you advised to use a skilled birth attendant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414A	Were you told where to go if you had any problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414B	What kind of preparation did you make beforehand for the delivery of (NAME)? Anything else? CIRCLE ALL MENTIONED	SAVED MONEY . . . . . A ARRANGED FOR TRANSPORT . . . . . B FOUND BLOOD DONOR . . . . . C CONTACTED HLTH WKR TO HELP WITH DELIVERY . . . . . D BOUGHT SAFE DELIVERY KIT . . . . . E ARRANGED FOOD . . . . F ARRANGED CLOTHES . G OTHER _____ X (SPECIFY) NO PREPARATION . . . . Y		
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 418) ← DON'T KNOW 8		
416	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . [ ] DON'T KNOW 8		
417	CHECK 416:	2 OR MORE TIMES [ ] → (SKIP TO 421) OTHER [ ] →		
418	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) ← DON'T KNOW . . . 8		
419	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . [ ] DON'T KNOW 8		
420	How many years ago did you receive the last tetanus injection before this pregnancy?	YEARS AGO . . . . . [ ][ ]		
421	During this pregnancy, were you given or did you buy any iron/folic acid tablets? SHOW TABLETS.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423) ← DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS [ ][ ][ ] DON'T KNOW . . . 998		
422A	CHECK 422:	LESS THAN 180 DAYS [ ] → (SKIP TO 423) OTHER [ ] →		
422B	What is the main reason for not taking the iron/folic acid tablets for atleast 180 days?	DID NOT LIKE IT . . . 1 DID NOT RECEIVE COMPLETE DOSE . 2 NOT AVAILABLE . . . 3 DID NOT KNOW . . . 4 OTHER _____ 6 (SPECIFY)		
423	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
424	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
425	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 427) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 427) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 427) DON'T KNOW 8
426	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998
427	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF FCHV NOT MENTIONED PROBE IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B HEALTH ASST./ AHW . . . . . C MCHW . . . . . D VHW . . . . . E OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . F FCHV . . . . . G RELATIVE/FRIEND . H OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 428)	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B HEALTH ASST./ AHW . . . . . C MCHW . . . . . D VHW . . . . . E OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . F FCHV . . . . . G RELATIVE/FRIEND . H OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 428)	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B HEALTH ASST./ AHW . . . . . C MCHW . . . . . D VHW . . . . . E OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . F FCHV . . . . . G RELATIVE/FRIEND . H OTHER _____ X (SPECIFY) NO ONE . . . . . Y (SKIP TO 428)
427A	Immediately after delivery of (NAME) did you receive an injection in the thigh or buttock?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
428	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 (SKIP TO 431A) ← OTHER HOME . . . 12 GOVT. SECTOR GOVT. HOSPITAL 21 PHC CENTER 22 HEALTH POST 23 SUB-HEALTH POST . . . . . 24 OTHER GOVT. _____ 26 (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . 31 ADRA . . . . . 32 UMN . . . . . 33 OTHER NGO _____ 36 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/N.HOME ... 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 431A) ←	HOME YOUR HOME . . . 11 (SKIP TO 442) ← OTHER HOME . . . 12 GOVT. SECTOR GOVT. HOSPITAL 21 PHC CENTER 22 HEALTH POST 23 SUB-HEALTH POST . . . . . 24 OTHER GOVT. _____ 26 (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . 31 ADRA . . . . . 32 UMN . . . . . 33 OTHER NGO _____ 36 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/N.HOME 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 442) ←	HOME YOUR HOME . . . 11 (SKIP TO 442) ← OTHER HOME . . . 12 GOVT. SECTOR GOVT. HOSPITAL 21 PHC CENTER 22 HEALTH POST 23 SUB-HEALTH POST . . . . . 24 OTHER GOVT. _____ 26 (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . 31 ADRA . . . . . 32 UMN . . . . . 33 OTHER NGO _____ 36 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/N.HOME 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 442) ←
428A	Did you receive cash incentive for transportation from the facility after the delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
428B	Did the facility charge you any amount for the delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
428C	How long did it take you to reach the facility for delivery of (NAME)?	MINUTES [ ][ ][ ] DON'T KNOW . . . 998		
429	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 430) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442) ←
429A	Was it planned or was it carried out due to complication?	PLANNED . . . . . 1 COMPLICATION 2	PLANNED . . . . . 1 COMPLICATION . . . 2	PLANNED . . . . . 1 COMPLICATION . . . 2
430	After you gave birth to (NAME), did anyone check on your health while you were still in the facility?	YES . . . . . 1 (SKIP TO 433) ← NO 2		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
431	Did anyone check on your health after you left the facility?	YES . . . . . 1 (SKIP TO 433) NO . . . . . 2 (SKIP TO 436)		
431A	Why didn't you deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED.	COST TOO MUCH . . A FACILITY NOT OPEN . B TOO FAR/ NO TRANS-PORTATION . . . C DON'T TRUST FACILITY/POOR QUALITY SERVICE D NO FEMALE PROVID-ER AT FACILITY . . E HUSBAND/FAMILY DID NOT ALLOW . . F SECURITY CONCERNS . . . . . G NOT NECESSARY . . H NOT CUSTOMARY . . I CHILD BORN BEFORE REACHING FACILITY . . . . . J OTHER _____ X (SPECIFY)		
431B	Was a special clean delivery kit used? SHOW CLEAN DELIVERY KIT MARKETED BY CRS	YES . . . . . 1 (SKIP TO 431D) NO . . . . . 2 DON'T KNOW . . . 8		
431C	When (NAME) was born, what instrument was used to cut the umblical cord?	NEW/BOILED BLADE . . . . . 1 USED BLADE . . . 2 KNIFE . . . . . 3 HASIYA . . . . . 4 KHUKURI . . . . . 5 SCISSORS . . . . . 7 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
431D	Was anything placed on the stump after the umblical cord was cut?	YES . . . . . 1 NO . . . 2 (SKIP TO 431F) ←┤ DON'T KNOW . . . 8		
431E	What was placed on the stump?	OIL . . . . . A ASH . . . . . B VERMILON . . . . . C OINTMENT/POWDER D ANIMAL DUNG . . . E TURMERIC . . . . . F GHEE . . . . . G CHLORHEXIDINE . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . Z		
431F	Was (NAME) dried before the placenta was delivered?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . 8		
431G	Was (NAME) placed on your belly/breast before delivery of the placenta?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . 8		
431H	Was (NAME) wrapped in cloth before the placenta was delivered?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . 8		
431I	How long after delivery was (NAME) bathed for the first time? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
432	After you gave birth to (NAME), did anyone check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 436)←┘		
433	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON. IF FCHV NOT MENTIONED PROBE	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE 12 HEALTH ASST./ AHW . . . . . 13 MCH WORKER ... 14 VHW . . . . . 15 FCHV . . . . . 16 OTHER _____ 96 (SPECIFY)		
433A	Did this person talk to you about using a family planning method?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
434	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
436	In the two months after (NAME) was born, did any health care provider check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 440) ←┤ DON'T KNOW 8		
437	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 [ ][ ] DAYS AFTER BIRTH . . 2 [ ][ ] WKS AFTER BIRTH . . 3 [ ][ ] DON'T KNOW . . . 998		
438	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON. IF FCHV NOT MENTIONED PROBE	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE 12 HEALTH ASST./ AHW . . . . . 13 MCH WORKER ... 14 VHW . . . . . 15 FCHV . . . . . 16 OTHER _____ 96 (SPECIFY)		
439	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 OTHER HOME . . . 12 GOVT. SECTOR GOVT. HOSPITAL 21 PHC CENTER 22 HEALTH POST 23 SUB-HEALTH 24 PHC OUTREACH 25 OTHER GOVT. _____ 26 (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . 31 MARIE STOPES . 32 ADRA . . . . . 33 UMN . . . . . 34 OTHER GOVT. _____ 36 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/N.HOME . 41 OTHER PRIVATE MED. _____ 46 (SPECIFY) OTHER _____ 96 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
440	In the first two months after delivery, did you receive a vitamin A dose like this? SHOW VITAMIN A CAPSULES	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
440A	After delivery were you given or did you buy any iron/folic acid tablets? SHOW TABLETS.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 441) ← DON'T KNOW 8		
440B	After delivery, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . [ ][ ] DON'T KNOW . . . 98		
441	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 443) ← NO . . . . . 2 (SKIP TO 444) ←		
442	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 446) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 446) ←
443	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
444	CHECK 234: IS RESPONDENT PREGNANT?	NOT PREGNANT [ ] ↓ PREGNANT OR UNSURE [ ] ← (SKIP TO 446)		
445	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 447) ←		
446	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
447	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 449) ← NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
448	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 454) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501)		
449	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . 000 HOURS 1 ☐☐ DAYS 2 ☐☐		
450	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)		
451	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) A PLAIN WATER . . . B SUGAR OR GLU-COSE WATER . . . C GRIPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA G TEA/INFUSIONS . . . H COFFEE . . . . . I HONEY . . . . . J OTHER _____ X (SPECIFY)		
452	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)
453	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2		
454	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
455		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5. CHILD IMMUNIZATION, HEALTH AND NUTRITION

