



Government of Samoa

Samoa

Demographic and Health Survey

2014





# Samoa

## Demographic and Health Survey

### 2014

Samoa Bureau of Statistics  
Apia, Samoa

Ministry of Health  
Apia, Samoa

June 2015



**Samoa Demographic and Health Survey 2014**

by

**Census-Surveys and Demography Division.**

National University of Samoa Library CIP entry.

Samoa demographic and health survey 2014 / Census-Surveys and Demography Division. - Apia, Samoa : Samoa Bureau of Statistics, Government of Samoa, 2014.

419 p., ; 29 cm.

ISBN 978 982 98096 4 3.

1. Demographic surveys of Samoa or statistics. 2. Health surveys of Samoa or statistics. 3. Samoa or population or statistics. I. Census-Surveys and Demography Division.

Sam 304.6099614 Sam DDC22

Published by Samoa Bureau of Statistics, Government of Samoa, Apia, Samoa, 2015.

**CONTACTS**

Telephone: (685) 62000/21373

Facsimile: (685) 24675

Email: [info.stats@sbs.gov.ws](mailto:info.stats@sbs.gov.ws)

Website: [www.sbs.gov.ws](http://www.sbs.gov.ws)

Postal Address: Samoa Bureau of Statistics

PO BOX 1151

Apia

Samoa

**Disclaimer:**

This publication is a product of the Division of Census-Surveys & Demography, Samoa Bureau of Statistics. The findings, interpretations, and conclusions expressed in this volume do not necessarily reflect the views of any funding or technical agencies involved in the 2014SDHS. The boundaries and other information shown on the maps are only imaginary census boundaries but do not imply any legal status of traditional village and district boundaries.

# CONTENTS

---

	Page
TABLES AND FIGURES	x
PREFACE	xvi
ACKNOWLEDGEMENT	xvii
MAP OF SAMOA	xx

## CHAPTER 1 INTRODUCTION

1.1	Geography, History, and Economy	1
1.1.1	Geography	1
1.1.2	History and Governance	1
1.1.3	Economy	2
1.2	Demographic Profile	3
1.3	Health Care System	3
1.3.1	Health Care Reforms	3
1.3.2	Primary, Secondary, and Tertiary Health Care	4
1.3.3	Maternal and Child Health Care	4
1.3.4	Family Planning Services	5
1.3.5	HIV/AIDS Program	5
1.4	Systems for Collecting Demographic and Health Data	5
1.5	Objectives and Organization of the Survey	6
1.6	Sample Design	6
1.7	Questionnaires	7
1.8	Pretest, Training, and Fieldwork	8
1.8.1	Pretest	8
1.8.2	Training and Fieldwork	9
1.9	Response Rates	9

## CHAPTER 2 HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

2.1	Household Population by Age and Sex	11
2.2	Household Composition	13
2.2.1	Children's Living Arrangements and Orphan hood	13
2.2.2	School Attendance by Survivorship of Parents..	14
2.3	Educational Attainment of Household Members	15
2.3.1	School Attendance Ratios	18
2.3.2	Grade Repetition and Dropout Rates	20
2.3.3	Age-Specific School Attendance Rates	22
2.4	Housing Characteristics	22
2.4.1	Household Drinking Water	22
2.4.2	Household Sanitation Facilities	25
2.4.3	Household Characteristics	26

2.5	Household Possessions .....	28
2.6	Wealth Quintiles .....	30
2.7	Birth Registration .....	31
2.8	Burden of Diseases .....	32
2.8.1	Household Level: Burden of diseases .....	33
2.8.2	Household Members: Burden of diseases .....	34

### CHAPTER 3 CHARACTERISTICS OF SURVEY RESPONDENTS

3.1	Background Characteristics of Respondents .....	36
3.2	Educational Attainment .....	38
3.3	Literacy .....	40
3.4	Access to Mass Media .....	41
3.5	Employment .....	43
3.6	Occupation .....	47
3.7	Type of Employer, FORM of Earnings, and Continuity of Employment .....	49
3.8	Health Insurance Coverage .....	51
3.9	Knowledge and Attitude Concerning Tuberculosis .....	53
3.9.1	Misconceptions about the Way Tuberculosis Spreads .....	56
3.9.2	Exposure to Messages on TB .....	57
3.10	Smoking .....	61
3.11	Participation in the Physical activity Campaign .....	64
3.12	Alcohol Consumption.....	67

### CHAPTER 4 FERTILITY

4.1	Fertility Levels and Trends .....	72
4.1.1	Fertility Levels.....	72
4.1.2	Differentials in Current and Completed Fertility .....	73
4.1.3	Fertility by Marital Status .....	74
4.1.4	Trends in Fertility .....	75
4.2	Children Ever Born and Living .....	77
4.2.1	Children Ever Born by Marital Status .....	78
4.3	Birth Intervals .....	80
4.4	Age at First Birth .....	81
4.5	Teenage Fertility .....	83

### CHAPTER 5 FAMILY PLANNING

5.1	Knowledge of Contraceptive Methodsí í í í .í í í í í í í í í í í í í í .í í í í í í í í í í .85	85
5.2	Ever Use of Contraception .....	88
5.3	Current Use of Contraceptive Methods .....	91
5.4	Differentials in Contraceptive Use by Background Characteristics .....	92
5.5	Trends in the Use of Family Planning .....	94
5.6	Number of Children at First Use of Contraception .....	94
5.7	Knowledge of Fertile Period .....	95
5.8	Timing of Sterilization .....	96
5.9	Source of Contraception .....	97
5.10	Cost of Contraception .....	98
5.11	Informed Choice .....	99
5.12	Future Use of Contraception .....	100
5.13	Reasons for Not Intending to Use Contraception .....	101
5.14	Preferred Method of Contraception for Future Use .....	102
5.15	Exposure to Family Planning Messages .....	103

5.16	Contact of Non-users with Family Planning Providers .....	105
5.17	Husband/Partner's Knowledge about Woman's Use of Family Planning .....	106
5.18	Male Attitudes towards Family Planning .....	108

## **CHAPTER 6 OTHER PROXIMATE DETERMINANTS OF FERTILITY**

6.1	Current Marital Status .....	110
6.2	Age at First Marriage .....	111
6.3	Age at first sexual intercourse .....	115
6.4	Recent sexual activity .....	118
6.5	Amenorrhoea, Abstinence, and Insusceptibility .....	121
6.6	Menopause .....	124

## **CHAPTER 7 FERTILITY PREFERENCES**

7.1	Desire for More Children .....	125
7.2	Need and Demand for Family Planning .....	130
7.3	Ideal Family Size .....	134
7.4	Fertility Planning .....	137

## **CHAPTER 8 INFANT AND CHILD MORTALITY**

8.1	Definition, Data Quality, and Methodology .....	140
8.2	Levels and Trends in Infant and Child Mortality .....	141
8.3	Socio-economic Differentials in Mortality .....	142
8.4	Demographic Characteristics and Child Mortality .....	143
8.5	Perinatal Mortality .....	145
8.6	High-Risk Fertility Behaviour .....	146

## **CHAPTER 9 MATERNAL HEALTH**

9.1	Antenatal Care .....	148
9.1.1	Antenatal Care Coverage .....	148
9.1.2	Number and Timing of Antenatal Care Visits .....	150
9.1.3	Components of Antenatal Care .....	151
9.1.4	Tetanus Immunisation .....	153
9.2	Delivery Care .....	154
9.2.1	Place of Delivery .....	155
9.2.2	Assistance at Delivery .....	156
9.2.3	Complications of Delivery .....	158
9.3	Postnatal Care .....	158
9.3.1	Timing of First Postnatal Check-up .....	158
9.3.2	Type of Provider of First Postnatal Check-up .....	159
9.4	Problems in Accessing Health Care .....	160

## **CHAPTER 10 CHILD HEALTH**

10.1	Child's Size at Birth .....	163
10.2	Vaccination Coverage .....	165
10.3	Trends in Vaccination Coverage .....	167
10.4	Acute Respiratory Infection .....	169
10.5	Fever .....	171
10.6	Diarrhoeal Disease .....	172
10.6.1	Incidence and Treatment of Diarrhoea .....	172
10.6.2	Feeding Practices .....	174

10.7	Knowledge of ORS Packets	175
10.8	Stool Disposal	176

## CHAPTER 11 NUTRITION OF CHILDREN AND ADULTS

11.1	Nutrition Status of Children	179
11.2	Initiation of Breastfeeding	182
11.3	Breastfeeding Status by Age	184
11.4	Duration and Frequency of Breastfeeding	186
11.5	Types of Complementary Foods	188
11.6	Infant and Young Child Feeding Practices	189
11.7	Micronutrient Intake among Children	193
11.8	Prevalence of Anaemia in Children	195
11.9	Presence of Iodized salt in Household	197
11.10	Nutritional Status of Women	197
11.11	Foods Consumed by Mothers	199
11.12	Micronutrient Intake among Mothers	200
11.13	Prevalence of anaemia in women	203
11.14	Consumption of Fruits and Vegetables by Women and Men	205

## CHAPTER 12 HIV AIDS-RELATED KNOWLEDGE, ATTITUDES AND BEHAVIUR

12.1	Knowledge of AIDS	209
12.2	Knowledge of HIV Prevention Methods	211
12.3	Beliefs about AIDS	213
12.4	Knowledge of Prevention of Mother-to-Child Transmission of HIV	216
12.5	Stigma Associated With Aids and Attitudes Related to HIV/AIDS	218
12.6	Attitudes towards Negotiating Safer Sex	222
12.7	Coverage of Prior HIV Testing	223
12.7.1	HIV Testing during Antenatal Care	226
12.8	Treatment of Individuals with HIV/AIDS	227
12.9	Prevalence of Medical Injections	229
12.10	HIV/AIDS-Related Knowledge among Youth	232
12.10.1	Knowledge about HIV/AIDS and Source of Condoms	232
12.10.2	Age at first sexual intercourse among youth	234
12.11	Exposure to Messages about HIV/AIDS	236

## CHAPTER 13 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEATH OUTCOMES

13.1	Employment and Forms of Earnings	238
13.2	Control over Women's and Men's Earnings	239
13.3	Women's Participation in Household Decision-making	245
13.4	Attitudes towards Wife Beating	250
13.5	Attitudes towards Refusing Sex with Husband	254
13.6	Women's Empowerment Indicators	258
13.7	Current Use of Contraception by Women's Status	259
13.8	Ideal Family Size and Unmet Need by Women's Status	261
13.9	Reproductive Health Care and Women's Empowerment Status	262



PREFERENCESí . 264

APPENDIX A SAMPLE DESIGN FOR 2014 SDHS í ..266

APPENDIX B ESTIMATES OF SAMPLE ERRORSí . 271

APPENDIX C DATA QUALITY TABLES í 282

APPENDIX D PERSONS INVOLVED IN THE 2014 SDHS í .289

APPENDIX E QUESTIONNAIRES í í í í í í í í í í í ..... 292

# TABLES AND FIGURES

---

## CHAPTER 1 INTRODUCTION

Page

Table 1.1	Results of the household and individual interviewsí í í í í í í í í í í ...	10
-----------	---	----

## CHAPTER 2 HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

Table 2.1	Household population by age, sex, and residence.....	12
Table 2.2	Household composition .....	13
Table 2.3	Children's living arrangements and orphan hood.....	14
Table 2.4.1	Educational attainment of the female household population.....	16
Table 2.4.2	Educational attainment of the male household population.....	17
Table 2.5	School attendance ratios.....	19
Table 2.6	Grade repetition and dropout rates.....	21
Table 2.7	Household drinking water.....	24
Table 2.8	Household sanitation facilities.....	25
Table 2.9	Household characteristics.....	27
Table 2.10	Household durable goods.....	30
Table 2.11	Wealth quintiles.....	32
Table 2.12	Birth registration of children under age five.....	33
Figure 2.1	Population Pyramid.....	12
Figure 2.2	Age-Specific Attendance Rates of Population Age 15-24 by Sex.....	22
Figure 2.3	Percentage of Households with Usual Members 25 years or Older Ever Diagnosed with Specific Disease.....	33
Figure 2.4	Percentage of Households with Usual Members Age 25 or Older Ever Diagnosed with Diabetes or Hypertension, by Wealth.....	34
Figure 2.5	Percentage of Household Members Age 25 or Older Ever Diagnosed with Specific Diseases.....	34
Figure 2.6	Percentage of Households with Usual Members age 25 or older ever-diagnosed with Diabetes or Hypertensions, by Age.....	35

## CHAPTER 3 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1	Background characteristics of respondentsí í í í í í í í í í í .....	37
Table 3.2.1	Educational attainment: Womení í í í í í í í í í í í í í í í .....	38
Table 3.2.2	Educational attainment: Mení í í í í í í í í í í í í í í í .....	39
Table 3.3.1	Literacy: Womení .....	40
Table 3.3.2	Literacy: Mení .....	41
Table 3.4.1	Exposure to mass media: Womení í í í í í í í í í í í í í .....	42
Table 3.4.1	Exposure to mass media: Mení í í í í í í í í í í í í í í í .....	43
Table 3.5.1	Employment status: Womení í í í í í í í í í í í í í í í .....	44
Table 3.5.2	Employment status: Mení í í í í í í í í í í í í í í í .....	45
Table 3.6.1	Occupation: Womení í í í í í í í í í í í í í .....	47
Table 3.6.2	Occupation: Mení .....	49
Table 3.7.1	Type of employment: Womení í í í í í í í í í í í í í í .....	50
Table 3.7.2	Type of employment: Mení í í í í í í í í í í í í í í í .....	51
Table 3.8.1	Health insurance coverage: Womení í í í í í í í í í í í .....	52
Table 3.8.2	Health insurance coverage: Mení í í í í í í í í í í í í í .....	53
Table 3.9.1	Knowledge and attitude concerning tuberculosis: Womení í í .....	54

Table 3.9.2	Knowledge and attitude concerning tuberculosis: Mení í í í í í .....	55
Table 3.10.1	Exposure to messages about TB in printed media and the Internet: Women .....	57
Table 3.10.2	Exposure to messages about TB in printed media and the Internet: Men .....	58
Table 3.11.1	Exposure to messages about TB: Women .....	59
Table 3.11.2	Exposure to messages about TB: Men .....	60
Table 3.12.1	Use of tobacco: Women .....	63
Table 3.12.2	Use of tobacco: Men .....	64
Table 3.13.1	Participation in the Physical Activity Campaign: Women .....	66
Table 3.13.2	Participation in the Physical Activity Campaign: Men .....	67
Table 3.14.1	Consumption of Alcohol: Women .....	69
Table 3.14.2	Consumption of Alcohol: men .....	70
Figure 3.1	Employment Status of Women and Men Age 15-49 .....	46
Figure 3.2	Among Women and Men Age 15-49 Who Have Heard of TB, Knowledge and Misconceptions About Transmission of TB .....	56
Figure 3.3	Women and Men Exposed to Messages on Tuberculosis .....	61

## CHAPTER 4 FERTILITY

Table 4.1	Current fertility .....	73
Table 4.2	Fertility by background characteristics .....	74
Table 4.3	Trends in age-specific fertility rates .....	76
Table 4.4	Children ever born and living .....	78
Table 4.5	Mean number of children ever born by marital status .....	79
Table 4.6	Children ever born by marital status .....	79
Table 4.7	Birth intervals .....	81
Table 4.8	Age at first birth .....	82
Table 4.9	Median age at first birth .....	83
Table 4.10	Teenage pregnancy and motherhood .....	84
Figure 4.1	Age-specific fertility rates by urban-rural residence .....	73
Figure 4.2	Age-specific Fertility Rates by Marital Status .....	75
Figure 4.3	Total Fertility Rate from Different Sources .....	77
Figure 4.4	Percent Distribution of Births in the Past 3 Years by Marital Status of Mother .....	80

## CHAPTER 5 FAMILY PLANNING

Table 5.1	Knowledge of contraceptive methods .....	86
Table 5.2	Knowledge of contraceptive methods by background characteristics .....	88
Table 5.3.2	Ever use of contraception: Men .....	90
Table 5.4	Current use of contraception by age .....	91
Table 5.5	Current use of contraception by background characteristics .....	93
Table 5.6	Number of children at first use of contraception .....	95
Table 5.7	Knowledge of fertile period .....	96
Table 5.8	Source of modern contraception methods .....	97
Table 5.9	Cost of modern contraceptive methods .....	98
Table 5.10	Future use of contraception .....	100
Table 5.11	Reason for not intending to use contraception in the future .....	102
Table 5.12	Preferred method of contraception for future use .....	103
Table 5.13	Exposure to family planning messages .....	104
Table 5.14	Contact of nonusers with family planning providers .....	106
Table 5.15	Husband/partner's knowledge of women's use of contraception .....	107
Table 5.16	Male attitudes towards contraceptive use .....	109

Figure 5.1	Trend in current use of Contraceptive methods: 2009-2014 .....	94
------------	--	----

## CHAPTER 6 OTHER PROXIMATE DETERMINANTS OF FERTILITY

Table 6.1	Current marital status í í í í í í í í í í í í í .....	111
Table 6.2	Age at first marriage í í í í í í í í í í í í í í í í .....	113
Table 6.3.1	Median age at first marriage: Womení í í í í í í í í í .....	114
Table 6.3.2	Median age at first marriage: Mení í í í í í í í í í í í .....	115
Table 6.4	Age at first sexual intercourseí í í í í í í í í í .....	116
Table 6.5.1	Median age at first intercourse: Womení í í í í í .....	117
Table 6.5.2	Median age at first intercourse: Mení í í í í í í í .....	118
Table 6.6.1	Recent sexual activity: Womení í í í í í í í í .....	119
Table 6.6.2	Recent sexual activity: Mení í í í í í í í í í í í í .....	120
Table 6.7	Postpartum amenorrhea, abstinence and insusceptibilityí í í í .....	122
Table 6.8	Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibilityí í í í í í .....	123

## CHAPTER 7 FERTILITY PREFERENCES

Table 7.1	Fertility preferences by number of living childrení í .....	126
Table 7.2.1	Desire to limit childbearing: Womení í í í í .....	128
Table 7.2.2	Desire to limit childbearing: Mení í í í í í í .....	129
Table 7.3.1	Need and demand for family planning among currently married women.....	131
Table 7.3.2	Need and demand for family planning for women who are not currently married...	133
Table 7.4	Ideal number of childrení í í í í í í í í í í .....	135
Table 7.5	Mean ideal number of childrení í í í í í í í í í .....	137
Table 7.6	Fertility planning statusí í í í í í í í .....	138
Table 7.7	Wanted fertility ratesí í í í í í í í í í .....	139

## CHAPTER 8 INFANT AND CHILD MORTALITY

Table 8.1.1	Early childhood mortality ratesí í í .í .....	142
Table 8.1.2	Estimates of child mortality rates for Samoa from various sources.....	142
Table 8.2	Early childhood mortality rates by socioeconomic characteristicsí í í .í .....	143
Table 8.3	Early childhood mortality rates by demographic characteristicsí í í .....	144
Table 8.4	Prenatal mortalityí í í í í í í í í .....	145
Table 8.5	High-risk fertility behaviourí í í í í í í í í .....	147

## CHAPTER 9 MATERNAL HEALTH

Table 9.1	Antenatal careí í í í .....í í í í í í í ..í .....	149
Table 9.2	Number of antenatal care visits and timing of first visití í í í í í ..í ..	150
Table 9.3	Components of antenatal careí í í í í í í .....	152
Table 9.4	Tetanus toxoid injectionsí í í í í í í .....	154
Table 9.5	Place of deliveryí í í í í í .....	155
Table 9.6	Assistance during deliveryí í í í í í .....	157
Table 9.7	Timing of first postnatal check upí í í í í .....	159
Table 9.8	Type of provider of first postnatal check upí í í í .....	160
Table 9.9	Problems in accessing health careí í í í .....	162

## CHAPTER 10 CHILD HEALTH

Table 10.1	Child's weight and size at birth .....	164
------------	--	-----

Table 10.2	Vaccinations by source of information .....	166
Table 10.3	Vaccinations by background characteristics .....	167
Table 10.4	Vaccinations in first year of life .....	168
Table 10.5	Prevalence and treatment of symptoms of ARI .....	170
Table 10.6	Prevalence and treatment of fever .....	171
Table 10.7	Prevalence of diarrhoea .....	173
Table 10.8	Knowledge of ORS packets or pre-packaged liquids.....	176
Table 10.9	Disposal of children's stools.....	178
Figure 10.1	Trends in vaccination coverage among children 18-29 monthsí í í .....	169
Figure 10.2	Treatment of diarrhoea among children under 5 í í í í í í í í í í í .....	174
Figure 10.3	Feeding practices during diarrhoea among children under 5 í í í í í í í í í .....	175

## CHAPTER 11 NUTRITION OF CHILDREN AND ADULTS

Table 11.1	Nutritional status of childrení í í í í í í í í í í .....	181
Table 11.2	Initial breastfeedingí í í í í í í í í í í í í í í í í í .....	183
Table 11.3	Breastfeeding status by ageí í í í í í í í í í í í í í í í í í .....	185
Table 11.4	Median duration and frequency of breastfeedingí í í í í í í í í í í í .....	187
Table 11.5	Foods and liquids consumed by children in the day or night preceding the interviewí .....	189
Table 11.6	Infant and young child feeding (IYCF) practices í í í í í í .....	191
Table 11.7	Micronutrient intake among childrení í í í í í í í í í í í í í í í í .....	194
Table 11.8	Prevalence of anaemia in childrení í í í í í í í í í í í í í í í í .....	196
Table 11.9	Presence of iodized salt in householdí í í í í í í í í í í í í í í í .....	197
Table 11.10	Nutritional status of womení í í í í í í í í í í í í í í í í .....	198
Table 11.11	Foods consumed by mothers in the day or night preceding the interviewí í .....	200
Table 11.12	Micronutrient intake among mothersí í í í í í í í í í í í í í í í í .....	202
Table 11.13	Prevalence of anaemia in women.....í í í í í í í í í í í í í í í í .....	204
Figure 11.1	Infant Feeding Practices by Age í í í í í í í í í í í í í í í í í í .....	186
Figure 11.2	Infant and Young Child Feeding Practices í í í í í í í í í í .....	192
Figure 11.3	Number of servings of fruits consumed per week by women and men age 15-49, 2014 í .....	205
Figure 11.4	Number of servings of vegetables consumed per week by women and men age 15-49, 2014 í í í í í í í í í í í í í í í í .....	206
Figure 11.5	Number of servings of fruits and vegetables consumed per week by women and men age 15-49, 2014 í í í í í í í í í í í í í í í í .....	206

## CHAPTER 12 HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES AND BEHAVIOUR

Table 12.1	Knowledge of AIDSí .....	210
Table 12.2	Knowledge of HIV prevention methods í í í í í í í í í í í í í í í .....	212
Table 12.3.1	Comprehensive knowledge about AIDS: Womení í í í í í í í í í í .....	214
Table 12.3.2	Comprehensive knowledge about AIDS: Mení í í í í í í í í í í .....	215
Table 12.4	Knowledge of prevention of mother to child transmission of HIV í í í í .....	217
Table 12.5.1	Accepting attitudes toward those living with HIV/AIDS: Womení í í í í .....	219
Table 12.5.2	Accepting attitudes toward those living with HIV/AIDS: Mení í í í í .....	220
Table 12.6	Attitudes toward negotiating safer sexual relations with husbandí í í .....	223
Table 12.7.1	Coverage of prior HIV testing: Womení í í í í í í í í í í í í í í .....	224
Table 12.7.2	Coverage of prior HIV testing: Mení í í í í í í í í í í í í í í .....	225

Table 12.8	Pregnant women counselled and tested for HIV	227
Table 12.9	Prevalence of medical injections	230
Table 12.10	Comprehensive knowledge about AIDS and of a source of condoms among youth	233
Table 12.11	Age at first sexual intercourse among youth	235
Figure 12.1	Attitudes towards People Living with HIV/AIDS among Women Age 15-49 Who have Heard of HIV/AIDS	221
Figure 12.2	Attitudes towards People Living with HIV/AIDS among Men Age 15-49 Who have Heard of HIV/AIDS	222
Figure 12.3	Treatment of individuals with HIV/AIDS: Reported by Women Age 15-49	228
Figure 12.4	Treatment of individuals with HIV/AIDS: Reported by Men Age 15-49	229
Figure 12.5	Source of last medical injection Received by Women and Men Age 15-49	231
Figure 12.6	Safe Injection Received by Women and Men Age 15-49	232
Figure 12.7	Exposure to messages about HIV/AIDS: Women	236
Figure 12.8	Exposure to messages about HIV/AIDS: Men	237

### CHAPTER 13 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

Table 13.1	Employment and cash earnings of currently married women	239
Table 13.2.1	Control over women's cash earnings and relative magnitude of women's earnings: Women	241
Table 13.2.2	Control over men's cash earnings	243
Table 13.3	Women's control over her own earnings and over those of her husband	244
Table 13.4.1	Women's participation in decision making	245
Table 13.4.2	Women's participation in decision making according to men	246
Table 13.5.1	Women's participation in decision making by background characteristics	247
Table 13.5.2	Men's attitude toward wives' participation in decision making	249
Table 13.6.1	Attitude toward wife beating: Women	251
Table 13.6.2	Attitude toward wife beating: Men	253
Table 13.7.1	Attitude toward refusing sexual intercourse with husband	255
Table 13.7.2	Men's attitude toward a husband's rights when his wife refuses to have sexual intercourse	257
Table 13.8	Indicators of women's empowerment	259
Table 13.9	Current use of contraception by women's status	260
Table 13.10	Women's empowerment and ideal number of children and unmet need for Family planning	261
Table 13.11	Reproductive health care by women's empowerment	261
Figure 13.1	Number of decisions in which women participate	248

### APPENDIX A SAMPLE DESIGN FOR 2014 SDHS

Table A.1	Sample implementation: Women	268
Table A.2	Sample implementation: Male	270

## APPENDIX B ESTIMATE OF SAMPLING ERRORS

Table B.1	List of selected variables for sampling errors, Samoa 2014 .....	273
Table B.2	Sampling errors for national sample, Samoa 2014 .....	274
Table B.3	Sampling errors for urban sample, Samoa 2014 .....	275
Table B.4	Sampling errors for rural sample, Samoa 2014 .....	276
Table B.5	Sampling errors for Apia urban area, Samoa 2014 .....	277
Table B.6	Sampling errors for North West Upolu sample, Samoa 2014 .....	278
Table B.7	Sampling errors for Rest of Upolu sample, Samoa 2014 .....	279
Table B.8	Sampling errors for Savaii sample, Samoa 2014 .....	280
Table B.9	Sampling errors for 5 years mortality rate, Samoa 2014 .....	281
Table B.10	Sampling errors for total fertility rates in the last 3 years (0-3), Samoa 2014.....	281
Table B.11	Sampling errors for 10 years mortality rates, Samoa 2014 .....	281

## APPENDIX C DATA QUALITY TABLES

Table C.1	Household age distribution.....	282
Table C.2.1	Age distribution of eligible and interviewed women.....	284
Table C.2.2	Age distribution of eligible and interviewed men.....	284
Table C.3	Completeness of reporting.....	285
Table C.4	Births by calendar years.....	285
Table C.5	Reporting of age at death in days.....	286
Table C.6	Reporting of age at death in months.....	286
Table C.7	Nutritional status of children.....	287

## PREFACE

---

The 2014 Samoa Demographic and Health Survey (2014 SDHS) was conducted by the Samoa Bureau of Statistics as a follow up of the 2009 SDHS which was first conducted by the Ministry of Health. As population and health issues continue to remain priority areas in the development of Samoa, the Bureau of Statistics therefore enlisted this survey under its regular official data collections. This will ensure that the SDHS is priority in national data collections and it will be conducted at every 5 years under the Statistics Act.

The primary objective of the 2014 SDHS was to provide up-to-date information for policy-makers, planners, researchers and programme managers, for use in planning, implementing, monitoring and evaluating population and health programs within the country. The survey was intended to provide key estimates of Samoa's demographic and health situation.

The 2014 SDHS was designed to repeat the modules used in the 2009 SDHS for comparative analysis. However, two major modules were added to the 2014 SDHS. The first module was the Disability module based on the Washington Disability Group questionnaires, and the second module was the extension of the Nutrition module to include the collection of anthropometric data from children 0-5 years of age and mothers' weight and height.

The findings of the 2014 Samoa Demographic and Health Survey are very important in measuring the achievements of reproductive health services, children and mothers' health, awareness of critical diseases, and many other health programs. The results of the survey will be disseminated to the public and relevant organizations for planning and intervention purposes.

The government of Samoa financed three-quarters of the total survey budget. The rest of the budget was kindly financed by UNICEF Pacific, Government of Australia (DFAT) and UNFPA Pacific in Suva.

The technical support for the Nutrition and Disability Module was provided by UNICEF Pacific; the technical support for data processing was financed by DFAT; and the technical support for data analysis and report writing was provided by UNFPA Pacific.

We are very grateful to the government ministries mainly the Ministry of Health, National Health Services especially the nurses, Ministry of Women, Community and Social Developments and the Ministry of Finance for their support throughout the survey. We are also very grateful to the continuous support provided by the village mayors and government representatives and especially the survey participants in the communities for their willingness to participate in the survey. Finally we congratulate the survey interviewers for the job well done.

We hope this report will be widely used as reference materials to guide population and health program interventions, delivery of services, as well as related research, in the next 5 years.



Muagututia Sefuiva Reupena  
Government Statistician/CEO  
Samoa Bureau of Statistics



## ACKNOWLEDGEMENTS

---

The 2014 SDHS survey and report was successfully completed with the assistance of many people and organisations and we fully acknowledge their contribution to the success of the survey:

- i. Government of Australia (DFAT): Kassandra Betham
- ii. UNICEF Pacific : Bjorn Belgers, Seini Kurusiga, Karen Mannan
- iii. UNFPA Pacific: Lorna Rolls, Tupe Esera, Saunoa Karen Komiti
- iv. Washington Disability Group: Mitchell Loeb
- v. Ministry of Health: Rumanusina Maua, Keneti Vaigafa
- vi. National Health Services: Maatasesa Matthes, Peseta Saeu Tualima, Tapai Taupau Tanielu, Tofaga A Fiu, Malae Faamatala
- vii. Ministry of Women Community and Social Developments: Faafetai Korua, Veei Enosa, Patricia Timua, Sui o Nuu, Sui o le Malo, Sui o Tina ma Tamaitai
- viii. Nuanua o le Alofa and Disability Council: Faatino Masunu
- ix. Ministry of Finance: Noumea Simi, Etevis Moananu, Maliliga Peseta
- x. Data Expert Consultant: Ruben Hume
- xi. Report writing consultant: Luisa Engracia, UNFPA
- xii. Sampling advisor: Dr Ruilin Ren, ICF Macro International
- xiii. 2014 SDHS STEERING COMMITTEE



Muagututia Sefuiva Reupena  
Government Statistician/CEO  
Samoa Bureau of Statistics

## **SAMOA 2014 DEMOGRAPHIC AND HEALTH SURVEY STEERING COMMITTEE**

- i. Rumanusina Maua (**Chair**), Ministry of Health (MOH)
- ii. Keneti Vaigafa, MOH
- iii. Faafetai Koria, Ministry of Women Community and Social Developments (MWCSO)
- iv. Faatino Masunu, Nuanua o le Alofa (NOLA), Disability Council
- v. Maliliga Peseta, Ministry of Finance (MOF)
- vi. Malaefono Taua, Samoa Bureau of Statistics (**SDHS Manager**), (SBS)
- vii. Lewis Sinclair (**Secretary**), SBS
- viii. Taiaopo Faumuina, SBS
- ix. Kaisarina Moananu, SBS

## **CONTRIBUTORS TO THIS REPORT**

### **Authors and Co-authors (All staffs of Division of Census-Surveys and Demography, SBS)**

- Chapter 1 : Lewis Sinclair, SBS  
Chapter 2 : Junior AhYen, Talaimalo Simanu, SBS  
Chapter 3 : Kaisarina Moananu, SBS  
Chapter 4 : Taiaopo Faumuina, SBS  
Chapter 5 : Lewis Sinclair, SBS  
Chapter 6 : Taiaopo Faumuina, SBS  
Chapter 7 : Kaisarina Moananu, SBS  
Chapter 8 : Malaefono Taua, SBS  
Chapter 9 : Malaefono Taua, SBS  
Chapter 10: Malaefono Taua, SBS  
Chapter 11: Taiaopo Faumuina, SBS  
Chapter 12: Junior Ah Yen, Talaimalo Simanu, SBS  
Chapter 13: Poinsettia Epati, SBS

## **REVIEWERS**

### **All Chapters: Ms Luisa Engracia, UNFPA Technical Consultant**

- Chapter 1 : RumanusinaMaua, Keneti Vaigafa, MOH  
Chapter 5 : PeriveLelevaga, MOH, MomotiUlise, Samoa Family Health  
Chapter 6 : MomotiUlise, Samoa Family Health  
Chapter 7 : MomotiUlise, Samoa Family Health  
Chapter 8 : Dr Saine Vaai, Keneti Vaigafa, Rumanusina Maua, MOH  
Chapter 9 : Dr Saine Vaai, Keneti Vaigafa, Rumanusina Maua, MOH  
Chapter 10: Dr Saine Vaai, Keneti Vaigafa, Rumanusina Maua, MOH  
Chapter 11: Kay Paterika, Gail Cumming, MOH  
Chapter 12: Aaone Tanumafili, Keneti Vaigafa, Dr Saine Vaai, MOH  
Chapter 13: Veei Enosa, Patricia Timua, MWCSO

## **RESOURCE PEOPLE**

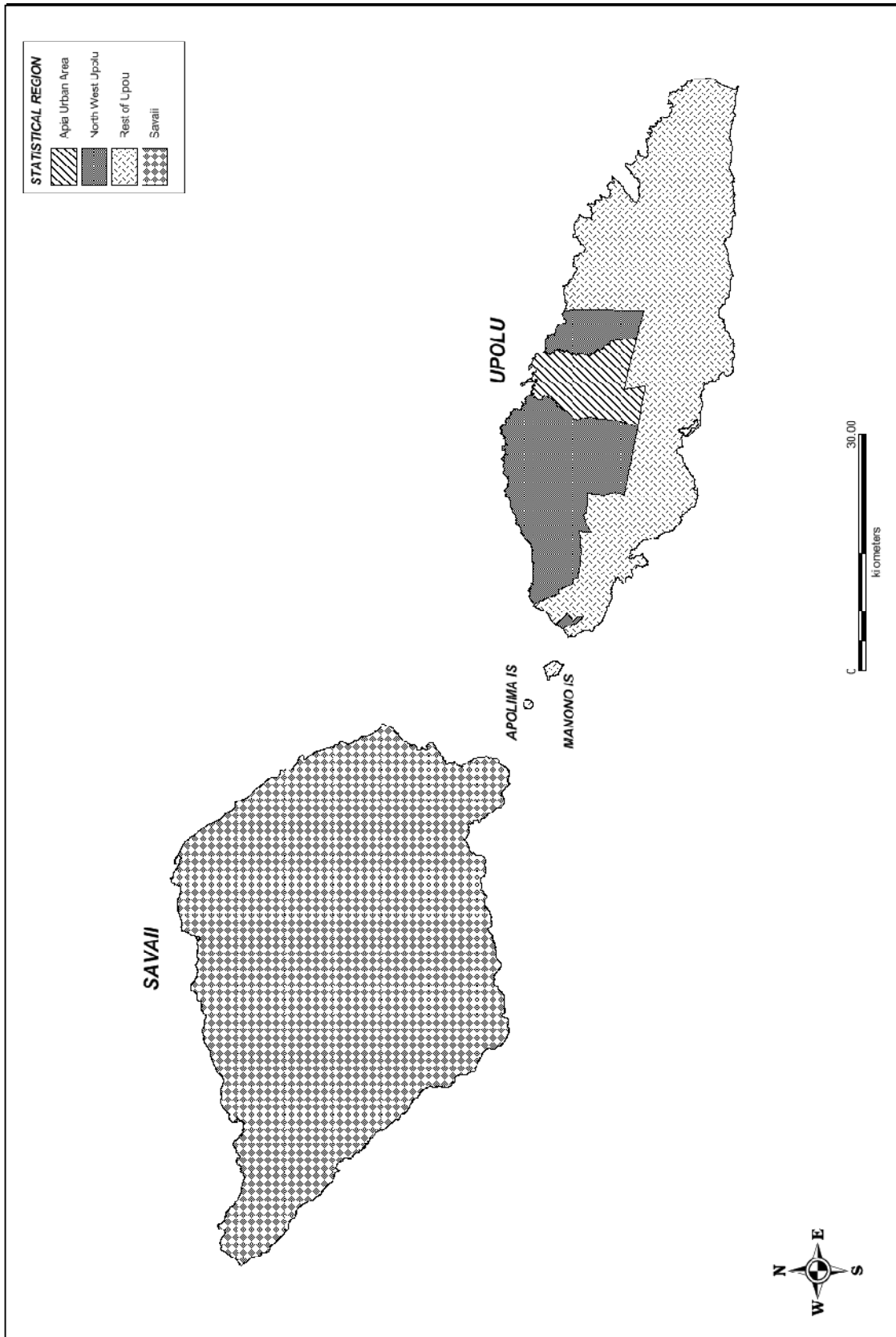
- i. Malaefono Taua, Division of Census-Surveys and Demography (SBS)
- ii. Taiaopo Faumuina, Division of Census-Surveys and Demography (SBS)
- iii. Lewis Sinclair, Division of Census-Surveys and Demography (SBS)
- iv. Leilua Taulealo, Division of IT and Data Processing (SBS)
- v. Shammah Luteru, Division of IT and Data Processing (SBS)
- vi. Ruben Hume, Data Consultant (SBS)
- vii. Mitchell Loeb, Washington Disability Group
- viii. Faatino Masunu, Nuanua o le Alofa
- ix. Sarah Filemu (MOH)
- x. Faimanifo Peseta (MOH)
- xi. Christina Soti (MOH)
- xii. Kay Paterika (MOH)

- xiii. Perive Lelevaga (MOH)
- xiv. Fuapepe Manuleleua (NHS)

**PUBLICATION/LAYOUT**

Junior AhYen, GIS and Cartography Unit, SBS  
Semo Fepuleai, GIS and Cartography Unit, SBS

# MAP OF SAMOA



## 1.1 GEOGRAPHY, HISTORY, AND ECONOMY

### 1.1.1 Geography

Samoa is located between latitudes 13 degrees and 15 degrees south and longitudes 171 degrees and 176 degrees west. It consists of two main islands - Upolu and Savaii - smaller islets of Apolima, Manono, Fanuatapu, Namua, Nuutele, Nuulua, and Nuusafee. Only Upolu, Savaii, Manono and Apolima are currently inhabited. The two large islands of Savaii and Upolu are 1,694 square kilometres and 1,091 square kilometres, respectively (Samoa Bureau of Statistics, 2012). The islands of Samoa belong to the Samoan Islands archipelago in the South Pacific Ocean. They feature a rugged mountain range of volcanoes, including Mount Matavanu which erupted in the 1990s. Mount Silisili is the highest point in Savaii at 1,800 metres. The eastern area is flat and fertile. Twenty kilometres southeast of the port Salelologa on Savaii is Upolu, the second largest and most populous island. Like Savaii, it has a near impenetrable interior of mountains and ravines, with its highest point being Mount Fito at just over 1,000 metres in elevation. The climate is continuously hot and humid (Field, 1984, 1991).

Apia, the capital of Samoa, is situated on the main island of Upolu. Upolu's population of 143,418 persons represents 76 percent of the total Samoan population of 187,820 persons. The rest of Samoan population is currently residing in Savaii totalling 44,402 persons or 24 percent of the population (Samoa Bureau of Statistics, 2012). The official languages are Samoan and English, and Samoa has a high literacy rate for women and men age 15-49 (99 percent each, respectively) (see Chapter 3).

Samoa is in the centre of the Pacific region and as such is prone to natural disasters. The country was the site of a devastating tsunami in September 2009 that hit the coastal areas of the south-eastern part of the island of Upolu and claimed 147 lives. The tsunami was triggered by an 8.1 magnitude earthquake, which struck the islands minutes before the tsunami (MOH, 2009). More recently, in December 2012, Samoa was hit by cyclone Evans which was considered the worst tropical cyclone to affect the country since 1991. The cyclone caused widespread destruction around the capital of Apia. Many of the roads were blocked by flood waters and houses and crops were badly destroyed. Two people were confirmed dead as a result of that cyclone.

### 1.1.2 History and Governance

The Samoan Islands are believed to have been discovered and settled around 1,000 BC. The Samoans originated from Austronesian predecessors from Southeast Asia and Melanesia. The Austronesian migration started in south-eastern Asia and moved eastward, reaching the Fiji islands around 1,000 BC. By 200 BC Samoa was the centre of a flourishing Polynesian community with trade taking place among Tonga, Fiji and Samoa.

Samoa language belongs to the Austronesian family, said to be the world's largest (Evans, 2010). Samoa was first named the Navigator Islands by the French explorer Louis de Bougainville because of its people's impressive navigating skills (Field, 1984 & 1991).

As a predominantly Christian society, Samoa has a Congregational Christian Church of Samoa, a Roman Catholic Church, Latter Day Saints and Methodist church with 32 percent, 19

percent, 15 percent and 14 percent of the population belonging to these denominations, respectively (Samoa Bureau of Statistics, 2012).

Samoa was ruled by Germany during the late 19<sup>th</sup> century until 29<sup>th</sup> August 1914 when New Zealand troops landed in German Samoa and established a period of colonial rule that was to last for almost 50 years (Field, 1984, 1991). Samoa officially became independent on 1<sup>st</sup> June 1962 after the successful Mau movement, which ended a period of New Zealand administration. The Mau movement (or opinion movement), established in 1908, was a declaration of pacifism and non-violence and a commitment to democracy. Upon gaining its independence, the country was officially known as Western Samoa until it was renamed Samoa by a change to the constitution in 1997 (www.parliament.gov.ws).

Samoa is a parliamentary democracy. The parliament consists of the head of state and the legislative assembly. There are 49 members in the legislative assembly and they are chosen through an electoral vote every five years. The next election is to be held in March 2016. To be able to run for the election, candidates have to be holders of Matai (Chiefly) titles. The Head of State holds supreme authority and is elected by the members of parliament for a five-year term. The current Head of State, Tuiaua Tupua Tamasese Efi succeeded the late Malietoa Tanumafili II in 2007. The Cabinet has the responsibility to provide general direction and control of the executive government of Samoa and reports to the parliament. The Prime Minister is chosen by the Cabinet. Since 1998, the position of the Prime Minister is being held by Tuilaepa Sailele Malielegaoi.

### 1.1.3 Economy

The Samoan economy over the past 5 years (2010-2014) was growing at a moderate rate with an average annual growth of 1.5 percent. The main contributors to growth in the last 5 years were commerce (1.4 percentage points) and public administration (0.4 percentage points). Total GDP at constant 2009 prices in 2014 amounted to ST\$1,711.7 million; an increase of 1.6 percent over that of 2013. In nominal terms, the economy generated a total GDP of \$1,920.7 million, increasing by 3.3 percent over the year 2013. GDP per capita was equivalent to ST\$10,185<sup>1</sup>, the highest GDP per capita ever achieved by the economy. It went up by 3.1 percent compared to 2013. The Samoan economy has recovered following the global economic crisis in 2008/2009, the tsunami in 2009 and more recently cyclone Evan which struck the country in late 2012, all of which affected economic activities in the years concerned.

The improved performance in some industries (i.e. commerce) in the year 2014 was fuelled by the activities related to the preparation and hosting of the UN Small Island Developing States (SIDS) conference<sup>2</sup> by the country as well as the recovery and rehabilitation efforts put forward by the government, the private sector and the international organizations following the global economic crisis and natural disasters. Moreover, the recent growth also reflects structural changes in the economy and generally good weather conditions which have boosted economic activities in almost all the industries during the year.

In terms of GDP composition, the tertiary sector<sup>3</sup> remains the largest contributor to total GDP at current prices in 2014 with a share of 57.8 percent. Commerce is the leading contributor to total GDP having a share of 32.4 percent. Secondary Sector<sup>4</sup> became second largest contributor to

<sup>1</sup> ST = Samoan Tala (GDP per capita = 10,185 SAT = USD 4121 (2014))

<sup>2</sup> The SIDS conference was held early September 2014 and commerce industries show an increase of 8.3 percent from the same quarter of the previous year.