501	ENTER IN THE TABLE THE PREGNANCY HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2062 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
502	PREGNANCY HISTORY NUMBER FROM 214 IN BIRTH HISTORY	LAST BIRTH PREGNANCY HISTORY NUMBER . . . . . [ ][ ]	NEXT-TO-LAST BIRTH PREGNANCY HISTORY NUMBER . . . . . [ ][ ]	SECOND-FROM-LAST BIRTH PREGNANCY HISTORY NUMBER . . . . . [ ][ ]
503	FROM 218 AND 221	NAME _____ LIVING [ ] DEAD [ ] (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 539)	NAME _____ LIVING [ ] DEAD [ ] (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 539)	NAME _____ LIVING [ ] DEAD [ ] (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 539)
504	Do you have a card where (NAME)'s vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2

506 (1) COPY DATES FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	LAST BIRTH DAY	LAST BIRTH MONTH	LAST BIRTH YEAR	NEXT-TO-LAST BIRTH DAY	NEXT-TO-LAST BIRTH MONTH	NEXT-TO-LAST BIRTH YEAR	SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR
BCG				BCG			BCG		
POLIO 1				P1			P1		
POLIO 2				P2			P2		
POLIO 3				P3			P3		
DPT 1/HEP B1				D1/HB1			D1/HB1		
DPT 2/HEP B2				D2/HB2			D2/HB2		
DPT 3/HEP B3				D3/HB3			D3/HB3		
DPT1/HEP B1/Hib 1				D1/HB1 /Hib1			D1/HB1 /Hib1		
DPT 2/HEP B2/Hib2				D2/HB2 /Hib2			D2/HB2 /Hib2		
DPT 3/HEP B3/Hib3				D3/HB3 /Hib3			D3/HB3 /Hib3		
MEASLES				MEA			MEA		
JAPANESE ENCEPHALITIS				JE			JE		

507	CHECK 506:	ALL RECORDED [ ] (GO TO 511) OTHER [ ]	ALL RECORDED [ ] (GO TO 511) OTHER [ ]	ALL RECORDED [ ] (GO TO 511) OTHER [ ]

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
508	Has (NAME) had any vaccinations that are not recorded on this card, including vaccinations given in a national immunization day campaign? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 506 THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
509	Did (NAME) ever have any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
510	Please tell me if (NAME) had any of the following vaccinations:			
510A	A BCG vaccination against tuberculosis, that is, an injection in the right arm that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
510B	Polio vaccine, that is, drops in the mouth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510D) DON'T KNOW 8
510C	How many times was the polio vaccine given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
510D	A DPT/HEP B/Hib vaccination, that is, an injection given in the left thigh, usually at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510F) DON'T KNOW 8
510E	How many times was the DPT/HEP B/Hib vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
510F	A measles injection, that is, a shot in the right thigh at the age of 9 months or older - to prevent him/her from getting measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
510G	A Japanese encephalitis vaccination, that is, an injection given in the upper arm between the age of 12-23 months of age?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
511	Were any of the vaccinations (NAME) received during the last two years given as part of a national immunization day campaign?	YES . . . . . 1 NO . . . . . 2 NO VACCINATION IN THE LAST 2 YRS. 3 DON'T KNOW . . . 8 (SKIP TO 511B)	YES . . . . . 1 NO . . . . . 2 NO VACCINATION IN THE LAST 2 YRS. 3 DON'T KNOW . . . 8 (SKIP TO 511B)	YES . . . . . 1 NO . . . . . 2 NO VACCINATION IN THE LAST 2 YRS. 3 DON'T KNOW . . . . 8 (SKIP TO 511B)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
511A	At which national immunization day campaigns did (NAME) receive the polio vaccinations? RECORD ALL CAMPAIGNS MENTIONED.	CHAITRA 2066 . . . A JESTHA 2067 . . . B MAGH 2067 . . . . . C FALGUN 2067 . . . . . D	CHAITRA 2066 . . . A JESTHA 2067 . . . B MAGH 2067 . . . . . C FALGUN 2067 . . . . . D	CHAITRA 2066 . . . . A JESTHA 2067 . . . . B MAGH 2067 . . . . . C FALGUN 2067 . . . . . D
511B	Did (NAME) receive a vitamin A capsule during the event in Kartik/Baisakh? IF THE INTERVIEW IS BEFORE BAISAKH, ASK ABOUT KARTIK. IF THE INTERVIEW IS AFTER BAISAKH, ASK ABOUT BAISAKH. SHOW THE CAPSULE.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512	In the last seven days, was (NAME) given VITA MISHRAN, or iron syrup like (this/any of these)? SHOW VITA MISHRAN SACHET OR IRON SYRUP	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
513	Was (NAME) given any drug for intestinal worms in the last six months (including any deworming	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
514	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8
515	Was there any blood in the stools?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
517	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
518	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←
519	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF FCHV NOT MENTIONED PROBE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . C SUB-HTH POST . . . D PHC OUTREACH CLINIC . . . . . E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER NGO. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/NURSING HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER . O OTHER _____ X (SPECIFY)	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . C SUB-HTH POST . . . D PHC OUTREACH CLINIC . . . . . E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER NGO. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/NURSING HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER . O OTHER _____ X (SPECIFY)	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . . C SUB-HTH POST . . . . D PHC OUTREACH CLINIC . . . . . E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER NGO. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC/NURSING HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER . O OTHER _____ X (SPECIFY)
520	CHECK 519:	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ → (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ → (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ → (SKIP TO 522)
521	Where did you first seek advice or treatment? USE LETTER CODE FROM 519.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . . . ☐
522	Was he/she given any of the following to drink at any time since he/she started having the diarrhea: a) A fluid made from a special packet called Jeevan Jal/Navajeevan/Orestal? b) A government-recommended homemade fluid?	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
523	Was anything (else) given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8
524	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)
524A	CHECK 524: GIVEN ZINC?	CODE `C' CIRCLED CODE `C' NOT CIRCLED (SKIP TO 525)	CODE `C' CIRCLED CODE `C' NOT CIRCLED (SKIP TO 525)	CODE `C' CIRCLED CODE `C' NOT CIRCLED (SKIP TO 525)
524B	How many days was (NAME) given zinc?	DAYS . . . . . [ ][ ] DON'T KNOW 98	DAYS . . . . . [ ][ ] DON'T KNOW 98	DAYS . . . . . [ ][ ] DON'T KNOW 98
525	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
526	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 529) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 529) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 529) DON'T KNOW 8
527	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8
528	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 530)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 530)	CHEST ONLY . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 530)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
529	CHECK 525: HAD FEVER?	YES ☐ ↓ NO OR DK ☐ → (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539)	YES ☐ ↓ NO OR DK ☐ → (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539)	YES ☐ ↓ NO OR DK ☐ → (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 539)
530	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
531	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
532	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536) ←
533	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF FCHV NOT MENTIONED PROBE IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . B HEALTH POST . . . C SUB-HTH POST . D PHC OUTREACH E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER GOVT. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL CLINIC/NURSING/ HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER O OTHER _____ X (SPECIFY)	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . B HEALTH POST . . . C SUB-HTH POST . D PHC OUTREACH E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER GOVT. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL CLINIC/NURSING/ HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER O OTHER _____ X (SPECIFY)	GOVT. SECTOR GOVT HOSPITAL/ CLINIC . . . . . A PHC CENTER . . . B HEALTH POST . . . C SUB-HTH POST . D PHC OUTREACH E FCHV . . . . . F OTHER GOVT. _____ G (SPECIFY) NON-GOVT. (NGO) SECT. FPAN . . . . . H UMN . . . . . I OTHER GOVT. _____ J (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL CLINIC/NURSING/ HOME . . . . . K PHARMACY . . . . . L OTHER PRIVATE MED. _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N TRADITIONAL PRACTITIONER O OTHER _____ X (SPECIFY)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
534	CHECK 533:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536)
535	Where did you first seek advice or treatment? USE LETTER CODE FROM 533.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . . . ☐
536	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 539) DON'T KNOW 8
537	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS CHLOROQUINE A PRIMAQUINE . . . B QUININE . . . . . C OTHER _____ D (SPECIFY) ANTIBIOTIC DRUGS COTRIMOXAZOLE E AMOXYCILLIN . F CIPROFLOXACIN G PROCAINE PENICILLIN INJECTION . H OTHER DRUGS PARACETAMOL . I IBUPROFEN . . . J COUGH SYRUP K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS CHLOROQUINE A PRIMAQUINE . . . B QUININE . . . . . C OTHER _____ D (SPECIFY) ANTIBIOTIC DRUGS COTRIMOXAZOLE E AMOXYCILLIN . F CIPROFLOXACIN G PROCAINE PENICILLIN INJECTION . H OTHER DRUGS PARACETAMOL . I IBUPROFEN . . . J COUGH SYRUP K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS CHLOROQUINE A PRIMAQUINE . . . . B QUININE . . . . . C OTHER _____ D (SPECIFY) ANTIBIOTIC DRUGS COTRIMOXAZOLE . E AMOXYCILLIN . F CIPROFLOXACIN G PROCAINE PENICILLIN INJECTION . H OTHER DRUGS PARACETAMOL . I IBUPROFEN . . . . J COUGH SYRUP K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
538		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 539.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 539.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
539	CHECK 220 AND 223, ALL ROWS: NUMBER OF CHILDREN BORN IN 2062 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ → 542 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 540 _____ (NAME)		
540	The last time (NAME FROM 539) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	
541	CHECK 522(a) ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ → 543		
542	Have you ever heard of a special product called Jeevan Jal/Navajeevan/Orestal you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
543	CHECK 220 AND 223, ALL ROWS: NUMBER OF CHILDREN BORN IN 2065 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ → 601 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 544 _____ (NAME)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
544	Now I would like to ask you about liquids or foods that (NAME FROM 543) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods.		
	Did (NAME FROM 543) (drink/eat):	YES NO DK	
	a) Plain water?	**a)** 1 2 8	
	b) Juice or juice drinks?	**b)** 1 2 8	
	c) Soup?	**c)** 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk?	**d)** 1 2 8	
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK [ ]	
	e) Infant formula like Lactogen?	**e)** 1 2 8	
	IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK FORMULA [ ]	
	f) Any other liquids?	**f)** 1 2 8	
	g) Yogurt?	**g)** 1 2 8	
	IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT [ ]	
	h) Any fortified baby food like Cerelac, Nestum, Champion etc?	**h)** 1 2 8	
	i) Roti, rice, maize, millet, noodles, porridge, or other foods made from grains?	**i)** 1 2 8	
	j) Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	**j)** 1 2 8	
	k) White potatoes, white yams, colocasia, or any other foods made from roots?	**k)** 1 2 8	
	l) Any dark green, leafy vegetables like spinach, amaranth leaves, mustard leaves?	**l)** 1 2 8	
	m) Ripe mangoes, papayas or apricot?	**m)** 1 2 8	
	n) Any other fruits or vegetables?	**n)** 1 2 8	
	o) Liver, kidney, heart or other organ meats?	**o)** 1 2 8	
	p) Any meat, such as pork, buff, lamb, goat, chicken, or duck?	**p)** 1 2 8	
	q) Eggs?	**q)** 1 2 8	
	r) Fresh or dried fish or shellfish?	**r)** 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts?	**s)** 1 2 8	
	t) Cheese or other food made from milk?	**t)** 1 2 8	
	u) Any other solid, semi-solid, or soft food (jaulo, lito, sarbottam pitho etc.)?	**u)** 1 2 8	
545	CHECK 544 (CATEGORIES "g" THROUGH "u"):	ALL "NO" [ ] ↓ / AT LEAST ONE "YES" OR ALL DKs [ ] →	547
546	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 544 TO RECORD FOOD EATEN YESTERDAY) ← NO . . . . . 2 →	601
547	How many times did (NAME FROM 543) eat solid, semisolid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 609
604	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	→ 605
604A	For how long have you and your husband not been living together? IF LESS THAN 1 YEAR, RECORD MONTHS, OTHERWISE RECORD IN COMPLETED YEARS.	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ]	
605	RECORD THE HUSBAND'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . [ ][ ]	
606	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 609
607	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . [ ][ ] DON'T KNOW 98	
608	Are you the first, second, ... wife?	RANK . . . . . [ ][ ]	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
610	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 612