<sup>3</sup> Tertiary sector consists of 8 industries (Commerce, Accommodation & Restaurant, Transportation, Communication, Financial Services, Business Services, Ownership of dwellings, Personal and other services)

<sup>4</sup> Secondary sector consists of 4 industries (Constructions, Electricity & Water, Food & Beverages, Other manufacturing)

aggregate GDP with a share of 25.2 percent. The sector continues to decline due to the poor performance from the other manufacturing industry. Construction was the second largest contributor to overall GDP having a share of 10.2 percent; this was equivalent to 40.6 percent of the Secondary Sector. Primary Sector<sup>5</sup> share to total GDP was 9.4 percent in 2014 declining by 4.1 percent compared to 2013 (Samoa Bureau of Statistics, 2015).

## **1.2 DEMOGRAPHIC PROFILE**

There are a number of sources in Samoa that provide diverse demographic information about its population. These include the population and housing censuses, various surveys and government administrative data. Population censuses collect information related to social, economic and demographic characteristics of the Samoan population. The most recent population and housing census (PHC) was conducted in 2011. It recorded a total population of 187,820 people, which represents an increase of 3.9 percent (or 7,079 people) to the population reported in the 2006PHC of 180,741 people.

The population density per square kilometre in Samoa has slightly increased from 65 persons per square kilometre in 2006 to 67 persons per square kilometre in 2011. Samoa has a high total sex ratio (the ratio of males to females in a population). The 2011 PHC shows a sex distribution of 52 percent males and 48 percent females, similar to the previous 1981, 1991, 2001 and 2006 Censuses respectively (Samoa Bureau of Statistics, 2012). This translates to a sex ratio of 107 males to 100 females (*global ratios 105 males to 100 females*). The sex ratio at birth is estimated at 108 males to 100 females. The 2011 census reported that almost half of the people belong to the dependant age-groups (age 0-14 and 65 or older), while the other half belong to the working age group (age 15-64). The proportion of the population under age 15 years has decreased slightly from 39 percent in 2006 to 38 percent in 2011, while the proportion of 65 years and above has increased slightly from 4.8 percent to 4.9 percent over the same period. Life expectancy at birth in Samoa is 73 years for males and 76 years for females respectively (Samoa Bureau of Statistics, 2012).

## **1.3 HEALTH CARE SYSTEM**

Samoa's health system is made up of public and private health sector. It includes private-sector practitioners, dentists, pharmacists, and nurses on wheels, alternative therapists, physiotherapists, traditional healers and traditional birth attendants. Non-government organizations (NGOs), academic institutions, community-based organizations, and development partners also play various roles in providing health care services. The present health system was developed and strengthened as part of health reforms with the objective of improving quality of life for all Samoan people. With this strategic national goal in mind, a nationwide network was created under the leadership of the Ministry of Health (MOH) consisting of primary, secondary, and tertiary health care facilities. At present, publicly funded health services dominate the Samoan health system.

### **1.3.1 Health Care Reforms**

In the late 1990s, the Samoa Ministry of Health undertook a number of health care reforms. The reforms were focused on the development of national policies and strategic plans, health care financing, resource allocation, refurbishment and institutional strengthening. The health sector reforms led to the establishment of the National Health Service (NHS) in July 2006 to take over the service delivery aspects of health care, except for health promotion and prevention services. The Ministry of Health (MOH) has taken on a more strategic role in regulating and monitoring the health sector. Its focus has shifted from the operational management of public health services to providing overarching strategic leadership in the health sector, through setting of policy directions, establishing health services standards, and assuring effective health promotion and preventive services.

---

<sup>5</sup> Primary Sector consist of 2 industries (Agriculture and Fishing)

The health reforms also resulted in a National Health Service Plan covering urban and rural areas. This national plan was formulated through strengthened partnerships among various health sectors, including formal and informal private health sectors, the community based organizations, NGOs, the MOH and other governmental ministries.

In February 2007, three district hospitals at Poutasi, Safotu and Lalomanu were constructed and equipped and a major refurbishment of the Tupua Tamasese Meaole Hospital was completed. The district hospital at Satapuala near Faleolo international airport was also opened in 2014. This increased the accessibility of the Samoan citizens to higher-level health care services.

During the reform, the MOH established the Sector Wide Approach program (SWAp) in an effort to improve the coordination of international donors' funds and activities for the health sector, in order to avoid duplication of efforts.

### **1.3.2 Primary, Secondary, and Tertiary Health Care**

Primary health care in Samoa is provided mainly by national and district hospital outpatient clinics, private clinics and outreach clinics. Outreach clinics are implemented through women's health centres in the rural communities. The main focus of primary health care is disease prevention, antenatal care services, delivery assistance, and family planning services.

At the secondary level, health services are provided by the two national hospitals, Tupua Tamasese Meaole Hospital (TTM) and Malietoa Tanumafili II Hospital (MTII), and a private hospital, MEDCEN Private Hospital. Majority of the secondary level health care cases are referred by the district hospitals around Upolu and Savaii. Secondary health care services include diagnosis and treatment at the above hospitals. Additionally, the Samoa National Kidney Foundation focuses on secondary care for patients who need dialysis treatment.

Tertiary health care services in Samoa are provided by contracted hospitals in New Zealand and Australia through Samoa's Overseas Medical Treatment Scheme. The Overseas Medical Treatment Scheme was an initiative undertaken by the Samoa government in order to facilitate the process for Samoans to go overseas for medical services that are not available in Samoa.

### **1.3.3 Maternal and Child Health Care**

Maternal and child health services in Samoa are provided mostly through primary and secondary health care institutions. Most deliveries occur at public health facilities including national and district hospitals; at private hospitals; and, in rural areas, in the community health centres. Antenatal care in urban areas is provided by both public and private general practitioners at district hospitals and in rural areas by nurses and traditional birth attendants through outreach community visits. In Samoa there is a strong culture of childbirth assisted by traditional birth attendants (TBAs) whose role has been encouraged by the Ministry of Health through the provision of registered TBA training (MOH, 2008b).

Ongoing activities have been implemented in Samoa aimed at the promotion of maternal and child health. These programs include Baby Friendly Hospital Initiative (BFHI) inside maternity wards which promote breastfeeding of newborn babies and rooming-in. Policies have also been put in place that promote breastfeeding in work places.

Other health promotion activities target road safety and injury prevention, rheumatic fever screening and health promotion in schools.



### **1.3.4 Family Planning Services**

With the recent health sector reform, family planning services have been outsourced to private clinics and NGOs, while the Ministry of Health concentrates on monitoring and evaluation of the services. Private clinics and NGOs have fully taken on the responsibilities of family planning services in close collaboration with National Health Services as a monitoring body. The main goal of the family planning program and policy is to avoid unwanted pregnancies, to reduce complications of pregnancies and, in general, to promote safe motherhood.

The Ministry of Health monitors the whole range of family planning activities, including family planning education of the population and supply of contraceptives throughout the country. Contraceptives are also marketed by the private sector. Family planning in Samoa is considered part of the maternal health care and the MOH requires that counselling is provided to women by OB/GYN professionals to help them select and properly use contraceptive methods. For the past decade, women in Samoa have been introduced to various modern contraception methods, including injections, pills, intrauterine device (IUD), sterilization, male and female condoms, and implants.

### **1.3.5 HIV/AIDS Program**

The close relationship between sexually transmitted infections (STIs) and HIV infection requires that STI control is seen as essential to the prevention and control of HIV infection (MOH, 2008). In an effort to prevent the spread of STIs and HIV infections, epidemic control measures have been put in place in the country. Communities have received education on STI and HIV prevention methods, treatment for those infected, care and support for people infected with HIV and their families. A system of STI and HIV infection surveillance and epidemiology and safe blood procedures has also been set up. The STI and HIV/AIDS awareness programs in Samoa pay special attention to issues related to stigma and misconceptions and address these issues in partnership with the communities themselves.

As part of its advocacy role in health promotion and prevention, in implementing STI and HIV-related primary health care, the Ministry of Health continues to work in close collaboration with partners from the private and public sectors, international agencies and NGOs.

## **1.4 SYSTEMS FOR COLLECTING DEMOGRAPHIC AND HEALTH DATA**

Population and housing censuses (PHC) are expensive, require many resources, and take a long time to implement. To fill the gap in information required by various organizations and agencies and to complement the data collected during the censuses, sample surveys are usually conducted in between censuses. Because sample surveys are much cheaper and can be implemented more quickly than censuses, they are conducted at more frequent intervals. The 2014 Samoa Demographic and Health Survey (SDHS) is one example of a sample survey of nationally representative households. Another important source of information is administrative data. Vital registration systems (birth and death registration), health services and systems (e.g. childhood immunisation), and education data (school enrolment) are a few examples of administrative functions that provide alternative sources of data on the demographic and health condition of the population.

The Samoa Bureau of Statistics (SBS) is the responsible governmental agency for maintaining and updating the national registration system and for conducting population censuses and household sample surveys. As part of the national registration system, births, deaths, marriages, and divorces are registered at the local administrative level, and aggregated statistics are forwarded to the SBS central office. As mentioned earlier, the last PHC in Samoa was conducted in 2011, and the next census is scheduled for 2016.

Collection of health data is primarily the responsibility of the Ministry of Health. Data are provided by the two national referral hospitals, the district hospitals in Upolu and Savaii, and private clinics. The data and information collected from these health information systems are utilized by the MOH to develop evidence-based health policies and plans at the national level. The health data are also used to produce reports on various health topics and issues faced by Samoa.

## **1.5 OBJECTIVES AND ORGANIZATION OF THE SURVEY**

The 2014 Samoa Demographic and Health Survey (2014 SDHS) is a nationally representative sample survey designed to provide information on population and health issues in Samoa. This is the second round of national level population and health surveys conducted in Samoa. The primary goal of the survey is to develop a single integrated set of demographic and health data pertaining to the population of Samoa.

Unlike the 2009 SDHS, which was an initiative of the Ministry of Health under its Health Sector Wide Approach program (SWAp), implementation of the 2014 SDHS was led by the Samoa Bureau of Statistics in close collaboration with the Ministry of Health. This shift in the leading agency came about as a result of the recommendations by the Ministry of Health during the formulation of the Samoa Strategy for Statistical Development (2011-2021). The main objective was to ensure that evaluation of health programs via the SDHS will be conducted on a regular basis like the census instead of being project-driven only. The 2014 SDHS will provide a broad range of data to help assess the health and demographic status of the Samoan population and to assist with monitoring and evaluation of various health and population indicators.

During the planning of the 2014 SDHS, SBS worked in close collaboration with the Ministry of Health for guidance in areas pertaining to health. The 2014 SDHS steering committee was established during the preparatory stage of the project in early 2014. The overall goal of the committee was to ensure that the timing of activities and the work plan flows as planned and the outputs are delivered on time. About 60% of funding for the survey was provided by the Government of Samoa and the rest was funded by donor partners such as the DFAT (Department of Foreign Affairs for Australia), UNICEF Pacific and UNFPA Pacific.

The survey collected national and regional level data on fertility and contraceptive use, maternal and child health, adult health, tuberculosis, and HIV/AIDS and other sexually transmitted diseases. The survey obtained detailed information on these issues from women of reproductive age and, on certain topics, from men as well.

The survey results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving the health of Samoans and health services for the people of Samoa. The SDHS also contributes to the growing international database on demographic and health-related variables.

## **1.6 SAMPLE DESIGN**

The sample for the 2014 SDHS was drawn from the master sample frame that was designed for the 2011 Population and Housing Census. The sample was designed to cover 16 percent of the households in rural areas and 17 percent of households in urban areas. The sample allows for detailed analysis for most indicators at the national level, for urban and rural areas separately, and for each of the four regions (Apia Urban Area, North West Upolu, the Rest of Upolu, and Savaii).

A representative probability sample of households was selected in two stages. The first stage involved selecting data collection points or clusters from the master sample. For the second stage, a complete listing of households was obtained from the census 2011 census frame. Households were then systematically selected from each cluster for participation in the survey. The design did not allow for replacement of clusters or households. A total of 458 primary sampling units or clusters was

selected, 132 in urban areas and 326 in rural areas. Because Samoan households do not move frequently, a fresh household listing was not deemed necessary. Instead, the listing conducted in November 2011 in connection with the 2011 Population and Housing census was used. In the urban clusters, 7 households were selected per cluster, whereas in the rural clusters, 10 households were selected per cluster. This design resulted in a final sample of 4,171 households.

Because of the non-proportional allocation of the sample to the different economic regions, sampling weights would be required in all analysis using the DHS data to ensure the actual representativeness of the sample at both national and regional levels. The sampling weight for each household is the inverse of its overall selection probability with correction for household non-response; the individual weight is the household weight with correction for individual non-response. Sampling weights are further normalized in order to give the total number of unweighted cases equal to the total number of weighted cases at the national level, for both household weights and individual weights.

All women age 15-49 that were either permanent residents of the households in the 2014 SDHS sample or visitors present in the household for more than 3 months before the survey were eligible to be interviewed. In addition, all men age 15-54 in every other household selected for the survey were eligible to be interviewed if they were either permanent residents or visitors present in the household for more than 3 months before the survey. There were a total of 5,319 eligible women and 2,025 eligible men in the survey sample.

## 1.7 QUESTIONNAIRES

Four questionnaires were used in the SDHS: Household Questionnaire, Women's Questionnaire, and Men's Questionnaire and the Nutrition Questionnaire.

A public consultation organised by the SBS was held in April for two days to obtain input from the Ministry of Health and other stakeholders on the design of the 2014 SDHS Questionnaires. Based on the questionnaires used for the 2009 SDHS, the workshop and several other informal meetings with various local and international organisations, the global DHS model questionnaires were modified to reflect relevant issues in population, family planning, HIV/AIDS, TB and other health issues in Samoa. The questionnaires were pre-tested in June 2014. The lessons learnt from the pre-test were used to finalise the survey instruments and logistical arrangements.

The Household Questionnaire was used to list all usual members of the selected households and to collect information on the socioeconomic status of the household. The first part of the Household Questionnaire collected information on the age, sex, educational attainment, and relationship of each household member or visitor to the household. This information provides basic demographic data for Samoan households. It was also used to identify the women and men who were eligible for the individual interview (i.e., women age 15-49 and men age 15-54) as well as eligible individuals for the nutrition module. In the second part of the Household Questionnaire, there were questions on housing characteristics (e.g., the flooring material, the source of water, and the type of toilet facilities), on ownership of a variety of consumer goods, ownership of land and farm animals, and other questions relating to the socioeconomic status of the household.

Additionally, the inclusion of the disability questionnaires generated by the Washington Group on Disability in the survey was one of the recommendations of the SPC HOPS meeting held in Noumea 2013. The meeting gave a strong commitment to improving disability statistics globally and in the Pacific region and also encouraging national government agencies to revisit and assess their data collection methods for adult and childhood disability in light of international standard and to consider inclusion of standard disability questions into regular household survey activities. Three detailed sets of questionnaires were integrated into the household questionnaire in order to collect comprehensive and relevant information on disability in Samoa. These were the following:

- Module on child functioning and disability (2-4 years)

- Module on child functioning and disability (5-17 years)
- Module on adult functioning and disability (18 years and over)

The Women's Questionnaire was used to collect information from all women age 15-49 years and covered the following topics:

- Background characteristics (education, residential history, media exposure, etc.)
- Birth history
- Antenatal, delivery, and postnatal care
- Knowledge, attitudes and use of family planning methods
- Fertility preferences
- Marriage, woman's work and husband's background characteristics
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Childhood mortality
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Knowledge of and attitudes toward tuberculosis
- Other health issues

The Men's Questionnaire, administered to all men age 15-54 years living in every other household, collected similar information contained in the Women's Questionnaire, but was shorter because it did not contain questions on reproductive history, maternal and child health, and nutrition.

Unlike the model DHS household questionnaire, the 2014SDHS developed and used a separate questionnaire for anthropometry and anemia testing questionnaire. This is the Nutrition Module. The use of a separate questionnaire for collecting nutrition data was done on account of the nature of survey operations. Collection of data for the Nutrition questionnaire began on the second week of the survey. It was done by a team of nurses operating from one central location. Meanwhile, the regular survey teams working in different regions were responsible for identifying women and children in the selected sample households who were eligible for the nutrition module. The list was then passed on to the nurses for their work the following week.

Certain individuals in the household (women and children) are eligible for anthropometry and anemia. All children age 0-5 years (or 0-59 months) and women age 15-49 are eligible to have their height and weight measured. Women and children age 6 to 59 months in the households selected for individual interview were also tested for anaemia.

After finalization of the questionnaires in English, they were translated into Samoan by SBS and Ministry of Health responsible staffs.

## **1.8 PRETEST, TRAINING, AND FIELDWORK**

### **1.8.1 Pretest**

All four survey questionnaires were pretested. The pretest training was also used as a tool for training of trainers. The main objectives of the pretest were to provide experience for the trainers, who, in turn, trained the field staff during the main training, test the survey instruments and logistics and to build capacity of the survey team.

Pretest training and fieldwork were conducted from 19<sup>th</sup> May to 27<sup>th</sup> June 2014 for 49 participants: 31 women and 18 men. Training entailed classroom discussions and practice focusing on the four survey questionnaires: Household Questionnaire, Women's Questionnaire, Men's Questionnaire and Nutrition Questionnaire. Resource persons from the MOH were invited to make short presentations on family planning, child health, nutrition programmes being implemented in

Samoa. The participants actively discussed the questionnaires and made suggestions for modifications. Based on these suggestions, both English and Samoan versions of the questionnaires were updated for the pretest fieldwork. Participants were divided into 4 teams and participated in 2-days of field practice in selected EAs that was not part of the survey sample EAs. Interviews were conducted in both English and Samoan. By the end of the pretest, a few errors in skip patterns and translation were identified and corrected before the final printing of survey questionnaires.

### **1.8.2 Training and Fieldwork**

The main training of the survey field personnel was conducted for a period of 30 days from 26<sup>th</sup> May to 27<sup>th</sup> June in Apia. A total of 54 persons from various backgrounds were trained; 4 supervisors, 7 field editors, 25 female interviewers, 13 male interviewers, 5 office editors.

The training of survey field staff consisted of a detailed, question-by-question explanation of the questionnaires, reading of the interviewer's manual, demonstrations, practice interviewing in small groups and pairs, and tests. Resource persons were invited to give lectures about family planning, communicable and non-communicable diseases, health care waste, pregnancy and antenatal care, child's and woman's nutrition and immunisation programmes in Samoa. Each section of the questionnaire was tested. The test results were used to reinforce understanding of key topics among the trainees and to strengthen their interviewing skills. Training included two days of field practice in a selected community that was not included in the 2014 SDHS sample. A special training was held for field supervisors and editors one week prior to the main training.

Fieldwork for the main survey lasted from 7<sup>th</sup> July to 29<sup>th</sup> August. Senior staff from SBS and Ministry of Women Community and Social Development (MWCSD) coordinated and supervised the fieldwork activities. Field staffs were divided into 4 teams; each team was responsible to enumerate all the selected households in the region allocated to them. Each team was composed of one supervisor, two field editors, 6-9 female interviewers and 5-7 male interviewers. The allocation of interviewers per team was based on the number of households selected in each region. Each team was assigned a driver and a vehicle.

The processing of the 2014 SDHS results began shortly after the fieldwork started. Data editing was first done in the field by field editors and supervisors. Completed and edited questionnaires for each cluster were packed and delivered to the SBS office where they were entered and edited by data processing personnel. The data processing team was composed of 12 data entry operators, 1 data entry supervisor and a data processing manager, and 5 office editors. Data operators and supervisors went through a one-week training conducted by the Data Consultant Mr. Ruben Hume. Data were entered using CSPRO, a programme specially developed for use in household based surveys and censuses. All data were entered twice (100 percent verification). The concurrent processing of the data was an advantage since the survey technical staff were able to advise field teams of problems detected during the data entry using tables generated to check various data quality parameters. As a result, specific feedbacks were given to the teams to improve their performance. The data entry and editing phase of the survey was completed in November 2014 and final tabulation in January 2015.

## **1.9 RESPONSE RATES**

Table 1.1 presents household and individual response rates for the survey. A total of 4,171 households were selected in the sample, of which 3,853 were found occupied at the time of the fieldwork. Of those occupied households, 3,660 households were successfully interviewed, yielding a household response rate of 95 percent.

In the households interviewed, a total of 5,319 eligible women were identified, of whom 4,805 were interviewed, yielding a response rate of 90 percent. Survey results indicate that 2,025 eligible men were identified in the sub-sample of households selected for the male survey and 1,669 were successfully interviewed, yielding a response rate of 82 percent.

The household and women's response rates are slightly lower in urban (90 percent and 83 percent, respectively) than rural areas (97 percent and 92 percent, respectively), while for men, the response rate is much lower in urban (66 percent) than in rural areas (87 percent).

The principal reason for non-response among eligible women and men was the failure to find them at home despite repeated visits to the households. The substantially lower response rates for men reflect the more frequent and longer absences of men from home.

<u>Table 1.1 Results of the household and individual interviews</u>			
Number of households, number of interviews, and response rates, according to residence (unweighted), Samoa 2014			
Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	920	3,251	4,171
Households occupied	869	2,984	3,853
Households interviewed	779	2,881	3,660
Household response rate <sup>1</sup>	89.6	96.5	95.0
<b>Interviews with women age 15-49</b>			
Number of eligible women	1,120	4,199	5,319
Number of eligible women interviewed	927	3,878	4,805
Eligible women response rate <sup>2</sup>	82.8	92.4	90.3
<b>Interviews with men age 15-54</b>			
Number of eligible men	413	1,612	2,025
Number of eligible men interviewed	273	1,396	1,669
Eligible men response rate <sup>2</sup>	66.1	86.6	82.4
<sup>1</sup> Households interviewed/households occupied			
<sup>2</sup> Respondents interviewed/eligible respondents			

This chapter provides a summary of the demographic and socioeconomic characteristics of the household population in the 2014 SDHS, including age, sex, place of residence, educational status, and household characteristics. Information collected on the characteristics of the households and respondents is important in understanding and interpreting the findings of the survey and also provides some indication of the representativeness of the survey.

The main focus of this chapter is to describe the environment in which men, women, and children live. This description presents the general characteristics of the population, such as the age-sex structure, literacy and education, household arrangements (headship, size), and housing facilities (sources of water supply, sanitation facilities, dwelling characteristics and household possessions). A distinction is made between urban and rural areas because many of these indicators differ by urban-rural residence.

A household is defined as a person or group of related and unrelated persons who live together in the same dwelling unit(s) or in connected premises, who acknowledge one adult member as head of the household, and who have common arrangements for cooking and eating their food. The 2014 DHS listed and collected information about all usual members of a household including those persons who are not permanent members but have stayed with the household for 3 months or more at the time of the survey. This is a departure from the 2009 DHS which also listed visitors who slept with the household on the night prior to the survey.

Due to the way the sample was designed, the number of cases in some regions may appear small since they are weighted to make the regional distribution nationally representative. Throughout this report, numbers in the tables reflect weighted numbers. To ensure statistical reliability, percentages based on 25 to 49 unweighted cases are shown within parentheses, and percentages based on fewer than 25 unweighted cases are suppressed.

### 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are important variables in analysing demographic trends. Table 2.1 and Figure 2.1 present the distribution of the household population enumerated during the 2014SDHS by five-year age groups, according to sex and urban-rural residence. The total population is comprised of children below age 15 (38 percent), persons age 15-64 (56 percent) and elderly people age 65 or over (5.6 percent). This age composition of Samoa is typical of a young population and this is graphically portrayed in Figure 2.1, the age pyramid of the population. A population is said to be young if children comprise a large proportion of the total as is the case of Samoa. The wide base of the population pyramid, which represents the size of children relative to the older population, suggests that fertility levels have been high in the recent past. This type of population structure imposes a heavy burden on the social and economic resources of a country.

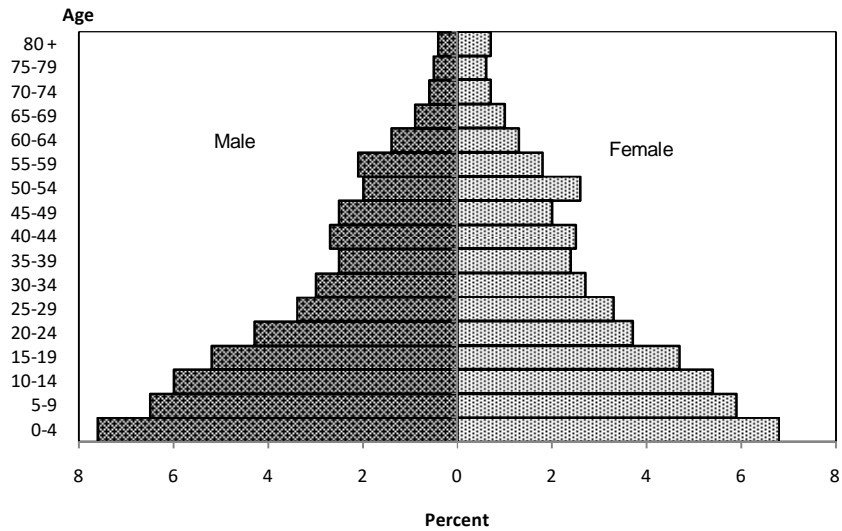
The age structures of the urban and rural population are somewhat different. The proportionate size of the young population in rural areas (39 percent) is higher than in urban areas (35 percent). As a result, the population age 15-65 which is generally referred to as the working population is higher in urban than in rural areas.

**Table 2.1 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, Samoa 2014

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	14.2	11.3	12.8	14.7	14.7	14.7	14.6	14.0	14.3
5-9	12.0	11.7	11.9	12.6	12.4	12.5	12.5	12.3	12.4
10-14	9.1	11.2	10.2	12.1	11.3	11.7	11.5	11.3	11.4
15-19	10.9	10.7	10.8	9.9	9.5	9.7	10.1	9.8	10.0
20-24	9.4	8.4	8.9	8.0	7.5	7.7	8.3	7.7	8.0
25-29	6.8	7.1	6.9	6.6	6.8	6.7	6.6	6.8	6.7
30-34	6.3	6.1	6.2	5.7	5.4	5.5	5.8	5.5	5.7
35-39	5.0	5.6	5.3	4.7	4.8	4.8	4.8	5.0	4.9
40-44	4.9	4.8	4.9	5.4	5.3	5.3	5.3	5.2	5.2
45-49	4.8	4.1	4.5	4.8	4.2	4.5	4.8	4.2	4.5
50-54	4.0	5.7	4.8	3.9	5.4	4.6	3.9	5.5	4.7
55-59	4.2	3.3	3.8	4.1	3.8	3.9	4.1	3.7	3.9
60-64	2.7	3.0	2.8	2.8	2.6	2.7	2.8	2.7	2.7
65-69	2.1	2.6	2.4	1.7	2.0	1.9	1.8	2.1	2.0
70-74	1.5	1.7	1.6	1.2	1.5	1.3	1.2	1.5	1.4
75-79	1.0	1.2	1.1	1.0	1.2	1.1	1.0	1.2	1.1
80 +	0.7	1.3	1.0	0.8	1.5	1.2	0.8	1.5	1.1
Don't know/missing	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,439	2,364	4,803	10,500	9,672	20,172	12,939	12,036	24,975

**Figure 2.1 Population Pyramid**





## 2.2 HOUSEHOLD COMPOSITION

Table 2.2 shows the percent distribution of households in the 2014 SDHS sample by sex of the head of the household and household size. It also presents the mean household size for urban and rural areas, as well as the percentage of households with orphans and foster children under age 18. These characteristics about household composition are important because they are often associated with differences in household socioeconomic levels. For example, female-headed households are frequently poorer than households headed by males. In addition, the size and composition of the household affect the allocation of financial and other resources among household members, which in turn influence the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavourable health conditions.

In Samoa, the mean household size is 6.8 persons. Rural households are larger than those in urban areas; the former have 7 members, on average, compared with 6.2 in urban areas. Households in Samoa are predominantly male-headed (79 percent). Female-headed households are more common in the urban areas (25 percent) than in the rural areas (20 percent).

One of every 4 Samoan households (27 percent) has nine or more members. Such big households are more common in rural areas. Small households, that is, those with no more than 4 members, constitute slightly more than a quarter (28 percent) of all households in the country. Households with only 1 member are of particular interest as they actually represent people who live alone. In the urban areas, a little less than 6 percent of households were reported to have only 1 member while the corresponding figure in rural areas is about 3 percent.

### 2.2.1 Children's Living Arrangements and Orphanhood

Information on households with foster children and orphans was collected in the 2014S DHS. Foster children are defined here as children under age 18 living in households with neither their mother nor their father present; orphans are children with one or both parents dead. Foster children and orphans are of concern because they may be at increased risk of neglect or exploitation when their mothers or fathers are not present to assist them. Table 2.2 shows that about one in ten of households in Samoa has at least one foster child. The proportion is slightly higher in rural areas (27 percent) than in urban areas (18 percent). Five percent of households have a single orphan and about 1 percent have double orphans. About 28 percent of all households in Samoa have either foster or orphan children. Having this type of children is much more common in rural (30 percent) than in urban (21 percent) areas.

Table 2.3 shows the distribution of foster children and children with one or both parents dead, according to background characteristics. Of the 11,001 children under age 18 reported in the 2014SDHS, nearly three quarters (72 percent) live with both parents, and 10 percent live with their

Table 2.2 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 18, according to residence, Samoa 2014

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	75.3	79.5	78.6
Female	24.7	20.5	21.4
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
1	5.5	2.6	3.3
2	10.0	5.2	6.2
3	9.6	8.2	8.5
4	12.0	9.2	9.8
5	11.2	12.3	12.0
6	9.9	11.9	11.4
7	11.4	12.5	12.3
8	8.8	10.3	10.0
9+	21.6	27.8	26.5
Total	100.0	100.0	100.0
Mean size of households	6.2	7.0	6.8
<b>Percentage of households with orphans and foster children under 18</b>			
Foster children <sup>1</sup>	17.8	26.6	24.8
Double orphans	0.3	0.9	0.8
Single orphans <sup>2</sup>	4.2	5.0	4.9
Foster and/or orphan children	20.8	29.6	27.8
Number of households	771	2,889	3,660

<sup>1</sup> Foster children are those under age 18 living in households where neither their mother nor their father present  
<sup>2</sup> Includes children with one dead parent and an unknown survival status of the other parent.

mother only, although their father is still alive. Only 2 percent live with their father only, although their mother is alive, and 11 percent live with neither of their natural parents, although both parents are alive. Table 2.3 also provides data on the extent of orphan hood, that is, the proportion of children who have lost one or both parents. It shows that less than 1 percent of children under age 18 have both parents dead while 3 percent have one or both parents dead.

The percentage of children living with both biological parents decreases with increasing age of the child. The percentage of children living with both biological parents is slightly higher among households in North West Upolu (75 percent) when compared with other households. Among children in the highest wealth quintile, 70 percent are living with both biological parents compared with 76 percent of households in the lowest wealth quintile<sup>1</sup>.

**Table 2.3 Children's living arrangements and orphan hood**

Percent distribution of 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, Samoa 2014

Background characteristic	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total				
	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 <sup>1</sup>	Number of children
<b>Age</b>														
0-4	75.6	13.6	1.2	0.7	0.1	7.4	0.1	0.1	0.1	1.0	100.0	7.7	1.6	3,581
..<2	75.1	16.3	1.2	0.6	0.0	5.6	0.0	0.0	0.0	1.2	100.0	5.6	1.2	1,441
..2-4	76.0	11.8	1.2	0.8	0.1	8.5	0.1	0.2	0.2	0.9	100.0	9.1	2.0	2,139
5-9	73.0	10.1	1.5	1.8	0.5	11.1	0.2	0.3	0.2	1.3	100.0	11.8	2.7	3,090
10-14	69.8	7.7	2.4	2.8	0.7	13.2	0.4	0.4	0.6	2.1	100.0	14.5	4.5	2,843
15-17	66.0	6.9	3.8	2.1	1.0	13.1	0.4	0.3	0.7	5.7	100.0	14.5	6.2	1,488
<b>Sex</b>														
Male	72.1	10.1	1.8	1.9	0.4	10.8	0.2	0.3	0.4	2.0	100.0	11.6	3.1	5,766
Female	72.0	10.3	2.2	1.6	0.5	10.6	0.3	0.2	0.3	2.0	100.0	11.4	3.5	5,236
<b>Residence</b>														
Urban	72.2	12.7	2.3	1.4	0.5	8.0	0.4	0.0	0.1	2.4	100.0	8.5	3.3	1,979
Rural	72.1	9.7	1.9	1.8	0.5	11.3	0.2	0.3	0.4	1.9	100.0	12.2	3.3	9,022
<b>Region</b>														
Apia Urban Area	72.2	12.7	2.3	1.4	0.5	8.0	0.4	0.0	0.1	2.4	100.0	8.5	3.3	1,979
North West Upolu	74.9	8.3	2.2	1.8	0.3	9.6	0.2	0.2	0.5	1.9	100.0	10.6	3.6	3,690
Rest Of Upolu	70.9	9.8	2.2	1.7	0.7	11.5	0.2	0.3	0.3	2.3	100.0	12.3	3.8	2,801
Savaii	69.2	11.5	0.9	2.1	0.4	13.4	0.1	0.5	0.4	1.5	100.0	14.4	2.3	2,530
<b>Wealth quintile</b>														
Lowest	76.0	8.0	1.8	2.1	0.7	9.2	0.1	0.2	0.1	1.7	100.0	9.6	3.0	2,499
Second	71.4	10.1	2.2	1.9	0.3	11.0	0.1	0.3	0.4	2.2	100.0	11.8	3.3	2,295
Middle	68.8	12.1	1.9	1.3	0.7	12.3	0.5	0.3	0.7	1.4	100.0	13.8	4.2	2,211
Fourth	73.4	10.5	2.2	1.3	0.1	9.6	0.2	0.2	0.6	1.8	100.0	10.7	3.3	2,122
Highest	70.0	10.6	1.5	2.2	0.5	11.4	0.3	0.1	0.2	3.1	100.0	12.0	2.7	1,874
Total <15	73.0	10.7	1.7	1.7	0.4	10.3	0.2	0.3	0.3	1.4	100.0	11.1	2.8	9,514
Total <18	72.1	10.2	2.0	1.8	0.5	10.7	0.2	0.3	0.4	2.0	100.0	11.5	3.3	11,001

<sup>1</sup> Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent.

### 2.2.2 School Attendance by Survivorship of Parents

Children who are orphaned or live in a house with chronically ill adults may be at a greater risk of dropping out of school because of lack of money to pay school fees, the need to stay at home to care for the sick relative or the need to sell goods to survive. The 2014 SDHS included information to monitor such situations, including information on school attendance of children age 10-14 by paren-

<sup>1</sup> See Section 2.6 for a description of how the wealth index was calculated.

tal survival. The overall ratio of school attendance of children whose parents are dead to those whose parents are alive, (and at least one of them residing with the child) is not presented due to the low number of cases of children age 10-14 attending school whose parents are both dead (17 cases). As mentioned above, the vast majority of children in Samoa (97 percent) either have both parents alive or live with at least one parent.

### **2.3 EDUCATIONAL ATTAINMENT OF HOUSEHOLD MEMBERS**

Education is important because it helps individuals make informed decisions that impact their health and well-being. At present, an increasing number of qualified teachers graduate from universities overseas and also from the National University of Samoa, which has enabled the Samoan government to improve the level of education, especially in the rural areas. The current system of formal education in Samoa is based on a three-tier system: eight years of primary education (year 1 through 8), followed by five years of secondary education (year 9 to 13), and tertiary education. In addition to a university education, which is considered tertiary, many institutions offer vocational, technical, and professional training that could be considered tertiary.

Tables 2.4.1 and 2.4.2 show the percent distribution of the female and male household populations, respectively, age six years and over, by highest level of education attended or completed, according to background characteristics. The majority of Samoans have gone to school. The proportion of the population with no education is low, 2 percent for both males and females. The percentage is much higher (6-7 percent of males and females) in the age group 6-9 years since many children at these ages may not have started their schooling yet. Among the elderly, that is, those who are 65 years and above, the proportions who have never received any formal education are 4 percent and 3 percent of females and males, respectively.

The results of the 2014 SDHS indicate that women tend to be more educated than men. Twenty seven (27) percent of the women have at least completed secondary of which about 13 percent even have some tertiary education. In contrast, only 23 percent of the men have at least completed secondary education. Among them, 12 percent have attended tertiary education.

Urban-rural differential in education level is more pronounced than the differential by sex. Thus, while 36 percent of females residing in urban areas have completed secondary or higher education, only 25 percent of their rural counterparts have achieved that same level of education. Among males, the corresponding values are 35 percent in urban and 20 percent in rural areas.

There are also variations across regions and the patterns are similar for males and females. Apia urban area has the highest proportion of people who have completed secondary or higher education (36 percent and 35 percent among females and males, respectively). In contrast, the regions of Savaii and the Rest of Upolu have the smallest proportion of highly educated people. In general, the males residing in these 2 regions are least likely to have attained a high level of education.

Wealth also has a strong positive relationship with level of education. As tables 2.4.1 and 2.4.2 show, a person, whether male or female, who belongs to the richest quintile group is about 10 times more likely to have received tertiary education than one who belongs to the poorest quintile group.

The median number of years of schooling is 10.4 years for women and 9.8 years for men. Considering only the population above age 25, the age when schooling would have been completed, tables 2.4.1 and 2.4.2 show that median years of schooling, regardless of sex, decline with advancing age. In other words, the younger persons are more likely to have attended more years of schooling than those in the older cohort. This suggests that the education system in the country has improved over the years by providing conditions for students to remain in school longer than it had in the past.

In general, the number of years of schooling is longer for people who live in the urban areas and for those who belong to wealthier households. Respondents from the wealthiest household have

about 3 more years of schooling than those from the poorest households.

Table 2.4.1 Educational attainment of the female household population

Percent distribution of the de facto female household populations age six and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Samoa 2014

Background characteristic	No education, pre-school, special needs	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	6.3	93.1	0.0	0.2	0.0	0.0	0.4	100.0	1,174	1.3
10-14	0.8	73.6	6.7	18.3	0.0	0.1	0.4	100.0	1,354	5.7
15-19	0.6	1.4	2.0	79.1	8.9	7.8	0.3	100.0	1,176	10.6
20-24	1.3	1.0	1.4	32.0	29.9	34.0	0.5	100.0	922	12.4
25-29	1.0	0.7	1.0	36.4	29.0	30.7	1.2	100.0	824	12.3
30-34	0.6	1.2	3.5	42.2	28.0	23.2	1.4	100.0	662	12.1
35-39	0.7	0.7	2.2	51.5	26.1	17.3	1.5	100.0	600	11.8
40-44	0.3	1.4	3.0	54.7	24.1	15.0	1.4	100.0	626	11.6
45-49	0.4	2.6	3.9	60.1	17.9	14.1	1.0	100.0	507	11.4
50-54	1.7	5.2	8.4	53.7	17.1	11.7	2.3	100.0	657	11.1
55-59	0.7	10.5	12.7	52.8	12.1	9.9	1.4	100.0	440	10.6
60-64	0.9	19.3	20.5	41.5	6.5	9.6	1.6	100.0	320	9.1
65+	4.1	33.5	23.5	23.8	4.7	6.7	3.6	100.0	769	7.5
Don't know/missing	*	*	*	*	*	*	*	100.0	11	*
<b>Residence</b>										
Urban	1.9	20.7	6.2	32.7	15.8	20.9	1.8	100.0	2,035	11.1
Rural	1.8	26.6	5.5	40.5	13.8	10.7	1.0	100.0	8,008	10.3
<b>Region</b>										
Apia urban area	1.9	20.7	6.2	32.7	15.8	20.9	1.8	100.0	2,035	11.1
North West Upolu	1.6	24.7	4.9	38.9	15.9	13.3	0.7	100.0	3,415	10.6
Rest of Upolu	1.8	28.1	6.7	41.8	11.2	9.5	0.9	100.0	2,344	10.0
Savaii	2.1	28.0	5.3	41.7	13.3	8.1	1.4	100.0	2,249	10.1
<b>Wealth quintile</b>										
Lowest	2.0	31.2	6.5	45.3	10.9	3.5	0.6	100.0	1,860	9.3
Second	2.3	27.6	5.8	43.4	13.2	6.5	1.1	100.0	2,007	10.1
Middle	1.4	27.7	6.0	42.4	13.7	7.6	1.2	100.0	2,020	10.2
Fourth	1.6	22.5	5.7	38.8	15.6	14.9	0.9	100.0	2,025	10.7
Highest	1.7	19.0	4.5	26.1	17.2	29.8	1.7	100.0	2,130	11.8
Total	1.8	25.4	5.7	39.0	14.2	12.8	1.1	100.0	10,042	10.4

<sup>1</sup> Completed 8 grade at the primary level

<sup>2</sup> Completed 5 grade at the secondary level

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

Table 2.4.2 Educational attainment of the male household population

Percent distribution of the de facto male household populations age six and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Samoa 2014

Background characteristic	No education, pre-school, special needs	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	6.7	93.1	0.0	0.0	0.0	0.0	0.2	100.0	1,278	1.1
10-14	0.5	76.2	5.4	17.3	0.1	0.0	0.5	100.0	1,489	5.6
15-19	1.1	3.8	4.0	78.7	6.3	5.7	0.4	100.0	1,311	10.1
20-24	1.4	2.2	4.4	45.7	22.5	23.3	0.4	100.0	1,068	11.8
25-29	1.2	1.8	4.7	43.7	23.4	24.5	0.8	100.0	855	11.9
30-34	1.5	2.7	5.4	46.0	22.6	20.5	1.3	100.0	749	11.7
35-39	0.6	2.4	5.7	52.6	20.0	17.6	1.1	100.0	620	11.5
40-44	1.3	3.7	10.4	49.0	17.3	16.5	1.9	100.0	683	11.2
45-49	1.3	6.1	11.1	51.6	13.9	15.1	1.0	100.0	624	11.0
50-54	2.0	7.3	12.6	48.1	12.0	14.4	3.7	100.0	507	10.7
55-59	2.3	16.9	15.2	39.0	9.8	14.4	2.4	100.0	531	10.1
60-64	1.4	25.4	24.1	28.2	9.1	10.1	1.6	100.0	362	7.9
65+	2.7	28.9	25.5	23.5	5.3	11.2	2.9	100.0	625	7.7
Don't know/missing	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	14	0.0
<b>Residence</b>										
Urban	2.5	20.9	6.1	33.8	12.2	22.8	1.7	100.0	2,032	11.0
Rural	2.0	28.6	8.1	40.2	11.0	9.2	1.0	100.0	8,683	9.5
<b>Region</b>										
Apia urban area	2.5	20.9	6.1	33.8	12.2	22.8	1.7	100.0	2,032	11.0
North west										
Upolu	2.1	25.9	7.5	39.1	13.6	11.3	0.7	100.0	3,637	10.1
Rest of Upolu	2.2	31.3	8.6	40.9	8.6	7.7	0.7	100.0	2,590	9.1
Savaii	1.6	29.9	8.5	41.1	9.6	7.6	1.7	100.0	2,457	9.1
<b>Wealth quintile</b>										
Lowest	2.5	34.3	10.5	41.6	7.8	2.4	0.9	100.0	2,143	8.0
Second	1.9	30.3	8.8	43.3	9.6	5.2	0.9	100.0	2,116	9.2
Middle	1.9	27.2	8.0	40.9	11.9	8.9	1.2	100.0	2,128	9.8
Fourth	2.0	24.4	7.0	39.2	13.0	13.0	1.4	100.0	2,170	10.2
Highest	2.1	19.6	4.3	30.1	13.7	29.0	1.2	100.0	2,157	11.4
Total	2.1	27.2	7.7	39.0	11.2	11.7	1.1	100.0	10,715	9.8

<sup>1</sup> Completed 8 grade at the primary level

<sup>2</sup> Completed 5 grade at the secondary level

### 2.3.1 School Attendance Ratios

The 2014 SDHS collected information on school attendance for the population age 5-24 that allows the calculation of net attendance ratios (NARs) and gross attendance ratios (GARs). The NAR for primary school is the percentage of the primary-school-age (5-12 years) population that is attending primary school. The NAR for secondary school is the measure of the secondary-school-age (13-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR however, measures participation at each level of schooling among persons age 5-24. The GAR is almost always higher than the NAR for the same level because the GAR includes participation by those who may be older, because they may have started school late, may have repeated one or more grades in school, or may have dropped out of school and later returned, or may be younger than the official age range for that level.