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	How old were you when you first started living with him?	AGE . . . . . [ ][ ]	
612	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
613	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . .00 AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 628
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
616	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
617	The last time you had sexual intercourse (with this second/third person), was a condom used? **(2)**	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
619	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)
620	CHECK 609:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)
622	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
623	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
624	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 627)	YES . . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 627)	
626	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
627	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
628	PRESENCE OF OTHERS DURING THIS SECTION	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	
629	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 701
630	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . . . C SUB-HEALTH POST . . . . . D PHC OUTREACH . . . . . E MOBILE CLINIC . . . . . F FCHV . . . . . G OTHER GOVT. _____ H (SPECIFY) NON-GOVT. (NGO) SECTOR FPAN . . . . . I MARIE STOPES . . . . . J ADRA . . . . . K NEPAL RED CROSS . . . . . L UMN . . . . . M OTHER NGO. _____ N (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . O PHARMACY . . . . . P SANGINI OUTLET . . . . . Q OTHER PRIVATE MEDICAL _____ R (SPECIFY) OTHER SOURCE SHOP . . . . . S FRIEND/RELATIVE . . . . . T OTHER _____ X (SPECIFY)	
631	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 712
702	CHECK 234: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐		→ 704
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	 → 707 → 712 → 710
705	CHECK 234: NOT PREGNANT OR UNSURE ☐ How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE/GAUNA . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	 → 710 → 712 → 710
706	CHECK 234: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 711
707	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 712
708	CHECK 705: NOT ASKED ☐ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ 00-23 MONTHS OR 00-01 YEAR ☐		→ 711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	CHECK 703 AND 704: WANTS TO HAVE A/ANOTHER CHILD ☐ ↓ You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐ ↓ You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C HUSBAND AWAY . . . . . D MENOPAUSAL/HYSTERECTOMY E CAN'T GET PREGNANT . . . . . F NOT MENSTRUATED SINCE LAST BIRTH . . . . . G BREASTFEEDING . . . . . H UP TO GOD/FATALISTIC . . . . . I OPPOSITION TO USE RESPONDENT OPPOSED . . . . . J HUSBAND/PARTNER OPPOSED . . . K OTHERS OPPOSED . . . . . L RELIGIOUS PROHIBITION . . . . . M LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . N KNOWS NO SOURCE . . . . . O METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COSTS TOO MUCH . . . . . R PREFERRED METHOD NOT AVAILABLE . . . . . S NO METHOD AVAILABLE . . . . . T INCONVENIENT TO USE . . . . . U INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . V OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
710	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ ↓ NO, NOT CURRENTLY USING ☐ ↓ YES, CURRENTLY USING ☐ →		712
711	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
712	CHECK 221: HAS LIVING CHILDREN ☐ ↓ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ If you could choose exactly the number of children to have in your whole life, how many would be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 714 → 714

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	
714	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Read about family planning in brochure or flipchart? Seen message on family planning in a poster, hoarding board or billboard? Seen street dramas on family planning?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 BROCHURE OR FLIPCHART . . . 1 2 POSTER, HOARDING/BILLBOARD 1 2 STREET DRAMA 1 2	
715	CHECK 601: YES, CURRENTLY MARRIED ☐ YES, LIVING WITH A MAN ☐ NO, NOT IN UNION ☐ → 801		
716	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ NOT CURRENTLY USING OR NOT ASKED ☐ → 719		
717	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
718	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐ → 801		
719	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ FORMERLY MARRIED/ LIVED WITH A MAN ☐ NEVER MARRIED AND NEVER LIVED WITH A MAN ☐		→ 803 → 806
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 805
804	What was the highest grade he completed? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐ DON'T KNOW 98	
805	CHECK 801: CURRENTLY MARRIED ☐ FORMERLY MARRIED ☐ What is your (husband's/ partner's) occupation? That is, what kind of work does he mainly do? What was your (last) (husband's/ partner's) occupation? That is, what kind of work did he mainly do?	_____ ☐☐ _____ _____	
806	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 810
807	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 810
808	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 810
809	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 813A
810	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
811	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
812	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	814
813A	Why are you not involved in any work aside from your own house work?	NO NEED TO WORK . . . . . 1 WORKLOAD AT HOME . . . . . 2 SMALL CHILDREN TO LOOK AFTER . 3 FAMILY DOES NOT ALLOW . . . . . 4 LOOKING FOR WORK . . . . . 5 LACK EDUCATION/TRAINING . . . . . 7 NO OPPORTUNITY . . . . . 8 OTHER _____ 6 (SPECIFY)	
814	CHECK 601: CURRENTLY MARRIED ☐ NOT IN UNION ☐		822
815	CHECK 813: CODE 1 OR 2 CIRCLED ☐ OTHER ☐		818
816	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
817	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 DON'T KNOW 8	819
818	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
819	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
820	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
821	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 SOMEONE ELSE HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
822	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
823	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
823A	Do you belong to any group? Please specify.	AMA SAMUHA . . . . . A BACHAT SAMUHA . . . . . B MAHILA SAMUHA . . . . . C OTHER _____ X (SPECIFY) DOES NOT BELONG TO ANY GROUP Z	
824	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
824A	In your opinion, should a husband hit or beat his wife for any reason at all?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 901
825	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 921
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people get the AIDS virus by touching someone who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
909	CHECK 908: AT LEAST ONE 'YES' ☐ OTHER ☐		→ 911
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
911	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 915
912	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
913	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . 11 VCT CENTER . . . . . 12 OTHER GOVT. _____ 16 (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . 21 AMDA . . . . . 22 INF . . . . . 23 NEPAL RED CROSS . . . . . 24 OTHER GOVT. _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . 31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	→ 917
915	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 917
916	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . A VCT CENTER . . . . . B OTHER GOVT. _____ C (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . D AMDA . . . . . E INF . . . . . F NEPAL RED CROSS . . . . . G OTHER GOVT. _____ H (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . I OTHER PRIVATE MEDICAL _____ J (SPECIFY) OTHER _____ X (SPECIFY)	
917	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
918	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
919	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
920	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
921	CHECK 901: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
922	CHECK 613: HAS HAD SEXUAL INTERCOURSE NEVER HAD SEXUAL INTERCOURSE		→ 930
923	CHECK 921: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO		→ 925
924	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
925	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
926	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
927	CHECK 924, 925, AND 926: HAS HAD AN INFECTION (ANY 'YES') HAS NOT HAD AN INFECTION OR DOES NOT KNOW		→ 930
928	The last time you had (PROBLEM FROM 924/925/926), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 930

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
929	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . A PRIMARY HEALTH CARE . . . . . B HEALTH POST . . . . . C SUB-HEALTH POST . . . . . D PHC OUTREACH . E FAMILY PLANNING CLINIC . . . F MOBILE CLINIC . . . . . G FIELDWORKER . . . . . H OTHER GOVT. _____ I (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . J AMDA . . . . . K ADRA . . . . . L INF . . . . . M NEPAL RED CROSS . . . . . N UMN . . . . . O OTHER NON-GOVT. _____ P (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . Q OTHER PRIVATE MEDICAL _____ R (SPECIFY) OTHER SOURCE OTHER _____ X (SPECIFY)	
930	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
931	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
932	CHECK 601: CURRENTLY MARRIED ☐ NOT IN UNION ☐ → 1001		
933	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
934	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 1003A
1002	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 1003A
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1003A	CHECK 210: ONE OR MORE PREGNANCIES [ ] ↓	NONE [ ] →	1004
1003B	Have you ever experienced signs of uterine prolapse (Patheghar Khasne/ Ang Khasne)?	YES . . . . . 1 NO 2	→ 1004
1003C	Did you seek treatment for this condition?	YES, MEDICAL TREATMENT . . . . . 1 YES, TRADITIONAL METHODS . . . . . 2 NO 3	
1004	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1006	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 1008
1007	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A BIDI . . . . . B CHEWING TOBACCO . . . . . C SNUFF . . . . . D OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
1008	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?		BIG PROB-LEM	NOT A BIG PROB-LEM	
	Getting permission to go to the doctor?	PERMISSION TO GO . . .	1	2	
	Getting money needed for advice or treatment?	GETTING MONEY	1	2	
	The distance to the health facility?	DISTANCE	1	2	
	Not wanting to go alone?	GO ALONE	1	2	
1008A	In the last few months have you heard or seen the following programs on the radio and/or television:		YES	NO	
	Jana Swastha Radio Karyakram?	JANA SWASTHA	1	2	
	Janasankhya Chetana ka Sworeharu Radio Karyakram?	JANASANKHYA	1	2	
	Hamro Swastha Radio Karyakram?	HAMRO SWASTHA . . .	1	2	
	Ama radio Karyakram?	AMA RADIO	1	2	
	Hamro Swastha TV Karyakram?	HAMRO SWASTH	1	2	
	Jeevan Chakra TV Karyakram?	JEEVAN CHAKRA T	1	2	
	Thorai bhaye pugi sari TV Karyakram?	THORAI BHAYA	1	2	
	Ama TV Karyakram?	AMA TV	1	2	
	Sathi Sanga Manka Kura Radio Karyakram?	SATHI SANGA MANKA .	1	2	
	Jeevan Jyoti Radio Karyakram?	JEEVAN JYOTI	1	2	
1008B	Which source of media do you prefer the most to receive health-related messages?	NEPAL RADIO		01	
		FM		02	
		TELEVISION		03	
		NEWSPAPER OR MAGAZINE		04	
		BROCHURE OR LEAFLET		05	
		FLIPCHART		06	
		POSTER		07	
		HOARDING/BILLBOARD		08	
		OTHER _____ (SPECIFY)		96	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1009	CHECK 327 VISITED HEALTH FACILITY IN 12 MONTHS ☐ ↓ NOT VISITED ☐ →		1009F
1009A	Which health faciltiies did you visit last during the past 12 months for care for yourself or your children? PROBE TO IDENTIFY TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC ..... 11 PHC CENTER ..... 12 HEALTH POST ..... 13 SUB-HEALTH POST ..... 14 PHC OUTREACH ..... 15 MOBILE CLINIC ..... 17 OTHER GOVT. _____ 16 (SPECIFY) NON-GOVT. (NGO) SECTOR FPAN ..... 21 MARIE STOPES ..... 22 ADRA ..... 23 NEPAL RED CROSS ..... 24 UMN ..... 25 OTHER NGO. _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME ..... 31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER _____ 96 SPECIFY	
1009B	CHECK1009A CODES 11-17 CIRCLED ☐ ↓ OTHER CODES/ NOT CIRCLED ☐ →		1009F
1009C	Did you pay the registration fee during your last visit to the health facility?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
1009D	Were you prescribed any medicines/drug by the health care provider the last time you visited the health facility?	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 1009F
1009E	Did you get any medicine/drug free of cost from the health facility?	YES, FULLY ..... 1 YES, PARTIALLY ..... 2 NOT AT ALL 3	
1009F	Does a woman get free health services from a government health facility for the following services: Post abortion service? Delivery service?	YES NO DK POST ABORTION ..... 1 2 8 DELIVERY 1 2 8	
1009G	Does a woman get a cash incentive if she delivers her baby at a government health facility?	YES ..... 1 NO ..... 2 DON'T KNOW 8	

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	CHECK HOUSEHOLD QUESTIONNAIRE, COL. 9A AND COVER PAGE OF WOMAN QUESTIONNAIRE. WOMAN SELECTED FOR THIS SECTION ↓	WOMAN NOT SELECTED →	1134
1102	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL EFFECTIVE PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓	PRIVACY NOT POSSIBLE . . . . . 2 →	1133
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women in Nepal. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else will know that you were asked these questions.		
1103	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ↓	FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE) ↓	NEVER MARRIED/ NEVER LIVED WITH A MAN → 1115

1104	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) husband/partner?		YES	NO	DK
	a) He (is/was) jealous or angry if you (talk/talked) to other men?	JEALOUS	1	2	8
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES	1	2	8
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . .	1	2	8
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY	1	2	8
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE . . .	1	2	8
	f) He (does/did) not trust you with any money?	MONEY	1	2	8

1105	Now if you will permit me, I need to ask some more questions about your relationship with your (last) husband/partner.				
	A (Does/did) your (last) husband/partner ever:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?			
			OFTEN	SOME-TIMES	NOT AT ALL
	a) say or do something to humiliate you in front of others?	YES 1 → / NO 2 ↓	1	2	3
	b) threaten to hurt or harm you or someone close to you?	YES 1 → / NO 2 ↓	1	2	3
	c) insult you or make you feel bad about yourself?	YES 1 → / NO 2 ↓	1	2	3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1106	A (Does/did) your (last) husband/partner ever do any of the following things to you:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