Table 2.5 presents data on the NAR and GAR among the population age 5-24 years by level of schooling and sex, according to place of residence, region and wealth quintile. At primary level, the data on NAR indicate that 91 percent of children age 5-12 who should be attending primary school, are currently doing so. GAR, on the other hand, is 102 percent, which means that the number of students actually attending school at primary level is 2 percent more than the population 5-12.

The results show nearly similar NAR for females (91 percent) and males (90 percent) at the primary school level indicating that there is no gender gap in primary school attendance for the primary school-age population who should be attending school at a given level. The GAR at primary level likewise shows no significant difference between males and females.

**Table 2.5 School attendance ratios**

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the gender parity index (GPI), according to background characteristics, Samoa 2014

Background characteristic	Net attendance ratio <sup>1</sup>				Gross attendance ratio <sup>2</sup>			
	Male	Female	Total	Gender Parity Index <sup>3</sup>	Male	Female	Total	Gender Parity Index <sup>3</sup>
<b>PRIMARY SCHOOL</b>								
<b>Residence</b>								
Urban	88.4	89.7	89.0	1.01	97.0	96.8	96.9	1.00
Rural	90.9	91.7	91.3	1.01	103.7	102.0	102.9	0.98
<b>Region</b>								
Apia urban area	88.4	89.7	89.0	1.01	97.0	96.8	96.9	1.00
North West Upolu	88.3	91.7	89.9	1.04	99.5	100.7	100.1	1.01
Rest of Upolu	92.7	91.9	92.3	0.99	106.8	104.7	105.8	0.98
Savaii	92.5	91.7	92.1	0.99	106.1	101.1	103.6	0.95
<b>Wealth quintile</b>								
Lowest	88.0	90.5	89.1	1.03	101.3	103.4	102.2	1.02
Second	88.3	89.8	89.0	1.02	100.2	101.5	100.8	1.01
Middle	91.7	93.5	92.6	1.02	105.5	104.7	105.1	0.99
Fourth	91.9	90.6	91.2	0.99	104.8	97.9	101.4	0.93
Highest	93.8	92.7	93.2	0.99	101.7	96.9	99.3	0.95
<b>Total</b>	<b>90.5</b>	<b>91.3</b>	<b>90.9</b>	<b>1.01</b>	<b>102.6</b>	<b>101.0</b>	<b>101.8</b>	<b>0.99</b>
<b>SECONDARY SCHOOL</b>								
<b>Residence</b>								
Urban	64.6	73.6	69.1	1.14	69.0	76.8	72.9	1.11
Rural	56.1	69.7	62.5	1.24	59.4	73.2	65.8	1.23
<b>Region</b>								
Apia urban area	64.6	73.6	69.1	1.14	69.0	76.8	72.9	1.11
North west Upolu	54.1	68.9	61.0	1.27	58.1	73.1	65.2	1.26
Rest of Upolu	55.1	66.0	60.4	1.20	58.4	68.1	63.1	1.17
Savaii	59.9	75.4	66.7	1.26	62.0	79.0	69.6	1.27
<b>Wealth quintile</b>								
Lowest	47.7	58.7	52.9	1.23	51.4	60.7	55.8	1.18
Second	53.9	71.1	62.2	1.32	57.3	74.5	65.5	1.30
Middle	56.7	69.9	63.2	1.23	59.4	75.5	67.3	1.27
Fourth	63.7	78.0	70.2	1.22	68.0	81.2	74.0	1.19
Highest	67.4	76.2	71.4	1.13	70.5	78.8	74.3	1.12
<b>Total</b>	<b>57.7</b>	<b>70.5</b>	<b>63.7</b>	<b>1.22</b>	<b>61.2</b>	<b>73.9</b>	<b>67.2</b>	<b>1.21</b>

<sup>1</sup> The NAR for primary school is the percentage of the primary-school age (5-12 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (13-18 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. 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 percent.

<sup>3</sup> The Gender Parity Index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

There are no major variations in both NAR and GAR at the primary school with respect to the background characteristics of the students.

Table 2.5 shows that both the NAR and GAR are much lower at the secondary school level: 64 percent of students age 13-18 who should be attending secondary school are in school (NAR), while the GAR for secondary school is 67 percent. The secondary school NAR is substantially higher for females (71 percent) than males (58 percent), indicating much wider gender gap in favour of girls in the secondary school attendance. GAR at secondary school level is also higher for females than males (74 percent versus 61 percent) among

The NAR and the GAR for secondary education are lower in rural than urban areas. For example, the secondary school GAR is 66 percent in rural areas compared with 73 percent in urban areas. Regional differences also exist, with the NAR and GAR for the secondary school being notably lower in the Rest of Upolu region (60 percent and 63 percent, respectively) when compared with all other regions.

As one might expect, wealth is a determinant of the level of school attendance among children. Thus, data show that at secondary level, NAR increases with wealth quintile from 53 percent among children in the lowest wealth quintile to 71 percent among those in the highest wealth quintile. A similar pattern can be seen with respect to NAR at primary level although the variation is less pronounced, which is from 89 percent among children belonging to the lowest wealth quintile increasing to 93 percent in the highest wealth quintile.

The Gender Parity Index (GPI) represents the ratio of the NAR (or GAR) for females to the NAR (or GAR) for males. It is presented in Table 2.5 at both the primary and secondary levels and offers a summary measure of gender differences in school attendance rates. A GPI of less than 1 indicates that a smaller proportion of females than males attend school. In Samoa, the GPI for NAR is 1.01 for primary school attendance and 1.22 for secondary school attendance, indicating that girls are ahead of boys at both levels of education.

### **2.3.2 Grade Repetition and Dropout Rates**

Table 2.6 presents school repetition and dropout rates for the de facto household population age 5-24 who attended primary school in the previous school year, by school grade and background characteristics. Repetition and drop-out rates describe the flow of pupils through the educational system in Samoa. Repetition rates indicate the percentage of pupils who attended a particular class during the previous school year who are repeating that grade in the current school year, that is, those who were in a particular grade in the 2012/2013 academic year who attended the same grade during the 2013/2014 academic year. Drop-out rates show the percentage of pupils who attended class during the 2012/2013 academic year but did not attend school the following year. Repetition and drop-out rates approach zero when pupils nearly always progress to the next grade at the end of the school year. They often vary across grades, indicating points in the school system where pupils are not regularly promoted to the next grade or they decide to drop out of school.



**Table 2.6 Grade repetition and dropout rates**

Repetition and dropout rates for the de facto household population age 5-24 who attended primary school in the previous school year by school grade, according to background characteristics, Samoa 2014

Background characteristic	School grade							
	1	2	3	4	5	6	7	8
<b>REPETITION RATE 1</b>								
<b>Sex</b>								
Male	1.7	0.0	0.0	0.3	0.0	0.0	0.0	0.7
Female	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<b>Residence</b>								
Urban	3.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Rural	1.1	0.2	0.0	0.2	0.0	0.0	0.0	0.2
<b>Region</b>								
Apia urban area	3.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0
North west								
Upolu	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of Upolu	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Savaii	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.7
<b>Wealth quintile</b>								
Lowest	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Second	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle	0.7	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Fourth	3.3	0.9	0.0	0.0	0.0	0.0	0.0	0.9
Highest	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>1.5</b>	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>
<b>DROPOUT RATE 2</b>								
<b>Sex</b>								
Male	0.3	0.3	0.6	0.0	0.0	0.7	0.7	2.2
Female	0.0	0.3	0.0	0.3	0.0	0.4	0.0	2.0
<b>Residence</b>								
Urban	0.0	0.0	1.7	0.0	0.0	1.9	0.0	1.9
Rural	0.2	0.4	0.0	0.2	0.0	0.2	0.4	2.1
<b>Region</b>								
Apia urban area	0.0	0.0	1.7	0.0	0.0	1.9	0.0	1.9
North West								
Upolu	0.0	0.5	0.0	0.0	0.0	0.6	0.5	4.0
Rest of Upolu	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Savaii	0.0	0.7	0.0	0.7	0.0	0.0	0.7	1.5
<b>Wealth quintile</b>								
Lowest	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.8
Second	0.0	0.0	0.0	0.0	0.0	0.9	0.0	4.7
Middle	0.0	1.6	0.0	0.8	0.0	1.0	0.0	2.6
Fourth	0.8	0.0	0.8	0.0	0.0	0.0	0.0	1.0
Highest	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>0.1</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.5</b>	<b>0.4</b>	<b>2.1</b>

In Samoa, virtually all primary school students in grades 1 through 8 are promoted every year. Though it rarely happens, repetition occurs most frequently among pupils in grade 1 and, to a lesser extent, in grade 8 with repetition rates of 1.5 percent and 0.4 percent, respectively. These proportions are especially high among 1st grade repeaters in the urban areas (3.5 percent), and among those from the lowest and fourth wealth quintiles (2.1 and 3.3 percent, respectively).

School dropout is also rare as nearly all children stay in school until they complete primary level of education. Overall, dropout rate is less than 1 percent for all grades except for grade 8 where 2.1 percent of students drop out of school. The results of the survey also show that students living in

North West Upolu region and those whose households belong to the second wealth quintile are more likely to drop out at grade 8 than other students.

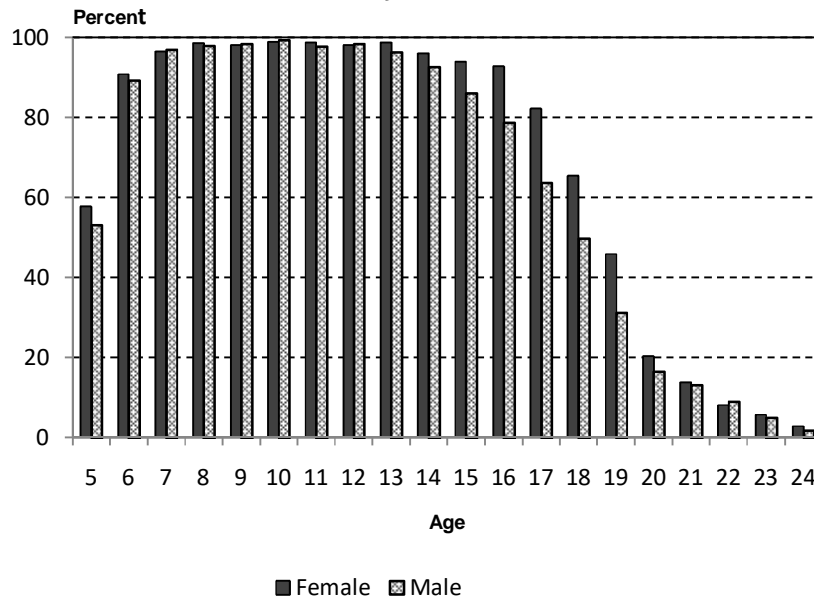
It is noteworthy to point out that, compared to the repetition and dropout rates observed in the 2009 SDHS, there have been significant improvements in these aspects of primary education. The repetition rate at grade 1 declined from 8 percent in 2009 to 1.5 percent by 2014. Even at the last level of primary school, repetition rate also declined, albeit slightly. Dropout rate from grade 8 also declined from 3 to 1 percent over the same period.

### 2.3.3 Age-Specific School Attendance Rates

Figure 2.2 shows the age-specific attendance rates (ASAR) for household population age 5-24 by sex. The ASAR shows participation in schooling at any level, from primary through higher education. The closer the ASAR is to 100, the higher the participation of a given age population at that level. More than half of children age five are attending school, 53 percent among boys and 58 percent among girls. It should be noted, however, that children age five at the time the household was interviewed may still be in pre-school and have not yet entered primary education.

School attendance rises markedly up to age 8 and remains high up to age 13 and then gradually declines. There are no marked differences in the proportion of boys and girls attending school up to age 13; however, beyond this age, the proportions attending school are much higher among the girls.

**Figure 2.2 Age-Specific Attendance Rates of Population Age 15-24 by Sex**



## 2.4 HOUSING CHARACTERISTICS

There is a strong association between the socio-economic condition of households and the vulnerability of its members, especially children, to common diseases. The amenities and assets available to households are important in determining the general socio-economic status of the population. The 2014 SDHS included questions on the household's access to electricity, source of drinking water, type of sanitation facilities, flooring materials, and ownership of durable goods.

### 2.4.1 Household Drinking Water

The availability of and accessibility to improved drinking water may, to a large extent, minimise the prevalence of water-borne diseases among household members, especially young children. The source of drinking water is important because potentially fatal diseases, such as diarrhoeal diseases, guinea worm, typhoid, schistosomiasis, trachoma, and dysentery, are common in Samoa. Table 2.7 shows the distribution of households and population according to main source of drinking water, time to collect drinking water, and person who usually collects drinking water and treatment of water according to residence.

Overall, 95 percent of households obtain drinking water from an improved source. Seventy-eight percent of households have access to piped water in their dwelling, yard, or plot, and only 1 percent access water from a public tap. Seven percent of households use rainwater for drinking while 9 percent take bottled water. About 1 percent of households use non-improved sources of drinking water such as unprotected dug well, unprotected spring, surface water.

It should be noted that access to an improved source of drinking water has deteriorated somewhat among rural households during the last 5 years. Results of the 2009 SDHS indicated that the proportion of rural households having access to an improved source was 98 percent whereas the 2014 SDHS shows that it is down to 95 percent. In urban areas, the proportion has nevertheless remained stable at 98 percent.

Almost all households in Samoa (97 percent) have water on their premises (98 percent in urban and 96 percent in rural areas). Since water is not available within their premises, 2 percent of all households collect water elsewhere spending less than half an hour doing so and another 1 percent spend more than half an hour to do the same.

Drinking water is collected more frequently by male adults (2 percent) than by other household members (less than 1 percent). Regarding treatment of water, about half of the households (52 percent) do not treat their water prior to drinking. Of households that do treat their drinking water, the most common treatment methods are boiling (45 percent) or straining through cloth (7 percent).

Table 2.7 Household drinking water

Percent distribution of households and population by source, time to collect, and person who usually collects drinking water; and percentage of households and population by treatment of drinking water, according to residence, Samoa 2014

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Source of drinking water</b>						
Improved source	72.2	90.5	86.6	76.1	92.0	89.0
Piped water into dwelling/yard/plot	69.7	80.7	78.4	73.9	82.6	81.0
Public tap/standpipe	0.0	1.3	1.0	0.0	1.3	1.1
Tube well or borehole	0.0	0.1	0.1	0.0	0.1	0.1
Protected dug well	0.1	0.2	0.2	0.0	0.1	0.1
Protected spring	0.5	0.5	0.5	0.7	0.6	0.6
Rainwater	1.8	7.7	6.5	1.5	7.2	6.1
Non-improved source	0.6	1.1	1.0	0.8	1.2	1.1
Unprotected dug well	0.3	0.2	0.2	0.4	0.3	0.3
Unprotected spring	0.4	0.7	0.6	0.3	0.7	0.6
Surface water	0.0	0.2	0.2	0.0	0.2	0.2
Bottled water, improved source for cooking/washing <sup>1</sup>	26.2	4.1	8.8	22.1	3.1	6.7
Bottled water, non-improved source for cooking/washing <sup>1</sup>	0.4	0.5	0.5	0.2	0.4	0.4
Other	0.6	3.8	3.1	0.8	3.3	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	98.3	94.6	95.4	98.3	95.1	95.7
<b>Time to obtain drinking water (round trip)</b>						
Water on premises	98.2	96.4	96.8	98.0	96.4	96.7
Less than 30 minutes	1.5	2.2	2.1	2.0	2.1	2.1
30 minutes or longer	0.1	1.1	0.9	0.0	1.2	0.9
Don't know/missing	0.1	0.3	0.3	0.0	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Person who usually collects drinking water</b>						
Adult female 15+	0.8	0.9	0.8	0.7	1.0	0.9
Adult male 15+	0.6	2.1	1.8	0.9	1.9	1.7
Female child under age 15	0.1	0.2	0.2	0.4	0.3	0.3
Male child under age 15	0.0	0.2	0.1	0.0	0.2	0.1
Other	0.1	0.2	0.2	0.0	0.2	0.2
Water on premises	98.2	96.4	96.8	98.0	96.4	96.7
Missing	0.1	0.0	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Water treatment prior to drinking<sup>3</sup></b>						
Boiled <sup>2</sup>	53.1	43.0	45.2	55.1	43.1	45.4
Bleach/chlorine	0.1	0.2	0.2	0.1	0.2	0.2
Strained through cloth	4.2	8.3	7.4	4.0	8.8	7.9
Ceramic, sand or other filter	3.6	1.8	2.2	3.0	1.9	2.1
Other	1.7	1.6	1.6	1.3	1.7	1.6
No treatment	45.5	53.6	51.9	44.0	53.3	51.5
Percentage using an appropriate treatment method <sup>3</sup>	53.6	45.8	47.4	55.4	46.2	47.9
Number	771	2,889	3,660	4,803	20,172	24,975

<sup>1</sup> Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing.

<sup>2</sup> Respondents may report multiple treatment methods (boiled, bleach, etc) so the sum of treatment may exceed 100 percent.

<sup>3</sup> Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

## 2.4.2 Household Sanitation Facilities

Poor sanitation coupled with unsafe water sources increases the risk of water-borne diseases and illnesses due to poor hygiene. An improved toilet facility is considered the most efficient and hygienic method of human waste disposal. Table 2.8 shows the proportion of households and population having access to hygienic sanitation facilities. Hygienic status is determined on the basis of type of facility used and whether or not it is a shared facility. A household's toilet/latrine facility is classified as hygienic if it is used only by household members (i.e., not shared) and if the type of facility effectively separates human waste from human contact. The types of facilities that are most likely to accomplish this are 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. A household's sanitation facility is classified as unhygienic if it is shared with other households or if it does not effectively separate human waste from human contact.

**Table 2.8 Household sanitation facilities**

Percent distribution of households and population by type of toilet/latrine facilities, according to residence, Samoa 2014

Type of toilet/latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Improved, not shared facility</b>	<b>94.0</b>	<b>95.7</b>	<b>95.3</b>	<b>93.3</b>	<b>96.0</b>	<b>95.6</b>
Flush/pour flush to septic tank	91.4	85.7	86.9	90.3	86.3	87.1
Flush/pour flush to pit latrine	2.2	8.2	6.9	2.6	8.0	7.0
Ventilated improved pit (VIP) latrine	0.3	0.9	0.8	0.3	0.9	0.8
Pit latrine with slab	0.1	0.9	0.7	0.1	0.8	0.7
<b>Non-improved facility</b>	<b>5.5</b>	<b>3.4</b>	<b>3.9</b>	<b>6.3</b>	<b>3.1</b>	<b>3.7</b>
Any facility shared with other households	4.9	2.5	3.0	5.5	2.4	3.0
Flush/pour flush not to septic tank/pit latrine	0.0	0.1	0.1	0.0	0.1	0.1
Pit latrine without slab/open pit	0.4	0.5	0.5	0.5	0.4	0.4
No facility/bush/field	0.1	0.2	0.2	0.2	0.1	0.1
Other	0.1	0.1	0.1	0.1	0.1	0.1
Missing	0.5	0.8	0.8	0.3	0.9	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	771	2,889	3,660	4,803	20,172	24,975

Overall, 95 percent of households in Samoa use improved sanitation facilities that are not shared with another household. Nearly all is flush type connected to either septic tank (87 percent) or pit latrine (7 percent). The proportion of rural households with improved sanitation facilities is slightly higher than that of urban households (96 compared to 94 percent); however, more of the rural households connect their toilet to a pit latrine rather than to a septic tank.

Use of non-improved toilet facilities has gone down from 6 percent in 2009 to 4 percent in 2014. Although the reduction is quite small, it nevertheless implies that there has been an improvement in the sanitary condition among Samoan households.

### 2.4.3 Household Characteristics

Table 2.9 presents the distribution of households in terms of access to electricity, some selected features of their housing situation, and type of fuel used.

Nearly all households (98 percent) in Samoa have access to electricity. This is the case even in rural areas.

The type of flooring material used in dwellings is a proxy indicator of the socio-economic status of the household as well as the likelihood of exposure to disease-causing agents. Most households in Samoa (93 percent) have finished floors (parquet or polished wood, vinyl or asphalt strips, ceramic tiles, cement, carpet), with only 5 percent of households having rudimentary or natural flooring material (gravel, sand, wood planks, coconut midribs). Carpeted floors are the most common type of flooring, used by 44 percent of all households (47 percent in rural areas and 32 percent in urban areas). The second most common flooring material is cement, used by 31 percent of all households. Cement flooring is more common in rural than in urban households (32 percent compared with 28 percent). Overall, 13 percent of households use ceramic tiles for flooring; rural households are more than twice likely to have this type of flooring than urban households (24 percent compared to only 10 percent in urban areas).

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 like acute respiratory infections and skin diseases, which particularly affect children. The 2014 SDHS results show that 46 percent of households have three or more rooms for sleeping, 29 percent have only one room, while 23 percent have two rooms for sleeping. Households in urban areas are markedly more likely than those in rural areas to have three or more rooms for sleeping (63 and 42 percent, respectively).

Smoke from solid fuels used for cooking, such as charcoal, wood, and other biomass fuels, is a major cause of respiratory infections. The type of fuel used for cooking, the location where food is cooked, and the type of stove used are all related to indoor air quality and the degree to which household members are exposed to risk of respiratory infections and other diseases. Nearly seven in ten households (67 percent) do their cooking in a separate building, 31 percent cook in the house, and 2 percent cook outdoors. The majority of rural households do their cooking in a separate building (76 percent), while the majority of urban households prefer cooking inside the house (62 percent).

Almost two-thirds of Samoan households (62 percent) use wood for cooking, about one in five (24 percent) use LPG/ natural gas/bio gas, and about 7 percent use kerosene. In rural areas, the main cooking fuel is wood (72 percent), followed by LPG/ natural gas/bio gas (18 percent). In urban areas, the most common fuel used for cooking is LPG/ natural gas/bio gas used by 46 percent of households, followed by wood (26 percent).

Reducing the proportion of the population relying on solid fuels is a Millennium Development Goal (MDG). In 2014, nearly two-thirds of households in Samoa (63 percent) still use solid fuels for cooking (26 percent in urban areas and 73 percent in rural areas). These proportions are only slightly lower than those recorded in the 2009 SDHS. The majority of these households (99 percent), whether in urban or rural areas, use solid fuels either open fire or a stove without a chimney or hood.

Table 2.9 Household characteristics

Percent distribution of households and population by housing characteristics and percentage using solid fuel for cooking; and among those using solid fuels, percent distribution by type of fire/stove, according to residence, Samoa 2014

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Electricity:</b>						
Yes	99.4	97.6	97.9	99.4	98.3	98.5
No	0.6	2.4	2.0	0.6	1.7	1.5
Missing	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
<b>Flooring material:</b>						
Gravel/sand	0.1	1.4	1.1	0.3	1.5	1.2
Wood planks	5.5	3.3	3.8	6.0	3.1	3.6
Coconut midribs	0.0	0.5	0.4	0.0	0.5	0.4
Parquet or polished wood	6.3	2.9	3.6	5.6	2.6	3.2
Vinyl or asphalt strips	2.9	1.6	1.9	2.1	1.3	1.4
Ceramic tiles	24.3	9.5	12.6	20.4	8.7	10.9
Cement	27.5	32.4	31.4	29.3	31.9	31.4
Carpet	32.3	47.0	43.9	35.7	49.3	46.7
Other	0.6	1.5	1.3	0.6	1.3	1.1
Missing	0.4	0.0	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rooms used for sleeping:</b>						
One	17.0	32.4	29.2	14.0	31.7	28.3
Two	19.7	24.4	23.4	19.0	23.5	22.6
Three or more	63.2	41.9	46.4	66.9	43.8	48.2
Missing	0.0	1.3	1.0	0.0	1.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Place for cooking:</b>						
In the house	62.2	22.3	30.7	55.2	17.7	25.0
In a separate building	35.5	75.5	67.1	43.5	80.2	73.1
Outdoors	1.3	1.7	1.6	0.9	1.8	1.7
Other	0.0	0.0	0.0	0.0	0.0	0.0
Missing	1.0	0.4	0.5	0.4	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Cooking fuel:</b>						
Electricity	11.8	3.3	5.1	8.1	2.5	3.6
LPG	45.5	17.8	23.7	42.9	14.6	20.1
Kerosene	15.0	4.5	6.7	16.1	4.1	6.4
Wood	26.0	71.8	62.2	32.0	76.2	67.7
Coconut parts	0.1	1.6	1.3	0.1	2.0	1.7
No food cooked in household	1.0	0.3	0.5	0.4	0.1	0.2
Other	0.4	0.7	0.6	0.3	0.4	0.4
Missing	0.1	0.0	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking	26.1	73.4	63.4	32.1	78.2	69.4
Number of households	771	2,889	3,660	4,803	20,172	24,975
<b>Type of fire/stove among households using solid fuel<sup>1</sup></b>						
Open fire/stove with chimney	1.0	0.5	0.5	1.0	0.5	0.6
Open fire/stove without chimney or hood	97.6	99.3	99.1	97.3	99.2	99.0
Other	1.0	0.1	0.2	1.0	0.1	0.2
Missing	0.5	0.1	0.2	0.7	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population using solid fuel	201	2,119	2,321	1,544	15,781	17,325

LPG = Liquid petroleum gas

<sup>1</sup> Includes wood and coconut parts

## 2.5 HOUSEHOLD POSSESSIONS

The availability of durable goods is a proximate measure of household socioeconomic status. Moreover, particular goods have specific benefits. For example, having access to a radio or a television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transport allows greater access to many services available only in places away from their residence. Table 2.10 provides information on household ownership of durable goods (radios, televisions, telephones, and refrigerators) and modes of transportation (bicycles, motorcycles, and automobiles).

The 2014 SDHS results indicate that Samoan households, in general, possess appliances that enable them to access information beyond the communities they are living in. For example, 74 percent of households own a radio; 82 percent own a television set. In addition, nearly every household (96 percent) has the means to communicate through mobile telephone even if only 15 percent own a non-mobile telephone.

Except for air conditioner, amenities for modern and comfortable living are owned also by a fairly substantial number of Samoan households. These include refrigerator (48 percent), gas stove (46 percent), microwave oven (31 percent), rice cooker (34 percent), and washing machine (21 percent). As one might expect, a greater proportion of urban households own these types of amenities. The computer, which is another symbol of modern existence, is owned by more than a quarter of all households in the country. In urban areas, 1 of every 2 households has a computer in their homes.

The country-wide availability of cheap electric power in Samoa is certainly a facilitating factor that enables many households who can afford to own these electricity-driven appliances and devices. It is therefore not surprising that even in the rural areas, a substantial proportion of the households own such consumer goods, as the results of the survey show.

Samoan households live in houses that are relatively well-equipped in terms of basic house furnishings. Around nine in ten Samoan households have a bed, table, chair, sofa or food safe. In a tropical country like Samoa where mosquito infestation can be a problem, particularly those causing serious disease like malaria and dengue, having a mosquito net under which one sleeps at night is, indeed, a necessity. This is needed especially in houses that do not have nets or screen around windows, doors and other openings. It is therefore notable to point out that nearly all households (97 percent in rural and 87 percent in urban) do heed to this essential health measure by owning a mosquito net.

It is also interesting to note that a substantial proportion (42 percent) of households in Samoa own a car or a truck (56 percent in urban and 38 percent in rural areas). Ownership of a bicycle is 25 percent while less than 1% owns a motorcycle. Nine percent of all households have a canoe. Ownership of a canoe is mostly rural-based as ownership of a fishing gear is.

Eighty-five percent of rural households own residential lands compared to 79 percent in the urban areas. As for agricultural land, rural households are nearly twice more likely to be owners than those from the urban area (69 percent and 37 percent, respectively).



Table 2.10 Household durable goods

Percentage of households and population possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Samoa 2014

Possession	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Household effects/electronic appliances:</b>						
Radio	76.9	73.8	74.5	76.6	75.1	75.4
Television	93.1	79.2	82.1	94.4	81.3	83.8
Mobile telephone	98.0	95.0	95.6	98.7	96.3	96.8
Non-mobile telephone	25.0	12.2	14.9	21.7	11.5	13.5
Refrigerator	70.0	42.6	48.4	65.9	42.4	47.0
Deep freezer	33.4	29.1	30.0	33.4	30.0	30.7
Gas stove	66.8	40.4	45.9	65.9	39.3	44.4
Kerosene stove	30.9	21.6	23.5	33.9	23.0	25.1
Microwave oven	49.1	25.9	30.8	44.7	24.7	28.6
Electric jug/kettle	89.4	70.5	74.5	89.9	71.2	74.8
Rice cooker	53.5	28.4	33.7	49.6	27.1	31.5
Blender	31.7	11.2	15.5	28.1	9.4	13.0
Sewing machine	34.8	25.0	27.0	37.0	26.6	28.6
CD/cassette player	55.3	42.2	45.0	54.4	42.8	45.0
Video or DVD player	72.5	54.9	58.6	73.5	56.9	60.1
Electric water pump	8.3	2.2	3.5	6.9	2.0	3.0
Washing machine	45.0	14.8	21.1	41.8	12.9	18.4
Computer	53.6	20.1	27.1	49.9	19.0	24.9
Electric fan	60.9	27.9	34.9	56.9	26.3	32.2
Air conditioner	10.5	2.2	3.9	8.4	2.0	3.2
Iron	95.0	85.9	87.8	96.8	87.1	89.0
<b>Household fittings:</b>						
Bed	94.9	87.0	88.7	95.2	87.7	89.2
Table	97.8	92.3	93.5	98.2	93.1	94.1
Chair	97.7	93.5	94.3	98.0	94.5	95.2
Sofa	86.2	83.0	83.7	88.6	84.0	84.9
Food safe	78.0	81.2	80.5	81.7	83.3	83.0
Cupboard	75.7	40.2	47.7	73.2	39.3	45.8
Clock	60.5	30.8	37.1	57.6	29.9	35.3
Mosquito net	86.6	97.1	94.9	91.0	97.7	96.4
<b>Other items:</b>						
Generator	5.9	2.3	3.1	5.1	2.2	2.7
Solar power	3.2	0.9	1.4	1.8	0.9	1.1
Fishing gear	14.8	22.1	20.6	15.5	24.4	22.7
<b>Means of transport:</b>						
Bicycle	29.6	23.3	24.6	31.6	23.9	25.4
Motorcycle/scooter	4.6	1.7	2.3	4.5	1.5	2.0
Car/truck	55.7	37.7	41.5	53.6	37.2	40.4
Hand cart	2.2	0.6	0.9	1.8	0.5	0.7
Boat with a motor	1.4	1.1	1.2	1.5	1.1	1.2
Boat	1.3	1.0	1.1	1.3	1.1	1.1
Canoe	1.5	10.8	8.9	1.5	12.1	10.1
<b>Ownership of land:</b>						
Residential land	78.7	84.8	83.5	77.9	84.9	83.6
Commercial land	9.0	3.6	4.7	7.7	3.0	3.9
Ownership of agricultural land	36.5	69.3	62.3	38.0	71.5	65.1
<b>Ownership of farm animals:</b>						
Ownership of farm animals	66.7	82.5	79.1	69.2	85.1	82.0
Number	771	2,889	3,660	4,803	20,172	24,975

## 2.6 WEALTH QUINTILES

The wealth index was developed and tested in a number of countries as a tool for assessing inequities in household income and relating those inequities to use of health services and health outcomes (Rutstein et al., 2000). The wealth index is constructed by assigning a weight or factor score to each household asset through principal components analysis. These scores are summed by household, and individuals are ranked according to the total score of the household in which they reside. The sample is then divided into population quintiles—five groups with an equal number of individuals in each group. At the national level, approximately 20 percent of the population is in each wealth quintile.

Wealth quintiles provide a consistent measure of combined indicators of household income and expenditures. The wealth quintile, as constructed, uses information on household ownership of consumer items, ranging from a television to a bicycle or car, as well as dwelling characteristics, such as source of drinking water, sanitation facilities, and type of flooring material.

Each asset is assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores are standardised in relation to a normal distribution with a mean of 0 and standard deviation of 1. Each household is then assigned a score for each asset, and the scores are summed for each household; individuals are ranked according to the total score of the household to which they belong. The sample is then divided into quintiles from one (lowest) to five (highest). A single asset index is developed for the whole sample; separate indices are not prepared for the urban and rural populations.

Table 2.11 shows the distribution of the population across the five wealth quintiles by urban-rural residence and region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas. If wealth were perfectly evenly distributed, then the proportions falling in each quintile category should be 20 percent across urban-rural category and across regions. The survey results, however, suggest that this is far from being true. Forty-four percent of the urban population belong to the highest quintile compared to only 14 percent of rural population. It means that urban areas have much more than their fair share of the wealthiest population than what it should have had there been an equitable distribution of rich and poor population between urban and rural. On the other hand, 24 percent of the population living in rural areas belong to the poorest fifth of the country while only 5 percent come from the urban areas. Marked differentials in the wealth distribution are also observed among regions. Savaii and Rest of Upolu region have the highest concentration of population (about 25 percent) belonging to the lowest quintile while less than 10 percent in either of these two regions belong to the richest quintile. North West Upolu has perhaps the most egalitarian distribution of wealth; nearly a fifth of the total population of the region belongs to each of the quintile category.

**Table 2.11 Wealth quintiles**

Percent distribution of population by wealth quintiles according to residence and region, Samoa 2014

Residence/region	Wealth quintile					Total	Number of population
	Lowest	Second	Middle	Fourth	Highest		
<b>Residence</b>							
Urban	4.9	8.9	13.6	29.0	43.6	100.0	4,803
Rural	23.5	22.7	21.6	17.9	14.3	100.0	20,172
<b>Region</b>							
Apia Urban Area	4.9	8.9	13.6	29.0	43.6	100.0	4,803
North West Upolu	21.7	18.8	19.9	17.9	21.8	100.0	8,493
Rest Of Upolu	24.3	26.3	22.4	17.9	9.1	100.0	6,039
Savaii	25.5	24.7	23.2	17.8	8.8	100.0	5,641
Total	20.0	20.0	20.0	20.0	20.0	100.0	24,975

## 2.7 BIRTH REGISTRATION

The Convention on the Child's Right (UN General Assembly, 1989) states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Parents are required to give their children a name and to register the child because the child has a right to know who his or her parents are and to have a nationality through registration in accordance with national laws and relevant international instruments.

Samoa has a civil registration system that legally requires all births, deaths and marriages be registered with the Samoa Bureau of Statistics. In particular, the law requires that all babies be registered at the office of the Registrar within 14 days of birth.

Table 2.12 shows the percentage of children under five whose births were officially registered and the percentage with a birth certificate at the time of the survey. Only 59 percent of children under age five in Samoa have been registered and only 46 percent had birth certificates at the time of the survey. Thirteen percent did not have their certificates even though their births have been registered possibly because the certificates may have been lost or because they were never issued at the time of registration. The current level of birth registration among children under 5 is improved compared to 48 percent in the 2009 SDHS. It still highlights the fact that registration of births is still very low (below 60%) and it calls for more efforts in the promotion of early birth registrations.

Table 2.12 Birth registration of children under age five

Percentage of children under five years of age whose births are registered with the civil authorities, according to background characteristics, Samoa 2014

Background characteristic	Percentage of children whose births are registered			Number of children
	Had a birth certificate	Did not have a birth certificate	Total registered	
<b>Age</b>				
<2	34.5	14.7	49.2	1,441
2-4	53.1	11.8	64.9	2,139
<b>Sex</b>				
Male	46.2	12.9	59.1	1,891
Female	44.9	13.1	58.0	1,690
<b>Residence</b>				
Urban	51.7	16.0	67.8	615
Rural	44.3	12.4	56.7	2,966
<b>Region</b>				
Apia urban area	51.7	16.0	67.8	615
North west Upolu	54.1	3.4	57.5	1,243
Rest of Upolu	31.2	12.6	43.8	916
Savaii	44.2	26.0	70.2	806
<b>Wealth quintile</b>				
Lowest	31.5	15.2	46.7	836
Second	37.9	13.5	51.5	747
Middle	44.3	12.3	56.6	744
Fourth	54.1	13.3	67.4	664
Highest	67.2	9.8	77.0	589
Total	45.6	13.0	58.6	3,581

Children ages 2-4 years (65 percent) are markedly more likely to have their births registered than those younger than 2 years (49 percent). This may be explained by the tendency of parents to put off the process of registering the birth of their child until such time that the child is ready to enter school for the first time. Copy of the birth certificate is a requirement for admission into the school system.

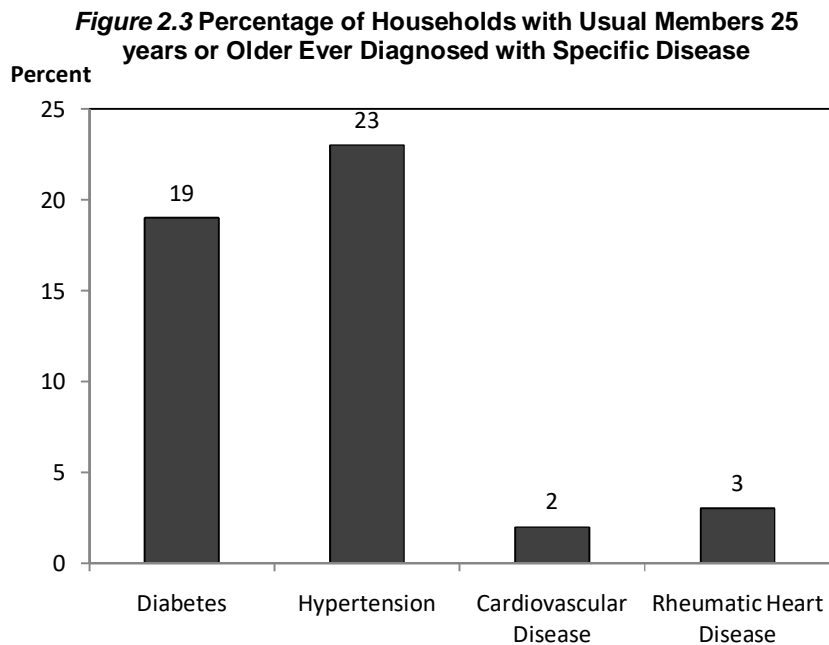
There is no substantial variation in birth registration by sex of child. There are, however, marked differences by urban-rural residence. Although 68 percent of children under age 5 years in urban areas have their births registered, only 57 percent of their rural counterparts have been registered. The proportion of children whose births are registered varies by region. Children in Savaii region are more likely to be registered (70 percent) than children from the other regions (44 to 68 percent), with the Rest of Upolu region having the lowest level of birth registration (44 percent). Births in the households in the highest wealth quintile (77 percent) are much more likely to be registered than those in the lowest wealth quintile (47 percent).

## 2.8 BURDEN OF DISEASES

In an effort to assess the burden of diseases in Samoa, all respondents to the Household Questionnaire of the 2014 SDHS were asked whether the respondent or any other household member has ever been diagnosed by a medical doctor of specific types of non-communicable diseases and infectious diseases; whether the respondent or any other household member has had certain infectious diseases in the previous 12 months; and, how many of the household members have had each of the specific diseases ever or in the last 12 months.

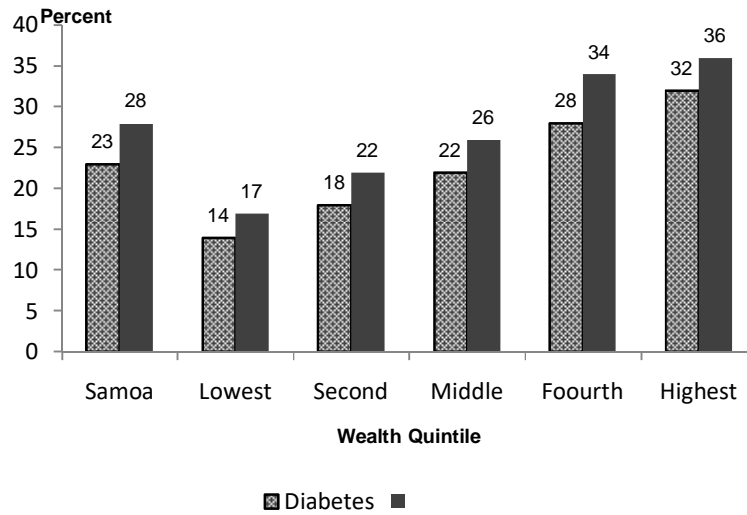
### 2.8.1 Household Level: Burden of diseases

The age range for measuring the burden of non-communicable diseases is 25 or more years because these diseases mostly affect adults. The results of the survey as shown in Figure 2.3, indicate that cases of diabetes and hypertension are quite high with 19 and 23 percent of the households, respectively, reporting to have adult members who have ever been diagnosed with these non-communicable diseases. While cases of diagnosed diabetes remain almost at the same level as in 2009, hypertension appears to be on the rise (from 19 percent of households reporting in 2009 to 23 percent by 2014). Incidences of cardiovascular and rheumatic heart diseases, on the other hand, are low based on the proportion of reporting households.



The proportion of households with members ever-diagnosed with diabetes or hypertension increases steadily with increase in wealth (Figure 2.4). For example, 14 percent of households in the lowest wealth quintile have a member age 25 or older diagnosed with diabetes compared with 32 percent of households in the highest wealth quintile. Similarly, 17 percent of poorest households reported having at least a member age 25 or older ever diagnosed with hypertension compared with 36 percent of those in the wealthiest households. The increase in proportion of ever diagnosed hypertension cases during the last 5 years, as mentioned earlier, is observed in all quintile groups.

**Figure 2.4 Percentage of Households with Usual Members Age 25 or Older Ever Diagnosed with Diabetes or Hypertension, by Wealth**



### 2.8.2 Household Members: Burden of diseases

From a population perspective, Figure 2.5 shows the percentages of household members age 25 or older who have ever been diagnosed with non communicable diseases. Hypertension and diabetes are the most common type of the four specified non-communicable diseases afflicting 9 percent and 7 percent, respectively, of the adult household members. Cardiovascular and rheumatic heart diseases, on the other hand, are reported by only about 1 percent each of the adult population.