				OFTEN	SOME-TIMES	NOT AT ALL
a)	push you, shake you, or throw something at you?	YES 1 →		1	2	3
		NO 2 ↓				
b)	slap you?	YES 1 →		1	2	3
		NO 2 ↓				
c)	twist your arm or pull your hair?	YES 1 →		1	2	3
		NO 2 ↓				
d)	punch you with his fist or with something that could hurt you?	YES 1 →		1	2	3
		NO 2 ↓				
e)	kick you, drag you or beat you up?	YES 1 →		1	2	3
		NO 2 ↓				
f)	try to choke you or burn you on purpose?	YES 1 →		1	2	3
		NO 2 ↓				
g)	threaten or attack you with a knife, gun, or any other weapon?	YES 1 →		1	2	3
		NO 2 ↓				
h)	physically force you to have sexual intercourse with him even when you did not want to?	YES 1 →		1	2	3
		NO 2 ↓				
i)	force you to perform any sexual acts you did not want to?	YES 1 →		1	2	3
		NO 2 ↓				

1107	CHECK 1106A (a-i): AT LEAST ONE 'YES' ☐ ↓	NOT A SINGLE 'YES' ☐ →	1110
1108	How long after you first (got married to/started living with) your (last) husband/partner did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1109	Did the following ever happen as a result of what your (last) husband/partner did to you:		
	a) You had cuts, bruises or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	
1110	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) husband/partner at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1112
1111	In the last 12 months, how often have you done this to your husband/partner: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1112	(Does/Did) your husband/partner drink alcohol?	YES . . . . . 1 NO 2	→ 1114
1113	How often (does/did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1114	Are (were) you afraid of your (last) husband/partner: most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1115	CHECK 601 AND 602: EVER MARRIED/LIVED WITH A MAN From the time you were 15 years old has anyone other than your (current/last) husband/partner hit, slapped, kicked, or done anything else to hurt you physically? NEVER MARRIED/ NEVER LIVED WITH A MAN From the time you were 15 years old has anyone ever hit, slapped, kicked, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1118
1116	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E FORMER HUSBAND/ LIVE-IN PARTNER . . . . . F CURRENT BOYFRIEND . . . . . G FORMER BOYFRIEND . . . . . H MOTHER-IN-LAW . . . . . I FATHER-IN-LAW . . . . . J OTHER IN-LAW . . . . . K TEACHER . . . . . L EMPLOYER/SOMEONE AT WORK . . . M POLICE/SOLDIER . . . . . N OTHER _____ X (SPECIFY)	
1117	In the last 12 months, how often have you been hit, slapped, kicked, or physically hurt by this/these person(s): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1118	CHECK 201, 208, AND 234: EVER BEEN PREGNANT (YES ON 201 OR 208 OR 234) ↓ NEVER BEEN PREGNANT → 1121		
1119	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1121
1120	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/ LIVE-IN PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/ LIVE-IN PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	
1120A	Have you ever had a miscarriage or stillbirth as a result of these things?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1121	CHECK 1106A (h) and (i) 1106A(h)= YES OR 1106A (i)= YES Now I want to ask you about things that may have happened to you that were not done by your (current/last) husband/partner. At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts against your will? 1106A (h)= NO AND 1106A (i) = NO OR 1106A NOT ASKED At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts against your will?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1124
1122	How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . . [ ][ ] DON'T KNOW 98	
1123	Who was the person who was forcing you at that time?	CURRENT HUSBAND/ LIVE-IN PARTNER . . . . . 01 FORMER HUSBAND/ LIVE-IN PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . . 03 FATHER . . . . . 04 STEP-FATHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	
1124	CHECK 1106B (h) and (i) 1106B (h)= 1 OR 2 OR 1106B (i) = 1 OR 2 In the last 12 months, has anyone other than your (current/last) husband/ partner forced you to have sexual intercourse against your will? 1106B (h) = 3 AND 1106B (i) = 3 OR 1106B AND NOT ASKED In the last 12 months has anyone forced you to have sexual intercourse against your will?	YES . . . . . 1 NO 2	
1125	CHECK 1106A (a-i), 1115, 1119, 1121, AND 1124: AT LEAST ONE 'YES' [ ] ↓ NOT A SINGLE 'YES' [ ]		→ 1129
1126	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help to stop (the/these) person(s) from doing this to you again?	YES . . . . . 1 NO 2	→ 1128
1127	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND/LIVE-IN PARTNER'S FAMILY . . . . . B CURRENT/LAST/LATE HUSBAND/LIVE-IN PARTNER . . C CURRENT/FORMER BOYFRIEND . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . K OTHER _____ X (SPECIFY)	→ 1129

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1128	Have you ever told any one else about this?	YES . . . . . 1 NO 2	
1129	CHECK 613: EVER HAD SEX? HAS EVER HAD SEX ↓ ; NEVER HAD SEX →		1131
1130	The first time you had sexual intercourse, would you say that you had it because you wanted to, or because you were forced to have it against your will?	WANTED TO . . . . . 1 FORCED TO . . . . . 2 REFUSED TO ANSWER/ NO RESPONSE 3	
1131	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

		YES ONCE	YES, MORE THAN ONCE	NO
1132	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?			
	HUSBAND	1	2	3
	OTHER MALE ADULT	1	2	3
	FEMALE ADULT	1	2	3

1133 INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE

_____

_____

_____

1134	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE**

- B BIRTHS
- P PREGNANCIES
- C MISCARRIAGE
- A ABORTION
- S STILLBIRTH

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- H HUSBAND AWAY
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