**Figure 2.5 Percentage of Household Members Age 25 or Older Ever Diagnosed with Specific Diseases**

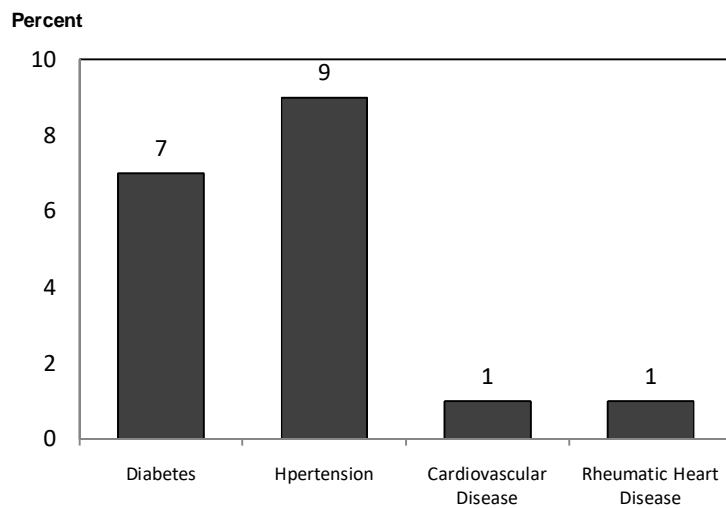
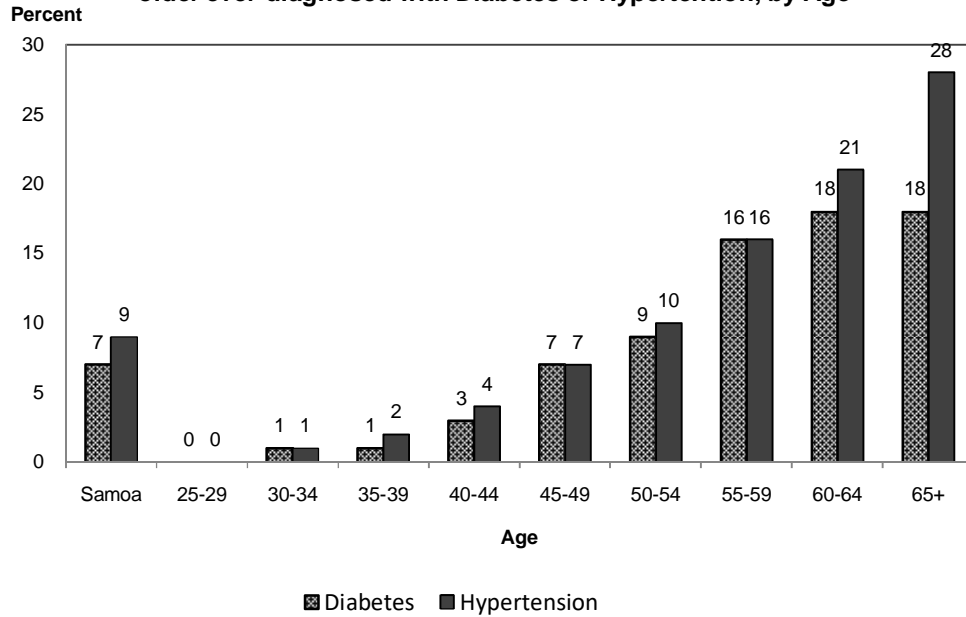


Figure 2.6 shows the percentages of household members age 25 or older ever diagnosed with diabetes or hypertension. The graph clearly shows that the prevalence of both of these types of disease increases with age. From just about 1 percent among of adult household members in the age group 30-34, the proportion steadily goes up to 18 percent among those who are age 60 and above. In the case of hypertension, a greater proportion of the elderly is reported to have been diagnosed with the disease ó more than a quarter of the elderly people above 65. Although data are now shown here, there is also evidence that both diabetes and hypertension have positive relationship with wealth; that is, prevalence of these diseases increases as wealth increases.

**Figure 2.6 Percentage of Households with Usual Members age 25 or older ever-diagnosed with Diabetes or Hypertension, by Age**



The proportion of household members of any age being diagnosed in the last 12 months by a medical doctor with any of the following infections - typhoid, measles, rubella, leprosy and meningococcal disease ó is less than 1 percent for each type. There was no report of any member diagnosed with leprosy in the past 12 months. However, more than 1 percent of usual members of households were diagnosed with dengue fever.

This chapter provides a descriptive summary of the demographic and socioeconomic profile of respondents who participated in the 2014 SDHS. The purpose of this chapter is to provide a descriptive summary of the demographic and socio-economic profile of respondents in the 2014 SDHS. Basic information on women and men of reproductive age is crucial for the interpretation of findings on reproduction, health, and women's status. Moreover, the distribution of respondents according to their demographic and socio-economic characteristics indicates how representative they are of the general population. The main background characteristics described here in detail, such as age at the time of the survey, marital status, residence, education, and wealth quintile, will reappear in subsequent chapters on reproduction and health. This chapter on characteristics of respondents also includes information on their level of literacy, exposure to mass media, employment and earnings, health insurance coverage, knowledge and attitudes concerning tuberculosis, and use of tobacco, participation in physical activity campaigns and the consumption of alcohol.

### 3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 shows the distribution of women and men age 15-49 by selected background characteristics including age, religion, ethnicity, marital status, urban-rural residence, region, education and wealth status.

More than half of women and men respondents (55 and 56 percent, respectively) are between 15 and 30. Samoa is a predominantly Christian country. About 30 to 33 percent belong to the Congregational Christian Church or *Ekalesia Faapotopotoga Kerisiano i Samoa* (EFKS/Taiti), while about 18 percent are Roman Catholics, and between 11 and 17 percent each, either Methodist or members of the Latter Day Saints (LDS) Church. Almost all respondents (90 percent) are members of the Samoan ethnic group.

The results of the 2014 SDHS indicate that 43 percent of women are married or in union (living in an informal arrangement with a partner), compared with 32 percent of men. Because men marry later in life than women, more than half of the men interviewed in the survey (52 percent) have never been married, compared with 36 percent of women. On the other hand, women are more likely than men to be widowed, divorced or separated (4 and 2 percent, respectively). This is because women have a higher life expectancy than men and also because men, more often than women, remarry after the dissolution of a previous marriage.

A large proportion of the population of Samoa lives in the rural area and this is reflected in the distribution of the sample respondents; around 80 percent of the sample respondents come from the rural areas. Region-wise, the distribution is around 20 percent from Apia Urban Area, 36 percent from North West Upolu, 23 percent from Rest of Upolu and 21 percent from Savaii. In terms of education the majority of respondents (76 percent of women and 74 percent of men) have attended secondary level education. Proportionately more women than men have completed their secondary education and/or attended tertiary level of education.

For Table 3.1, the wealth quintile of a respondent is the wealth quintile of the household to which that respondent belongs. The lowest quintile represents the poorest respondents; the highest quintile, the richest. Theoretically, the proportion in each quintile group should be 20 percent and that is reflected in the top four wealth quintile for women as the proportion is 20 percent and more. However only the lowest wealth quintile has the lowest proportion and it is below 20 percent. This distribution may suggest that the non-response rate to the survey is higher among poorer women resulting in a slight under representation of the lower wealth quintiles. Among men, it appears that the middle and the fourth highest quintile are over represented in the sample.



**Table 3.1 Background characteristics of respondents**

Percent distribution of women and men age 15-49 by selected background characteristics, Samoa 2014

Background characteristic	Women			Men		
	Weighted percent	Weighted	Unweighted	Weighted percent	Weighted	Unweighted
<b>Age</b>						
15-19	22.1	1,062	1,062	22.1	348	346
20-24	17.3	829	828	18.9	298	297
25-29	15.2	728	729	14.6	229	230
30-34	12.3	591	589	13.4	211	213
35-39	11.5	551	550	9.2	144	145
40-44	12.0	577	579	11.4	179	179
45-49	9.7	467	468	10.5	166	166
<b>Marital status</b>						
Never married	35.7	1,715	1,711	52.0	819	817
Married	42.9	2,060	2,059	32.4	511	511
Living together	17.0	815	820	13.1	207	210
Divorced/separated	3.3	159	158	2.1	32	32
Widowed	1.2	57	57	0.4	6	6
<b>Residence</b>						
Urban	20.8	1,000	927	20.2	318	258
Rural	79.2	3,805	3,878	79.8	1,257	1,318
<b>Region</b>						
Apia Urban Area	20.8	1,000	927	20.2	318	258
North West Upolu	36.1	1,733	1,774	35.7	563	602
Rest of Upolu	22.9	1,099	1,098	22.6	357	358
Savaii	20.2	973	1,006	21.4	338	358
<b>Education</b>						
No education	0.3	15	15	0.5	8	8
Primary or lower or special needs	3.3	161	162	7.4	116	119
Secondary	76.1	3,654	3,662	74.2	1,169	1,179
More than secondary	20.3	975	966	17.9	282	270
<b>Wealth quintile</b>						
Lowest	18.8	903	915	18.6	293	304
Second	19.9	955	965	18.9	298	307
Middle	19.8	954	959	20.9	330	336
Fourth	20.5	987	977	22.6	356	348
Highest	20.9	1,006	989	19.0	300	281
<b>Religion</b>						
EFKS/LotuTaiti <sup>1</sup>	30.2	1,451	1,446	32.6	513	507
Methodist	12.4	594	600	12.4	196	196
Roman Catholic	18.1	871	868	18.4	290	288
LDS	16.0	769	769	14.8	234	238
SDS	4.7	225	224	4.2	66	68
Assembly of God	10.9	522	528	12.1	191	198
Other	7.6	367	363	5.0	79	76
Don't know	0.0	2	2	0.2	2	2
Missing	0.1	5	5	0.2	3	3
<b>Ethnicity</b>						
Samoan	89.8	4,315	4,321	92.9	1,464	1,470
Part-Samoan	8.7	416	411	5.1	80	77
Other	0.9	41	40	1.0	16	13
Don't know	0.0	2	2	0.1	1	1
Missing	0.6	30	31	1.0	15	15
Total 15-49	100.0	4,805	4,805	100.0	1,576	1,576
50-54	na	na	na	na	93	93
Total men 15-54	na	na	na	na	1,669	1,669

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

na = Not applicable

<sup>1</sup> = EFKS/Lotu Taiti = Ekalesia Faapotopotoga Kerisiano Samoa = Congregational Christian Church

## 3.2 EDUCATIONAL ATTAINMENT

Education provides people with the knowledge and skills that can lead to a better quality of life. Level of education has been found to be closely associated with the health of women and children, as well as reproductive health behaviours of women and men. Tables 3.2.1 and 3.2.2 show the distribution of women and men by highest level of schooling attended or completed, and the median number of years of schooling, according to background characteristics. The results reflect the fact that education has been almost universal in Samoa for some time. Overall, a negligible percentage of all respondents age 15-49 (less than 1 percent) has never attended school, and the majority (96 percent of women and 92 percent of men) have attended or completed at least a secondary or higher education. The median years of schooling for women age 15-49 is 11.8 years and for men age 15-49 is 11.4 years.

**Table 3.2.1 Educational attainment: Women**

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Samoa 2014

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	0.5	1.0	1.5	56.9	20.3	19.8	100.0	11.6	1,891
15-19	0.4	1.2	1.8	75.6	12.6	8.4	100.0	10.9	1,062
20-24	0.6	0.7	1.2	32.9	30.1	34.5	100.0	12.4	829
25-29	0.3	0.8	0.9	37.9	29.1	31.0	100.0	12.3	728
30-34	0.0	1.7	3.5	44.8	27.2	22.8	100.0	12.0	591
35-39	0.2	0.5	2.0	53.4	26.2	17.6	100.0	11.8	551
40-44	0.5	1.4	2.8	57.5	23.8	14.1	100.0	11.5	577
45-49	0.0	2.5	4.3	61.6	18.4	13.2	100.0	11.3	467
<b>Residence</b>									
Urban	0.0	0.3	1.7	42.4	24.7	30.8	100.0	12.2	1,000
Rural	0.4	1.4	2.3	55.3	23.1	17.5	100.0	11.7	3,805
<b>Region</b>									
Apia Urban Area	0.0	0.3	1.7	42.4	24.7	30.8	100.0	12.2	1,000
North West Upolu	0.3	1.4	2.8	51.4	24.1	20.1	100.0	11.8	1,733
Rest of Upolu	0.4	1.4	2.2	58.1	21.8	16.2	100.0	11.6	1,099
Savaii	0.6	1.6	1.4	59.3	22.7	14.5	100.0	11.6	973
<b>Wealth quintile</b>									
Lowest	0.4	2.5	4.8	66.7	19.4	6.2	100.0	11.2	903
Second	0.7	1.6	1.1	60.9	23.8	11.8	100.0	11.5	955
Middle	0.1	0.9	2.5	58.4	25.0	13.1	100.0	11.6	954
Fourth	0.1	0.7	1.5	48.9	23.7	25.1	100.0	12.0	987
Highest	0.2	0.3	1.0	30.5	24.8	43.2	100.0	12.7	1,006
Total	0.3	1.2	2.2	52.6	23.4	20.3	100.0	11.8	4,805

<sup>1</sup> Completed 8 grade at the primary level

<sup>2</sup> Completed 5 grade at the secondary level

Data show that the differentials in educational attainment by background characteristics are similar for women and men. The differences across subgroups are more pronounced with respect to attainment of higher than secondary education. For example, 31 percent of urban women and 35 percent of urban men have some higher-level education, compared with 18 and 14 percent, respectively of rural women and men. Residents in the Apia urban area region seem to have an educational advantage over the rest of the country: 31 percent of women and 34 percent of men the Apia urban area region have higher than secondary education, compared with 14 percent of women

and 12 percent of men in the Savaii region. Attainment of a higher than secondary education is closely related to wealth status: 43 percent of women and 36 percent of men in the highest wealth quintile have attended or completed a higher than secondary education compared with 6 percent for both women and men belonging to the lowest quintile. Men living in the wealthiest households have, on average, almost two additional years of schooling compared with men in the poorest households (12.3 and 10.9 years, respectively). However, for women the overall difference between the median numbers of years of schooling is smaller: 11.2 years among women in the lowest wealth quintile compared with 12.7 years among those in the highest quintile.

**Table 3.2.2 Educational attainment: Men**

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Samoa 2014

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	0.6	2.0	3.1	63.1	17.5	13.7	100.0	11.1	645
15-19	0.8	1.4	3.2	78.9	11.1	4.6	100.0	10.4	348
20-24	0.3	2.7	3.0	44.6	24.9	24.4	100.0	12.0	298
25-29	1.4	1.6	3.3	42.5	24.3	26.9	100.0	12.0	229
30-34	0.5	3.2	2.7	50.7	22.3	20.7	100.0	11.7	211
35-39	0.0	2.6	3.3	52.0	22.2	19.9	100.0	11.7	144
40-44	0.0	3.8	10.2	43.4	23.0	19.6	100.0	11.6	179
45-49	0.0	4.1	11.6	52.9	16.7	14.7	100.0	11.2	166
<b>Residence</b>									
Urban	0.4	0.8	3.1	46.1	15.1	34.5	100.0	12.0	318
Rural	0.5	3.0	5.2	56.1	21.4	13.7	100.0	11.3	1,257
<b>Region</b>									
Apia Urban Area	0.4	0.8	3.1	46.1	15.1	34.5	100.0	12.0	318
North West Upolu	0.5	3.1	4.6	50.7	24.4	16.6	100.0	11.6	563
Rest of Upolu	1.1	3.1	5.3	59.5	20.7	10.3	100.0	11.2	357
Savaii	0.0	2.8	6.1	61.7	17.0	12.4	100.0	11.2	338
<b>Wealth quintile</b>									
Lowest	0.7	7.2	8.9	59.5	18.2	5.7	100.0	10.9	293
Second	0.3	2.3	5.9	64.6	19.8	7.0	100.0	11.1	298
Middle	0.9	1.8	4.6	56.0	21.2	15.5	100.0	11.4	330
Fourth	0.3	1.1	3.5	49.4	21.3	24.5	100.0	11.7	356
Highest	0.4	0.9	1.5	42.1	19.6	35.5	100.0	12.3	300
Total	0.5	2.6	4.8	54.1	20.1	17.9	100.0	11.4	1,576
50-54	1.0	6.4	10.9	56.5	8.1	17.1	100.0	10.8	93
Total men 15-54	0.5	2.8	5.1	54.2	19.4	17.9	100.0	11.4	1,669

<sup>1</sup> Completed 8 grade at the primary level

<sup>2</sup> Completed 5 grade at the secondary level

### 3.3 LITERACY

The ability to read and write is an essential competence that all individuals should possess as it facilitates person to improve his social and economic status. Data on the literacy level of the population is therefore important, especially for decision and policy makers, and development planners who have the responsibility to formulate programmes to improve literacy in the overall population. For other persons or organizations, having data on the extent and distribution of the population according to literacy is useful for planning initiatives and projects. For example, formulating a communication strategy to promote good health practice or family planning will depend on the literacy levels of the target population. During the 2014SDHS, data on literacy were collected by actually testing the ability of respondents to read. They were given both simple English and Samoan sentences to read. Literacy was determined by whether the respondent could read the whole sentence, part of the sentence or not at all. For obvious reason, those with visual impairment or blindness were not asked. Moreover, only men and women who had never attended secondary school were tested as it is assumed that those who have reached at least secondary level education are able to read.

Tables 3.3.1 and 3.3.2 show the percentage distribution of women and men age 15-49, respectively, by level of literacy according to background characteristics. Virtually all Samoan women and men age 15-49 are literate having the same literacy rate at (99 percent each, respectively). There are no major differences across subgroups of women and men in the proportions who are literate.

**Table 3.3.1 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, Samoa 2014

Background characteristic	Secondary school or higher	No schooling or primary school				Total	Percent-age literate <sup>1</sup>	Number
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Missing			
<b>Age</b>								
15-19	96.6	2.3	0.0	0.3	0.8	100.0	99.0	1,062
20-24	97.5	1.8	0.2	0.4	0.1	100.0	99.5	829
25-29	98.0	1.2	0.3	0.4	0.1	100.0	99.5	728
30-34	94.8	3.2	0.2	1.5	0.3	100.0	98.1	591
35-39	97.3	2.0	0.0	0.4	0.4	100.0	99.3	551
40-44	95.4	2.9	0.3	0.7	0.7	100.0	98.6	577
45-49	93.2	4.7	0.4	0.9	0.9	100.0	98.3	467
<b>Residence</b>								
Urban	98.0	1.4	0.0	0.2	0.4	100.0	99.4	1,000
Rural	95.9	2.7	0.2	0.7	0.5	100.0	98.9	3,805
<b>Region</b>								
Apia Urban Area	98.0	1.4	0.0	0.2	0.4	100.0	99.4	1,000
North West Upolu	95.6	3.3	0.2	0.7	0.3	100.0	99.0	1,733
Rest of Upolu	96.1	2.3	0.3	1.0	0.4	100.0	98.6	1,099
Savaii	96.4	2.2	0.2	0.3	0.9	100.0	98.8	973
<b>Wealth quintile</b>								
Lowest	92.3	4.9	0.3	1.8	0.8	100.0	97.5	903
Second	96.5	2.2	0.2	0.5	0.6	100.0	98.9	955
Middle	96.5	2.8	0.4	0.1	0.2	100.0	99.7	954
Fourth	97.7	1.5	0.0	0.4	0.4	100.0	99.2	987
Highest	98.5	1.0	0.0	0.2	0.3	100.0	99.5	1,006
Total	96.4	2.4	0.2	0.6	0.5	100.0	99.0	4,805

<sup>1</sup> Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

**Table 3.3.2 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, Samoa 2014

Background characteristic	Secondary school or higher	No schooling or primary school				Total	Percent-age literate <sup>1</sup>	Number
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Missing			
<b>Age</b>								
15-19	94.6	3.1	0.6	0.0	1.7	100.0	98.3	348
20-24	93.9	3.7	0.9	1.5	0.0	100.0	98.5	298
25-29	93.7	2.9	2.1	0.4	0.9	100.0	98.6	229
30-34	93.7	4.0	1.8	0.5	0.0	100.0	99.5	211
35-39	94.1	4.0	1.3	0.0	0.6	100.0	99.4	144
40-44	86.1	10.1	1.6	0.5	1.6	100.0	97.8	179
45-49	84.4	11.1	3.4	1.1	0.0	100.0	98.9	166
<b>Residence</b>								
Urban	95.7	2.8	0.0	0.8	0.8	100.0	98.5	318
Rural	91.2	5.6	1.9	0.5	0.8	100.0	98.7	1,257
<b>Region</b>								
Apia Urban Area	95.7	2.8	0.0	0.8	0.8	100.0	98.5	318
North West Upolu	91.7	6.0	1.3	0.0	1.0	100.0	99.0	563
Rest of Upolu	90.5	5.9	1.7	0.8	1.1	100.0	98.0	357
Savaai	91.1	4.7	3.1	1.1	0.0	100.0	98.9	338
<b>Wealth quintile</b>								
Lowest	83.3	10.2	3.9	0.3	2.3	100.0	97.4	293
Second	91.4	5.9	1.3	1.0	0.3	100.0	98.6	298
Middle	92.7	4.7	1.5	0.9	0.3	100.0	98.8	330
Fourth	95.2	3.8	0.5	0.3	0.3	100.0	99.5	356
Highest	97.2	0.9	0.6	0.4	0.8	100.0	98.8	300
Total	92.1	5.0	1.5	0.6	0.8	100.0	98.7	1,576
50-54	81.7	10.9	4.0	1.0	2.3	100.0	96.7	93
Total men 15-54	91.5	5.4	1.7	0.6	0.9	100.0	98.5	1,669

<sup>1</sup> 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

Mass media, such as newspapers, television and radio, just to name a few, play an important role in everyday life of Samoan people. Various types of media are commonly used by governmental and non-governmental organisations (NGOs) to disseminate public messages around important issues of concern in the country. The availability and easy access to various types of media by the public has greatly improved the understanding and awareness of the population on various issues affecting the country.

Access to information is essential in increasing people's knowledge and awareness of the events that take place around them. In the 2014 SDHS, information was collected on respondents' exposure to print and broadcast media, both of which are viewed as effective means of disseminating important health messages, including those on reproductive health and HIV/AIDS. In the survey, exposure to media was assessed by asking how often a respondent reads a newspaper, watches television, or listens to the radio. Tables 3.4.1 and 3.4.2 show that exposure of women and men to print and broadcast media in Samoa is high. Overall, men are somewhat more likely than women to watch television or listen to the radio. Eighty-seven percent of women age 15-49 and 92 percent of men age 15-49 watch television at least once a week and 78 percent of women and 87 percent of men listen to the radio weekly. Women, on the other hand, are somewhat more likely than men to read a newspaper (65 and 59 percent, respectively). Forty nine percent of women and men age 15-49 (52

percent) are exposed to all three media at least once a week, while only 3 percent of women and 2 percent of men have no access to any of the specified media.

Media exposure is higher among younger women than older women. For example, 52 percent of women 15-19 are reported to have been exposed to all three media compared to 47 percent of women age 45-49. However, among men, exposure is lower among those below the age of 30 (47 to 51 percent), when compared with other age groups (52 to 59 percent). Men and women in urban areas (53 and 50 percent, respectively) are more likely to be exposed to all three media on a weekly basis than those in rural areas (52 and 49 percent, respectively). Exposure to all three media at least once a week ranges from 45 percent for women living in the North West of Upolu to 59 percent of women living in Savaii. For men, it ranges from 47 percent among men in North West Upolu to 57 percent among men in Rest of Upolu. The proportion of respondents exposed to all three media increases with the level of more than secondary education (68 percent) compared to men with no education (12 percent) are education and wealth quintile. For example, more than five times as many men with exposure to all three media at least once a week. Similarly, about three times as many men in the highest wealth quintile (62 percent) as men in the lowest wealth quintile (41 percent) are exposed to all three media on a weekly basis. The same patterns are observed among women.

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Samoa 2014

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No media at least once a week	Number
<b>Age</b>						
15-19	69.5	89.5	75.6	52.5	2.6	1,062
20-24	64.3	90.2	78.8	50.3	1.8	829
25-29	62.7	87.2	78.4	47.9	3.4	728
30-34	61.6	83.6	78.0	46.2	4.7	591
35-39	63.7	86.5	78.0	49.6	4.1	551
40-44	65.6	85.2	77.4	49.3	3.6	577
45-49	64.3	83.5	79.0	47.4	2.7	467
<b>Residence</b>						
Urban	68.2	92.1	75.5	49.5	0.6	1,000
Rural	64.1	85.8	78.3	49.4	3.8	3,805
<b>Region</b>						
Apia Urban Area	68.2	92.1	75.5	49.5	0.6	1,000
North West Upolu	55.2	88.2	77.0	44.7	4.2	1,733
Rest of Upolu	67.6	82.7	76.2	48.1	3.6	1,099
Savaii	76.0	84.9	83.0	59.4	3.3	973
<b>Education</b>						
No education	*	*	*	*	*	15
Primary or lower or special needs	43.3	79.1	73.6	30.4	6.1	161
Secondary	61.9	86.9	77.9	47.5	3.3	3,654
More than secondary	79.9	89.2	77.8	60.0	2.0	975
<b>Wealth quintile</b>						
Lowest	53.8	74.3	71.1	36.8	8.6	903
Second	61.7	85.5	75.3	44.9	2.9	955
Middle	63.1	90.0	82.3	52.0	2.4	954
Fourth	68.2	91.5	82.0	53.9	1.2	987
Highest	76.6	93.0	77.3	58.4	1.1	1,006
Total	64.9	87.1	77.7	49.4	3.1	4,805

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

**Table 3.4.2 Exposure to mass media: Men**

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Samoa 2014

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No media at least once a week	Number
<b>Age</b>						
15-19	55.4	94.9	83.5	47.4	1.5	348
20-24	57.5	91.9	91.1	51.4	2.7	298
25-29	56.4	92.4	91.2	50.8	0.5	229
30-34	59.0	91.5	83.8	51.8	3.2	211
35-39	66.6	93.6	89.8	59.4	1.5	144
40-44	62.3	90.9	84.0	55.2	3.1	179
45-49	63.1	86.4	85.7	54.6	4.6	166
<b>Residence</b>						
Urban	65.9	89.1	82.6	52.8	2.7	318
Rural	57.3	92.8	88.1	51.8	2.2	1,257
<b>Region</b>						
Apia Urban Area	65.9	89.1	82.6	52.8	2.7	318
North West Upolu	50.8	93.5	91.7	47.0	1.9	563
Rest of Upolu	66.5	90.5	84.9	57.3	2.8	357
Savaii	58.5	94.1	85.5	54.0	2.2	338
<b>Education</b>						
No education	*	*	*	*	*	8
Primary or lower or special needs	43.6	85.5	80.1	35.1	5.7	116
Secondary	56.4	92.4	87.3	50.0	2.5	1,169
More than secondary	77.8	93.3	88.9	68.2	0.3	282
<b>Wealth quintile</b>						
Lowest	51.4	84.6	81.5	41.0	5.1	293
Second	53.2	95.2	87.5	49.2	2.3	298
Middle	57.7	92.1	87.4	52.2	2.2	330
Fourth	61.0	95.2	88.6	54.5	0.8	356
Highest	71.4	92.5	89.5	62.3	1.5	300
Total	59.1	92.1	87.0	52.0	2.3	1,576
50-54	71.8	86.9	84.9	55.4	2.0	93
Total men 15-54	59.8	91.8	86.9	52.2	2.3	1,669

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

### 3.5 EMPLOYMENT

In the 2014 SDHS, respondents were asked about their employment status at the time of the survey and, if they were not currently employed, about any work they may have done in the 12 months prior to the survey.<sup>1</sup> All employed respondents were asked additional questions about their occupation; whether they were paid in cash, in kind, or not at all; and for whom they worked.

<sup>1</sup>The measurement of women's employment can be especially difficult because some of the activities that women do, especially work on family farms, for family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such. To avoid underestimating women's employment, therefore, the questions relating to employment in the Women's Questionnaire encouraged women to report such activities. First, women were asked, "Aside from your own housework, have you done any work in the last seven days?"

Tables 3.5.1 and 3.5.2 show the percent distribution of female and male respondents by employment status according to background characteristics. Men are more likely to be employed than women. A substantially higher proportion of men (37 percent) than women (19 percent) reported being currently employed. Furthermore, 74 percent of women are not employed in the 12 months preceding the survey compared with 48 percent of men, while 8 percent of women and 15 percent of men were employed in the 12 months preceding the survey but not working at the time of the survey because of some valid reasons (Figure 3.1).

**Table 3.5.1 Employment status: Women**

Percent distribution of women age 15-49 by employment status, according to background characteristics, Samoa 2014

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 <sup>1</sup>	Not currently employed	Missing/ don't know	Missing/ don't know		
<b>Age</b>						
15-19	2.6	2.6	94.8	0.0	100.0	1,062
20-24	19.5	10.8	69.6	0.1	100.0	829
25-29	23.4	9.9	66.2	0.4	100.0	728
30-34	25.0	10.6	64.4	0.0	100.0	591
35-39	25.6	8.8	65.6	0.0	100.0	551
40-44	23.2	5.7	71.0	0.2	100.0	577
45-49	23.6	7.0	69.4	0.0	100.0	467
<b>Marital status</b>						
Never married	14.8	6.9	78.2	0.1	100.0	1,715
Married or living together	20.5	7.7	71.7	0.1	100.0	2,874
Divorced/separated/widowed	23.3	11.4	64.3	1.0	100.0	216
<b>Number of living children</b>						
0	15.1	6.7	78.2	0.1	100.0	1,778
1-2	21.4	10.8	67.5	0.3	100.0	1,143
3-4	23.8	8.4	67.8	0.0	100.0	976
5+	16.2	4.5	79.1	0.1	100.0	908
<b>Residence</b>						
Urban	34.0	6.5	59.4	0.2	100.0	1,000
Rural	14.5	7.9	77.5	0.1	100.0	3,805
<b>Region</b>						
Apia Urban Area	34.0	6.5	59.4	0.2	100.0	1,000
North West Upolu	17.8	11.8	70.4	0.0	100.0	1,733
Rest of Upolu	11.3	4.0	84.4	0.3	100.0	1,099
Savaii	12.4	5.4	82.2	0.0	100.0	973
<b>Education</b>						
No education	*	*	*	*	100.0	15
Primary or lower or special needs	8.0	4.9	87.0	0.0	100.0	161
Secondary	12.9	6.6	80.4	0.1	100.0	3,654
More than secondary	41.6	12.1	46.1	0.2	100.0	975
<b>Wealth quintile</b>						
Lowest	9.4	7.0	83.5	0.1	100.0	903
Second	13.9	6.0	79.9	0.2	100.0	955
Middle	15.6	7.8	76.6	0.1	100.0	954
Fourth	19.3	8.9	71.7	0.0	100.0	987
Highest	33.4	8.3	58.2	0.1	100.0	1,006
Total	18.6	7.6	73.7	0.1	100.0	4,805

<sup>1</sup> "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. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



**Table 3.5.2 Employment status: Men**

Percent distribution of men age 15-49 by employment status, according to background characteristics, Samoa 2014

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
	Currently employed <sup>1</sup>	Not currently employed				
<b>Age</b>						
15-19	7.6	5.1	87.3	0.0	100.0	348
20-24	34.9	19.5	45.6	0.0	100.0	298
25-29	46.1	13.2	40.8	0.0	100.0	229
30-34	47.2	22.0	30.7	0.0	100.0	211
35-39	50.1	18.5	30.8	0.7	100.0	144
40-44	57.6	22.1	20.3	0.0	100.0	179
45-49	43.4	14.7	41.9	0.0	100.0	166
<b>Marital status</b>						
Never married	24.7	12.0	63.2	0.1	100.0	819
Married or living together	50.6	19.4	30.0	0.0	100.0	718
Divorced/separated/widowed	(46.0)	(14.7)	(39.2)	(0.0)	100.0	38
<b>Number of living children</b>						
0	26.9	12.5	60.5	0.1	100.0	882
1-2	45.3	18.7	36.0	0.0	100.0	259
3-4	56.5	19.5	24.0	0.0	100.0	230
5+	48.1	19.5	32.4	0.0	100.0	204
<b>Residence</b>						
Urban	56.6	7.3	36.1	0.0	100.0	318
Rural	32.1	17.5	50.4	0.1	100.0	1,257
<b>Region</b>						
Apia Urban Area	56.6	7.3	36.1	0.0	100.0	318
North West Upolu	25.4	24.6	50.1	0.0	100.0	563
Rest of Upolu	41.3	7.3	51.1	0.3	100.0	357
Savaai	33.5	16.4	50.0	0.0	100.0	338
<b>Education</b>						
No education	*	*	*	*	100.0	8
Primary or lower or special needs	28.2	9.2	62.6	0.0	100.0	116
Secondary	33.8	15.6	50.6	0.1	100.0	1,169
More than secondary	54.8	17.8	27.4	0.0	100.0	282
<b>Wealth quintile</b>						
Lowest	28.8	15.6	55.6	0.0	100.0	293
Second	33.2	16.0	50.4	0.3	100.0	298
Middle	35.1	20.7	44.2	0.0	100.0	330
Fourth	38.9	14.7	46.4	0.0	100.0	356
Highest	48.8	9.8	41.5	0.0	100.0	300
Total 15-49	37.0	15.4	47.5	0.1	100.0	1,576
50-54	34.8	14.6	50.6	0.0	100.0	93
Total men 15-54	36.9	15.4	47.6	0.1	100.0	1,669

<sup>1</sup> "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.

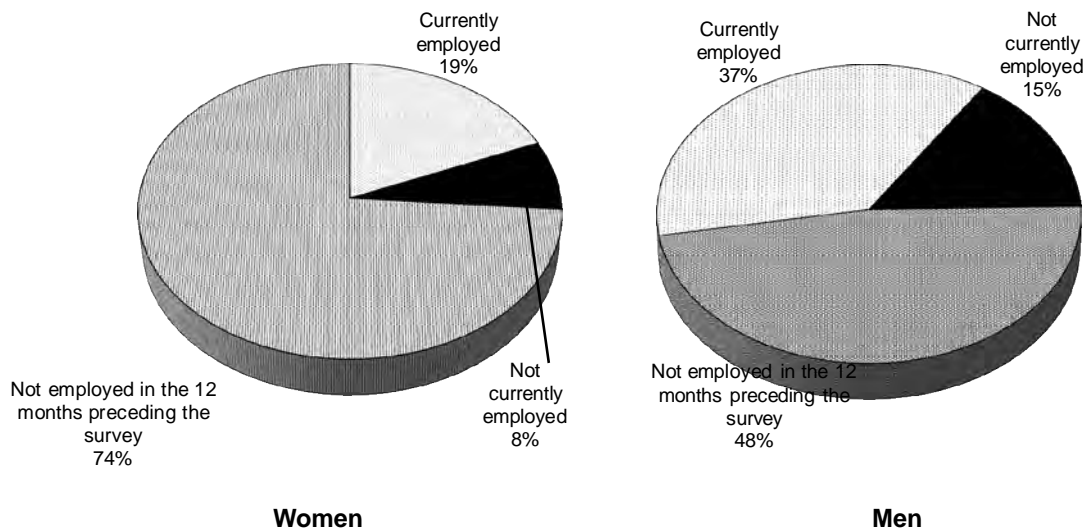
An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

Looking at the differentials by background characteristics, it can be seen from Table 3.5.1 and 3.5.2 that current employment rate is lowest at age 15-19 since most of the women and men in this age group are still in school. Employment rate among women is highest at age 35-39 whereas for men it is at age 40-44.

For both sexes, those who are never married, which comprise mainly of young people, are least likely to be employed (15 percent among women and 25 percent among men). The highest employment rate among men is observed among those who are currently married (51 percent). However, in the case of women, the highest employment rate is among those who are widowed or divorced/separated (23 percent). It suggests that, without their husbands, women are constrained to take up jobs to support themselves and their families.

The responsibility of taking care of one's children, especially if they are still young, is often an obstacle for a woman to join the labour market. However, in the context of extended families and availability of domestic helpers, which is common in Samoa, having children may not pose a serious constraint on woman's employment unless perhaps when she has too many children, in which situation, her own participation in child care becomes necessary. This supposition is to some extent borne by the findings of the survey where it is observed that women with 1 to 4 children have higher employment rate than women with 5 or more children.

**Figure 3.1 Employment Status of Women and Men Age 15-49**



With respect to urban-rural residence, differentials in employment are stark and in favour of the urban residents. Women in urban areas (34 percent) are much more likely to be currently employed than their rural counterparts (15 percent). Similarly, for men, being in the urban area means higher employment rate - 57 percent compared to only 32 percent among rural residents.

The likelihood that a woman or a man is currently employed increases with education level. For example, 42 percent of women with vocational or higher than secondary education are currently employed compared with 7 percent of women with primary or less education. Current employment also has a positive relationship with wealth. Among women, it ranges from 9 percent of those in the lowest wealth quintile to 33 percent among those in the highest wealth quintile. Among men, current employment rate also increases concomitantly with increase in wealth status, from 29 percent in the poorest quintile to 49 percent in the richest.

### 3.6 OCCUPATION

Table 3.6.1 shows the percentage distribution of women who are either currently employed or employed in the 12 months preceding the survey by occupation, according to background characteristics. The two most common occupations pursued by Samoan women are as workers in sales and services (32 percent) and as professionals, technical or managerial personnel. About 16 percent of currently employed or previously employed women work in clerical positions while only 3 percent work in agriculture.

**Table 3.6.1 Occupation: Women**

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Samoa 2014

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of women
<b>Age</b>										
15-19	1.8	13.1	60.2	8.8	12.5	0.0	1.8	1.8	100.0	55
20-24	24.6	23.8	35.0	5.5	5.9	0.0	2.7	2.5	100.0	251
25-29	35.2	19.7	31.2	4.0	7.8	0.4	1.2	0.4	100.0	243
30-34	30.0	15.4	35.0	7.1	7.6	0.0	3.5	1.5	100.0	210
35-39	33.7	14.3	21.0	11.0	12.7	0.0	4.1	3.1	100.0	190
40-44	32.8	9.8	30.4	7.9	13.2	0.0	4.1	1.7	100.0	167
45-49	35.2	10.1	26.0	5.6	16.1	0.8	6.2	0.0	100.0	143
<b>Marital status</b>										
Never married	25.9	23.8	33.5	7.4	6.1	0.0	1.1	2.2	100.0	373
Married or living together	32.5	13.1	30.4	6.2	11.4	0.3	4.5	1.5	100.0	810
Divorced/separated/widowed	25.7	13.8	35.7	9.5	14.0	0.0	1.3	0.0	100.0	75
<b>Number of living children</b>										
0	28.6	21.6	31.1	7.1	7.7	0.0	1.8	2.1	100.0	387
1-2	29.4	19.1	33.3	6.4	7.5	0.6	1.6	2.1	100.0	368
3-4	34.0	11.7	30.7	8.0	10.0	0.0	4.7	1.0	100.0	314
5+	28.6	7.7	31.2	4.8	19.7	0.0	7.4	0.6	100.0	188
<b>Residence</b>										
Urban	32.0	21.1	31.8	2.9	9.6	0.3	0.5	1.9	100.0	404
Rural	29.3	14.0	31.6	8.6	10.2	0.1	4.6	1.5	100.0	854
<b>Region</b>										
Apia Urban Area	32.0	21.1	31.8	2.9	9.6	0.3	0.5	1.9	100.0	404
North West Upolu	27.0	15.2	30.1	11.1	10.1	0.0	5.2	1.3	100.0	513
Rest of Upolu	32.7	9.0	39.9	7.7	6.5	0.6	1.8	1.8	100.0	168
Savaii	33.0	15.4	28.1	2.2	14.0	0.0	5.6	1.7	100.0	173
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	100.0	1
Primary or lower or special needs	*	*	*	*	*	*	*	*	100.0	21
Secondary	11.2	12.5	43.6	10.4	15.2	0.1	5.1	1.8	100.0	713
More than secondary	57.1	22.0	15.6	1.9	1.4	0.2	0.4	1.4	100.0	524
<b>Wealth quintile</b>										
Lowest	11.3	5.3	43.5	11.4	13.5	0.0	12.9	2.0	100.0	148
Second	18.3	11.7	34.8	13.1	16.0	0.0	6.2	0.0	100.0	190
Middle	21.0	15.5	37.5	9.8	11.8	0.0	2.2	2.2	100.0	222
Fourth	35.0	15.6	31.9	5.0	9.9	0.4	1.1	1.1	100.0	279
Highest	43.9	23.1	22.7	1.9	5.1	0.2	0.7	2.2	100.0	419
Total	30.2	16.3	31.6	6.8	10.0	0.2	3.3	1.6	100.0	1,258

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

There is only a slightly difference in the proportion of women holding professional, technical, or managerial jobs between urban (32 percent) and rural (29 percent). The high proportion of rural women working in this kind of occupation may be due to the fact that many of these women, though they work in urban Apia, may actually be residents of nearby rural areas surrounding the capital city. However, this does not explain the survey findings that a large proportion of employed women from the more remote areas of Savaii to be engaged as professionals, technical or managerial workers.

There are substantial differences in the types of occupation of women according to their education and wealth. Over half of women with more than secondary education hold professional, technical, or managerial jobs compared with 11 percent of women who have attended and completed secondary education. Additionally, about a quarter of women living in households in the highest wealth quintile has professional, technical or managerial jobs compared with 11 percent of women in the lowest quintile. The proportion of women working in sales and services is markedly higher among women who have attended and completed secondary school(44 percent) than among women with vocational or secondary or higher education (16 percent). The percentage of women working in sales and services decreases steadily with wealth from 44 percent of women in the lowest wealth quintile to 23 percent of women in the highest wealth quintile.

Table 3.6.2 shows that employed men age 15-49, in general, have a different occupational profile than employed women in the same age category. The biggest proportion of employed men work as unskilled manual labour (22 percent). Agriculture and sales and services employed about 20 percent each of all currently employed or previously employed men. Proportionately fewer men (20 percent) than women (30 percent) occupy professional, technical or managerial positions. Nevertheless, for both men and women, the likelihood that they work in this type of occupation is highest in urban areas and among those that have more than secondary education and belong to the highest wealth quintile.

Table 3.6.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Samoa 2014

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of men
<b>Age</b>										
15-19	(11.9)	(2.1)	(9.9)	(15.1)	(38.7)	(0.0)	(22.3)	0.0	100.0	44
20-24	12.1	7.2	25.4	10.0	26.3	0.0	19.0	0.0	100.0	162
25-29	22.6	4.3	23.8	12.7	17.3	0.0	18.3	0.9	100.0	136
30-34	18.6	1.7	28.1	9.6	23.8	0.0	17.4	0.8	100.0	146
35-39	19.5	5.3	21.4	12.3	21.2	0.0	20.4	0.0	100.0	99
40-44	25.9	5.2	9.2	11.3	21.2	0.0	26.3	0.9	100.0	143
45-49	26.1	2.2	19.5	10.8	16.3	0.0	25.0	0.0	100.0	96
<b>Marital status</b>										
Never married	17.3	5.8	22.8	10.3	25.0	0.0	17.9	0.8	100.0	301
Married or living together	22.1	3.4	19.2	11.7	21.5	0.0	21.9	0.2	100.0	503
Divorced/separated/widowed	*	*	*	*	*	*	*	*	100.0	23
<b>Number of living children</b>										
0	18.1	5.9	20.5	10.5	24.8	0.0	19.5	0.7	100.0	348
1-2	17.7	1.9	28.6	13.9	17.8	0.0	20.1	0.0	100.0	166
3-4	25.7	3.7	18.3	11.2	21.3	0.0	19.9	0.0	100.0	175
5+	19.6	4.0	15.7	10.0	23.1	0.0	26.7	0.9	100.0	138
<b>Residence</b>										
Urban	31.4	9.7	23.2	12.1	15.1	0.0	6.7	1.8	100.0	204
Rural	16.1	2.6	20.1	11.0	24.8	0.0	25.5	0.0	100.0	623
<b>Region</b>										
Apia Urban Area	31.4	9.7	23.2	12.1	15.1	0.0	6.7	1.8	100.0	204
North West Upolu	21.2	4.3	25.9	16.7	22.6	0.0	9.3	0.0	100.0	281
Rest of Upolu	10.9	0.6	15.5	4.7	25.8	0.0	42.5	0.0	100.0	173
Savaii	12.8	1.7	15.1	7.9	27.3	0.0	35.1	0.0	100.0	169
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	*	1
Primary or lower or special needs	(2.1)	(2.2)	(15.9)	(9.9)	(27.3)	(0.0)	(42.6)	(0.0)	100.0	43
Secondary	11.3	3.5	21.8	12.0	25.9	0.0	25.0	0.4	100.0	577
More than secondary	47.8	7.0	19.2	8.9	11.7	0.0	4.7	0.6	100.0	205
<b>Wealth quintile</b>										
Lowest	7.3	0.7	14.3	10.7	35.9	0.0	31.1	0.0	100.0	130
Second	13.8	3.4	19.1	12.5	23.5	0.0	27.6	0.0	100.0	147
Middle	15.5	1.7	19.4	10.6	28.9	0.0	24.0	0.0	100.0	184
Fourth	17.5	6.2	23.5	13.5	20.0	0.0	18.6	0.6	100.0	191
Highest	41.4	8.5	25.8	8.8	7.1	0.0	7.1	1.4	100.0	176
Total 15-49	19.9	4.3	20.8	11.2	22.4	0.0	20.9	0.4	100.0	827
50-54	(28.7)	(0.0)	(27.1)	(4.7)	(11.1)	(2.7)	(25.7)	(0.0)	100.0	46
Total men 15-54	20.3	4.1	21.2	10.9	21.8	0.1	21.1	0.4	100.0	873

Note: Numbers 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.

### 3.7 TYPE OF EMPLOYER, FORM OF EARNINGS, AND CONTINUITY OF EMPLOYMENT

Women and men who are currently employed or were employed in the 12 months preceding the survey were asked about the type of earnings they received, that is, whether they were paid in

cash, in kind, or not at all. They were also asked about whether they were employed by a relative, a nonrelative, or if they were self-employed. Additionally, women and men were asked whether they worked continuously throughout the year or seasonally. Table 3.7.1 and 3.7.2 shows the percentage distribution of employed women and men by type of earnings, type of employer, and continuity of employment, according to the sector where they are employed, that is, whether agricultural or non-agricultural.

Overall, 80 percent of employed women earn cash only, 8 percent are paid in cash and in kind, and 11 percent receive either in-kind payment or no payment at all. Men are less likely than women to be paid in cash only (63 percent versus 80 percent) but more likely to receive no payment (21 percent versus 11 percent). This is because proportionately more men than women work in the agriculture sector where farmers own the farm and workers get compensation in the form of shares in the produce. This is evident from table 3.7.2 which shows that about three quarters (76 percent) of the men who work in agriculture actually do not get paid for the work they do. If employment is in the non-agricultural sector, majority of those employed get paid in cash ó 75 percent among men, 83 percent among women.

Table 3.7.1 and 3.7.2 also show that nearly 8 of every 10 women and six of every 10 men who have been employed in the preceding 12 months are employed by a nonfamily member. Men are nearly twice as likely to be self-employed than women (33 percent versus 18 percent) although, in the case of men, self-employment means work in the agriculture sector.

**Table 3.7.1 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), Samoa 2014

Employment Characteristics	Agricultural work	Nonagricultural work	Missing	Total
<b>Type of earnings</b>				
Cash only	(11.9)	82.5	*	79.9
Cash and in-kind	(0.0)	8.6	*	8.2
In-kind only	(0.0)	0.3	*	0.3
Not paid	(88.1)	8.4	*	11.3
Missing	(0.0)	0.3	*	0.3
Total	100.0	100.0	100.0	100.0
<b>Type of employer</b>				
Employed by family member	(2.3)	3.5	*	3.4
Employed by nonfamily member	(7.0)	81.1	*	78.5
Self-employed	(88.3)	15.2	*	17.7
Missing	(2.3)	0.3	*	0.4
Total	100.0	100.0	100.0	100.0
<b>Continuity of employment</b>				
All year	(61.7)	94.7	*	93.2
Seasonal	(35.9)	4.3	*	5.6
Occasional	(2.3)	0.7	*	0.8
Missing	(0.0)	0.3	*	0.4
Total	100.0	100.0	100.0	100.0
Number of women employed during the last 12 months	42	1,196	20	1,258

Note: Total includes women with missing information on type of employment who are not shown separately. Numbers 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.

**Table 3.7.2 Type of employment: Men**

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), Samoa 2014

Employment Characteristics	Agricultural work	Nonagricultural work	Missing	Total
<b>Type of earnings</b>				
Cash only	16.7	75.0	*	62.6
Cash and in-kind	7.1	17.3	*	15.4
In-kind only	0.0	1.1	*	0.9
Not paid	76.2	6.1	*	20.7
Missing	0.0	0.5	*	0.4
Total	100.0	100.0	100.0	100.0
<b>Type of employer</b>				
Employed by family member	1.3	7.3	*	6.0
Employed by nonfamily member	16.7	72.4	*	60.9
Self-employed	82.1	19.8	*	32.7
Missing	0.0	0.5	*	0.4
Total	100.0	100.0	100.0	100.0
<b>Continuity of employment</b>				
All year	68.5	86.0	*	82.3
Seasonal	30.4	13.0	*	16.7
Occasional	1.1	0.3	*	0.5
Missing	0.0	0.7	*	0.5
Total	100.0	100.0	100.0	100.0
Number of men employed during the last 12 months	173	650	4	827

Note: Total includes men with missing information on type of employment who are not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

With regard to continuity of employment, the data show that about nine in ten employed respondents (93 percent of women and 82 percent men) work all year. As expected, most women who work in non-agricultural jobs typically work all year (95 percent) compared with 62 percent of women who work in agriculture. The difference observed for men is substantially smaller; the majority of men typically work all year regardless of type of employment (68 percent of men working in agricultural jobs and 86 percent of men working in non-agricultural jobs). This is not surprising considering that the climate in Samoa is tropical. There are only two distinct seasons: a dry season from May to October and a wet season from November to April. Due to its close proximity to the Equator, there are no large seasonal differences in temperature, allowing agricultural activities, mostly pursued by men, to be spread continuously throughout the year.

### 3.8 HEALTH INSURANCE COVERAGE

In Samoa, health care is heavily subsidized by the government in all the areas of health services. The main goal of the government is to make health care accessible and affordable for all Samoan people. Sixty-six percent of total health expenditures in Samoa are sourced from public funds, while 9 percent are financed from out-of-pocket household funds as part of the user-fee system that has been put in place. Donor funding covers 21 percent of health care expenditures in Samoa. It is clear from these figures that the Samoan health system is mostly funded by public and donor funds, in an effort to limit the population's out-of-pocket support for health care (MOH, 2008a)

The only form of health insurance that exists in the public sector is the Senior Citizens Benefit Scheme initiated in 1990 for citizens age of 65 and older. It is coordinated by the Samoa National Provident Fund. The benefit package includes free health care services for the senior

population in any of the public facilities, free inpatient and diagnostic services, and free supply of medication and drugs from the public pharmacies. The Samoan and the New Zealand governments also provide funding for the Overseas Treatment Scheme, facilitated by the National Health Service which represents 9 percent of all health care funding. Under the Overseas Treatment Scheme, the Samoan Government and the New Zealand Agency for International development (NZAID) cover the fee for hospital treatment overseas for patients who need to go abroad, while the patients are responsible only for the airfare (MOH,2008a).

On account of the highly subsidized health care enjoyed by citizens of Samoa, any form of health insurance scheme is extremely rare. All women and men who were interviewed in the 2014 SDHS were asked if they hold a membership in any health insurance scheme such as social security, employer-based insurance or privately purchased commercial insurance. The vast majority of women and men age 15-49 (98 percent each) say that they are not covered by any type of health insurance scheme. Where it is availed of, it is either provided by private employers or individually-purchased from commercial insurance firms. Moreover, whatever limited health insurance coverage there is, it is confined mainly to those who reside in urban residents, the highly educated men and women and those who belong to the highest wealth quintile.

**Table 3.8.1 Health insurance coverage: Women**

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Samoa 2014

Background characteristic	Social security	Other employer based insurance	Privately purchased commercial insurance	Other	None	Number
<b>Age</b>						
15-19	0.0	0.2	0.4	0.0	99.4	1,062
20-24	0.1	1.2	0.6	0.0	98.1	829
25-29	0.0	1.5	0.1	0.0	98.3	728
30-34	0.0	1.0	0.3	0.2	98.5	591
35-39	0.0	1.9	0.6	0.6	97.0	551
40-44	0.0	1.6	0.2	0.5	97.7	577
45-49	0.0	0.9	0.4	0.4	98.2	467
<b>Residence</b>						
Urban	0.1	2.3	0.9	0.4	96.3	1,000
Rural	0.0	0.8	0.3	0.1	98.8	3,805
<b>Region</b>						
Apia Urban Area	0.1	2.3	0.9	0.4	96.3	1,000
North West Upolu	0.0	0.6	0.3	0.2	98.9	1,733
Rest of Upolu	0.0	0.4	0.2	0.1	99.4	1,099
Savaai	0.0	1.6	0.3	0.0	98.1	973
<b>Education</b>						
No education	*	*	*	*	100.0	15
Primary or lower or special needs	0.0	0.0	0.0	0.0	100.0	161
Secondary	0.0	0.4	0.3	0.1	99.2	3,654
More than secondary	0.0	4.1	0.8	0.4	94.7	975
<b>Wealth quintile</b>						
Lowest	0.0	0.4	0.2	0.0	99.4	903
Second	0.0	0.2	0.1	0.0	99.7	955
Middle	0.1	0.5	0.2	0.0	99.1	954
Fourth	0.0	1.3	0.3	0.1	98.3	987
Highest	0.0	2.9	1.0	0.8	95.2	1,006
Total 15-49	0.0	1.1	0.4	0.2	98.3	4,805

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



**Table 3.8.2 Health insurance coverage: Men**

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Samoa 2014

Background characteristic	Social security	Other employer based insurance	Privately purchased commercial insurance	Other	None	Number
<b>Age</b>						
15-19	0.3	0.0	0.6	0.4	98.8	348
20-24	0.0	1.8	1.7	0.0	96.8	298
25-29	0.0	0.9	0.0	0.5	98.5	229
30-34	0.4	1.9	0.0	0.4	97.2	211
35-39	0.9	0.9	0.0	0.0	98.3	144
40-44	0.7	1.0	1.9	0.0	96.4	179
45-49	0.0	1.3	1.9	0.6	96.2	166
<b>Residence</b>						
Urban	0.8	2.4	1.2	0.8	94.9	318
Rural	0.1	0.8	0.8	0.1	98.2	1,257
<b>Region</b>						
Apia Urban Area	0.8	2.4	1.2	0.8	94.9	318
North West Upolu	0.3	0.8	0.7	0.2	98.0	563
Rest of Upolu	0.0	0.8	1.2	0.0	98.3	357
Savaii	0.0	0.6	0.6	0.3	98.6	338
<b>Education</b>						
No education	*	*	*	*	100.0	8
Primary or lower or special needs	0.0	0.0	0.0	0.0	100.0	116
Secondary	0.1	0.6	0.6	0.2	98.6	1,169
More than secondary	1.2	3.7	2.2	0.8	92.1	282
<b>Wealth quintile</b>						
Lowest	0.0	0.3	0.0	0.0	99.7	293
Second	0.0	0.3	0.3	0.0	99.4	298
Middle	0.3	0.6	0.6	0.3	98.3	330
Fourth	0.0	0.4	0.9	0.3	98.4	356
Highest	1.1	3.9	2.6	0.7	92.0	300
Total 15-49	0.3	1.1	0.9	0.3	97.6	1,576
50-54	1.0	1.0	1.0	0.0	98.0	93
Total men 15-54	0.3	1.1	0.9	0.3	97.6	1,669

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

### 3.9 KNOWLEDGE AND ATTITUDE CONCERNING TUBERCULOSIS

Tuberculosis (TB) is primarily caused by a bacterium called *Mycobacterium tuberculosis*.<sup>2</sup> The disease usually affects the lungs, although other organs are involved in up to one-third of cases. If properly treated, tuberculosis caused by drug-susceptible strains is curable in virtually all cases. If untreated, more than half the cases may be fatal within five years. Transmission is usually airborne

<sup>2</sup>Bovine tuberculosis was eliminated with the introduction of pasteurization. In Samoa, any commercially available animal milk is pasteurized, and milk products available for human consumption are made from pasteurized milk.

through the spread of droplets produced when patients with infectious pulmonary tuberculosis cough. Tuberculosis is a major global health problem and is currently responsible for the deaths of about two million people each year.

Tuberculosis is a minor public health problem in Samoa. Nevertheless, it is important for people to know about the disease, especially, on how it can be transmitted. The 2014 SDHS collected information on respondents' knowledge and attitudes concerning TB and the results are summarized in Tables 3.9.1 and 3.9.2.

**Table 3.9.1 Knowledge and attitude concerning tuberculosis: Women**

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentages who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Samoa 2014

Background characteristic	Among all respondents		Among respondents who have heard of TB, the percentage who			
	Percentage who have heard of TB	Number	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Number
<b>Age</b>						
15-19	75.6	1,062	75.5	64.7	4.9	803
20-24	82.9	829	79.5	72.2	3.9	688
25-29	89.9	728	83.8	77.4	2.6	655
30-34	88.4	591	82.6	77.2	2.7	522
35-39	87.1	551	88.2	82.2	2.5	480
40-44	91.8	577	87.1	80.0	4.3	530
45-49	89.4	467	85.2	82.6	4.2	417
<b>Residence</b>						
Urban	91.9	1,000	80.6	80.0	2.0	919
Rural	83.5	3,805	82.9	74.1	4.1	3,176
<b>Region</b>						
Apia Urban Area	91.9	1,000	80.6	80.0	2.0	919
North West Upolu	83.1	1,733	84.2	76.3	4.0	1,440
Rest of Upolu	82.4	1,099	84.8	76.6	4.9	906
Savaai	85.3	973	78.5	67.5	3.5	830
<b>Education</b>						
No education	*	15	*	*	*	12
Primary or lower or special needs	67.4	161	80.5	62.5	2.7	108
Secondary	83.9	3,654	81.5	74.2	3.7	3,066
More than secondary	93.2	975	85.6	81.1	3.4	909
<b>Wealth quintile</b>						
Lowest	78.3	903	82.4	71.5	3.6	707
Second	82.6	955	81.8	71.4	3.1	789
Middle	85.3	954	78.8	73.5	5.7	814
Fourth	88.0	987	83.9	79.1	2.2	869
Highest	91.1	1,006	84.6	80.2	3.6	916
Total	85.2	4,805	82.4	75.4	3.6	4,095

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

Table 3.9.2 Knowledge and attitude concerning tuberculosis: Men

Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentages who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Samoa 2014

Background characteristic	Among all respondents		Among respondents who have heard of TB, the percentage who			
	Percentage who have heard of TB	Number	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Number
<b>Age</b>						
15-19	63.7	348	82.4	69.9	9.0	222
20-24	76.5	298	83.1	77.1	9.1	228
25-29	73.6	229	87.3	80.3	4.6	169
30-34	80.2	211	85.0	84.7	2.8	170
35-39	81.2	144	89.3	86.8	5.9	117
40-44	82.4	179	81.4	81.8	4.8	147
45-49	84.5	166	89.8	85.1	2.7	140
<b>Residence</b>						
Urban	83.5	318	86.1	80.1	4.2	266
Rural	73.7	1,257	84.7	79.7	6.5	927
<b>Region</b>						
Apia urban area	83.5	318	86.1	80.1	4.2	266
North west Upolu	71.8	563	86.4	75.0	7.9	404
Rest of Upolu	82.1	357	94.6	78.3	4.1	293
Savaai	68.2	338	69.3	89.8	7.0	230
<b>Education</b>						
No education	*	8	*	*	*	4
Primary or lower or special needs	63.9	116	81.7	78.0	3.9	74
Secondary	74.7	1,169	84.7	78.7	6.4	873
More than secondary	85.5	282	87.0	84.9	5.1	241
<b>Wealth quintile</b>						
Lowest	69.2	293	83.3	77.5	8.1	203
Second	72.2	298	85.4	78.4	4.4	215
Middle	74.5	330	87.0	82.9	5.1	246
Fourth	77.3	356	81.5	79.6	7.2	275
Highest	85.0	300	88.0	80.0	4.9	255
Total 15-49	75.7	1,576	85.0	79.8	5.9	1,193
50-54	85.6	93	90.2	86.2	0.0	80
Total men 15-54	76.3	1,669	85.4	80.2	5.6	1,273

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

Most women (85percent) and men (76 percent) in Samoa have heard of TB. Younger respondents age 15-19 are less likely to have heard of TB and the level of knowledge tends to increase with age. There are no major variations by urban-rural residence or region, although women in rural areas are slightly less likely to have heard of TB than those in urban areas (84 percent compared with 92 percent). Respondents with less education and those in households in the lowest wealth quintile are less likely to know about TB. For example, 67 percent of women with primary or lower or special needs education have heard of TB compared with 93 percent of women with more than secondary education. Similarly, knowledge of TB increases from 78 percent of women in the lowest wealth quintile to 91 percent of those in the highest wealth quintile.

Among women and men who have heard of TB, a relatively high proportion knows that TB is spread through the air by coughing (82 percent of women and 85 percent of men). About eight in ten

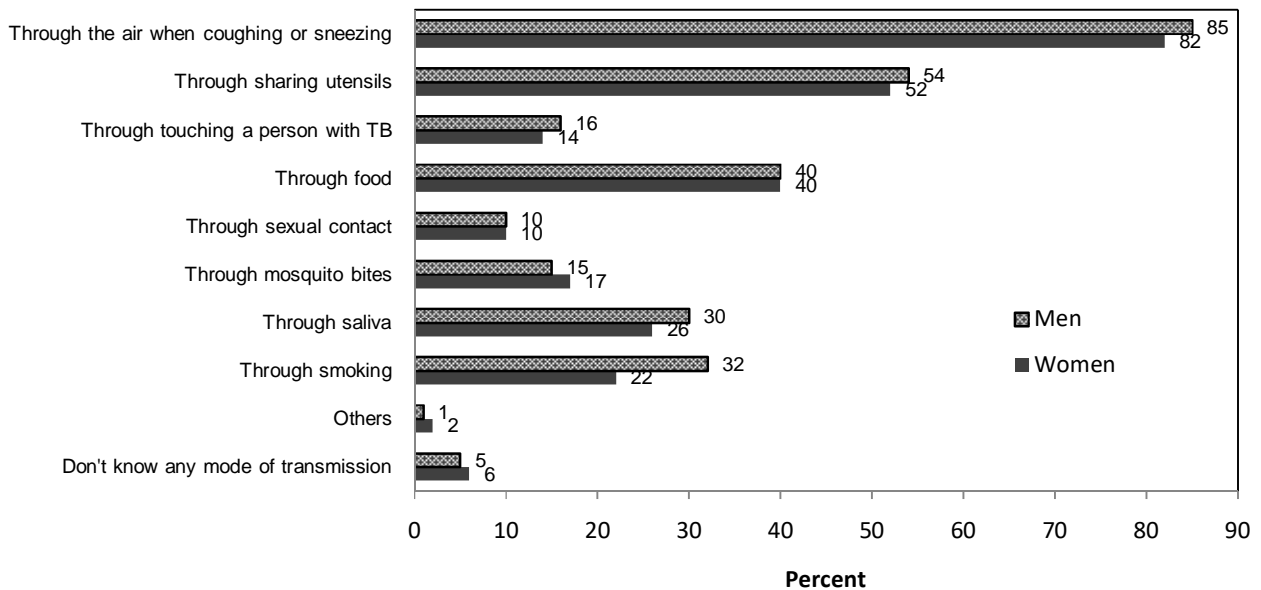
respondents believe that TB can be cured (75 percent women and 80 percent men). The knowledge that TB can be cured is generally lower among the youngest respondents, those with less education, and respondents in the lower wealth quintiles.

There is very little stigma attached to TB. For example, only 4 percent of women and 6 percent of men said that if a family member had TB, they would want it to remain a secret. There are no major variations by background characteristics except for urban-rural residence. Rural women (4percent) and men (6 percent) are more likely to want to keep secret that a family member has the TB when compared with urban women (2 percent) and men (4 percent).

### 3.9.1 Misconceptions about the Way Tuberculosis Spreads

While the majority of women and men are able to correctly identify that tuberculosis is spread through the air by coughing, misconceptions about tuberculosis transmission are widespread in the adult population. Figure 3.2 shows percentage of women and men who have heard about TB with correct and incorrect knowledge of ways how TB is spread. As commented above (see Tables 3.9.1 and 3.9.2), overall, 82 percent of women and 85 percent of men correctly know that tuberculosis is spread through air when coughing or sneezing. Figure 3.2 shows that the two most common misconceptions, reported by about five in ten respondents, are that TB spreads through sharing of utensils (54 percent of men and 52 percent of women), and it spreads through food (40 percent each for both women and men). About three in ten women and men who have heard of TB believe that it can be contracted through saliva, while 22 percent of women and 32 percent of men think that TB can be contracted through smoking. Furthermore, 10 percent of women and men believe that TB can be contracted through sexual contact, and less than two in ten (14 percent of women and 16 percent of men) believe that TB can be transmitted by touching a person with tuberculosis. Respondents who believe that tuberculosis can be transmitted through mosquito bites (17 percent of women and 15 percent of men). A small proportion of respondents who reported that TB is spread by other mean (2 percent for women and 1 percent for men).

**Figure 3.2 Among Women and Men Age 15-49 Who Have Heard of TB, Knowledge and Misconceptions About Transmission of TB**



### 3.9.2 Exposure to Messages on TB

The media is seen as an effective means to disseminate any public health information. To assess the extent to which various types of media serve as a source of messages on tuberculosis, respondents were asked whether they ever had read or seen information about TB in a newspaper or magazine, in leaflets, brochures or booklets, or on the internet. Results are shown in Table 3.10.1 and 3.10.2.

Overall, about three in ten women (26 percent) and men (24 percent) reporting having read a TB message at some point in a newspaper or magazine, and about two in ten (18 percent of women and 15 percent of men) in a brochure or a booklet. The internet is the least common source of TB messages for both women (11 percent) and men (7 percent). Overall, 65 percent of women and 69 percent of men have not heard or seen any TB messages in any of the specified media.

Table 3.10.1 Exposure to messages about TB in printed media and the Internet: Women

Percentage of women age 15-49 who have ever read or seen a TB message in a newspaper/magazine, in leaflets/brochures or booklets, or on the Internet, according to background characteristics Samoa 2014

Background characteristic	Newspaper/magazine	Leaflets/booklets	Internet	None of these 3 medias	Number of women
<b>Age</b>					
15-19	20.7	16.7	11.4	68.3	1,062
20-24	22.0	15.7	15.3	68.2	829
25-29	30.5	18.7	13.1	61.2	728
30-34	28.2	19.3	9.0	63.5	591
35-39	30.8	19.6	9.6	61.3	551
40-44	27.7	20.7	9.3	63.2	577
45-49	29.0	17.2	5.8	63.9	467
<b>Residence</b>					
Urban	27.0	19.6	15.5	64.6	1,000
Rural	25.9	17.6	9.8	64.8	3,805
<b>Region</b>					
Apia Urban Area	27.0	19.6	15.5	64.6	1,000
North West Upolu	29.6	20.4	15.1	61.3	1,733
Rest of Upolu	23.1	23.2	5.4	63.1	1,099
Savaii	22.4	6.1	5.5	73.1	973
<b>Education</b>					
No education	*	*	*	*	15
Primary or lower or special needs	11.6	6.7	0.6	84.7	161
Secondary	23.4	15.5	6.4	68.5	3,654
More than secondary	38.7	29.5	30.0	47.6	975
<b>Wealth quintile</b>					
Lowest	16.2	10.2	2.4	76.5	903
Second	23.1	15.2	6.3	68.7	955
Middle	23.6	17.2	7.6	66.6	954
Fourth	27.7	20.0	11.2	62.2	987
Highest	38.8	26.5	26.3	51.2	1,006
Total	26.1	18.0	11.0	64.8	4,805

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

Table 3.10.2 Exposure to messages about TB in printed media and the Internet: Men

Percentage of men age 15-49 who have ever read or seen a TB message in a newspaper/magazine, in leaflets/brochures or booklets, or on the Internet, according to background characteristics Samoa 2014

Background characteristic	Newspaper/magazine	Leaflets/booklets	Internet	None of these 3 medias	Number of men
<b>Age</b>					
15-19	14.2	9.5	4.6	79.7	348
20-24	23.6	17.5	9.9	66.5	298
25-29	22.3	14.2	6.2	71.1	229
30-34	27.0	13.2	5.9	67.1	211
35-39	31.0	22.9	9.5	58.8	144
40-44	27.4	16.0	8.4	66.5	179
45-49	32.6	19.5	7.0	62.9	166
<b>Residence</b>					
Urban	34.0	22.1	17.0	60.2	318
Rural	21.3	13.5	4.6	71.3	1,257
<b>Region</b>					
Apia Urban Area	34.0	22.1	17.0	60.2	318
North West Upolu	18.9	11.8	7.3	71.4	563
Rest of Upolu	21.6	23.2	2.2	68.7	357
Savaii	24.9	6.0	2.8	73.9	338
<b>Education</b>					
No education	*	*	*	*	8
Primary or lower or special needs	13.6	8.5	1.1	83.9	116
Secondary	20.1	12.8	3.4	72.9	1,169
More than secondary	43.9	28.2	25.6	46.8	282
<b>Wealth quintile</b>					
Lowest	15.5	8.6	2.0	79.3	293
Second	15.8	14.7	2.2	76.2	298
Middle	21.8	11.6	6.1	71.1	330
Fourth	29.0	16.8	7.3	63.8	356
Highest	36.2	24.2	18.0	56.2	300
Total 15-49	23.8	15.2	7.2	69.1	1,576
50-54	28.5	18.5	7.6	64.0	93
Total men 15-54	24.1	15.4	7.2	68.8	1,669

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

Among women, exposure to TB messages in any type of the specified media is more common in urban than rural areas. Exposure of women and men to TB messages through any type of these three media increases with level of education and wealth quintile. For example, only 12 percent of women who have heard of TB and have primary or less or special needs education have read a TB message on a newspaper or magazine compared with 39 percent of women with more than secondary education. Exposure to TB messages via newspaper or magazine ranges from 16 percent among women in the lowest wealth quintile to 39 percent of women in the highest quintile.

Women and men who have heard about TB were also asked whether they saw or heard a TB message in a billboard or poster, on the television or the radio, whether they participated in a TB peer education program, in any other TB-related programs, or in a community event, and whether they received information about TB from other sources such as an outreach worker or family or friends. Tables 3.11.1 and 3.11.2 show the results by background characteristics. Results in the tables and in Figure 3.3 show that TV is the most common source of TB-related information among respondents who have heard of TB; it is reported by 76 percent of women and 64 percent of men. More than half of women (54 percent) and 46 percent of men heard about TB on the radio, while more than two in ten (46 percent of women and 37 percent of men) saw or read TB messages on a billboards or posters or heard them from family or friends (36 percent of women and 27 percent of men). About 12 percent of

women and 10 percent of men have heard a TB message from an outreach worker. Peer or other types of TB education programs and community events are the least common source of TB messages reported by 9 to 11 percent of women and men.

Table 3.11.1 Exposure to messages about TB: Women

Percentage of women age 15-49 who have ever seen or heard a TB message in a billboard/poster, on TV or radio, through a TB education program or from other specific sources, according to background characteristics Samoa 2014

Background characteristic	Signs/posters	TV	Radio	Peer education	Other education	Community event	Outreach worker	Family/friends	None of those sources	Number of women
<b>Age</b>										
15-19	38.9	66.5	37.1	10.3	24.8	5.9	7.0	29.6	25.2	1,062
20-24	43.3	74.8	48.4	11.2	21.3	8.4	10.2	34.4	17.5	829
25-29	52.6	80.9	61.7	12.9	20.3	10.5	11.4	38.5	10.9	728
30-34	48.2	79.4	59.1	8.4	13.9	12.6	12.5	40.1	12.4	591
35-39	49.3	78.3	61.2	10.8	16.0	14.8	16.3	38.2	13.9	551
40-44	49.1	79.3	63.2	11.4	13.5	13.9	13.9	41.0	8.6	577
45-49	50.4	76.3	63.5	7.5	12.9	13.3	13.7	39.6	11.6	467
<b>Residence</b>										
Urban	42.8	84.0	53.1	9.5	20.1	11.6	10.3	38.9	8.9	1,000
Rural	47.4	73.3	54.2	10.8	18.2	10.3	11.8	35.7	17.3	3,805
<b>Region</b>										
Apia Urban Area	42.8	84.0	53.1	9.5	20.1	11.6	10.3	38.9	8.9	1,000
North West Upolu	49.9	74.1	52.3	14.0	22.7	9.6	11.4	40.0	17.6	1,733
Rest of Upolu	44.6	69.6	57.1	10.0	14.9	9.9	11.2	39.0	18.8	1,099
Savaii	46.0	76.1	54.1	6.0	14.1	11.9	13.0	24.6	14.9	973
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	*	15
Primary or lower or special needs	27.1	53.1	38.3	1.8	4.3	2.4	5.5	18.5	34.4	161
Secondary	44.5	74.3	53.2	8.5	15.9	9.2	10.0	33.7	16.8	3,654
More than secondary	56.5	83.9	59.3	19.5	31.3	16.7	17.5	49.2	7.5	975
<b>Wealth quintile</b>										
Lowest	36.7	64.6	47.4	7.2	13.7	7.9	7.3	29.8	22.1	903
Second	44.1	72.0	54.2	9.0	15.3	10.9	11.1	32.6	18.3	955
Middle	46.4	75.7	53.8	8.5	16.6	7.8	12.5	35.6	15.6	954
Fourth	50.2	80.5	56.7	12.8	22.1	11.4	12.6	40.0	12.6	987
Highest	53.6	83.7	57.1	14.6	24.8	14.3	13.4	43.1	9.8	1,006
Total	46.4	75.5	53.9	10.5	18.6	10.5	11.5	36.4	15.5	4,805

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

Roughly one in four respondents (16 percent of women and 25 percent of men) reported not having been exposed to TB messages via any of the specified media. For both men and women, lack of exposure to TB messages through any type of media is higher for younger age groups. Rural women are slightly less likely to be exposed to TB messages through the specified media than urban women (17 percent compared with 9 percent), similarly for men 28 percent compared with 16 percent. Lack of exposure to TB messages through media is inversely associated with education and wealth quintile; it decreases with an increase in education and wealth. Women and men with more education and belonging to the higher wealth quintiles are more likely to be exposed to TB messages through the specified media than those with less education and in the lower wealth quintiles.

**Table 3.11.2 Exposure to messages about TB: Men**

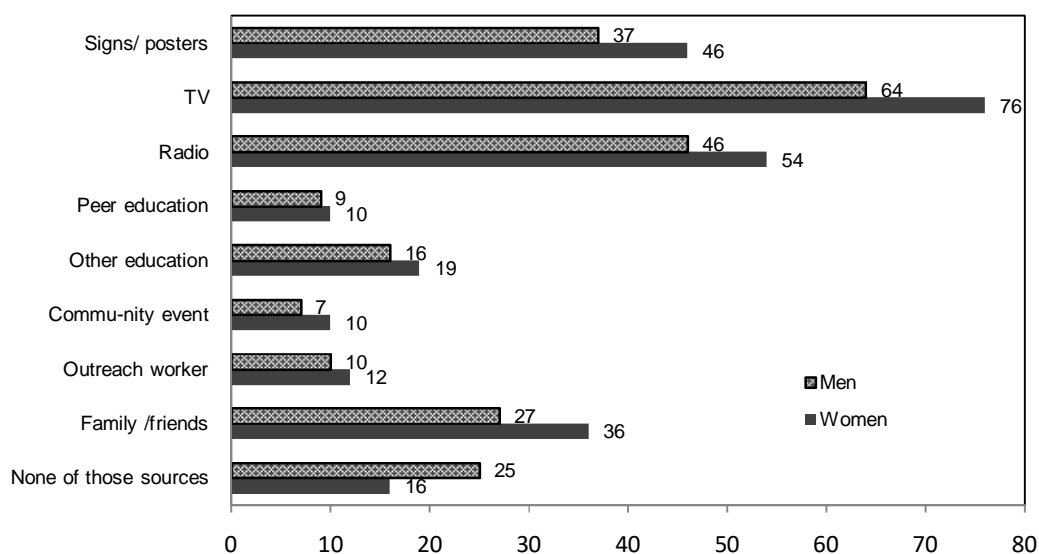
Percentage of men age 15-49 who have ever seen or heard a TB message in a billboard/poster, on TV or radio, through a TB education program or from other specific sources, according to background characteristics Samoa 2014

Background characteristic	Signs/posters	TV	Radio	Peer education	Other education	Community event	Outreach worker	Family/friends	None of those sources	Number of men
<b>Age</b>										
15-19	25.0	53.0	29.2	4.3	18.6	2.6	3.1	19.2	37.1	348
20-24	38.1	64.1	46.8	12.6	17.9	6.9	7.3	25.9	24.5	298
25-29	36.5	63.3	46.9	8.2	15.5	5.8	8.6	27.8	27.7	229
30-34	42.1	67.8	49.9	8.9	17.7	5.4	10.6	29.1	20.3	211
35-39	42.3	69.5	49.2	10.7	11.6	11.4	15.3	27.8	20.8	144
40-44	39.5	67.1	54.3	11.0	12.1	11.6	14.7	36.1	18.7	179
45-49	43.4	71.9	60.7	11.6	12.0	8.9	17.3	30.4	16.6	166
<b>Residence</b>										
Urban	44.4	76.1	53.4	15.1	27.0	12.7	11.2	35.1	16.5	318
Rural	34.6	60.6	44.0	7.7	13.0	5.2	9.2	24.9	27.6	1,257
<b>Region</b>										
Apia Urban Area	44.4	76.1	53.4	15.1	27.0	12.7	11.2	35.1	16.5	318
North West Upolu	28.7	61.6	42.0	10.2	15.5	4.5	7.0	20.1	28.6	563
Rest of Upolu	38.0	56.5	41.9	3.1	9.8	3.9	6.7	22.6	21.2	357
Savaii	41.0	63.1	49.5	8.4	12.3	7.9	15.7	35.2	32.7	338
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	*	8
Primary or lower or special needs	23.5	52.5	41.5	2.4	3.3	2.5	4.1	16.1	38.6	116
Secondary	35.1	61.6	44.1	7.7	13.8	5.1	8.5	25.0	26.5	1,169
More than secondary	48.0	78.1	55.6	18.3	29.7	15.7	17.0	40.2	14.5	282
<b>Wealth quintile</b>										
Lowest	30.2	55.4	39.5	4.9	9.0	2.1	7.2	27.8	32.4	293
Second	35.8	57.8	39.9	5.9	11.8	3.5	9.2	25.5	29.1	298
Middle	34.8	61.4	47.0	7.6	12.1	7.7	9.5	28.1	27.0	330
Fourth	36.5	65.8	50.2	12.5	18.1	8.4	11.7	25.1	23.0	356
Highest	45.8	77.7	51.8	14.4	28.0	11.7	10.2	28.4	15.6	300
Total 15-49	36.6	63.7	45.9	9.2	15.8	6.8	9.6	26.9	25.3	1,576
50-54	36.5	65.5	63.5	7.7	6.5	6.0	22.6	33.8	16.5	93
Total men 15-54	36.6	63.8	46.9	9.1	15.3	6.7	10.4	27.3	24.9	1,669

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



**Figure 3.3 Women and Men Exposed to Messages on Tuberculosis**



### 3.10 SMOKING

Smoking is a known risk factor for cardiovascular disease. It also causes lung and other forms of cancer, and contributes to the severity of pneumonia, emphysema, and chronic bronchitis. Smoking may also have an impact on individuals who are exposed to the smoke second-hand. For example, inhaling second-hand smoke may adversely affect children's growth and cause childhood illness, especially respiratory diseases. With the increasing number of Samoans suffering from non communicable diseases, smoking is a behaviour that has a negative impact on the nation's efforts to combat diseases and improve the population's lifestyle. The fact that smoking is an acquired behaviour indicates that morbidity and mortality associated with smoking is highly preventable.

The Health Sector Situational Analysis conducted in May 2006 by the Samoa Ministry of Health identified non-communicable diseases as one of the most important health challenges in the country. Non-communicable diseases in Samoa are increasing rapidly and they continue to place a major burden on the country's health sector and economy, as well as have a significant impact on the adult morbidity and mortality (National Health Accounts, 2006). These findings have been the driving force behind the health sector's focus on health promotion activities and programs, which include campaigns against smoking. The percentage of population that smoke in Samoa is expected to decline in the near future due to recent passing and coming into effect of the Tobacco Control Act 2008 ([www.parliament.gov.ws](http://www.parliament.gov.ws)) which prohibited smoking in public areas, including but not limited to restaurants, nightclubs or bars, and public transport vehicles. On-going awareness campaigns and health promotion activities against smoking are constantly being implemented by the Health Promotion and Prevention Division, including the School Tobacco Control Program in all primary schools in Samoa.

To measure the extent of smoking and use of tobacco in Samoa, women and men who were interviewed in the 2014 SDHS were asked if they currently smoke cigarettes or use any other forms of tobacco. Tables 3.12.1 and 3.12.2 show the percentage of women and men age 15-49 who smoke cigarettes, or use other forms of tobacco by background characteristics.

Cigarette smoking is the most common type of tobacco use in Samoa and it is significantly higher among men than women (36 and 12 percent, respectively). Additionally, Samoan men smoke more cigarettes per day than Samoan women. Sixty-seven percent of men who say they smoke 10 or more cigarettes per day compared with 40 percent of women.

The distribution of women smoking cigarettes does not vary much according to age or education. On the other hand, women residing in urban areas and in Apia urban area (18 percent each), women who are neither breastfeeding nor pregnant (13 percent), and those from the fourth wealth quintile (14 percent) are more likely to smoke cigarettes than other women. The proportion of men smoking cigarettes increases dramatically with age, from 12 percent among men 15-19 to (34 percent) among men 20-24, to nearly half of men in their 20s, 30s and 40s. Cigarette smoking among men decreases with an increase in education and wealth.

A higher percentage of men (10 percent) than women (less than 1 percent) smoke Tapaa Samoa, a locally grown tobacco product. The use of Tapaa Samoa is more likely among rural (10 percent) than urban (6 percent) men (and it is particularly popular in Savaii (27 percent). The use of Tapaa Samoa among men decreases from 20 percent among men with primary or lower or special needs education to 5 percent of men with more than secondary education. Men in the two lowest wealth quintile have the highest percentage of use of Tapaa Samoa (11 percent), while men in the highest wealth quintile have the lowest use (5 percent).

Table 3.12.1 Use of tobacco: Women

Percentage of women 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 and maternity status, Samoa 2014

Background characteristic	Cigarette	Other tobacco	Does not use tobacco	Number of women	Number of cigarettes in the last 24 hours					Don't know/missing	Total	Number of cigarette smokers
					0	1-2	3-5	6-9	10+			
<b>Age</b>												
15-19	1.8	0.0	98.2	1,062	*	*	*	*	*	0.0	100.0	19
20-24	11.1	0.1	88.8	829	1.2	15.7	29.7	10.9	42.5	0.0	100.0	92
25-29	14.4	0.3	85.5	728	0.0	17.8	35.2	12.4	30.8	3.9	100.0	105
30-34	17.6	0.3	82.4	591	0.0	17.5	34.7	9.1	34.7	4.0	100.0	104
35-39	16.0	0.0	83.8	551	0.0	10.3	29.7	7.9	47.6	4.5	100.0	88
40-44	16.8	0.5	82.9	577	0.0	6.1	32.0	17.9	43.0	1.0	100.0	97
45-49	19.4	0.6	80.4	467	0.0	11.1	33.2	15.3	39.3	1.1	100.0	91
<b>Residence</b>												
Urban	17.8	0.2	82.1	1,000	0.6	14.0	23.2	12.1	47.1	3.0	100.0	178
Rural	11.0	0.2	88.9	3,805	0.2	13.6	35.5	12.3	36.3	2.1	100.0	417
<b>Region</b>												
Apia Urban Area	17.8	0.2	82.1	1,000	0.6	14.0	23.2	12.1	47.1	3.0	100.0	178
North West Upolu	11.5	0.1	88.5	1,733	0.0	8.0	37.3	13.4	40.4	1.0	100.0	199
Rest of Upolu	12.3	0.3	87.5	1,099	0.7	19.2	30.4	11.1	36.3	2.2	100.0	135
Savaai	8.6	0.4	91.2	973	0.0	17.6	39.3	11.6	26.9	4.6	100.0	83
<b>Education</b>												
No education	*	*	*	15	*	*	*	*	*	*	0.0	0
Primary or lower or special needs	13.2	0.7	86.8	161	*	*	*	*	*	*	100.0	21
Secondary	12.4	0.2	87.4	3,654	0.2	13.8	32.8	12.4	38.3	2.4	100.0	455
More than secondary	12.3	0.1	87.7	975	0.0	14.0	26.2	11.9	45.3	2.6	100.0	119
<b>Maternity status</b>												
Pregnant	11.0	0.0	89.0	314	(0.0)	(32.2)	(29.4)	(14.6)	(23.8)	(0.0)	100.0	35
Breastfeeding (not pregnant)	11.7	0.3	88.2	1,156	0.0	20.5	35.9	10.4	27.9	5.3	100.0	135
Neither	12.8	0.2	87.1	3,335	0.5	10.0	30.7	12.6	44.6	1.7	100.0	425
<b>Wealth quintile</b>												
Lowest	12.7	0.7	87.2	903	0.9	16.1	38.7	11.3	31.2	1.7	100.0	115
Second	11.9	0.2	87.8	955	0.0	17.3	28.7	15.9	36.4	1.7	100.0	114
Middle	11.1	0.1	88.6	954	0.0	12.3	30.8	13.3	38.9	4.7	100.0	106
Fourth	14.0	0.1	86.0	987	0.8	11.1	32.9	6.7	45.5	3.1	100.0	139
Highest	12.1	0.1	87.9	1,006	0.0	12.2	27.8	15.0	44.2	0.8	100.0	122
Total	12.4	0.2	87.5	4,805	0.3	13.7	31.8	12.2	39.6	2.4	100.0	595

Note: Numbers 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.

Table 3.12.2 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, Samoa 2014

Background characteristic	Cigarette	Pipe	Other tobacco	Does not use tobacco	Number of men	Number of cigarettes in the last 24 hours					Don't know/missing	Total	Number of cigarette smokers
						0	1-2	3-5	6-9	10+			
<b>Age</b>													
15-19	11.6	0.0	3.2	87.8	348	(4.7)	93.1)	917.8)	(18.8)	(55.7)	(0.0)	100.0	40
20-24	33.6	0.0	8.1	64.5	298	0.0	6.9	21.4	10.5	60.2	1.0	100.0	100
25-29	45.9	0.4	11.4	53.7	229	0.9	3.9	9.9	18.8	66.5	0.0	100.0	105
30-34	45.2	0.0	11.0	54.4	211	2.0	1.0	12.9	13.3	70.7	0.0	100.0	96
35-39	46.7	0.7	9.4	52.6	144	1.5	1.8	17.9	7.4	68.6	2.9	100.0	67
40-44	45.4	0.5	15.0	51.4	179	0.0	4.7	8.6	13.6	72.0	1.2	100.0	81
45-49	42.7	0.6	14.4	49.7	166	0.0	1.7	15.9	7.5	72.3	2.6	100.0	71
<b>Residence</b>													
Urban	39.4	0.0	6.2	59.8	318	0.0	4.9	18.6	14.7	61.8	0.0	100.0	126
Rural	34.6	0.3	10.3	63.3	1,257	1.3	3.1	13.4	12.3	68.6	1.3	100.0	435
<b>Region</b>													
Apia urban area	39.4	0.0	6.2	59.8	318	0.0	4.9	18.6	14.7	61.8	0.0	100.0	126
North west Upolu	32.2	0.2	1.7	67.3	563	0.0	1.5	9.3	9.8	78.4	1.0	100.0	181
Rest of Upolu	36.1	0.6	7.8	62.6	357	1.5	2.3	13.9	13.2	67.5	1.5	100.0	129
Savaii	37.1	0.3	27.3	57.4	338	3.0	6.0	18.8	15.0	55.6	1.5	100.0	125
<b>Education</b>													
No education	*	*	*	*	8	*	*	*	*	*	*	100.0	1
Primary or lower or special needs	37.9	0.8	19.9	54.7	116	(0.0)	(0.0)	(22.3)	(13.1)	(62.4)	(2.1)	100.0	44
Secondary	36.6	0.2	9.6	61.8	1,169	1.3	3.8	13.4	12.8	67.5	1.1	100.0	428
More than secondary	31.2	0.4	5.0	68.1	282	0.0	3.6	16.4	13.0	67.0	0.0	100.0	88
<b>Wealth quintile</b>													
Lowest	34.4	0.3	10.5	63.0	293	0.0	3.8	18.4	12.6	64.2	1.0	100.0	101
Second	36.0	0.3	10.9	62.2	298	2.6	3.6	9.9	14.7	67.3	1.8	100.0	107
Middle	41.9	0.6	13.1	55.4	330	2.1	2.9	16.9	7.6	69.8	0.7	100.0	138
Fourth	34.8	0.0	8.3	63.6	356	0.0	2.5	15.5	14.7	66.5	0.8	100.0	124
Highest	30.2	0.0	4.5	69.3	300	0.0	5.2	11.0	16.2	66.7	1.0	100.0	91
Total 15-49	35.6	0.2	9.5	62.6	1,576	1.0	3.5	14.6	12.8	67.1	1.0	100.0	561
50-54	42.3	0.0	16.2	54.6	93	(2.5)	(2.4)	(16.5)	(5.5)	(70.7)	(2.4)	100.0	39
Total men 15-54	35.9	0.2	9.8	62.1	1,669	1.1	3.4	14.7	12.3	67.3	1.1	100.0	600

Note: Numbers 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.