				1	2	
	12	CHAITRA	01			
	11	FALGUN	02			
	10	MAGH	03			
	09	POUSH	04			
2	08	MANGSIR	05			2
0	07	KARTIK	06			0
6	06	ASWIN	07			6
8	05	BHADRA	08			8
	04	SRAWAN	09			
	03	ASHAD	10			
	02	JESTHA	11			
	01	BAISAKH	12			
	12	CHAITRA	13			
	11	FALGUN	14			
	10	MAGH	15			
	09	POUSH	16			
2	08	MANGSIR	17			2
0	07	KARTIK	18			0
6	06	ASWIN	19			6
7	05	BHADRA	20			7
	04	SRAWAN	21			
	03	ASHAD	22			
	02	JESTHA	23			
	01	BAISAKH	24			
	12	CHAITRA	25			
	11	FALGUN	26			
	10	MAGH	27			
	09	POUSH	28			
2	08	MANGSIR	29			2
0	07	KARTIK	30			0
6	06	ASWIN	31			6
6	05	BHADRA	32			6
	04	SRAWAN	33			
	03	ASHAD	34			
	02	JESTHA	35			
	01	BAISAKH	36			
	12	CHAITRA	37			
	11	FALGUN	38			
	10	MAGH	39			
	09	POUSH	40			
2	08	MANGSIR	41			2
0	07	KARTIK	42			0
6	06	ASWIN	43			6
5	05	BHADRA	44			5
	04	SRAWAN	45			
	03	ASHAD	46			
	02	JESTHA	47			
	01	BAISAKH	48			
	12	CHAITRA	49			
	11	FALGUN	50			
	10	MAGH	51			
	09	POUSH	52			
2	08	MANGSIR	53			2
0	07	KARTIK	54			0
6	06	ASWIN	55			6
4	05	BHADRA	56			4
	04	SRAWAN	57			
	03	ASHAD	58			
	02	JESTHA	59			
	01	BAISAKH	60			
	12	CHAITRA	61			
	11	FALGUN	62			
	10	MAGH	63			
	09	POUSH	64			
2	08	MANGSIR	65			2
0	07	KARTIK	66			0
6	06	ASWIN	67			6
3	05	BHADRA	68			3
	04	SRAWAN	69			
	03	ASHAD	70			
	02	JESTHA	71			
	01	BAISAKH	72			
	12	CHAITRA	73			
	11	FALGUN	74			
	10	MAGH	75			
	09	POUSH	76			
2	08	MANGSIR	77			2
0	07	KARTIK	78			0
6	06	ASWIN	79			6
2	05	BHADRA	80			2
	04	SRAWAN	81			
	03	ASHAD	82			
	02	JESTHA	83			
	01	BAISAKH	84			

4 November 2010

NEPAL DEMOGRAPHIC AND HEALTH SURVEY 2011
MAN'S QUESTIONNAIRE

IDENTIFICATION

NAME AND CODE OF DISTRICT _____

NAME AND CODE OF VILLAGE/MUNICIPALITY _____

WARD NUMBER . . . . . .

CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

NAME AND LINE NUMBER OF MAN _____

NAME OF HOUSEHOLD HEAD _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY MONTH YEAR 2 0 6
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

LANGUAGE OF QUESTIONNAIRE ENGLISH 5

LANGUAGE OF INTERVIEW _____

NATIVE LANGUAGE OF RESPONDENT _____

TRANSLATOR USED (YES=1; NO=2) . . . . . .

LANGUAGE CODES: NEPALI=1; BHOJPURI=2; MAITHILI=3; OTHER=6

SUPERVISOR	OFFICE EDITOR	KEYED BY
NAME _____		
DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with MINISTRY OF HEALTH AND POPULATION. We are conducting a survey about health all over Nepal. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. No part of this interview is being recorded in tape or video. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWE . . . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
102	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 107
105	What is the highest grade you completed? IF COMPLETED LESS THAN ONE GRADE, RECORD '00'.	GRADE . . . . . [ ][ ]	
106	CHECK 105: GRADE 5 OR LOWER ↓ [ ] GRADE 6 OR HIGHER [ ] →		110

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
108	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)?	YES . . . . . 1 NO 2	
109	CHECK 107: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ →		111
110	Do you read a newspaper or magazine, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	What is your religion?	HINDU 1 BUDDHIST . . . . . 2 MUSLIM . . . . . 3 KIRAT . . . . . 4 CHRISTIAN . . . . . 5 OTHER _____ 6 (SPECIFY)	
114	What is your caste/ethnicity? WRITE CASTE/ETHNICITY ON LINE PROVIDED.	☐☐ _____ (CASTE/ETHNICITY)	
115	In the last 12 months, how many times have you been away from your home community for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE 00	→ 201
116	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD [ ] → 212 HAS NOT HAD ANY CHILDREN [ ] → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 212
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
212	How old were you when your (first) child was born?	AGE IN YEARS . . . . . [ ][ ]	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ↓ NO LIVING CHILDREN [ ] → 301		
214	How old is your (youngest) child?	AGE IN YEARS . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ OTHER ☐		→ 301
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
220	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Rhythm Method**. PROBE: Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2	
09	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
10	**Emergency Contraception**. PROBE: As an emergency measure, within three/five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
11	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Read about family planning in brochure or flipchart? Seen message on family planning in a poster, hoarding board or billboard? Seen street dramas on family planning?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE 1 2 BROCHURE OR FLIPCHART . . . 1 2 POSTER, HOARDING/BILLBOARD 1 2 STREET DRAMA 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE / DISAGREE / DK CONTRACEPTION WOMAN'S BUSINESS 1 2 8 WOMEN MAY BECOME PROMISCUOUS 1 2 8	
307	CHECK 301 (07): KNOWS MALE CONDOM YES ☐ NO ☐		→ 401
308	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 401
309	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC . . . . . A PHC CENTER . . . . . B HEALTH POST . . . . . C SUB-HEALTH PO . . . . . D PHC OUTREACH . . . . . E MOBILE CLINIC . . . . . F FCHV . . . . . G OTHER PUBLIC _____ H (SPECIFY) NON-GOVT. (NGO) SECTOR FPAN . . . . . I MARIE STOPES . . . . . J ADRA . . . . . K NEPAL RED CROSS . . . . . L UMN . . . . . M OTHER NGO. _____ N (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC NURSING HOME . . . . . O PHARMACY . . . . . P SANGINI OUTLET . . . . . Q OTHER PRIVATE MEDICAL _____ R (SPECIFY) OTHER SOURCE SHOP . . . . . S FRIENDS/RELATIVES . . . . . T OTHER _____ X (SPECIFY)	
310	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE) . . . . . 1 NO (ONLY ONE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . [ ][ ]	
407	CHECK 405: ONE WIFE/ PARTNER → Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER → Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER / 408 How old was (NAME) on her last birthday? AGE _____ [ ][ ] [ ][ ] _____ [ ][ ] [ ][ ] _____ [ ][ ] [ ][ ] _____ [ ][ ] [ ][ ]	
408	ASK 408 FOR EACH PERSON.		
409	CHECK 407: ONE WIFE/ PARTNER → MORE THAN ONE WIFE/ PARTNER →	[ ]	→ 411A
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 411A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
411	In what month and year did you start living with your (wife/partner)?	MONTH . . . . . [ ][ ]	
411A	Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . [ ][ ]	
413	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues.	NEVER HAD SEXUAL INTERCOURSE 00	→ 501
	How old were you when you had sexual intercourse for the very first time?	AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNE 95	
415	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
416	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 430