### 3.11 PARTICIPATION IN THE PHYSICAL ACTIVITY CAMPAIGN

In an effort to assess the prevalence of participation in physical activities, women and men in the 2014 SDHS survey were asked whether they were involved in any kind of physical activity and if they answered yes, respondents were again asked if they were involved in a village, MOH, private, personal exercise, and other Physical Activity Campaigns. Tables 3.13.1 and 3.13.2 show the results by background characteristics. About 56 percent of women and 69 percent of men responded that they had participated in any kind of physical activity.

There are some differences in the level of engagement in the Physical Activity Campaign by background characteristics. Women age 45-49 (62 percent) are more likely to be engaged in physical activity than younger women. A substantially higher percentage of urban women reported being involved in the PAC than rural women (62 and 55 percent, respectively). Looking at regional variations, women in the Savaii region (72 percent) are the most likely to be engaged in the Physical Activity Campaign, while women in the Rest of Upolu area are the least likely (43 percent). Level of education is positively associated with participation in physical activity. For example, only 40 percent of women with primary or no education are engaged in the PAC compared with 66 percent of women

with higher than secondary education. Similarly to educational level, participation in physical activity increases with wealth from 49 percent in the lowest quintile to 64 percent in the highest wealth quintile.

Differentials in the PAC participation among men by background characteristics indicate that men age 40- 44 (61 percent), men in rural areas (67 percent), those in the Rest of Upolu(52 percent ), and men in the poorest households (57 percent) are least likely to report participation than other men. As with women, men in the Savaii region are most likely to engage in physical activity (92 percent).

According to the types of physical activity campaigns that people are participating in Samoa, the highest proportion of women and men are participating in personal exercise (33 percent of women and 53 percent of men, respectively) compared to those who are participating in village, Ministry of Health, private and other specified physical activity campaigns. There are more women participating in village physical campaigns (16 percent) and private physical campaign (6 percent) compared to women participating in the Ministry of Health (MOH) physical activity campaign at only 2 percent. Just like women there are more men participating in the village and private physical activity campaign compared to those who participate in the MOH physical activity campaigns. This provides a clear message that the Ministry of Health (MOH) should do more physical activity campaigns especially in the rural areas where the proportion of women and men's participation are relatively low.

Among all physical activity campaigns the only paid physical activity campaign is the private physical activity campaign. According to urban and rural residence there is a higher participation of women and men in the urban areas participating in private physical activity campaign (12 percent of women and 38 percent of men, respectively) compared to women and men in the rural areas (5 percent of women and 9 percent of men, respectively). Considering that participation in private physical activity campaign involves financial cost, both women and men's participation increases with education and wealth.

Overall, in comparison to the 2009 SDHS, women were more likely to be involved in physical activity campaigns than men (32 percent versus 28 percent, respectively). However the 2014 SDHS shows that the proportion of men participating in physical activity campaigns has greatly increased from 2009 to 2014 (28 to 69 percent, respectively) and also women from 32 to 56 percent, respectively (MOH, 2010). Significantly for the 2014 SDHS results shows that men are now more likely than women to be involved in physical activity campaign than women.

Table 3.13.1 Participation in the Physical Activity Campaign: Women

Percentage of women age 15-49 participating in Physical Activity Campaign according to background characteristics Samoa 2014

Background characteristic	Percentage involved in Physical Activity Campaign	Percentage involved in Physical Activity Campaign Village	Percentage involved in Physical Activity Campaign MOH	Percentage involved in Physical Activity Campaign Private	Percentage involved in Physical Activity Campaign Personal Exercise	Percentage involved in Physical Activity Campaign Church	Percentage involved in Physical Activity Campaign School	Percentage involved in Physical Activity Campaign Other	Number of women
<b>Age</b>									
15-19	57.3	15.0	1.4	4.3	35.0	4.5	8.1	1.1	1,062
20-24	50.3	11.3	2.3	8.4	31.4	2.8	1.6	2.7	829
25-29	55.7	13.7	3.0	6.3	35.1	3.3	0.4	3.5	728
30-34	51.9	15.4	0.5	6.1	29.1	2.6	1.2	3.4	591
35-39	58.7	17.6	2.4	7.7	33.6	4.0	0.5	3.6	551
40-44	60.8	22.3	2.7	6.7	31.8	5.0	0.5	3.2	577
45-49	62.3	21.2	2.2	5.6	34.2	7.5	1.1	3.0	467
<b>Residence</b>									
Urban	61.5	4.2	5.4	12.1	40.0	6.9	3.2	5.7	1,000
Rural	54.9	19.1	1.2	4.8	31.2	3.4	2.3	2.0	3,805
<b>Region</b>									
Apia Urban Area	61.5	4.2	5.4	12.1	40.0	6.9	3.2	5.7	1,000
North West Upolu	52.7	8.3	1.4	6.2	38.3	3.2	2.6	1.9	1,733
Rest of Upolu	43.3	17.5	0.6	2.6	26.6	3.3	2.4	1.0	1,099
Savaii	71.8	40.1	1.3	4.9	23.9	3.8	1.6	3.3	973
<b>Education</b>									
No education	*	*	*	*	*	*	*	*	15
Primary or lower or special needs	39.5	14.7	0.7	2.4	18.0	5.0	0.0	2.5	161
Secondary	54.5	17.6	1.2	4.9	31.7	4.1	2.6	1.9	3,654
More than secondary	65.7	10.3	5.3	12.4	40.8	3.8	2.7	6.0	975
<b>Wealth quintile</b>									
Lowest	48.8	17.3	0.5	3.7	26.8	4.0	1.4	1.4	903
Second	52.2	19.9	0.4	3.3	28.3	3.3	2.5	2.2	955
Middle	55.8	21.0	1.1	4.3	30.5	3.9	3.0	1.4	954
Fourth	60.0	13.9	2.9	8.0	36.4	4.7	2.7	3.5	987
Highest	63.5	8.5	5.0	11.8	42.2	4.5	2.7	5.0	1,006
Total	56.3	16.0	2.0	6.3	33.1	4.1	2.5	2.7	4,805

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

Table 3.13.2 Participation in the Physical Activity Campaign: Men

Percentage of men age 15-49 participating in Physical Activity Campaign according to background characteristics Samoa 2014

Background characteristic	Percentage involved in Physical Activity Campaign	Percentage involved in Physical Activity Campaign Village	Percentage involved in Physical Activity Campaign MOH	Percentage involved in Physical Activity Campaign Private	Percentage involved in Physical Activity Campaign Personal Exercise	Percentage involved in Physical Activity Campaign Other	Number of men
<b>Age</b>							
15-19	74.0	14.3	1.4	16.2	56.3	5.4	348
20-24	75.6	18.4	1.2	15.2	59.2	1.3	298
25-29	67.9	15.2	1.1	14.9	54.5	1.0	229
30-34	67.6	14.7	2.6	14.5	53.4	1.3	211
35-39	65.1	20.6	5.8	13.3	47.3	1.5	144
40-44	60.8	14.0	2.1	13.6	45.5	1.2	179
45-49	62.7	11.8	4.7	13.4	47.5	2.4	166
<b>Residence</b>							
Urban	78.5	8.2	9.3	37.8	38.3	5.0	318
Rural	66.7	17.4	0.5	8.9	57.0	1.6	1,257
<b>Region</b>							
Apia urban area	78.5	8.2	9.3	37.8	38.3	5.0	318
North west Upolu	60.9	4.1	0.2	11.8	54.4	0.7	563
Rest of Upolu	51.6	27.6	0.6	11.2	36.3	2.5	357
Savaii	92.2	28.7	1.1	1.7	83.3	2.2	338
<b>Education</b>							
No education	*	*	*	*	*	*	8
Primary or lower or special needs	51.8	13.4	0.9	9.2	41.2	0.8	116
Secondary	69.5	16.4	1.9	13.4	53.9	2.6	1,169
More than secondary	75.1	13.3	4.7	22.6	56.2	1.8	282
<b>Wealth quintile</b>							
Lowest	57.0	11.8	0.3	8.4	47.0	0.6	293
Second	62.4	19.4	0.4	5.7	53.1	1.7	298
Middle	71.1	18.4	0.4	13.8	55.8	3.0	330
Fourth	73.1	15.9	2.0	15.6	56.9	2.5	356
Highest	80.4	11.8	8.5	30.0	52.2	3.4	300
Total 15-49	69.1	15.5	2.3	14.7	53.2	2.3	1,576
50-54	58.0	12.8	1.3	10.5	46.7	1.3	93
Total men 15-54	68.4	15.4	2.2	14.5	52.9	2.2	1,669

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

### 3.12 ALCOHOL CONSUMPTION

Alcohol abuse is a serious problem in many countries and is of increasing concern in Samoa. Alcohol consumption is considered one of the highest risk factors for death and disability. Potential consequences of alcohol abuse include increased risk of accidents, cirrhosis, hypertension, psychological illnesses, and congenital malformations. Moreover, alcohol consumption aggravates the risk of family problems as well as other social and employment issues such as alcohol addiction, accidents, criminal behaviour, inadvertent violence, homicide and suicide and road traffic problems.

Because there is a lack of consistent information available in the country on alcohol consumption and alcohol abuse, a series of questions related to alcohol consumption were included in the 2014 SDHS for the first time. All respondents were asked whether they drank alcoholic beverages, and if yes, did they consume it within the last 24 hours preceding the interview date and whether they

consumed alcohol before, during and after their meal and how many drinks did they frequently drink in this last 24 hours.

Table 3.14.1 shows that 9 percent of women in Samoa drink alcohol beverages. Alcohol consumption varies by age, residence, region, education and wealth. Consumption increases from 2 percent in the age group 15-29 to 12 percent in the age group 30-34 and decline when age increases to 8 percent in the age group 45-49. Women in the urban areas are more likely to consume alcoholic beverages compared to women in the rural areas (20 percent versus 6 percent, respectively). By region women in the Apia Urban area are more likely to drink alcohol compared to women in other regions. The consumption of alcohol increases with level of education and wealth quintile.

Twelve percent of women responded that they had a drink of alcohol beverages in the last 24 hours preceding the interview date. Consumption of alcohol in the last 24 hours increases with age from 6 percent in the age group 15-19 to 20 percent in the age group 45-49. Similarly it increases with wealth from 7 percent in the second wealth quintile to 12 in the highest wealth quintile. When alcohol was consumed in the last 24 hours most women consumed alcohol before they had their meal (54 percent); 9 percent consumed it during their meal and 30 percent after their meal. Looking at the number of alcoholic drinks (*measured by one glass of beer*) consumed by women in the last 24 hours preceding the interview date the proportion increases from 7 percent of those who had 1 to 2 drinks to 36 percent of those who had 10 or more drinks.

Table 3.14.2 shows that the proportion of men in Samoa who drink alcoholic beverages (44 percent) is higher than that of women. The biggest proportion of alcoholic drinkers is observed among men age 30-34 (58 percent) and there is quite a significant proportion (14 percent) of boys 15-19 who had already started to drink. Men residing in the urban area, Apia urban area region, have more than secondary education and are in the highest wealth quintile are more likely to drink alcohol beverages.

About 19 percent of men responded that they had a drink in the last 24 hours preceding the interview date; three quarters drank it before they had their meal. If the amount of drinks that a man reported he had in the last 24 hours is any indication of his usual alcoholic behaviour, then it is rather alarming to note that nearly one-third of men aged 15-49 reported 10 or more drinks in the last 24 hours.



**Table 3.14.1 Consumption of Alcohol: Women**

Percentage of women age 15-49 who drinks Alcohol, women who consume alcohol in the last 24 hours prior to the survey, the percentage distribution of women who drinks alcohol before, during and after a meal and the number of drinks women consume within 24 hours before the survey data by background characteristics, Samoa 2014

Background Characteristics	Percentage of women who drinks Alcohol	Number of Women	Percentage of women who consumes Alcohol in the last 24 hours	When alcohol was consumed in the last 24 hours				Number of drinks				Amount of drinks
				Before meal	During meal	After meal	Missing	1 - 2	3 - 5	6 - 9	10+	
<b>Age</b>												
15-19	1.7	18	5.6	100.0	0.0	0.0	0.0	0	0	9	0	9
20-24	10.4	86	9.3	62.5	0.0	37.5	0.0	0	18	6	37	61
25-29	11.4	83	9.6	62.5	12.5	12.5	12.5	0	11	19	42	73
30-34	12.0	71	11.3	50.0	0.0	37.5	12.5	0	15	29	0	43
35-39	10.5	58	12.1	71.4	0.0	28.6	0.0	2	17	8	11	38
40-44	8.8	51	13.7	28.6	14.3	42.9	14.3	8	8	0	26	42
45-49	7.9	37	18.9	42.9	28.6	28.6	0.0	7	5	6	13	31
<b>Residence</b>												
Urban	19.5	195	12.3	41.7	12.5	33.3	12.5	10	30	28	107	174
Rural	5.5	208	11.5	66.7	4.2	29.2	0.0	8	44	48	22	123
<b>Region</b>												
Apia Urban Area	19.5	195	12.3	41.7	12.5	33.3	12.5	10	30	28	107	174
North West Upolu	7.4	128	9.4	75.0	8.3	16.7	0.0	4	20	35	0	59
Rest of Upolu	5.6	61	19.7	58.3	0.0	41.7	0.0	4	24	13	22	63
Savaii	2.0	19	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
<b>Education</b>												
No education	*	0	*	*	*	*	*	*	*	*	*	0
Primary or lower or special needs	3.7	6	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
Secondary	5.7	208	13.0	51.9	3.7	33.3	7.4	6	55	47	54	162
Higher	19.5	190	11.1	52.4	14.3	23.8	4.8	11	20	29	75	135
<b>Wealth index</b>												
Lowest	3.0	27	11.1	33.3	0.0	66.7	0.0	2	5	6	0	13
Second	4.6	44	6.8	100.0	0.0	0.0	0.0	0	8	0	12	20
Middle	5.2	50	14.0	71.4	0.0	14.3	14.3	2	20	0	26	48
Fourth	9.9	98	12.2	16.7	0.0	75.0	0.0	4	17	15	54	90
Highest	18.3	184	12.5	60.9	17.4	8.7	8.7	9	25	55	37	126
<b>Total</b>	<b>9.0</b>	<b>404</b>	<b>11.5</b>	<b>54.3</b>	<b>8.7</b>	<b>30.4</b>	<b>6.5</b>	<b>17</b>	<b>74</b>	<b>77</b>	<b>129</b>	<b>297</b>

Note: Numbers 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.

**Table 3.14.1 Consumption of Alcohol: Men**

Percentage of women age 15-49 who drinks Alcohol, women who consume alcohol in the last 24 hours prior to the survey, the percentage distribution of women who drinks alcohol before, during and after a meal and the number of drinks women consume within 24 hours before the survey data by background characteristics, Samoa 2014

Background Characteristics	Percent- age of women who drinks Alcohol	Number of Women	Percent- age of women who consumes Alcohol in the last 24 hours	When alcohol was consumed in the last 24 hours				Number of drinks				Amount of drinks
				Before meal	During meal	After meal	Missing	1 - 2	3 - 5	6 - 9	10+	
<b>Age</b>												
15-19	14.2	492	12.2	100.0	0.0	0.0	0.0	12	29	0	19	60
20-24	42.6	1,270	14.1	54.7	5.0	29.6	10.6	0	48	69	62	179
25-29	52.4	1,201	22.2	71.2	0.0	28.8	0.0	0	94	135	39	267
30-34	58.1	1,228	20.0	68.6	0.0	23.3	8.2	22	32	91	100	245
35-39	57.2	827	18.4	71.1	14.5	14.5	0.0	0	50	35	67	152
40-44	57.5	1,029	24.2	88.4	0.0	11.6	0.0	10	60	69	110	249
45-49	52.7	875	21.5	83.0	0.0	17.0	0.0	12	73	70	33	188
<b>Residence</b>												
Urban	58.0	1,848	21.4	68.9	3.0	28.1	0.0	37	135	111	112	3,531
Rural	40.3	5,073	18.6	77.1	2.0	16.7	4.1	20	249	358	317	9,421
<b>Region</b>												
Apia urban area	58.0	1,848	21.4	68.9	3.0	28.1	0.0	37	135	111	112	3,531
North west												
Upolu	37.6	2,116	13.8	73.6	3.1	19.9	3.1	0	93	96	103	2,973
Rest of Upolu	42.5	1,515	23.8	61.4	2.8	27.8	8.3	20	100	112	129	3,964
Savaii	42.7	1,442	20.2	100.0	0.0	0.0	0.0	0	56	151	85	2,484
<b>Education</b>												
No education	15.0	12	100.0	100.0	0.0	0.0	0.0	0	0	12	0	74
Primary or lower or special needs	35.3	411	11.4	78.7	0.0	0.0	19.1	0	19	19	9	652
Secondary	42.5	4,965	17.7	75.3	1.0	20.1	3.4	10	268	300	301	8,635
Higher	54.4	1,534	26.1	71.6	5.5	22.7	0.0	47	98	138	119	3,592
<b>Wealth index</b>												
Lowest	34.0	995	17.8	77.4	0.0	22.6	0.0	10	70	78	19	1,205
Second	39.6	1,178	20.1	75.1	0.0	20.7	4.2	0	54	97	86	2,568
Middle	49.0	1,616	16.2	73.9	7.3	20.2	3.8	0	98	28	135	3,000
Fourth	45.2	1,608	16.4	73.9	0.0	26.1	0.0	0	66	126	72	2,418
Highest	50.9	1,526	26.1	74.2	3.0	17.8	4.8	47	97	139	117	3,761
<b>Total 15-49</b>	<b>43.9</b>	<b>6,922</b>	<b>19.4</b>	<b>74.6</b>	<b>2.3</b>	<b>20.1</b>	<b>2.9</b>	<b>56</b>	<b>386</b>	<b>469</b>	<b>430</b>	<b>1,340</b>
50-54	41.3	385	22.6	77.0	0.0	21.8	0.0	0	29	38	19	87
<b>Total men 15-54</b>	<b>43.8</b>	<b>7307</b>	<b>19.5</b>	<b>74.9</b>	<b>2.2</b>	<b>20.2</b>	<b>2.7</b>	<b>57</b>	<b>414</b>	<b>507</b>	<b>448</b>	<b>1425</b>

The 2014 Samoa Demographic and Health Survey (SDHS) reports on fertility levels, trends, and differentials in Samoa. Fertility is one of the three principal demographic components of population change, the other two being mortality and migration. Samoa's population of approximately 187,820 people is growing at an annual rate of around 0.8 percent. This population growth rate is driven exclusively by the relatively high fertility in Samoa. Growth would have been considerably greater if Samoa was close to out-migration.

After the 1994 International Conference on Population in Cairo, the Samoan cabinet directed the formation of a National Population Policy Council (NPPC) to develop a population policy with the Health Department acting as the coordinator. With the help of the new policy council, the government of Samoa developed its first National Population Policy in 1998 to manage population resources in a manner consistent with the government's ultimate objective of accelerating the rate of economic development and improving the quality of life of Samoan people. Because the population growth in Samoa was considered too high for economic development to significantly prosper, the National Population Policy was revised in 2001 and again in 2008 to integrate population issues into national planning for development. Emphasis on fertility reduction was renewed. Reduction in fertility and slowing of population growth would speed up economic modernisation, sustainable development, and poverty eradication (MOH, 2008a).

This chapter looks at a number of fertility indicators including current fertility levels, trends, and differentials; age at first birth, and teenage pregnancy and motherhood. Analysis is based on the birth histories collected from women age 15-49 who were interviewed during the survey. To obtain information, women were first asked a series of questions to determine the total number of live births in their lifetime. Then for each live birth, information was collected on the age, sex, and survival status of the child. For dead children, age at death was recorded. The birth histories constitute the core of any DHS and the utmost care is being taken to ensure that the information recorded is complete and accurate. However, it must be kept in mind that certain cultural factors may affect women's reporting, resulting in a failure to report live births in which infants die shortly after delivery and false reporting of adopted children as biological children. Therefore, special attention was paid during the training of the interviewers to ensure proper interviewing and data recording of birth histories of the respondents.

The following measures of current fertility are derived from birth history data:

- **Age-specific fertility rates (ASFR)** are expressed as the number of births per thousand women in a specified age group. They represent a valuable measure for assessing the current age pattern of childbearing. They are calculated by dividing the number of live births to women in a specific age group by the number of woman-years lived in that age group.
- **Total fertility rate (TFR)** is defined as the total number of births a woman would have by the end of her childbearing period if she were to pass through those years bearing children at the currently observed age-specific fertility rates. The TFR is obtained by summing the age-specific fertility rates and multiplying by five.
- **General fertility rate (GFR)** is the number of live births occurring during a specified period per 1,000 women.
- **Crude birth rate (CBR)** is the number of births per 1,000 population during a specified period.

The various measures of current fertility are calculated for the three-year period preceding the survey, which roughly corresponds to the calendar period 2012-2014. A three-year period was chosen because it reflects the current fertility situation, and provides a sufficient number of cases for statistical precision.

## 4.1 FERTILITY LEVELS AND TRENDS

### 4.1.1 Fertility Levels

The total fertility rate (TFR), which is calculated for women age 15-49, is a useful measure for examining the overall level of fertility. Table 4.1 shows the age-specific fertility rates, total fertility rates, general fertility rates, and crude birth rates for Samoa as a whole as well as for those persons living in urban and rural areas.

The 2014 survey findings in Table 4.1 indicate that a Samoan woman who is at the beginning of her childbearing years will, on average, give birth to 5.1 children by the end of her reproductive period. The 2009 DHS showed that TFR during the period 2006-2009 was about 4.6 while the estimate in 2011 from the census of population was 4.7. These findings suggest that fertility level has been rising during the recent past. One of the main targets of the 2001 revised National Population Policy was to reduce the total fertility rate from 4.4 in 2001 to 3.8 by the year 2011 (MOH, 2008a). Apparently, this target is far from being achieved.

The TFR for rural areas (5.2 births) is higher than the rate for urban areas (4.4 births). The significant difference in fertility level between urban and rural areas may, in part, be due to better access to reproductive health services for women in urban areas.

Table 4.1 Current fertility

Age-specific and total rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Samoa 2014

Age group	Residence		Total
	Urban	Rural	
15-19	45	59	56
20-24	199	264	250
25-29	247	247	247
30-34	230	224	226
35-39	114	167	156
40-44	39	70	65
45-49	12	12	12
TFR	4.4	5.2	5.1
GFR	143	169	163
CBR	30.4	31.9	31.6

Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation.

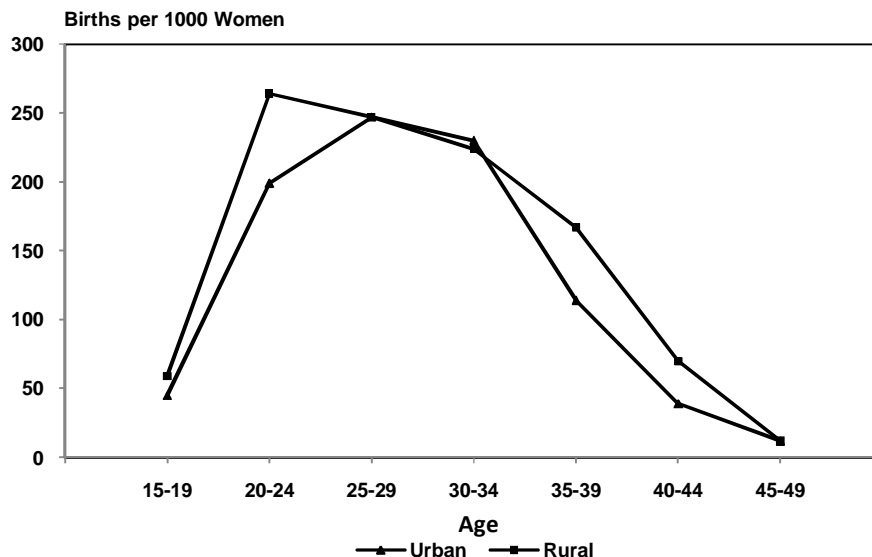
Rates are for the period 1-36 months prior to interview.

TFR: Total fertility rate expressed per woman

GFR: General fertility rate expressed per 1,000 women

CBR: Crude birth rate expressed per 1,000 population

Figure 4.1 Age-specific fertility rates by urban-rural residence



The 2014 SDHS findings indicate that the main childbearing years for Samoan women are during their twenties and early thirties. Urban-rural differences in childbearing rates are evident for all age groups, but they are especially great for women in their early twenties. Figure 4.1 shows that fertility among rural women is highest in this young age group (20-24) at 264 births per 1,000, while urban women's fertility peaks at the age group of 25-29 at 247 births per 1,000.

The general fertility rate (GFR) for Samoa is 163. This means that for every 1,000 women in the population, there are 163 births. Table 4.1 shows a crude birth rate (CBR) for Samoa of 31.6 per 1,000 populations for the period under review. Both measures are based on the birth history for the three-year period preceding the survey.

#### 4.1.2 Differentials in Current and Completed Fertility

Table 4.2 presents differentials in the TFR and the percentage of women who are currently pregnant by background characteristics. Regional differences in TFR observed from the 2014 SDHS are consistent with the results of the 2011 Population Census. TFR ranges from 4.4 births in Apia Urban Area to 5.5 births in the Rest of Upolu. The more educated women tend to have higher fertility than their less educated counterparts. Moreover, there is a strong inverse relationship between fertility and wealth; women living in the poorest households have the highest fertility (6.7 births per woman), while women in the highest quintile have the lowest (3.7 births per woman).

The percentage currently pregnant provides a useful measure of current fertility. Seven percent of women age 15-49 in Samoa are currently pregnant. This is likely to be an underestimate as some women in the early stages of pregnancy may be unaware or unsure that they are pregnant, and other women may be reluctant to declare that they are pregnant. The percentage of women who are currently pregnant is lowest in the Savaii (6 percent) and highest in Rest of Upolu region (8 percent). There are no clear patterns in the variation of percentage of currently pregnant women and education or wealth. The highest percentage of currently pregnant women is among women who have completed more than secondary education (8 percent) and those in the lowest wealth quintile (7 percent).

Table 4.2 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, Samoa 2014

Background characteristic	Total fertility rate	Percentage women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
<b>Residence</b>			
Urban	4.4	6.2	4.2
Rural	5.2	6.6	4.5
<b>Region</b>			
Apia urban area	4.4	6.2	4.2
North West Upolu	4.9	6.4	4.2
Rest of Upolu	5.5	7.5	5.2
Savaii	5.4	6.0	4.3
<b>Education</b>			
No education	1.2	6.6	3.3
Primary or lower or special needs	5.1	6.7	5.1
Secondary	5.4	6.2	4.6
More than secondary	4.0	7.8	3.4
<b>Wealth quintile</b>			
Lowest	6.7	7.3	5.3
Second	5.3	6.7	4.8
Middle	5.4	7.8	4.4
Fourth	4.3	6.1	4.5
Highest	3.7	5.0	3.5
Total	5.1	6.5	4.5

Note: Total fertility rates are for the period 1-36 months prior to interview.

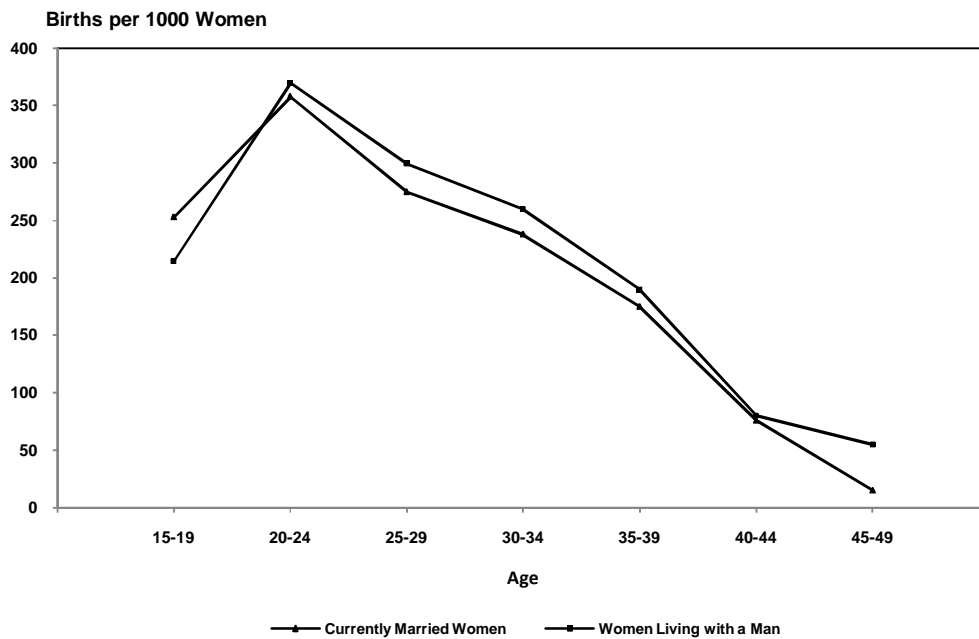
Table 4.2 also shows differentials in the mean number of children ever born to women age 40-49, that is, to women who are at the end of their childbearing years, which is a measure of completed or past fertility. If fertility remains stable over time, the two fertility measures, TFR and children ever born, would be equal or similar. The findings show that the mean number of children ever born to women age 40-49 is 4.5 which is lower than the TFR for the three years preceding the survey (5.1 children per woman), indicating that fertility has increased during the more recent period. Comparison of the completed fertility with the TFR across sub-groups indicates that the large increase

in fertility over time is observed among women in rural areas, among women with at least secondary education and among the lowest quintile groups.

### 4.1.3 Fertility by Marital Status

Childbearing in Samoa occurs primarily within marital unions. Cohabitation between two consenting adults also exist in Samoa, but these unions may are not considered legal. It is generally acknowledged that women who live with a man, with whom they are not legally married, are more vulnerable than those who are legally married. They tend to depend more on support by others, be it their partner, immediate family, or government social services. Working mothers often face the challenge of finding adequate childcare. Together, these factors tend to put the wellbeing of unmarried mothers and their children at heightened risk. Figure 4.2 shows the age-specific fertility rates by marital status. The data show that there are similar patterns in the age-specific fertility rates for currently married women and for cohabiting women up to the old age.

Figure 4.2 Age-specific Fertility Rates by Marital Status



#### 4.1.4 Trends in Fertility

Besides comparison between current and completed fertility, there are other ways of assessing fertility trends. For example, retrospective data from the birth histories collected from respondents in a single survey may show trends in fertility. Furthermore, fertility estimates from a single survey may be compared with estimates obtained in the past by other sources.

Table 4.3 uses information from the retrospective birth histories obtained from the 2014 SDHS respondents to examine the trends in age-specific fertility rates for successive five-year periods preceding the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. The age-specific rates are progressively truncated with increasing time before the survey. Because women age 50 and older were not interviewed in the 2014 SDHS, 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 45-49 for the period 5-9 years more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey. Partially truncated rates are enclosed in brackets in the table.

**Table 4.3 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, Samoa 2014

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	53	48	49	53
20-24	246	211	203	212
25-29	243	240	226	247
30-34	217	197	197	[210]
35-39	144	158	[149]	-
40-44	68	[73]	-	-
45-49	[12]	-	-	-

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

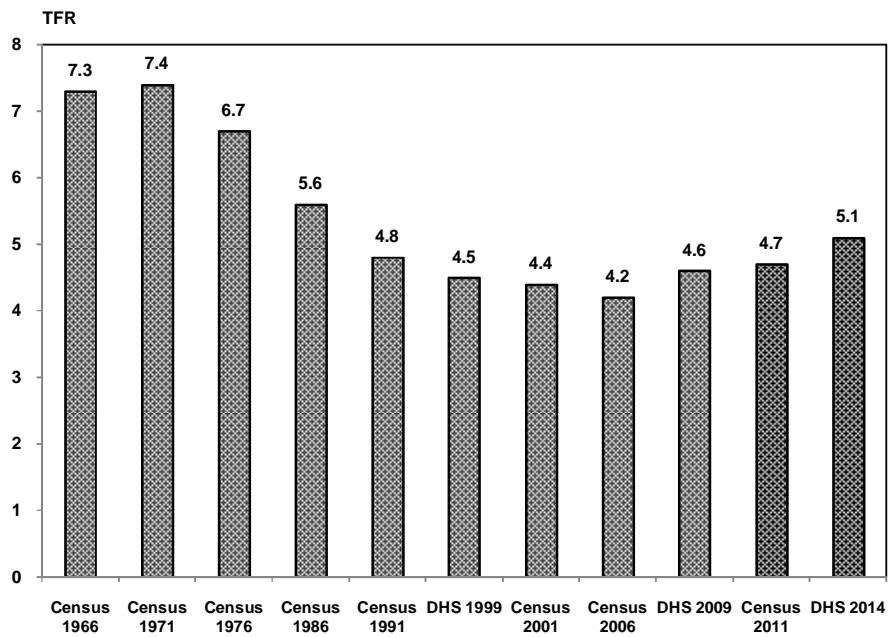
Table 4.3 shows some evidence that fertility has increased in the recent past. For example, the age specific fertility rate among women 20-24 increased from 203 births per 1000 women 10-14 years ago to 246 births per 1000 women during the last 5 years. However, these data should be taken with caution because events that happened in the past may be under reported.

Data from available sources over time indicate that fertility was very high in Samoa in the mid-sixties and early seventies (Figure 4.3). During this period, total fertility rate was around 7 children per woman (Western Samoa Census Commissioner's Office, 1968; Western Samoa Department of Statistics, 1972; Western Samoa Department of Statistics, 1979). According to the 1986 Census of Population and Housing the TFR then dropped to around 5.6<sup>1</sup> (Western Samoa Department of Statistics, 1990). By 1991, the TFR had declined to 4.8 children per woman (Western Samoa Department of Statistics, 1993). The 1999 Samoa DHS reported a TFR of 4.5 children per woman. In the subsequent 2001 and 2006 Censuses of Population and Housing, the TFR were 4.4 and 4.2 children, respectively (Samoa Department of Statistics, 2003; Samoa Bureau of Statistics, 2008), indicating that fertility decline has stagnated and that the TFR has remained fairly constant over the past 20 years or so. The results of the 2014 SDHS shows a slight increase in TFR from 4.6 children per woman based on the 2009 DHS (Ministry of Health, 2010), 4.7 TFR in Census 2011 (Samoa Bureau of statistics, 2012) to the current level of 5.1 children per woman.

<sup>1</sup> The estimated TFR of 5.6 is based on indirect estimation using Trussell equations in conjunction with examination of best fitting curves from the Relational Gompertz model.

Figure 4.3 clearly shows the pattern of fertility change in the country during the last 5 decades. From a very high level of more than 7 average numbers of children per woman in the sixties, fertility rate started to decline. The decline continued throughout the last quarter of the 20<sup>th</sup> century and into the first few years of the 21<sup>st</sup> century reaching a level of about 4 children per woman by 2006 at which point the downward trend seems to have been reversed. The last few surveys that provided estimates of TFR indicate that this is so.

Figure 4.3 Total Fertility Rate from Different Sources





## 4.2 CHILDREN EVER BORN AND LIVING

Table 4.4 shows the distribution of all women and of currently married women by the total number of children ever born and by mean number of living children. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive lives and therefore have limited reference to current fertility levels particularly when the country has experienced a decline in fertility. However, the information is useful for looking at how average family size varies across age groups and for looking at the level of primary infertility.

Table 4.4 shows that women in Samoa have given birth to an average of 2.26 children, nearly all of whom (2.22 children) are still alive. The number of children that women have increases with age, reflecting the natural family-building process. On average, women in Samoa have given birth to one child by their early twenties. Samoan women attain a parity of 4.7 children by the end of their reproductive period, which is lower than the total fertility rate of 5.1 children per woman. Since most of the women in the age group of 15-19 are unmarried 93 percent have never given birth. This proportion declines rapidly to 13 percent among women in their early thirties and to 6 percent among those in their late forties.

As expected, currently married women have had more births than all women in all age groups. Currently married women in Samoa have given birth to an average of 3.44 children (3.37 living children). The largest difference between the data on children ever born for currently married women and all women is in the young age groups because a large number of unmarried young women are not exposed to the risk of pregnancy. Differences at older ages reflect the impact of marital dissolution (divorce or widowhood).

Among currently married women, 14 percent have had only one live-born child, nearly half (46 percent) have had two to four children, and 30 percent have had five or more children. Voluntary childlessness is rare in Samoa, and most married women tend to have at least one child. The proportion of childless among women age 45-49 is an indirect indicator of primary infertility. In total, only 2 percent of currently married women age 45-49 have never had a live birth.

The progression of average parities by age of woman suggests that recall lapse is minimal amongst Samoan women. However, the minimal differences between number of children ever born and children surviving, indicate implausibly low mortality rates, suggest that some omission of children deaths may have taken place. While the 2014 SDHS did not investigate the issue, it is known that adoption is a common practise in Samoa<sup>2</sup>. It is possible that omission of dead children in conjunction with a tendency to report an adopted child as one's own, may have affected the quality of data on number of children ever born.

---

<sup>2</sup>Samoan population census tabulations for censuses conducted during the 1960 and 1970s distinguished "owned" children from "non-own" children. Based on these data, Levin and Retherford (Levin and Retherford, 1986) observed that the proportion of "non-own" children in Samoa was higher than in most other Pacific Island Countries

**Table 4.4 Children ever born and living**

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 living children, according to age group, Samoa 2014

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
<b>ALL WOMEN</b>															
<b>Age</b>															
15-19	93.3	6.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.00	1,062	0.08	0.07
20-24	50.2	24.7	15.9	6.6	2.0	0.5	0.1	0.0	0.0	0.0	0.0	100.00	829	0.88	0.86
25-29	24.2	16.7	22.3	18.8	9.9	6.2	1.5	0.3	0.1	0.0	0.0	100.00	728	2.00	1.97
30-34	13.1	11.7	13.8	18.0	17.7	16.0	6.3	2.9	0.5	0.0	0.0	100.00	591	3.06	3.02
35-39	7.5	8.4	14.2	16.1	14.4	15.7	12.0	5.7	4.0	0.9	1.1	100.00	551	3.85	3.76
40-44	7.5	7.2	8.6	13.0	17.8	14.1	14.5	8.2	4.7	1.7	2.6	100.00	577	4.30	4.23
45-49	6.0	7.1	7.8	10.6	15.4	17.0	12.6	10.3	7.3	2.6	3.4	100.00	467	4.68	4.54
<b>Total</b>	<b>36.9</b>	<b>12.1</b>	<b>11.3</b>	<b>10.7</b>	<b>9.3</b>	<b>8.1</b>	<b>5.4</b>	<b>3.0</b>	<b>1.8</b>	<b>0.6</b>	<b>0.8</b>	<b>100.00</b>	<b>4,805</b>	<b>2.26</b>	<b>2.22</b>
<b>CURRENTLY MARRIED WOMEN</b>															
<b>Age</b>															
15-19	46.9	45.9	4.7	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.00	83	0.63	0.62
20-24	20.3	33.7	26.9	13.6	4.2	1.0	0.2	0.0	0.0	0.0	0.0	100.00	403	1.52	1.49
25-29	11.4	16.7	25.6	23.2	12.8	8.0	1.7	0.4	0.2	0.0	0.0	100.00	524	2.43	2.39
30-34	6.1	10.8	14.6	19.8	19.3	18.8	6.6	3.3	0.6	0.0	0.0	100.00	487	3.39	3.34
35-39	4.1	7.6	12.2	17.1	15.4	17.2	13.0	6.5	4.5	1.1	1.3	100.00	484	4.14	4.04
40-44	3.6	6.5	8.5	13.1	19.0	15.2	14.9	9.0	5.4	1.9	3.0	100.00	505	4.59	4.50
45-49	2.3	4.9	7.1	9.0	16.7	18.9	13.8	12.3	8.3	2.8	3.9	100.00	389	5.12	4.95
<b>Total</b>	<b>8.9</b>	<b>14.0</b>	<b>15.6</b>	<b>16.0</b>	<b>14.4</b>	<b>12.9</b>	<b>8.1</b>	<b>5.0</b>	<b>3.0</b>	<b>0.9</b>	<b>1.3</b>	<b>100.00</b>	<b>2,874</b>	<b>3.44</b>	<b>3.37</b>

### 4.2.1 Children Ever Born by Marital Status

Table 4.5 presents mean number of children ever born by mother's age group, according to marital status. The data show that the mean number of children ever born for women living with a man closely resembles that of currently married women for all age groups up to age 40. After age 40 the mean number of children ever born for women living with a man starts lagging slightly behind those for currently married women. Even so, women who are cohabiting with a man as if married achieve relatively high fertility levels for all age groups. It must be noted that women, especially in the older age groups, may have passed through different marital statuses during their lifespan, and they may have had some of their births while being in another marital status.

**Table 4.5 Mean number of children ever born by marital status**

Mean number of children ever born by age group of mother, according to marital status, Samoa 2014

Age	Mean number of children ever born (CEB) to			
	Never-married women	Currently married women	Women living with a man	Number of children ever born
15-19	0.03	*	0.58	80
20-24	0.22	1.63	1.36	726
25-29	0.50	2.36	2.44	1458
30-34	0.59	3.36	3.27	1810
35-39	[0.92]	4.12	3.75	2121
40-44	*	4.51	4.47	2485
45-49	[0.81]	4.98	4.78	2186

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

Table 4.6 shows the percent distribution of children ever born by mother's age group, according to marital status. Overall, in Samoa 70 percent of children ever born are to currently married women, 21 percent are born to women living with a man, 6 percent to previously married women, and only 3 percent to never-married women. The data further show that the large majority of children of mothers up to age 25 are born outside the institution of conventional marriage. Just 19 percent of children ever born to women age 15-19 are born to currently married women, while 32 percent are born to never married women and 46 percent to those who live with a man as if married. By age 25-29, 57 percent of ever born children are born to currently married women, 31 percent are born to cohabiting women, while only 5 percent are born to never-married women.

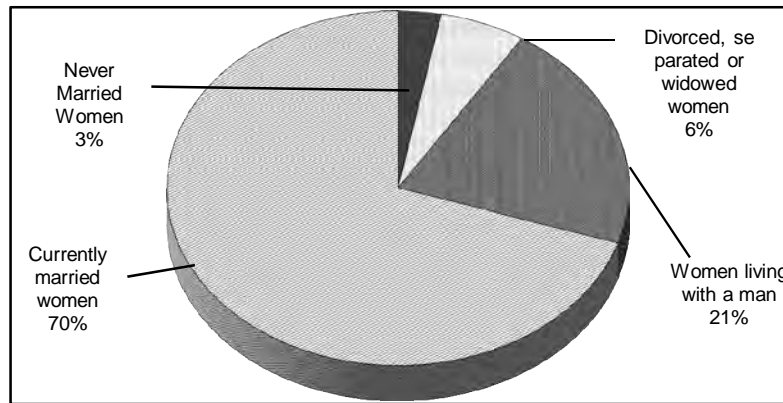
**Table 4.6 Children ever born by marital status**

Percent distribution of children ever born by age group of mother, according to marital status, Samoa 2014

Age	Never-married women	Currently married women	Women living with a man	Divorced, separated, or widowed women	Number of children ever born
15-19	31.7	18.7	46.0	3.7	80
20-24	12.4	45.7	38.4	3.4	726
25-29	5.8	56.9	30.6	6.7	1458
30-34	2.1	67.3	23.8	6.7	1810
35-39	1.5	75.5	18.8	4.2	2121
40-44	0.5	76.9	16.2	6.3	2485
45-49	1.1	79.4	11.6	7.9	2186
Total	2.8	70.4	20.7	6.1	10867

The percent distribution of births in the past three years preceding the survey is very similar to that of children ever born. But since births in the past three years reflect the most recent fertility, there is less chance that a woman has changed marital status since giving birth. Figure 4.4 shows that even though 70percent of births in the past three years occurred to currently married women, a total of 30percent occur outside a formal marital union (21percent are born to cohabiting women, 6percent to women who are divorced, separated or widowed and 3 percent to never-married women).

**Figure 4.4 Percent Distribution of Births in the Past 3 Years by Marital Status of Mother**



### 4.3 BIRTH INTERVALS

A birth interval is defined as the length of time between two live births. Research has shown that short birth intervals may adversely affect maternal health and children's chances of survival (Rutstein, 2005; WHO, 2006). Children born too close in time to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and death at an early age. The occurrence of closely spaced births gives the mother insufficient time to restore her health, which may limit her ability to take care of her children. The duration of breastfeeding for the older child may also be shortened if the mother becomes pregnant. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 4.7 presents the distribution of non-first births in the five years preceding the survey by number and median number of months since preceding birth, according to background characteristics.

The overall median birth interval in Samoa is 27.9 months. However, more than one-third (39 percent) of all non-first births occur less than 24 months after an earlier birth, an interval perceived to be too short. This proportion is as high as 49percent among women in their twenties, 43percent for second and third birth orders, and 42 percent among women living in urban areas.

In general, younger women have shorter birth intervals than older women. The median number of months since preceding birth increases from 23.2 months for births to women age 20-29 to 43.7 months for births to women age 40-49. The longer birth interval among older women may be attributed to the decline in fecundity as women grow older. The median birth interval is 2months longer for female (29months) than males (27months). It is also longer (30.2 months) for births of fourth or higher order than those of lower parity (26 months). The median interval between births is two months longer among women in urban areas (26 months) than among those in rural areas (28 months). By region, the median birth interval ranges from a low of 26 months in the Apia urban area to 30.8 months in the island of Savaii. There are no substantial differences in birth interval among women of different levels of education. Women's household wealth status also does not show clear relationship with median birth interval however the richest women space their non first children by 31months.

**Table 4.7 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, Samoa 2014

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+			
<b>Age</b>									
15-19	*	*	*	*	*	*	100.0	8	*
20-29	28.4	24.6	28.9	10.5	4.3	3.3	100.0	989	23.2
30-39	15.5	16.6	25.8	14.3	10.5	17.3	100.0	1,090	31.2
40-49	10.0	10.5	17.7	17.8	13.1	30.9	100.0	362	43.7
<b>Birth order</b>									
2-3	22.9	19.8	25.7	12.1	7.1	12.3	100.0	1,183	26.4
4-6	17.2	18.3	25.1	14.0	10.0	15.4	100.0	1,005	30.2
7+	18.0	17.8	28.5	15.3	7.5	13.0	100.0	261	27.9
<b>Sex of preceding birth</b>									
Male	19.8	20.5	27.1	11.7	8.4	12.5	100.0	1,302	27.2
Female	20.3	17.2	24.3	15.0	8.3	14.9	100.0	1,147	29.1
<b>Survival of preceding birth</b>									
Living	19.8	18.9	26.0	13.2	8.5	13.7	100.0	2,401	28.0
Dead	33.7	24.8	12.5	14.5	4.2	10.4	100.0	48	21.5
<b>Residence</b>									
Urban	21.7	20.4	26.9	11.9	6.8	12.4	100.0	462	26.5
Rural	19.7	18.7	25.5	13.5	8.7	13.9	100.0	1,987	28.2
<b>Region</b>									
Apia urban area	21.7	20.4	26.9	11.9	6.8	12.4	100.0	462	26.5
North West Upolu	19.4	20.1	26.4	12.5	7.3	14.3	100.0	817	27.2
Rest of Upolu	20.6	18.9	26.9	12.4	9.4	11.8	100.0	652	27.5
Savaii	19.0	16.0	22.3	16.6	10.2	15.8	100.0	518	30.8
<b>Education</b>									
No education	*	*	*	*	*		100.0	1	*
Primary or lower or special needs	30.8	10.2	25.8	14.1	3.9	15.2	100.0	77	26.2
Secondary	19.4	19.6	25.4	13.0	8.8	13.9	100.0	1,944	28.0
More than secondary	21.3	17.8	27.4	14.2	7.5	11.9	100.0	427	27.9
<b>Wealth quintile</b>									
Lowest	21.5	19.2	25.9	12.9	8.8	11.6	100.0	626	26.7
Second	22.0	15.8	28.1	13.7	8.2	12.1	100.0	507	28.3
Middle	16.2	22.8	26.0	11.9	7.8	15.3	100.0	506	27.8
Fourth	20.5	18.4	26.7	14.7	7.3	12.3	100.0	464	28.2
Highest	19.7	18.2	20.4	12.9	9.9	18.8	100.0	346	30.5
Total	20.1	19.0	25.8	13.2	8.4	13.6	100.0	2,449	27.9

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

#### 4.4 AGE AT FIRST BIRTH

The age at which childbearing begins has important demographic consequences for society as a whole as well as for the health and welfare of mothers and their children. One of the factors that determine the level of fertility in a population is age at first birth. Women who marry early are typically exposed to the risk of pregnancy for a longer time, especially when there is little or no contraceptive use. Thus, early childbearing generally leads to a larger family size than later-onset

childbearing. A rise in the median age at first birth is typically a sign of transition from high to low fertility. In many countries, postponement of first births, reflecting a rise in age at marriage, has made a large contribution to overall fertility decline. Table 4.8 shows the percentage of women age 15-49 that gave birth by specific ages, the percentage who have never given birth, and the median age at first birth, according to current age. For women age 25 and older, the median age at first birth is presented in the last column of the table.

The 2014 SDHS findings indicate that childbearing among women in Samoa begins rather early with a median age at first birth of 23.0 years among women 25 to 49 (Table 4.8). This is even slightly lower than 23.4, the median age estimated from the 2009 SDHS. About one-fifth of these women had already given birth by the time they reached the age of 20; however, the differences in this indicator by age group do not seem to indicate any trend towards early or delayed start of childbearing. The percentage of first births occurring at age 18 or less has decreased slightly from 8 percent among the oldest cohort (women age 45-49) to 6 percent among the youngest cohort for which complete information is available (women age 20-24) and this may suggest a trend towards postponement of childbearing. However, the opposite seems to hold if one looks at the differences by age and finds that proportionately more of the younger women have given birth by age 22 compared to the older women. Putting these pieces of information together, one can conclude that there is some evidence that women do delay their first birth but not long enough to bring down overall fertility levels.

**Table 4.8 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, Samoa 2014

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
<b>Age</b>								
15-19	0.0	na	na	na	na	93.3	1,062	a
20-24	0.4	5.8	22.2	na	na	50.2	829	a
25-29	0.5	5.3	19.2	41.1	66.4	24.2	728	22.9
30-34	0.3	6.6	21.2	41.1	66.7	13.1	591	22.8
35-39	0.7	6.3	22.0	40.2	64.6	7.5	551	23.1
40-44	0.9	7.1	18.6	38.7	65.5	7.5	577	23.0
45-49	0.4	8.1	20.9	37.0	65.6	6.0	467	23.3
20-49	0.5	6.4	20.7	na	na	20.9	3,743	na
25-49	0.6	6.6	20.3	39.8	65.8	12.6	2,914	23.0

na = Not applicable

a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 4.9 shows the differential patterns in the median age at first birth among women currently age 25-49, according to background characteristics. The measures are presented beginning with age group 25-49 to ensure that at least half of the women in the age group have already had a birth. Women in urban areas generally have a slightly higher median age at first birth than women in rural areas (23.2 and 22.9 years, respectively). Across regions, the median age at first birth ranges from 22.2 years in Rest of Upolu region to 23 years in Apia urban area.

Median age at first birth increases with educational attainment from 22.1 years among women with primary or no education to 24.7 years among women who have completed secondary

education. Similarly, median age at first birth increases with wealth quintile from 22.3 among women in the lowest wealth quintile to 24.5 years in the highest quintile.

**Table 4.9 Median age at first birth**

Median age at first birth among women age 20-49 (25-49) years, according to background characteristics, Samoa 2014

Background characteristic	Age					Women age
	25-29	30-34	35-39	40-44	45-49	25-49
<b>Residence</b>						
Urban	23.6	22.4	23.0	23.6	23.3	23.2
Rural	22.7	22.9	23.1	22.9	23.2	22.9
<b>Region</b>						
Apia urban area	23.6	22.4	23.0	23.6	23.3	23.2
North West Upolu	23.1	23.3	23.5	22.9	23.5	23.2
Rest of Upolu	21.8	22.3	22.4	22.4	22.2	22.2
Savaii	23.4	23.5	23.4	23.2	24.9	23.5
<b>Education</b>						
No education	*	*	*	*	*	*
Primary or lower or special needs	21.3	22.8	19.9	21.0	23.0	22.1
Secondary	22.3	22.5	22.7	22.8	23.0	22.7
More than secondary	24.4	23.7	26.1	26.2	24.9	24.7
<b>Wealth quintile</b>						
Lowest	21.6	22.0	22.4	22.5	23.1	22.3
Second	21.9	22.8	21.7	22.6	23.2	22.5
Middle	22.9	22.2	23.2	22.8	22.6	22.7
Fourth	23.5	23.1	23.7	22.3	23.3	23.2
Highest	24.9	24.3	24.4	25.5	23.7	24.5
Total	22.9	22.8	23.1	23.0	23.3	23.0

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

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

## 4.5 TEENAGE FERTILITY

Adolescent childbearing has potentially negative demographic and social consequences. Births to teenage mothers have been found to have the highest infant and child mortality in Samoa (MOH, 2008). Adolescent mothers are more likely to have complications during labour, which results in higher morbidity and mortality for themselves and their children. Moreover, childbearing during the teenage years frequently has adverse social consequences, particularly on female educational attainment, because women who become mothers in their teens are more likely to curtail education.<sup>3</sup>

Table 4.10 shows the percentage of women age 15-19 (teenagers) who are mothers or pregnant with their first child, by background characteristics. Overall, 9 percent of teenagers in Samoa have begun childbearing including about 7 percent who had already given birth and 2 percent who are currently pregnant. The percentage of adolescent women who have begun childbearing increases steadily with age from less than 2 percent among those who are age 16, to 26 percent among teenagers who are age 19. Teenage fertility does not vary by urban- rural. The region of North West Upolu (10 percent) has the highest proportion of teenage pregnancy while Savaii has the lowest (7 percent). It is interesting to note that teenage pregnancy is more common among women who have reached tertiary level of education (15 percent) than those who only have secondary level of schooling (8 percent). Based on wealth quintiles, the survey results indicate that the lowest incidence of teenage pregnancy is actually among women belonging to richest households.

<sup>3</sup> The legal age at marriage in Samoa is 18 for both women and men.

**Table 4.10 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, Samoa 2014

Background characteristic	Percentage who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
<b>Age</b>				
15	0.0	0.0	0.0	202
16	0.5	1.0	1.5	202
17	2.8	1.4	4.2	213
18	8.4	3.7	12.1	240
19	21.6	4.4	26.0	205
<b>Residence</b>				
Urban	7.6	0.9	8.5	227
Rural	6.5	2.5	8.9	835
<b>Region</b>				
Apia urban area	7.6	0.9	8.5	227
North West Upolu	6.6	3.7	10.3	398
Rest of Upolu	6.5	2.2	8.6	232
Savaii	6.2	0.5	6.7	205
<b>Education</b>				
No education	*	*	*	4
Primary or lower or special needs	12.3	0.0	12.3	32
Secondary	6.1	2.0	8.1	937
More than secondary	11.6	3.3	14.9	89
<b>Wealth quintile</b>				
Lowest	10.8	2.8	13.7	210
Second	7.1	1.7	8.8	234
Middle	6.4	4.0	10.4	222
Fourth	4.1	0.9	5.1	204
Highest	4.9	1.1	5.9	193
Total	6.7	2.1	8.9	1,062

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



Reproductive Health is recognised as a national priority in the National Strategy for Development of Samoa 2012-2016 (Samoa Ministry of Finance, 2012). Additionally, the Health Sector Plan 2008-2018 (Ministry of Health, 2008a) recognises improved reproductive, maternal and child health as a key results of its 'Quality Health Care Service Delivery' strategy. One of the main components outlined in the Samoa Reproductive Health Policy and Strategy is to improve the family planning programme in all areas of the country and among all age groups. Encouraging contraceptive use in general and increasing the proportion of women using modern contraceptive methods are key interventions in this context.

This chapter presents the 2014 SDHS findings on contraceptive knowledge and use, attitudes, sources of contraception and exposure to media messages about family planning. The information is particularly useful for policymakers, programme managers, and researchers in population and family planning because it provides a means to assess the success of the Samoa family planning programme. Although the focus is on women, some results from the male survey are also presented because men play an important role in helping women to realise reproductive goals. Comparisons are also made, where feasible, with findings from previous surveys to evaluate trends over the past 20 years in Samoa. Data on exposure to family planning messages through the media, sources and costs of contraception, contact with family planning providers, and husbands' knowledge about their wives' contraceptive use are also presented.

## 5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

A major objective of the 2014 SDHS was to assess the level of knowledge of contraception methods among women and men. Acquiring knowledge about contraceptive methods is an important step towards gaining access to family planning services and then adopting a suitable contraceptive method. Information on knowledge of contraception was collected in two ways. Respondents were asked to mention all ways or methods couples can use to avoid or delay pregnancy. When a respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent knew of it. Using this approach, information was collected for 10 modern family planning methods: female and male sterilization, the pill, the IUCD, injectables, implants, male and female condoms, the lactational amenorrhoea method (LAM), and emergency contraception. Information was also collected on two traditional methods: rhythm or periodic abstinence, and withdrawal. Provision was also made in the questionnaire to record any other methods named spontaneously by respondents; these were coded as 'folk methods.' This report combines both prompted and unprompted knowledge. Thus, knowledge of a family planning method in the SDHS is defined simply as having heard of a method.

Table 5.1 shows the percentage of all women and men and currently married women and men and sexually active but unmarried women and men age 15-49 who have heard of any specific contraceptive methods. Knowledge of any contraceptive method is high in Samoa, with 83 percent of all women and 81 percent of all men knowing at least one method of contraception. Modern methods are much more widely known than traditional methods. Eighty two percent of all women know of a modern method, compared with only 34 percent who know of a traditional method. Among all women, injectables are the most commonly known method (72 percent), followed by the pill (71 percent), male condoms (51 percent), and the female sterilization (39 percent). LAM is known by only 15 percent and emergency contraception by 7 percent of all women. Implants are the least known modern method (6 percent). Among the traditional methods, rhythm is the most commonly known method (29 percent), followed closely by withdrawal (17 percent). A very small proportion (3 percent) of all women mentioned folk methods.

Knowledge of contraceptive methods among currently married women is higher than among sexually active but unmarried women. Among currently married women, 93 percent know at least one method of contraception compared with 92 percent of the unmarried. Among modern methods, injectables are most commonly known by currently married women (87 percent), followed by the pill (85 percent), male condom (55 percent), and female sterilization (50 percent). Emergency contraception is known by 8 percent of currently married women. Implants are the least known modern method (7 percent).

**Table 5.1 Knowledge of contraceptive methods**

Percentage of all respondents, currently married respondents and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Samoa 2014

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried woman <sup>1</sup>	All men	Currently married men	Sexually active unmarried men <sup>1</sup>
Any method	82.5	93.4	91.7	81.1	89.9	91.1
Any modern method	82.0	92.9	91.7	79.8	88.4	89.4
Female sterilization	39.2	49.8	42.3	22.3	32.9	16.9
Male sterilization	8.7	10.4	15.4	9.8	12.6	11.6
Pill	70.6	84.5	75.4	33.8	50.0	29.3
IUD	28.6	38.3	33.1	11.6	18.1	8.2
Injectables	72.1	87.1	83.6	34.3	52.4	32.0
Implants	5.8	6.5	11.9	5.3	6.4	7.3
Male condom	50.8	54.9	74.0	74.8	78.6	87.5
Female condom	17.8	19.0	30.3	14.9	13.9	23.6
Lactational amenorrhea (LAM)	14.8	18.7	16.8	8.9	10.9	12.3
Emergency contraception	6.6	7.7	10.2	5.1	6.5	7.4
Any traditional method	34.4	44.7	38.5	29.7	40.1	40.0
Rhythm	28.8	37.2	36.7	12.0	18.2	11.9
Withdrawal	17.3	23.4	18.5	25.4	33.4	39.3
Folk method	3.1	4.5	5.1	1.0	1.3	1.7
Mean number of methods known by respondents 15-49	3.6	4.4	4.5	2.6	3.4	2.9
Number of respondents	4,805	2,874	62	1,576	718	166
Mean number of methods known by respondents 15-54	na	na	na	2.6	3.3	2.9
Number of respondents	na	na	na	1,669	798	167

<sup>1</sup> Had last sexual intercourse within 30 days preceding the survey  
na . Not applicable

Unmarried women reported the similar top four most commonly known methods as that reported by currently married women. Eighty four percent of unmarried women know injectables, followed by the pill (75 percent), male condom (74 percent), and female sterilization (42 percent). Sexually active unmarried women are also more likely to report knowledge of emergency contraception (10 percent), female condom, implant, and male sterilization methods, while knowledge of IUCD, LAM, rhythm and withdrawal is higher among married women.

As mentioned, knowledge of contraception is almost the same among men and women 83 percent of all women know of at least one method of contraception compared with 81 percent of all men (table 5.1). Like women, a larger proportion of all men (80 percent) know a modern method than a traditional method (30 percent). It is very interesting to note that sexually active unmarried men are

more likely to report knowledge of the implants, female condom, LAM, emergency contraception and withdrawal, while knowledge of female sterilization, the IUCD, injectables and rhythm is higher among married men. The most commonly known modern method is the male condom reported by 75 percent of all men, 79 percent of currently married men and 88 percent of sexually active unmarried men, and knowledge is much higher among men than women (known by 51 percent of all women, 55 percent of currently married women and 74 percent of sexually active unmarried women). Emergency contraception and implants are the least known modern methods (each known by 5 percent of all men, 6 percent of currently married men and 7 percent of sexually active unmarried men). Among traditional methods, the rhythm method is known by 12 percent of all men, 18 percent of currently married men and 12 percent of sexually active unmarried men. It is worth noting that, with the exception of male sterilization and male condoms, knowledge of each of the contraception methods is lower among men than women.

The mean number of contraceptive methods known by women and men age 15-49 in Samoa is about 3.6 and 2.6 respectively.

Table 5.2 shows differentials in knowledge of any contraceptive method and any modern contraceptive method among currently married women and men age 15-49 by background characteristics. Knowledge of at least one method is high in almost all categories. Nevertheless, among women, it is lower for younger women age 15-19, for women living in rural areas, and for women living in the North West Upolu region. Knowledge of at least one method increases with level of education and wealth quintile, but the differences are small. For example, 89 percent of women in the lowest wealth quintile have heard of at least one method of family planning compared with 96 percent of those in the highest wealth quintile.

Similar patterns are observed among the currently married men age 15-49.

Knowledge of contraceptive methods among women age 15-49 in Samoa has slightly increased over the past five years. The proportion of all women age 15-49 who have heard of at least one method of family planning increased from 71 percent in 2009 to 83 percent in 2014. Knowledge of specific methods has shown even more dramatic increases over the 5 year period. For example, the proportion of women age 15-49 who have heard of injectables increased from 59 to 72 percent, the proportion who have heard of the pill increased from 56 to 71 percent, and the proportion who have heard of the male condom increased from 37 to 51 percent. Knowledge of implants among women age 15-49 increased from 3 percent in 2009 to 6 percent in 2014. The mean number of methods known among all women has increased slightly from 2.8 in 2009 to 3.6 in 2014. There was a similar trend among men age 15-54 the mean number of methods known increased from 2.5 in 2009 to 2.6 in 2014.

Table 5.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Samoa 2014

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method <sup>1</sup>	Number	Heard of any method	Heard of any modern method <sup>1</sup>	Number
<b>Age</b>						
15-19	76.1	73.7	83	*	*	5
20-24	91.5	91.2	403	90.3	88.7	59
25-29	94.2	94.0	524	95.2	93.5	109
30-34	96.4	96.0	487	91.6	90.9	146
35-39	95.3	94.3	484	88.4	86.8	123
40-44	93.3	92.8	505	85.4	84.1	147
45-49	92.1	91.6	389	89.3	87.1	129
<b>Residence</b>						
Urban	99.2	99.0	535	94.2	94.2	131
Rural	92.1	91.5	2,339	88.9	87.1	587
<b>Region</b>						
Apia urban area	99.2	99.0	535	94.2	94.2	131
North West Upolu	90.5	89.5	998	84.2	83.1	254
Rest of Upolu	93.9	93.4	700	94.1	93.5	170
Savaii	92.7	92.4	640	90.7	86.7	162
<b>Education</b>						
No education	*	*	4	100.0	100.0	1
Primary or lower or special needs	87.2	86.2	92	86.6	82.2	63
Secondary	92.9	92.3	2,235	88.5	87.4	510
More than secondary	96.5	96.2	543	95.9	94.5	143
<b>Wealth quintile</b>						
Lowest	89.2	88.5	608	88.2	85.5	144
Second	94.0	93.4	568	88.0	85.2	134
Middle	92.8	92.5	570	90.3	89.7	156
Fourth	95.2	94.9	581	92.8	92.8	159
Highest	96.4	95.5	547	89.5	88.0	126
Total 15-49	93.4	92.9	2,874	89.9	88.4	718
50-54	na	na	na	83.9	76.9	81
Total men 15-54	na	na	na	89.3	87.2	798

<sup>1</sup> Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, lactational amenorrhea method (LAM), emergency contraception and other modern methods

na . Not applicable

An asterisks indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

## 5.2 EVER USE OF CONTRACEPTION

All women interviewed in the 2014 SDHS survey who said they had heard of a method of family planning were asked whether they had ever used that method. Men were asked if they had ever used male-oriented methods (i.e., male sterilization, condoms, rhythm, and withdrawal). Table 5.3.1 shows the percentage of all women and currently married women who have ever used specific methods of family planning, by age, and Table 5.3.2 shows comparable information for men.

Thirty-one percent of all women reported having used a method of contraception at some point in time; 30 percent have used a modern method and 6 percent have used a traditional method.

Among modern methods, injectables (20 percent) are the most commonly used method, followed by the pill (13 percent). Withdrawal and rhythm are each reported to have been used by 3 percent of the women. Ever use of any contraceptive method increases with age, peaking among women in their late thirties through forties, and then declining among women 45-49. In the case of sterilization, the survey shows that about 10 to 12 percent of women above age 35 has had undergone sterilization.

Forty-eight percent of currently married women age 15-49 have used a method of contraception at some point in time. Injectables are the most commonly used method among currently married women (31 percent) followed by the pill (20 percent) and the female sterilization (7 percent).

Table 5.3.1 Ever use of contraception: Women

Percentage of all women and currently married women age 15-49 who have ever used any contraceptive method by method, according to age, Samoa 2014

Age	Modern method											Traditional method			Number of women		
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Emergency contraception	Any traditional method	Rhythm		Withdrawal	Folk method
ALL WOMEN																	
<b>Age</b>																	
15-19	0.8	0.8	0.0	0.0	0.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	1,062
20-24	17.6	16.9	0.4	0.0	8.6	0.8	9.7	0.1	1.9	0.0	0.8	0.2	2.9	1.3	2.1	0.4	829
25-29	34.1	32.5	1.4	0.0	13.8	0.8	22.1	0.1	2.4	0.1	2.2	0.1	5.9	1.9	3.3	1.4	728
30-34	47.5	45.8	4.3	0.0	19.7	1.0	31.9	0.2	1.4	0.2	3.6	0.2	6.6	4.2	2.2	1.2	591
35-39	52.5	50.1	10.6	0.2	21.5	1.3	32.0	0.4	2.7	0.2	3.5	0.6	11.7	6.7	6.7	1.7	551
40-44	51.3	47.9	10.3	0.2	19.7	1.4	34.2	0.0	2.1	0.2	1.6	0.4	10.5	6.1	5.1	1.4	577
45-49	45.5	44.7	12.3	0.2	17.4	3.2	28.2	0.2	0.7	0.0	3.5	0.0	8.4	3.2	4.3	1.9	467
Total	30.9	29.5	4.5	0.1	12.6	1.0	19.6	0.1	1.5	0.1	1.9	0.2	5.6	2.9	2.9	1.0	4,805
CURRENTLY MARRIED WOMEN																	
<b>Age</b>																	
15-19	8.4	7.2	0.0	0.0	3.6	0.0	4.8	0.0	0.0	0.0	0.0	0.0	1.2	1.2	0.0	0.0	83
20-24	32.5	31.2	0.8	0.0	15.7	1.5	18.7	0.2	2.4	0.0	1.7	0.2	5.2	2.2	4.2	0.5	403
25-29	44.7	42.8	1.9	0.0	18.1	1.2	29.5	0.0	2.7	0.2	2.7	0.2	7.7	2.7	4.0	1.9	524
30-34	53.4	51.3	5.1	0.0	21.6	1.2	36.4	0.2	1.5	0.0	3.8	0.2	7.7	4.8	2.7	1.4	487
35-39	58.0	55.3	12.1	0.2	23.5	1.5	35.5	0.4	3.0	0.2	3.8	0.7	13.3	7.7	7.6	1.9	484
40-44	54.9	51.1	11.4	0.2	20.8	1.6	36.6	0.0	2.2	0.2	1.4	0.2	11.2	6.4	5.2	1.6	505
45-49	50.0	49.0	12.9	0.3	19.6	3.9	31.6	0.3	0.8	0.0	3.9	0.0	9.6	3.8	4.7	2.3	389
Total	48.2	46.0	7.1	0.1	19.5	1.7	31.0	0.2	2.1	0.1	2.8	0.2	9.0	4.6	4.6	1.6	2,874

LAM = Lactational amenorrhea method

<sup>1</sup> Women who had sexual intercourse within 30 days preceding the survey

Table 5.3.2 shows the percentage of all men and currently married men age 15-49 who reported having ever used one of four male methods of contraception male sterilization, male condom, rhythm, and withdrawal. Twenty-two percent of all men and 27 percent of currently married

men have ever used a contraceptive method at some point in time. Overall, ever use of any method tends to increase with age and it reaches its peak at age group 30-34 (32 percent) of all men and at age group 25-29 (38 percent) of currently married men and it declines sharply thereafter. The most popular modern male method, the condom, has been used by 15 percent of all men and 16 percent of currently married men. Male sterilization is practically non-existent in Samoa; less than 1 percent of men reported ever use of male sterilization. Among traditional methods, withdrawal is the most popular method, used by 11 percent of all men and 16 percent of currently married men.

Ever use of a modern method is considerably higher among all women (30 percent) than all men (15 percent); similar result for married women (46 percent) and married men (16 percent). On the other hand, ever use of a traditional method is much higher among men than women; 12 percent of all men and 18 percent of currently married men compared with 6 percent of all women and 9 percent of currently married women. The difference in ever use of traditional methods is mostly due to considerably higher proportion of men than women who have ever used withdrawal. Withdrawal is reported as having been used by 11 percent of all men and 16 percent of currently married compared with 3 percent of all women and 5 percent of currently married women reported using this method. Rhythm has only been used by 2 percent of all men and 4 percent of currently married men which is quite similar to the percentages observed for women.

Table 5.3.2 Ever use of contraception: Men

Percentage of all men and currently married men age 15-49 who have ever used any contraceptive method by method, according to age, Samoa 2014

Age	Any method	Any modern method	Modern method		Any traditional method	Traditional method		Number of men
			Male sterilization	Male condom		Rhythm	Withdrawal	
<b>ALL MEN</b>								
<b>Age</b>								
15-19	8.6	5.6	0.0	5.6	4.5	0.0	4.5	348
20-24	22.1	20.5	0.4	20.5	7.5	0.7	7.2	298
25-29	28.6	20.2	0.4	19.8	16.7	2.1	15.2	229
30-34	31.5	20.4	0.4	20.4	18.2	4.1	15.9	211
35-39	25.0	18.3	0.7	17.7	14.3	2.4	13.4	144
40-44	24.1	11.8	0.0	11.8	19.1	4.4	15.2	179
45-49	20.2	12.1	0.0	12.1	13.9	4.0	13.2	166
Total 15-49	21.6	15.1	0.3	15.0	12.2	2.1	11.0	1,576
50-54	16.8	4.4	0.0	4.4	12.4	3.0	11.4	93
Total men 15-54	21.4	14.5	0.2	14.4	12.2	2.2	11.1	1,669
<b>CURRENTLY MARRIED MEN</b>								
<b>Age</b>								
15-19	*	*	*	*	*	*	*	5
20-24	27.2	24.0	0.0	24.0	11.7	1.6	10.1	59
25-29	37.5	21.6	0.0	21.6	23.0	2.4	21.9	109
30-34	32.4	19.6	0.6	19.6	21.0	5.9	17.6	146
35-39	24.7	16.8	0.8	16.0	14.1	2.8	13.1	123
40-44	23.3	9.5	0.0	9.5	20.1	5.4	15.4	147
45-49	19.9	11.4	0.0	11.4	14.3	3.4	13.4	129
Total 15-49	27.3	16.3	0.3	16.2	17.8	3.9	15.5	718
50-54	18.3	5.1	0.0	5.1	13.2	3.5	12.0	81
Total men 15-54	26.4	15.2	0.2	15.0	17.4	3.8	15.2	798

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

### 5.3 CURRENT USE OF CONTRACEPTIVE METHODS

This section presents information on the prevalence of contraceptive use among all women, and currently married women age 15-49. The level of current use is the most widely used and valuable measure of the success of a family planning programme. Furthermore, it can be used to estimate the reduction in fertility attributable to contraception. The contraceptive prevalence rate (CPR) is usually defined as the percentage of currently married women who are currently using a method of contraception.

Table 5.4 shows that about one in four currently married women (27 percent) are currently using some method of contraception. Modern methods of contraception account for almost all the use, with 24 percent of married women reporting use of a modern method, compared with 3 percent using a traditional method. Injectables (10 percent), female sterilization (7 percent) and pills (6 percent) are the most widely used methods among married women, followed by rhythm, and withdrawal (1 percent each).

Among currently married women, the proportion of women who are using any modern method of contraception rises with age from 6 percent of those aged 15-19 to 36 percent among those age 35-39 after which it declines. Injectables are most commonly used by married women age 20-24 and those in their thirties, whereas female sterilization is mostly used by currently married women age 35-39 and those in their forties. Except for women in their late forties and those aged 15-19, pills are the third most commonly used method in every age group.

Table 5.4 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, Samoa 2014

Age	Modern method										Traditional method				Not currently using	Total	Number of women	
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	LAM	Any traditional method	Rhythm	Withdrawal	Folk method				
<b>ALL WOMEN</b>																		
<b>Age</b>																		
15-19	0.6	0.6	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.4	100.0	1,062
20-24	11.3	10.3	0.4	0.0	3.9	0.4	5.2	0.1	0.2	0.1	1.0	0.5	0.2	0.3	88.7	100.0	829	
25-29	17.8	16.9	1.4	0.0	3.8	0.1	10.7	0.0	0.4	0.4	1.0	0.7	0.1	0.1	82.2	100.0	728	
30-34	26.7	25.0	4.3	0.0	7.4	0.2	12.7	0.2	0.2	0.0	1.7	1.4	0.2	0.2	73.3	100.0	591	
35-39	31.5	27.1	10.6	0.0	6.0	0.0	9.7	0.2	0.2	0.4	4.5	2.3	1.3	0.9	68.5	100.0	551	
40-44	26.1	23.0	10.3	0.2	4.2	0.4	7.9	0.0	0.0	0.0	3.1	1.5	1.1	0.5	73.9	100.0	577	
45-49	19.0	17.1	12.3	0.0	2.2	0.9	1.7	0.0	0.0	0.0	1.9	0.4	0.4	1.1	81.0	100.0	467	
<b>Total</b>	<b>16.7</b>	<b>15.1</b>	<b>4.5</b>	<b>0.0</b>	<b>3.6</b>	<b>0.2</b>	<b>6.4</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>1.6</b>	<b>0.8</b>	<b>0.4</b>	<b>0.4</b>	<b>83.3</b>	<b>100.0</b>	<b>4,805</b>	
<b>CURRENTLY MARRIED WOMEN</b>																		
<b>Age</b>																		
15-19	6.0	6.0	0.0	0.0	3.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.0	100.0	83	
20-24	21.5	19.7	0.8	0.0	7.4	0.5	10.3	0.2	0.2	0.2	1.8	1.0	0.5	0.3	78.5	100.0	403	
25-29	24.8	23.4	1.9	0.0	5.3	0.2	14.8	0.0	0.6	0.6	1.3	1.0	0.2	0.2	75.2	100.0	524	
30-34	31.4	29.2	5.1	0.0	8.6	0.2	15.0	0.2	0.2	0.0	2.1	1.6	0.3	0.2	68.6	100.0	487	
35-39	35.5	30.4	12.1	0.0	6.6	0.0	10.9	0.2	0.2	0.4	5.1	2.6	1.5	1.0	64.5	100.0	484	
40-44	29.1	25.5	11.4	0.2	4.6	0.4	8.8	0.0	0.0	0.0	3.6	1.8	1.2	0.6	70.9	100.0	505	
45-49	20.9	18.6	12.9	0.0	2.7	1.0	2.1	0.0	0.0	0.0	2.3	0.5	0.5	1.3	79.1	100.0	389	
<b>Total</b>	<b>26.9</b>	<b>24.3</b>	<b>7.1</b>	<b>0.0</b>	<b>5.9</b>	<b>0.4</b>	<b>10.4</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>2.6</b>	<b>1.4</b>	<b>0.7</b>	<b>0.6</b>	<b>73.1</b>	<b>100.0</b>	<b>2,874</b>	

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhea method

<sup>1</sup> Women who have had sexual intercourse within 30 days preceding the survey

#### **5.4 DIFFERENTIALS IN CONTRACEPTIVE USE BY BACKGROUND CHARACTERISTICS**

Table 5.5 shows the percent distribution of currently married women by contraceptive method currently used, according to background characteristics. Current use of contraception varies with number of living children, urban-rural residence, region, education, and wealth.

The proportion of married women currently using contraception generally increases with increasing number of children. One percent of women without children are currently using a contraceptive method compared with 37 percent of women with five or more children.



Table 5.5 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, Samoa 2014

Background characteristic	Modern method										Traditional method					Total	Number of women	
	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	LAM	Any traditional method	Rhythm	Withdrawal	Folk method	Not currently using				
<b>Residence</b>																		
Urban	32.5	28.2	13.5	0.0	6.1	0.8	7.5	0.2	0.2	0.0	4.2	2.2	1.0	1.0	67.5	100.0	535	
Rural	25.7	23.4	5.6	0.0	5.8	0.2	11.1	0.1	0.2	0.2	2.3	1.2	0.6	0.5	74.3	100.0	2,339	
<b>Region</b>																		
Apia urban area	32.5	28.2	13.5	0.0	6.1	0.8	7.5	0.2	0.2	0.0	4.2	2.2	1.0	1.0	67.5	100.0	535	
North West Upolu	22.4	19.8	5.8	0.0	5.4	0.5	7.7	0.1	0.1	0.2	2.6	1.5	0.6	0.5	77.6	100.0	998	
Rest of Upolu	25.6	22.9	6.4	0.0	4.6	0.0	11.1	0.1	0.6	0.0	2.7	1.6	1.0	0.1	74.4	100.0	700	
Savaii	30.8	29.5	4.6	0.2	7.7	0.2	16.3	0.0	0.0	0.6	1.4	0.5	0.2	0.8	69.2	100.0	640	
<b>Education</b>																		
No education	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	4	
Primary or lower or special needs	22.7	19.5	7.7	0.0	0.0	0.0	11.8	0.0	0.0	0.0	3.2	2.1	0.0	1.1	77.3	100.0	92	
Secondary	26.6	24.2	6.9	0.0	5.7	0.2	11.0	0.0	0.2	0.2	2.3	1.2	0.7	0.4	73.4	100.0	2,235	
More than secondary	29.4	25.5	8.0	0.0	7.4	1.2	7.8	0.4	0.4	0.4	3.9	2.0	0.9	1.0	70.6	100.0	543	
<b>Number of living children</b>																		
0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.0	0.0	99.2	100.0	261	
1-2	16.8	15.6	1.5	0.0	5.1	0.5	7.8	0.2	0.2	0.3	1.2	0.8	0.1	0.2	83.2	100.0	867	
3-4	35.3	32.1	8.2	0.0	8.6	0.5	14.1	0.1	0.2	0.3	3.2	1.4	1.0	0.8	64.7	100.0	888	
5+	36.5	32.2	13.8	0.1	5.5	0.2	12.4	0.0	0.1	0.0	4.3	2.4	1.1	0.8	63.5	100.0	858	
<b>Wealth quintile</b>																		
Lowest	23.3	21.2	4.3	0.0	4.9	0.0	11.8	0.0	0.2	0.0	2.1	1.1	0.4	0.6	76.7	100.0	608	
Second	25.3	23.9	5.4	0.0	6.3	0.2	11.8	0.0	0.2	0.0	1.4	0.5	0.7	0.2	74.7	100.0	568	
Middle	24.7	22.4	4.9	0.0	5.1	0.3	10.9	0.2	0.2	0.8	2.3	1.1	0.7	0.5	75.3	100.0	570	
Fourth	31.7	27.9	11.0	0.2	5.5	0.3	10.7	0.0	0.0	0.2	3.9	2.6	0.7	0.5	68.3	100.0	581	
Highest	29.8	26.3	10.2	0.0	7.5	1.0	6.6	0.4	0.6	0.0	3.6	1.7	0.9	0.9	70.2	100.0	547	
Total	26.9	24.3	7.1	0.0	5.9	0.4	10.4	0.1	0.2	0.2	2.6	1.4	0.7	0.6	73.1	100.0	2,874	

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhea method

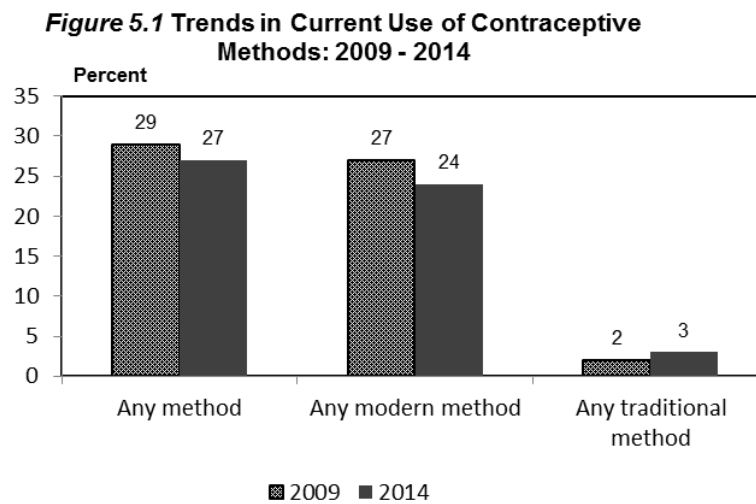
An asterisks indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

Women in urban areas are more likely to use contraceptive methods (33 percent) than their rural counterparts (26 percent), although women in rural areas are more likely to use injectables (11 percent) than those residing in urban areas (8 percent). Apia Urban Area has the highest contraceptive prevalence rate (33 percent) followed by the Savaii region (31 percent), Rest of Upolu region (26 percent) and North West Upolu region (22 percent). However, looking at specific methods, the lowest use of injectables is in the Apia urban area and North West Upolu (8 percent each) compared with 11-16 percent among women in other regions. Pills are the least popular among women in Savaii (8 percent). Less than 1 percent of women residing in Savaii region are using withdrawal compared with 1 percent of women in other regions. The current use of any contraceptive method tends to increase with women's education; it is lowest among women with primary or less education (23 percent) and highest among those with higher than secondary education (29 percent). Use of any method of contraception is also positively related to wealth status, increasing from 23 percent among currently married women in the lowest wealth quintile to 30-32 percent in the fourth and highest wealth quintiles.

The variation of current use of modern and traditional methods of contraception across subgroups follows similar patterns. Current use of each specific modern and traditional method is slightly more common in urban areas than rural areas (except for injectables, where the reverse is true), and tends to increase with level of education and wealth quintile.

## 5.5 TRENDS IN THE USE OF FAMILY PLANNING

Figure 5.1 shows trends in contraceptive use among currently married women based on the results from the 2014 SDHS and the 2009 SDHS. Overall, the contraceptive use among married women in Samoa has decreased in the past 5 years. The survey results indicate that the contraceptive prevalence rate has slightly decreased from 29 percent in 2009 SDHS to 27 percent in 2014. Similarly, current use of modern method has declined from 27 percent in 2009 to 24 percent in 2014, however, the percentage of currently married women who use a traditional method as their current method of family planning shows a small increase from 2 percent in 2009 to 3 percent in 2014.



## 5.6 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

Couples use family planning methods to either limit family size or delay the next birth. The decision to initiate family planning use differs according to the circumstances of couples and individuals concerned. Couples using family planning to control family size (i.e., to limit the number of children) adopt contraception when they have had the number of children they want. When contraception is used to space births, couples may start to use family planning earlier, with the intention of delaying a possible pregnancy. Using contraception for birth spacing may also be done before a couple has had their desired number of children.

In the 2014 SDHS, women were asked how many children they had at the time they first used a method of family planning. The number of living children at the time of first use of contraception is both a measure of the willingness to postpone the first birth (i.e., women who have no children), and of the desire of women with children to space subsequent births. Thus, differences in fertility-control behaviour among cohorts of women can be observed by examining the number of living children at first use of contraception.

Table 5.6 shows the percent distribution of women by number of living children at the time of first use of contraception, according to current age. The results indicate that the average number of living children at which Samoan women start using contraception has decreased. More Samoan women are adopting family planning methods at lower parities (i.e., when they have fewer children) than previously. A change in behaviour can be seen by comparing women's parity at first use of

contraception among younger and older women. Among women age 25-29, the highest proportion (12 percent) began using contraception after 1 child whereas among women age 45-49, 10 percent began using contraception after 1 child. Older women are more likely to have waited until they had children to start using contraception. The largest proportion of women age 45-49 started using after 4 or more children (16 percent). The survey findings suggest a move towards earlier use of contraception by Samoan women to delay childbearing. In a culture where smaller family size has not yet become a norm, young women are still less likely to adopt family planning at lower parity than their older counterparts. On the other hand, older women initiate contraceptive use at a later age primarily to limit births rather than to space them.

**Table 5.6 Number of children at first use of contraception**

Percent distribution of women age 15-49 by number of living children at the time of first use of contraception, according to current age, Samoa 2014

Current age	Never used	Number of living children at time of first use of contraception					Missing	Total	Number of women
		0	1	2	3	4+			
<b>Age</b>									
15-19	99.2	0.1	0.7	0.1	0.0	0.0	0.0	100.0	1,062
20-24	82.4	2.4	9.5	3.8	1.4	0.5	0.0	100.0	829
25-29	65.9	2.1	12.0	9.0	5.8	4.8	0.6	100.0	728
30-34	52.5	1.2	13.9	11.1	8.1	13.1	0.2	100.0	591
35-39	47.5	2.2	13.0	9.3	11.3	16.7	0.0	100.0	551
40-44	48.7	1.9	14.0	8.5	10.3	16.0	0.5	100.0	577
45-49	54.5	0.9	10.0	11.3	6.8	15.9	0.7	100.0	467
Total	69.1	1.5	9.5	6.6	5.3	7.8	0.2	100.0	4,805

## 5.7 KNOWLEDGE OF FERTILE PERIOD

A basic knowledge of reproductive physiology is important for the successful practice of coitus-related methods such as withdrawal, condoms, vaginal methods, and fertility-awareness methods that are collectively referred to as periodic abstinence, rhythm, or the calendar method. Knowledge of the fertile period in a woman's menstrual cycle is particularly critical in the case of the rhythm method, and the successful practice of natural family planning depends on an understanding of when during the menstrual cycle a woman is most likely to conceive.

The 2014 SDHS included a question designed to obtain information on the respondent's understanding of when a woman is most likely to become pregnant during the menstrual cycle. Both women and men were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to get pregnant if she has sexual intercourse?" If the answer was "yes," they were further asked whether that time was just before her period begins, during her period, right after her period ended, or halfway between two periods. Table 5.7 shows the results for all women and men age 15-49.

Table 5.7 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, Samoa 2014

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	(4.9)	2.2	2.2
During her menstrual period	(2.4)	2.5	2.5
Right after her menstrual period has ended	(72.8)	31.5	31.8
Halfway between two menstrual periods	(7.4)	8.0	8.0
Other	(0.0)	0.1	0.1
No specific time	(7.4)	26.7	26.6
Don't know	(5.1)	28.5	28.3
Missing	(0.0)	0.5	0.5
Total	100.0	100.0	100.0
Number of women	40	4,765	4,805

Note: Numbers in parentheses are based on 25-49 unweighted cases.