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
417	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
418	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)
419	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
420	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . . 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)
421	CHECK 410:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 423)
422	CHECK 414:	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER
423	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
424	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
425	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
426	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	
427	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . [ ][ ] DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
428	CHECK 420 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE ☐ NO PARTNERS ARE PROSTITUTES ☐		→ 430
429	CHECK 420 AND 418 (ALL COLUMNS): CONDOM USED LAST TIME WITH EVERY PROSTITUTE ☐ NO CONDOM USED/CONDOM NOT USED LAST TIME WITH EVERY PROSTITUTE ☐		→ 433 → 434
430	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 432
431	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 434
432	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 434
433	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
434	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
435	CHECK 418, MOST RECENT PARTNER (FIRST COLUMN): NOT ASKED ☐ CONDOM USED ☐ NO CONDOM USED ☐		→ 438 → 438
436	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	DHAAL . . . . . 01 PANTHER . . . . . 02 BLACK COBRA . . . . . 03 KAMASUTRA . . . . . 04 JODI . . . . . 05 NUMBER 1 . . . . . 06 MOHP-NO BRAND . . . . . 07 LILY . . . . . 08 VEGA . . . . . 09 SKINLESS SKIN . . . . . 10 SAFETY . . . . . 11 GOLD . . . . . 12 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
437	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . 11 PHC CENTER . . . . . 12 HEALTH POST . . . . . 13 SUB-HEALTH POST . . . . . 14 PHC OUTREACH . . . . . 15 MOBILE CLINIC . . . . . 17 FCHV . . . . . 18 CONDOM BOX . . . . . 19 OTHER GOVT. _____ 16 (SPECIFY) NON-GOVT. (NGO) SECTOR FPAN . . . . . 21 MARIE STOPES . . . . . 22 ADRA . . . . . 23 NEPAL RED CROSS . . . . . 24 UMN . . . . . 25 OTHER NGO. _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC NURSING HOME . . . . . 31 PHARMACY . . . . . 32 SANGINI OUTLET . . . . . 33 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY) OTHER SOURCE SHOP . . . . . 41 FRIENDS/RELATIVES . . . . . 42 OTHER _____ 96 (SPECIFY)	
438	The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 501
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F FEMALE CONDOM . . . . . G DIAPHRAGM . . . . . H FOAM/JELLY . . . . . I RHYTHM METHOD . . . . . J WITHDRAWAL . . . . . K OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		509
502	CHECK 439: MAN NOT STERILIZED ☐ ↓ MAN STERILIZED ☐ →		509
503	(Is your (wife/partner)/Are any of your (wives/partners)) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	505
504	Now I have some questions about the future. After the (child/children) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	506 509
505	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE (WIVES)/PARTNER(S) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	509
506	CHECK 407: ONE WIFE/ PARTNER ☐ ↓ MORE THAN ONE WIFE/ PARTNER ☐ →		508
507	CHECK 503: WIFE/PARTNER NOT PREGNANT OR DON'T KNOW ☐ ↓ How long would you like to wait from now before the birth of (a/another) child? WIFE/PARTNER PREGNANT ☐ ↓ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 COUPLE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	509
508	How long would you like to wait from now before the birth of (a/another) child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 HE/ALL HIS WIVES/PARTNERS ARE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ ↓ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 601 → 601
510	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ → 612		
608	CHECK 606: CODE 1 OR 2 CIRCLED ☐ ↓ OTHER ☐ → 610		
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 OTHER _____ 6 SPECIFY	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
613	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
613A	In your opinion, should a husband hit or beat his wife for any reason at all?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 701
614	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES NO DK	
	If she goes out without telling him?	GOES OUT 1 2 8	
	If she neglects the children?	NEGL. CHILDREN . . . 1 2 8	
	If she argues with him?	ARGUES 1 2 8	
	If she refuses to have sex with him?	REFUSES SEX 1 2 8	
	If she burns the food?	BURNS FOOD 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 722
702	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get the AIDS virus by touching someone who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐		→ 711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . A VCT CENTER . . . . . B OTHER GOVT. _____ C (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . D AMDA . . . . . E INF . . . . . F NEPAL RED CROSS . . . . . G OTHER GOVT. _____ H (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . I OTHER PRIVATE MEDICAL _____ J (SPECIFY) OTHER _____ X (SPECIFY)	→ 718
716	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . A VCT CENTER . . . . . B OTHER GOVT. _____ C (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . D AMDA . . . . . E INF . . . . . F NEPAL RED CROSS . . . . . G OTHER GOVT. _____ H (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . I OTHER PRIVATE MEDICAL _____ J (SPECIFY) OTHER _____ X (SPECIFY)	
718	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
719	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
720	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
721	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
722	CHECK 701: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
723	CHECK 414: HAS HAD SEXUAL INTERCOURSE → HAS NOT HAD SEXUAL INTERCOURSE →		731
724	CHECK 722: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES → NO →		726
725	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
726	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
727	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
728	CHECK 725, 726, AND 727: HAS HAD AN INFECTION (ANY 'YES') → HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		731
729	The last time you had (PROBLEM FROM 725/726/727), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 731

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
730	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	GOVT. SECTOR GOVERNMENT HOSPITAL . . . . . A PRIMARY HEALTH CARE . . . . . B HEALTH POST . . . . . C SUB-HEALTH POST . . . . . D PHC OUTREACH . E FAMILY PLANNING CLINIC . . . F MOBILE CLINIC . . . . . G FIELDWORKER . . . . . H OTHER GOVT. _____ I (SPECIFY) NON-GOVT. SECTOR FPAN . . . . . J AMDA . . . . . K ADRA . . . . . L INF . . . . . M NEPAL RED CROSS . . . . . N UMN . . . . . O OTHER NON-GOVT. _____ P (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ NURSING HOME . . . . . Q OTHER PRIVATE MEDICAL _____ R (SPECIFY) OTHER SOURCE OTHER _____ X (SPECIFY)	
731	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
732	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 804
802	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 804
803	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
804	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 806
805	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
806	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 807A
807	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A BIDI . . . . . B CHEWING TOBACCO . . . . . C SNUFF . . . . . D OTHER _____ X (SPECIFY)	
807A	In the last few months have you heard or seen the following programs on the radio and/or television:	YES NO	
	Jana Swastha Radio Karyakram?	JANA SWASTHA 1 2	
	Janasankhya Radio Karyakram?	JANASANKHYA 1 2	
	Hamro Swastha Radio Karyakram?	HAMRO SWASTHA . . . 1 2	
	Ama radio Karyakram?	AMA RADIO 1 2	
	Hamro Swastha TV Karyakram?	HAMRO SWASTHA . . . 1 2	
	Jeevan Chakra TV Karyakram?	JEEVAN CHAKRA 1 2	
	Thorai Bhaya Pugisari Radio Karyakram?	THORAI BHAYA 1 2	
	Ama TV Karyakram?	AMA TV 1 2	
	Sathi Sanga Manka Kura?	SATHI SANGA MANKA . 1 2	
	Jeevan Jyoti Radio Karyakram?	JEEVAN JYOTI 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
807B	Which source of media do you prefer the most to receive health-related messages?	NEPAL RADIO . . . . . 01 FM . . . . . 02 TELEVISION . . . . . 03 NEWSPAPER OR MAGAZINE . . . . . 04 BROCHURE OR LEAFLET . . . . . 05 FLIPCHART . . . . . 06 POSTER . . . . . 07 HOARDING/BILLBOARD . . . . . 08 OTHER _____ 96 (SPECIFY)	
808	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____