Among all women, only one in thirteen (8 percent) is aware that a woman is most likely to conceive halfway between her menstrual periods. Thirty-two percent of women wrongly believe that the fertile period is right after a woman's period has ended, 28 percent say they do not know when the fertile period falls, and 27 percent believe that there is no specific fertile time during the ovulatory cycle.

Knowledge of a woman's ovulatory cycle is even more limited among men than women. Only 2 percent of men know that a woman is most likely to conceive halfway between her menstrual periods, 18 percent of men wrongly believe that the fertile period is right after a woman's period has ended, and 40 percent say there is no specific time when a woman is most fertile.

It is expected that women who use the rhythm method should have a better understanding of when a woman is more likely to become pregnant during the menstrual cycle, however, results shows that non-users of the rhythm method are more likely to know that the fertile time in a woman's menstrual cycle is halfway between periods (8 percent) compared with women who are using the rhythm method (7 percent)

There has been an improvement in knowledge of the fertile period over the previous SDHS. In 2014, 8 percent of all women and 4 percent of all men correctly reported when a woman is most fertile compared with 5 percent of all women and 2 percent of all men in the 2009 SDHS.

## 5.8 TIMING OF STERILIZATION

The 2014 SDHS collected information on the timing of female sterilization among those using the method. However, the number of cases was too small for meaningful analysis by background characteristics. Twenty-eight percent of sterilized women underwent the procedure at age 35-39 and 33 percent at age 30-34. About one in seven sterilized women (14 percent) underwent the procedure at age 40-44 and about one in six (16 percent) did so at age 25-29. The smallest proportion of sterilized women underwent the procedure before age 25 and after age 45. The median age at sterilization is calculated only for women sterilized before 40 years of age to avoid problems of censoring. The median age at sterilization among women in Samoa is 33 years (data not shown).

## 5.9 SOURCE OF CONTRACEPTION

Information on sources of modern contraceptive methods is important when designing and managing family planning (FP) programmes. In Samoa, both public and private health sectors are strategically important in the provision of family planning services. Non-clinical short-term methods such as the pill and condoms are distributed by the private health sector. In addition a few pharmacies, private clinics as well as the Samoa Family Health Association provide both clinical and non-clinical methods. The public health sector provides a range of clinical and non-clinical methods mainly through health facilities and also by supporting major contributors in the family planning sector.

In the 2014 SDHS, all current users of modern contraceptive methods were asked the most recent source of their methods. Interviewers were instructed to record the name of the source or facility, because respondents may not always be able to accurately categorise a source as public or private. Supervisors and editors then verified and coded this information to improve the accuracy of the information.

Table 5.8 shows that the vast majority of users (92 percent) obtain their contraceptive methods from the public health sector. Government hospitals are the most common public source (67 percent), followed by government health centre (16 percent) and family planning clinic (10 percent).

Table 5.8 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, Samoa 2014

Source	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Total
Public sector	93.4	*	91.7	*	95.1	*	*	92.0
Govt. hospital	93.4	*	51.6	*	59.7	*	*	66.6
Govt. health centre	0.0	*	19.9	*	25.3	*	*	15.8
Family planning clinic	0.0	*	20.2	*	10.1	*	*	9.5
Private medical sector	0.5	*	5.4	*	1.6	*	*	2.3
Private medical centre	0.5	*	5.4	*	1.3	*	*	2.2
Peer trainer	0.0	*	0.0	*	0.3	*	*	0.1
Other source	5.2	*	1.2	*	0.3	*	*	3.2
Overseas	5.2	*	1.2	*	0.3	*	*	3.2
Other	0.0	*	1.8	*	1.3	*	*	1.2
Missing	0.9	*	0.0	*	1.6	*	*	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	214	1	174	11	306	3	7	717

Note: Total includes other modern methods but excludes lactational amenorrhea method (LAM). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

Very few women (2 percent) use the private health sector to obtain their contraceptive methods. The two main providers of contraception in the private sector are private medical centres and peer trainers.

Three percent of women who are using a modern method of contraception get their method from other sources, mostly from overseas (3 percent).

The type of source does differ slightly by method. The majority of users of injectables, pills and female sterilization obtain their methods from a government source (95 percent, 93 percent and 92 percent respectively). Whereas virtually all female sterilizations get done at a government hospital (93 percent), less than half of pill users (44 percent) and injectable users (60 percent) receive them

from a government hospital. Additionally, 20 percent of pill users and 10 percent of injectable users get their method from a family planning clinic. Five percent of female sterilizations occur overseas and 1 percent of pill users obtain their method from other sources.

## 5.10 COST OF CONTRACEPTION

Even though the majority of contraceptives are obtained from the public health sector, information on the cost of obtaining contraceptive methods is useful to family planning programmes. It is important to know how much clients are paying for contraceptive methods. This information provides guidance on price differentials among the sectors and pricing of commodities. It also gives an indication of adherence to stipulated prices by the various sectors. In 2014SDHS, women who were using modern methods of contraception were asked how much they paid in total the last time they obtained their method, including the cost of the method and any consultation they may have had. Table 5.9 shows the percentage of women who obtained the method free and, for those who do not know the cost of the method, according to source of current method.

**Table 5.9 Cost of modern contraceptive methods**

Percentage of current users of modern contraception age 15-49 who did not pay for the method and who do not know the cost of the method, according to source of current method, Samoa 2014

Source of method/cost	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Total
<b>Public sector</b>								
Percentage free	85.0	*	16.7	*	20.2	-	*	39.5
Do not know cost	5.5	*	4.3	*	2.0	-	*	3.6
Number of women	200	1	160	5	292	0	2	660
<b>Private medical sector/other</b>								
Percentage free	*	-	*	*	*	*	*	29.7
Do not know cost	*	-	*	*	*	*	*	10.4
Number of women	14	0	15	6	15	3	5	58
<b>Total</b>								
Percentage free	82.2	*	15.3	*	20.5	*	*	38.7
Do not know cost	6.5	*	4.0	*	2.2	*	*	4.2
Number of women	214	1	174	11	306	3	7	717

Note: Table excludes lactational amenorrhea method (LAM). Costs are based on the last time current users obtained method. Costs include consultation costs, if any. For condom, costs are per package; for pills, per cycle. For sterilization, data are based on women who received the operation in the 5 years before the survey.

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

In Samoa contraceptives are generally provided free of charge or a nominal fee which really covers the cost of the consultation. Commodities are sold at affordable prices and public health sector prices are expected to be much lower than those in the private health sector. Few respondents were able to provide cost information, which may affect the inferences drawn. Nevertheless, the information remains useful for family planning programmes. Among users of female sterilization, 82 percent reported that the method was provided for free. The median cost for female sterilization is \$49.2 tala. Only about one in seven (15 percent) of pill and one in five (20 percent) injectable users reported that they got their method free of charge. The median cost of pills and injectables is \$4.60 and \$4.30 tala, respectively.

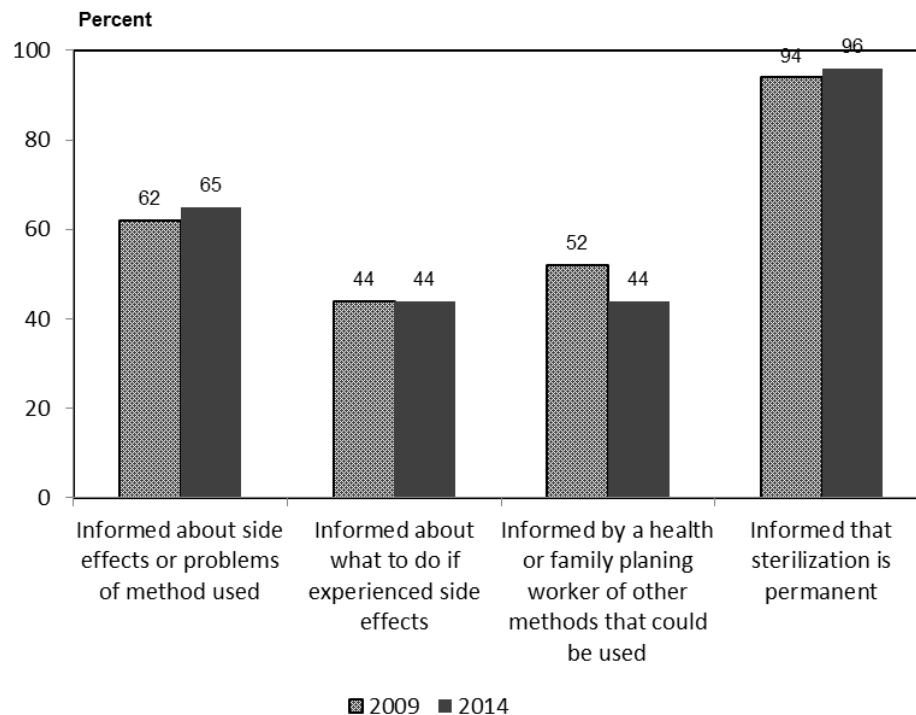
## 5.11 INFORMED CHOICE

Informed choice is an important aspect of the delivery of family planning services. Family planning clients have a right to information about their contraceptive method. Providers are required to inform all users of contraceptive methods about: the potential side effects of their method, what they should do if they encounter side effects or signs of a problem; and, alternate methods of family planning they can use.

Current users of modern methods who are well informed about the side effects and problems associated with methods and know of a range of method options are better placed to make an informed choice about the method they would like to use. This information improves the quality of care and compliance by assisting users to cope with side effects, thereby decreasing unnecessary discontinuation of temporary methods.

Current users of selected modern contraceptive methods were asked whether, at the time they adopted the particular method, they were informed about the possible side effects or problems that might be encountered with the method. Figure 5.2 shows that 65 percent of current users of modern methods were informed about side effects or problems related to the method they last used, 44 percent were informed about what to do if they experienced side effects and 44 percent were informed by a health or family planning worker of other methods that could be used. A large majority of women who were sterilized (96 percent) were informed that sterilization is permanent.

**Figure 5.2 Informed Choice Among Women 15-49 Currently Using Modern Methods and Female Sterilization: 2009-2014**



Information about contraceptive methods varies little by type of method, although information about side effects and what to do about them is less likely to be provided to users of pill than users of female sterilization and injectables. Approximately two-thirds (68 percent) of users who initially obtained their method at the public health sector were informed of other methods or side effects but only 46 percent of them were informed about what to do if they had side effects. Current users who obtained their method at a family planning clinic report the highest percentage (80 percent)

of being informed about side effects and problems of method used, being told what to do if side effects occurred (54 percent), and being given information about other methods they could use (54 percent) when compared with users who obtained their method from a government hospital or a government health centre (data not shown).

## 5.12 FUTURE USE OF CONTRACEPTION

Intention to use family planning is an important indicator of the potential demand for services. Currently married women who were not using contraceptives at the time of the survey were asked about their intention to use family planning in the future. Table 5.10 shows the percent distribution of currently married women age 15-49 that are not using a contraceptive method by intention to use in the future and according to number of living children.

Twenty percent of currently married women who are not using a contraceptive method say they intend to use family planning in the future, while 52 percent do not intend to use, and 27 percent are unsure. The proportion of those intending to use varies slightly with the number of living children, increasing from 19 percent for those with no children to a peak of 22 percent for those with two or three children, after which it drops to 18 percent among those with four or more living children. The proportion of non-users who do not intend to use contraception in the future is highest among those with four or more children (55 percent). About half of women with no children or with one child do not intend to use contraception. These findings indicate there is a need to increase the level of family planning messages and services to women of any parity.

Over the past 5 years, there has been an increase in the percentage of currently married non-users who intend to use family planning in the future ó including those who intend to use but are not sure of the timing ó from 36 percent in 2009 to 47 percent in 2014. It is worth noting that there has been a slight decline in the proportion of currently married non-users who do not intend to use family planning in the future, from 63 percent in 2009 to 52 in 2014.

Table 5.10 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, Samoa 2014

Intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	19.2	20.5	21.6	21.5	18.0	19.7
Unsure	38.6	29.5	25.1	25.5	25.0	27.2
Does not intend to use	42.2	49.7	51.8	51.2	54.6	51.5
Missing	0.0	0.3	1.4	1.8	2.4	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	208	362	354	322	855	2,100

<sup>1</sup> Includes current pregnancy



### 5.13 REASONS FOR NOT INTENDING TO USE CONTRACEPTION

An understanding of the reasons non-users of contraception have for intending not to use a contraceptive method in the future is crucial for identifying strategies to improve the access, acceptability, and quality of care of family planning services. Table 5.11 presents the main reasons for not intending to use contraception reported by currently married women who are not using a contraceptive method and who do not intend to use contraception in the future.

The most commonly cited reason for not intending to use contraception is respondent opposed to use, which was mentioned by 57 percent of non-users said they do not intend to use in the future because they themselves are opposed to using family planning, and an additional 3 percent said that their husband or partner was opposed to family planning. Other reasons given for not intending to use include health concerns (11 percent). Fertility-related reasons for future non-use such as menopause or infertility are slightly more likely to be cited by older women, while younger women are more likely to cite method-related reasons or lack of knowledge. Sixty-four percent of women age 30-49 are opposed to using family planning, compared with 62 percent of women age 15-29. Method-related reasons are more likely to be cited by younger than older women (18 and 16 percent, respectively). More specifically, health concerns and fear of side effects are cited by 11 and less than 1 percent, respectively, of younger women compared with 9 and 2 percent, respectively, of older women. Additionally, younger women age 15-29 are slightly more likely than older women age 30-49 to say that lack of knowledge of method is the main reason for future non-use (2 percent versus less than 1 percent).

In the 2014 SDHS, the main reasons for not intending to use contraception in the future among currently married women who are not using contraception are opposition to use (64 percent), followed by method-related reasons (16 percent), and fertility-related reasons (14 percent) and this pattern is similar to the pattern seen in the 2009 SDHS. It is worth noting that the percentage of those cited method-related and fertility-related reasons decline slightly from 2009 (19 and 17 percent, respectively) to 2014 as mentioned above. For example, the proportion of women who cited being menopausal/had hysterectomy has declined from 5 percent in 2009 to 3 percent in 2014. This decline is most pronounced among women age 15-29 (5 percent in 2009, compared with 1.7 percent in 2014). Those who cited health concerns as a reason for non-use of contraception in the future declined from 14 percent in 2009 to 10 percent in 2014 and this decline is evident for both young and old women.

These results call for more efforts and commitment from family planning service deliveries to enhance and improve family planning programmes all around Samoa in order to increase the knowledge of the importance of contraceptive methods among non-users.

**Table 5.11 Reason for not intending to use contraception in the future**

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, according to age Samoa 2014

Reason	Age		Percent distribution
	15-29	30-49	
<b>Fertility-related reasons</b>	<b>15.2</b>	<b>13.1</b>	<b>13.6</b>
Infrequent sex/no sex	1.0	1.2	1.1
Menopausal/had hysterectomy	1.7	2.9	2.6
Subfecund/ infecund	3.0	4.4	4.0
Wants as many children as possible	9.5	4.6	5.9
<b>Opposition to use</b>	<b>61.5</b>	<b>64.4</b>	<b>63.5</b>
Respondent opposed	57.4	61.7	60.5
Husband/partner opposed	3.1	1.3	1.7
Others opposed	0.0	0.1	0.1
Religious prohibition	1.0	1.3	1.2
<b>Lack of knowledge</b>	<b>2.1</b>	<b>0.9</b>	<b>1.2</b>
Knows no method	2.1	0.9	1.2
<b>Method-related reasons</b>	<b>18.4</b>	<b>15.6</b>	<b>16.4</b>
Health concerns	11.3	9.0	9.6
Fear of side effects	0.3	1.5	1.2
Lack of access/too far	1.4	0.6	0.8
Inconvenient to use	0.3	0.1	0.2
Interfere with body's normal process	5.1	4.4	4.6
Other	2.1	4.7	4.0
Don't know	0.0	1.3	0.9
Missing	0.7	0.1	0.3
Total	100.0	100.0	100.0
Number of women	291	792	1,083

## 5.14 PREFERRED METHOD OF CONTRACEPTION FOR FUTURE USE

Of particular interest to programme managers is the preferred method of contraception among non-users who reported that they intend to use a family planning method in the future. This information is useful in assessing the potential demand for specific methods of family planning. Table 5.12 shows that among currently married women not currently using a contraceptive method, the most preferred method for future use are injectables (57 percent), followed by the pill (24 percent) and female sterilization (10 percent). Only 2 percent cited rhythm and condom as preferred method for future use, while 1 percent or less cited other methods such as IUCD, implants or withdrawal.

When compared with results the SDHS 2009, there has been no change in the order of preferred methods over time. Similar to 2014, the most preferred method among non-users in 2009 were injectables (57 percent), followed by the pill (24 percent) and female sterilization (10 percent).

---

**Table 5.12 Preferred method of contraception for future use**

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but who intend to use in the future by preferred method, Samoa 2014

---

Method	Percent distribution
Female sterilization	10.2
Pill	23.6
IUD	1.0
Injectables	56.9
Implants	0.2
Condom	1.8
Lactation amenorrhea	0.5
Periodic abstinence	2.4
Withdrawal	0.3
Other	1.7
Unsure	1.0
Missing	0.3
Total	100.0
Number of women	414

---

### **5.15 EXPOSURE TO FAMILY PLANNING MESSAGES**

The media is seen as an effective means to disseminate family planning information. To assess the extent to which media serve as sources of family planning messages, respondents were asked whether they had heard or seen a message about family planning on the radio, television, newspapers or magazines in the few months preceding the survey. Exposure to family planning messages in the media over the past few months among women and men age 15-49 is shown in Table 5.13.

Exposure to family planning messages through any of the specified media is more common among women than men. Television is the most common source of family planning messages for both women (38 percent) and men (32 percent) age 15-49. More than three in ten women (31 percent) and more than two in ten men (25 percent) heard a family planning message on the radio. Newspapers and magazines are the least common source of family planning messages for both women (14 percent) and men (12 percent). Fifty-four percent of women and 62 percent of men have not been exposed to any family planning messages in any of the three specified media. These figures represent a considerable decline in exposure to messages on family planning in radio, television, newspapers and magazines over the past five years. In 2009 only one in three women (37 percent) and one in two men (43 percent) were not exposed to any family planning messages through radio, television, or newspaper/magazines in the few months preceding the survey.

Table 5.13 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 television or in a newspaper in the past few months, according to background characteristics, Samoa 2014

Background characteristic	Women					Men				
	Radio	Television	Newspaper/ magazine	None of these three media sources	Number	Radio	Television	Newspaper/ magazine	None of these three media sources	Number
<b>Age</b>										
15-19	18.5	26.2	9.8	67.7	1,062	13.3	18.9	6.1	76.4	348
20-24	28.3	37.0	14.2	54.4	829	25.1	30.3	12.1	60.9	298
25-29	33.2	42.2	14.4	49.5	728	21.6	31.2	9.8	62.3	229
30-34	36.4	41.0	13.5	49.7	591	31.8	39.4	17.4	53.8	211
35-39	38.4	43.1	16.7	47.6	551	37.0	44.2	15.5	50.4	144
40-44	38.1	43.0	14.5	47.7	577	30.8	33.6	17.7	59.0	179
45-49	37.2	39.1	16.2	50.5	467	29.0	41.7	14.0	52.9	166
<b>Residence</b>										
Urban	29.6	38.9	15.9	54.0	1,000	26.8	42.3	15.5	49.6	318
Rural	31.5	37.2	13.1	54.1	3,805	24.6	29.4	11.5	64.6	1,257
<b>Region</b>										
Apia urban area	29.6	38.9	15.9	54.0	1,000	26.8	42.3	15.5	49.6	318
North West Upolu	33.5	43.5	18.0	49.9	1,733	25.9	32.4	10.8	60.8	563
Rest of Upolu	30.2	33.9	12.1	54.2	1,099	14.0	19.8	5.0	74.6	357
Savaii	29.2	29.6	5.5	61.4	973	33.6	34.4	19.5	60.3	338
<b>Education</b>										
No education	34.0	40.9	6.8	52.6	15	11.7	38.6	11.7	61.4	8
Primary or lower or special needs	23.5	27.7	5.5	66.2	161	15.8	28.7	7.8	69.4	116
Secondary	31.2	36.3	11.7	54.9	3,654	25.2	30.2	11.1	62.9	1,169
More than secondary	31.8	43.8	22.6	48.9	975	28.5	40.5	19.1	52.6	282
<b>Wealth quintile</b>										
Lowest	26.7	27.4	6.4	62.6	903	23.2	27.0	10.4	66.7	293
Second	29.0	34.6	12.2	55.0	955	24.8	30.5	9.4	64.0	298
Middle	30.6	37.4	10.9	54.0	954	23.8	27.6	12.1	62.9	330
Fourth	35.1	41.3	16.6	51.0	987	27.2	36.6	13.4	58.3	356
Highest	33.5	45.7	21.3	48.5	1,006	25.9	37.7	16.1	56.5	300
Total 15-49	31.1	37.5	13.7	54.0	4,805	25.0	32.0	12.3	61.5	1,576
50-54	na	na	na	na	0	27.6	34.6	11.3	56.3	93
Total men 15-54	na	na	na	na	0	25.2	32.1	12.2	61.3	1,669

na = Not applicable

Women and men age 15-19 report the lowest exposure to family planning messages in the media. Sixty-eight percent of young women and 76 percent of young men age 15-19 have heard no family planning messages through any of the specified media. These results indicate a need for family planning programmes to specifically target youth with family planning messages through their preferred television and radio channels and other sources of information. Among women, exposure to family planning messages through television and newspaper is higher in urban areas (39 and 16 percent, respectively) than in rural areas (37 and 13 percent, respectively), while exposure through the

radio is slightly lower in urban (30 percent) than in rural areas (32 percent). On the other hand, exposure to family planning messages through any of the media is higher among men in urban areas than those in rural areas. For example, 42 percent of men in urban areas have seen a family planning message on television compared with 30 percent of men in rural areas. Among the regions, women in Apia Urban Area (39 percent) and North West Upolu (44 percent) have the greatest exposure to family planning messages through television, and women in North West Upolu (34 percent) have the highest exposure through the radio and newspaper and magazines. The Savaii region has the highest percentage of women who have never been exposed to none of the three media (61 percent), while North West Upolu has the highest percentage of men with no exposure (61 percent). Exposure to family planning messages generally increases with level of education (especially exposure through newspaper/magazine) and wealth quintile (especially exposure through television and newspaper/magazine).

## **5.16 CONTACT OF NON-USERS WITH FAMILY PLANNING PROVIDERS**

To determine whether non-users of family planning in Samoa have had an opportunity to receive information about family planning from providers, women who were not using contraception were asked whether they had attended a health facility in the past year for any reason and, if so, whether a staff person at that facility spoke to them about family planning methods. They were also asked whether they had been visited by a fieldworker who discussed family planning. The results are shown in Table 5.14.

Table 5.14 shows that 3 percent of non-users reported that they had visited a health facility in the 12 months preceding the survey and discussed family planning, while 8 percent of women visited a health facility and did not discuss family planning. Additionally, 4 percent of women not using contraception were visited by a peer trainer in the preceding 12 months who discussed family planning with them. Overall, the majority of women (94 percent) did not discuss family planning with a peer trainer or at a health facility in the past 12 months.

Table 5.14 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 a fieldworker 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 neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Samoa 2014

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who neither discussed family planning with fieldworker nor at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
<b>Age</b>					
15-19	2.6	1.1	4.7	96.7	1,056
20-24	3.4	5.3	8.2	92.3	735
25-29	4.2	7.5	10.1	90.0	599
30-34	2.6	9.0	11.8	88.9	433
35-39	2.8	4.5	9.5	93.4	377
40-44	1.9	3.8	7.8	95.1	427
45-49	2.7	1.9	9.6	96.5	378
<b>Residence</b>					
Urban	4.0	8.9	15.0	88.4	816
Rural	2.7	3.2	6.4	94.8	3,188
<b>Region</b>					
Apia Urban Area	4.0	8.9	15.0	88.4	816
North West Upolu	2.9	3.3	5.6	94.6	1,499
Rest of Upolu	2.1	4.0	9.5	94.7	916
Savaii	3.0	2.1	4.2	95.5	773
<b>Education</b>					
No education	*	*	*	100.0	15
Primary or lower or special needs	2.1	1.4	5.8	96.5	139
Secondary	2.3	4.2	7.4	94.1	3,042
More than secondary	5.6	5.6	11.5	90.6	809
<b>Wealth quintile</b>					
Lowest	2.5	3.7	4.7	94.9	760
Second	2.3	3.6	6.0	94.4	806
Middle	2.7	4.1	6.9	93.8	807
Fourth	2.4	5.4	9.6	92.6	796
Highest	4.6	5.0	13.1	92.0	835
Total	2.9	4.4	8.1	93.5	4,005

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

## 5.17 HUSBAND/PARTNER'S KNOWLEDGE ABOUT WOMAN'S USE OF FAMILY PLANNING

The husband or partner's knowledge about a woman's use of family planning is an indication of their prior discussion of, interest in, and continued practice of family planning. Inter-spousal/partner communication is an important intermediate step along the path to adopting a contraceptive method, as well as continuing to use that or other contraceptive methods in the future. Lack of knowledge or discussion of family planning may be related to a number of factors including lack of interest in family planning, hostility to the subject of family planning, or customary reticence to talk about sex-related matters. To assess the extent to which women use contraception without informing their husbands or partners, the 2014 SDHS asked married women whether their husbands or partners know they are using a method of family planning.

Table 5.15 shows that the majority of currently married women (87 percent) who are using contraception say that their husband or partner knows about their use of family planning. Only 3 percent said that their husband/partner does not know about their use of contraception, and 9 percent were unsure.

In Samoa, communication between couples about family planning use is high by most background characteristics and shows little variation by age, urban-rural residence, level of education, or wealth quintile. It is interesting to note that the percentage of women report that their husband or partner knows about their contraceptive use increases with age. More currently married women age 40-49 (85-96 percent) report that their husband or partner knows about their contraceptive use than do younger women. More women in urban areas (95 percent) report that their husband or partner know about their contraception use than do women in rural areas (85 percent). A higher proportion of women in Apia Urban Area say that their husband or partner is aware of their contraceptive use (95 percent) than do women in the Savaii region (80 percent). There is little variation in the husband's or partner's knowledge of women's use of contraception by level of education or wealth quintile. Interestingly, women who have completed secondary education (86 percent) and those in the middle wealth quintile (85 percent) are less likely than other women to say that their husband or partner knows about their use of family planning.

**Table 5.15 Husband/partner's knowledge of women's use of contraception**

Among currently married women age 15-49 who are using a method, percent distribution by whether they report that their husbands/partners know about their use, according to background characteristics, Samoa 2014

Background characteristic	Knows <sup>1</sup>	Does not know	Unsure whether knows/missing	Total	Number of women
<b>Age</b>					
15-19	*	*	*	100.0	5
20-24	84.3	4.5	11.3	100.0	87
25-29	84.1	2.2	13.7	100.0	130
30-34	87.9	3.8	8.3	100.0	153
35-39	88.3	3.5	8.2	100.0	172
40-44	85.0	4.1	10.9	100.0	147
45-49	96.3	1.2	2.5	100.0	81
<b>Residence</b>					
Urban	95.0	2.5	2.6	100.0	174
Rural	85.0	3.7	11.3	100.0	600
<b>Region</b>					
Apia Urban Area	95.0	2.5	2.6	100.0	174
North West Upolu	88.7	3.5	7.9	100.0	224
Rest of Upolu	86.0	1.1	12.8	100.0	179
Savaii	79.9	6.3	13.8	100.0	197
<b>Education</b>					
Primary or lower or special needs	*	*	*	100.0	21
Secondary	86.2	3.5	10.3	100.0	593
More than secondary	90.2	3.0	6.8	100.0	160
<b>Wealth quintile</b>					
Lowest	85.5	3.4	11.1	100.0	142
Second	87.7	4.8	7.5	100.0	144
Middle	84.8	3.4	11.8	100.0	141
Fourth	85.4	3.3	11.3	100.0	184
Highest	92.6	2.4	5.1	100.0	163
Total	87.2	3.4	9.3	100.0	774

<sup>1</sup> Includes women who report use of male sterilization, male condoms or withdrawal  
An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

## 5.18 MALE ATTITUDES TOWARDS FAMILY PLANNING

The 2014 SDHS assessed male respondents' attitudes towards contraception by asking currently married respondents whether they agreed or disagreed with two statements about family planning use:

- 1) Contraception is women's business and a man should not have to worry about it; and
- 2) Women who use contraception may become promiscuous.

The results are shown in Table 5.16.

The results on attitudes towards family planning show that the majority of currently married men age 15-49 in Samoa think that men should take some responsibility towards family planning. Seventy-four percent of men reject the statement that contraception is a woman's business and men should not have to worry about it. However, 12 percent of men agree with the statement, and 13 percent say they don't know.

Men age 30-34 (84 percent) and those living in Rest of Upolu (82 percent) are more likely to disagree that contraception is the woman's business than other men. Furthermore, male respondents with more than secondary education (80 percent) and those in the middle and highest wealth quintile (76-80 percent) are more likely than other respondents to disagree with the statement that contraception is a woman's business.

Regarding the statement that women who use contraception may become promiscuous, 31 percent of men agree with the statement, but 53 percent disagree and 15 percent are unsure. Compared with other men, those age 20-29, men from rural areas, men residing in Savaii regions, men with primary or lower or special needs education and in the middle and fourth wealth quintile are the most likely to agree with the statement that women who use contraception may become promiscuous.



Table 5.16 Male attitudes towards contraceptive use

Among men age 15-49, attitudes about women's use of contraceptive methods, according to background characteristics, Samoa 2014

Background characteristic	Contraception is woman's business					Women who use contraception may become promiscuous					Number of men
	Agree	Disagree	DK	Missing	Total	Agree	Disagree	DK	Missing	Total	
<b>Age</b>											
15-19	9.1	60.7	29.9	0.3	100.0	25.2	41.9	32.6	0.3	100.0	348
20-24	15.0	69.8	14.1	1.1	100.0	35.0	50.0	13.9	1.1	100.0	298
25-29	11.3	77.6	11.1	0.0	100.0	34.5	51.8	13.7	0.0	100.0	229
30-34	11.4	83.5	5.1	0.0	100.0	31.9	59.6	8.6	0.0	100.0	211
35-39	14.5	78.1	5.4	2.0	100.0	32.2	60.8	4.9	2.0	100.0	144
40-44	14.6	81.8	2.9	0.7	100.0	28.6	62.2	8.6	0.7	100.0	179
45-49	11.0	82.9	5.4	0.6	100.0	30.5	61.6	7.4	0.6	100.0	166
<b>Residence</b>											
Urban	16.3	72.7	10.2	0.8	100.0	30.5	55.1	13.6	0.8	100.0	318
Rural	11.1	74.7	13.7	0.5	100.0	31.0	52.9	15.6	0.5	100.0	1,257
<b>Region</b>											
Apia urban area	16.3	72.7	10.2	0.8	100.0	30.5	55.1	13.6	0.8	100.0	318
North West											
Upolu	11.8	76.6	11.3	0.3	100.0	22.8	64.9	12.1	0.2	100.0	563
Rest of Upolu	7.9	81.5	9.2	1.4	100.0	22.1	65.7	10.6	1.7	100.0	357
Savaii	13.4	64.3	22.4	0.0	100.0	53.9	19.5	26.6	0.0	100.0	338
<b>Education</b>											
No education	*	*	*	*	100.0	*	*	*	*	100.0	8
Primary or lower or special needs	11.6	66.0	20.5	1.9	100.0	32.6	47.8	18.6	1.1	100.0	116
Secondary	12.5	73.6	13.3	0.5	100.0	31.1	52.2	16.2	0.5	100.0	1,169
More than secondary	11.2	80.0	8.4	0.4	100.0	30.0	59.5	9.7	0.8	100.0	282
<b>Wealth quintile</b>											
Lowest	11.5	70.9	16.9	0.7	100.0	28.0	51.9	19.4	0.7	100.0	293
Second	8.9	75.8	14.6	0.6	100.0	32.2	52.1	15.1	0.6	100.0	298
Middle	11.0	79.6	9.1	0.3	100.0	33.4	55.4	10.9	0.3	100.0	330
Fourth	14.4	69.4	15.6	0.7	100.0	34.0	48.4	16.9	0.7	100.0	356
Highest	14.8	76.0	8.6	0.7	100.0	25.9	59.7	13.7	0.7	100.0	300
Total 15-49	12.2	74.3	13.0	0.6	100.0	30.9	53.4	15.2	0.6	100.0	1,576
50-54	12.1	79.1	8.7	0.0	100.0	35.5	52.1	12.4	0.0	100.0	93
Total men 15-54	12.2	74.6	12.7	0.6	100.0	31.1	53.3	15.0	0.6	100.0	1,669

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

## OTHER PROXIMATE DETERMINANTS OF FERTILITY

---

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant. These factors typically may include marital status, polygyny, sexual intercourse, postpartum amenorrhoea, abstinence from sexual relations, onset and termination of exposure to pregnancy. To gain insights into the other determinants of fertility, the 2014 DHS included for the first time, questions on sexual intercourse.

### 6.1 CURRENT MARITAL STATUS

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations where in age at first marriage is early tend to have early childbearing and high fertility. In Samoa, childbearing mainly occurs within marital unions. About 70 percent of all births occur to women who are currently married (Chapter 4). Nevertheless, table 6.1 shows that 17 percent of Samoan women age 15-49 are reportedly living with a partner without being formally married. In this report, the term "married" refers to legal or formal marriage, and "living together" refers to an informal union in which a man and a woman live together, even if a formal civil or religious ceremony has not occurred. In other tables that do not list "living together" as a separate category, these women and men are included in the "currently married" group. Respondents who are currently married, widowed, divorced, or separated are referred to as "ever-married."

Table 6.1 shows the percent distribution of women and men interviewed in the 2014 SDHS by their current marital status, according to age. Table 6.1 shows that 36 percent of women age 15-49 have never married. While a large majority of women who are still in their teens have not yet married (92 percent), the proportion never married in ages 20-24 is down to 50 percent. It is at this age when most women get married or have a live-in partner and become sexually active. In Samoa, marriage is not universal in the sense that a significant, though small, proportions of women still remain unmarried even when they turn 50 years of age.

Women who are currently in union constitute 60 percent and they include those who are formally married (43 percent) and those who are living with a male partner (17 percent). Fertility analysis is mostly concerned with this group of women as they are the ones exposed to the risk of pregnancy and childbirth. Among women in age 20-24, nearly half are currently in marital union. The proportion increases as age increases. Among older women, at least 80 percent are still in marital union and each one is a potential contributor to the overall fertility level of the country.

Although men do not reproduce, it is also important in fertility analysis to understand their marital pattern. From table 6.1, it can be gleaned that a greater proportion of men than women (52 percent versus 36 percent) have never married. Comparison of the proportions single between men and women indicate that men tend to marry later than women. At the same time, a larger proportion of men remain unmarried even when they reach the later years of their lives (13 percent at ages 45-49).

The proportion of Samoan men in the age group 15-49 who are reported to be currently in union is 46 percent, compared to 60 percent among women of the same age. In fact, the proportions of men who are in marital union are much less than that of the women in each of the 5-year age groups. For example, about three-quarters of Samoan women age 25-29 are currently in union (72 percent), while less than half (47 percent) of men in the same age group are currently in union. The large discrepancy, however, does not signify that women are more sexually active than men since it is commonly believed that men tend to take casual sex partners more than women do.

**Table 6.1 Current marital status**

Percent distribution of women and men age 15-49 by current marital status, according to age, Samoa 2014

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
<b>WOMEN</b>									
<b>Age</b>									
15-19	91.8	2.0	5.8	0.3	0.1	0.0	100.0	7.8	1,062
20-24	49.5	24.4	24.2	1.0	0.5	0.5	100.0	48.6	829
25-29	23.2	47.5	24.5	4.0	0.4	0.4	100.0	72.0	728
30-34	11.0	60.5	22.0	3.9	1.0	1.5	100.0	82.5	591
35-39	6.2	68.6	19.1	4.4	0.5	1.1	100.0	87.8	551
40-44	5.4	72.1	15.2	4.8	0.2	2.3	100.0	87.4	577
45-49	6.6	72.4	11.0	5.2	0.2	4.6	100.0	83.4	467
Total 15-49	35.7	42.9	17.0	2.9	0.4	1.2	100.0	59.8	4,805
<b>MEN</b>									
<b>Age</b>									
15-19	98.6	0.8	0.6	0.0	0.0	0.0	100.0	1.4	348
20-24	80.3	10.1	9.6	0.0	0.0	0.0	100.0	19.7	298
25-29	49.7	25.6	22.1	2.6	0.0	0.0	100.0	47.7	229
30-34	28.2	50.2	18.9	2.7	0.0	0.0	100.0	69.1	211
35-39	13.6	61.5	23.4	0.6	0.9	0.0	100.0	84.9	144
40-44	12.4	67.3	14.6	4.5	0.0	1.1	100.0	81.9	179
45-49	13.3	62.6	15.4	5.7	0.6	2.5	100.0	78.0	166
Total 15-49	52.0	32.4	13.1	1.9	0.1	0.4	100.0	45.6	1,576
50-54	6.4	69.4	16.9	7.2	0.0	0.0	100.0	86.4	93
Total men 15-54	49.5	34.5	13.3	2.2	0.1	0.4	100.0	47.8	1,669

The proportion of divorcees among Samoan women and men age 15-49 have remained the same rate as that reported in the 2009 SDHS (3 percent and 2 percent respectively). The highest proportion among men is 5 percent at age 40-44. One percent of Samoan women are widowed compared to less than half percent for men. The proportions who are separated are even smaller both for women and men. Among women, the percentage who is currently widowed increases to 2.5 percent at age 40 or older. The corresponding rates for men are 1-2 percent. This difference could be explained by the fact that women have a longer life expectancy at birth (76 years) than men (73 years) and that men have higher tendency to remarry after having become widowed (Samoa Bureau of Statistics, 2012).

## 6.2 AGE AT FIRST MARRIAGE

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and is, therefore, important for understanding fertility. Marriage is closely associated with fertility because women who marry early will, on average, have more births than women who marry later. Early age at first marriage is an important fertility indicator not only because it increases the length of time a woman is exposed to the risk of pregnancy, but it also tends to lead to early childbearing and higher fertility. Information on age at first marriage was obtained by asking respondents the month and year, or age, at which they started living with their first husband/partner. Older respondents are less likely to recall with accuracy marriage dates and ages, therefore, the data for older respondents

should be interpreted with caution. Table 6.2 shows the percentage of women and men who were first married by specific exact ages, and the median age at first marriage, according to current age.

The median age at first marriage for women age 25-49 is 22.9 years. This indicates that about half of these women got married before age 23. Median ages at marriage by 5-year age group are nearly the same implying that marriage pattern among Samoan women has remained constant - at least during the last 25 years.

Teenage marriage is not uncommon among Samoan women. About 10 percent of women now aged 25-49 married on or before they reached their 18th birthday while 24 percent married between ages 18 and 20. About 64 percent of women in that age group were married by the time they reached age 25 although 11 percent have remained unmarried by the time the survey was conducted.

Men, in general, marry later than women by a difference of about 5 to 6 years. For example, the median age at marriage among men 30 to 34 years of age is 28.1 while the median age of their female counterparts is only 23.1. Moreover, there is some indication of a trend towards further delay of entry into marital life among men based on the survey results which show that the median age at first marriage among the younger cohort is higher than that of the older men.

Table 6.2 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, Samoa 2014

Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
WOMEN								
<b>Age</b>								
15-19	0.4	na	na	na	na	91.8	1,062	a
20-24	0.7	10.8	28.6	na	na	49.5	829	a
25-29	1.3	8.5	22.9	44.1	66.0	23.2	728	22.7
30-34	1.0	9.2	23.8	42.3	63.9	11.0	591	23.1
35-39	0.5	10.4	24.0	43.4	62.2	6.2	551	22.9
40-44	1.2	9.4	23.3	41.7	62.6	5.4	577	22.9
45-49	2.1	11.7	25.6	44.2	65.1	6.6	467	22.7
20-49	1.1	9.9	24.8	na	na	19.8	3,743	a
25-49	1.2	9.7	23.8	43.2	64.0	11.3	2,914	22.9
MEN								
<b>Age</b>								
15-19	0.0	na	na	na	na	98.6	348	a
20-24	0.0	1.7	7.7	na	na	80.3	298	a
25-29	0.0	2.1	7.2	12.9	33.7	49.7	229	a
30-34	0.4	1.8	5.8	16.5	28.8	28.2	211	28.1
35-39	0.0	0.0	5.3	12.1	28.2	13.6	144	28.4
40-44	0.0	2.1	5.9	17.3	37.8	12.4	179	27.4
45-49	0.0	2.8	10.3	19.9	38.8	13.3	166	27.1
20-49	0.1	1.8	7.1	na	na	38.8	1,228	a
25-49	0.1	1.8	6.9	15.7	33.4	25.6	930	a
20-54	0.1	1.7	7.0	na	na	36.5	1,321	a
25-54	0.1	1.7	6.8	15.7	33.9	23.8	1,024	a

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Table 6.3.1 and table 6.3.2 show the median age at first marriage among women and men, respectively, by current age and background characteristics.

Urban women tend to marry later than rural women; median age at first marriage is 23.5 for urban women while it is slightly lower for rural women (22.8). Among women living in the rural regions, those living in Rest of Upolu have the earliest age at marriage with a median age 22.2. As expected, education is a major determinant on the timing of a woman's entry into marriage; pursuit of higher education leads women to postpone marriage. As table 6.3.1 shows, median age at first marriage among those who pursued higher education is at least 2 years later than among women who only have some secondary education. Just like education, wealth also has a strong bearing on women's entry into marriage. The wealthier the woman, the more likely that she marries late. In Samoa, women who belong to the poorest quintile have a median age of 21.8 but for those who belong to the richest group, median age is 24.6 which is nearly 3 years later than the poorest women.

**Table 6.3.1 Median age at first marriage: Women**

Median age at first marriage among women by five-year age groups, age 20-49 and age 25-49, according to background characteristics, Samoa 2014

Background characteristic	Age					Women age
	25-29	30-34	35-39	40-44	45-49	25-49
<b>Residence</b>						
Urban	24.1	23.0	23.0	23.9	22.7	23.5
Rural	22.5	23.1	22.9	22.8	22.6	22.8
<b>Region</b>						
Apia urban area	24.1	23.0	23.0	23.9	22.7	23.5
North west Upolu	23.0	23.6	23.7	23.1	22.7	23.2
Rest of Upolu	21.6	22.6	22.5	22.7	22.2	22.2
Savaii	22.9	22.6	22.7	22.5	23.6	22.7
<b>Education</b>						
No education	a	a	a	22.5	a	a
Primary or lower or special needs	20.6	23.7	20.0	20.6	22.0	21.9
Secondary	21.9	22.7	22.2	22.6	22.5	22.4
More than secondary	24.6	24.2	26.8	25.7	23.9	24.8
<b>Wealth quintile</b>						
Lowest	21.4	21.5	21.9	22.0	22.7	21.8
Second	21.8	24.0	21.9	22.3	22.3	22.4
Middle	22.5	22.1	23.2	22.1	22.4	22.4
Fourth	23.3	23.2	23.0	23.0	22.0	23.0
Highest	a	24.3	24.5	25.5	23.3	24.6
Total	22.7	23.1	22.9	22.9	22.7	22.9

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner  
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

As for the men, differentials in age at marriage are most pronounced between urban and rural. For the age group 45-49, the difference in median age at marriage is more than 1 year with urban men marrying later than their rural counterparts. Men residing in North west Upolu and Rest of Upolu, those who have no more than primary education and those who belong to the poorest households are more likely to marry at an early age compared with men from other backgrounds.

**Table 6.3.2 Median age at first marriage: Men**

Median age at first marriage among men by five-year age groups, age 20-54 and age 25-54, according to background characteristics, Samoa 2014

Background characteristic	Age				
	30-34	35-39	40-44	45-49	50-54
<b>Residence</b>					
Urban	28.2	a	24.2	28.0	28.3
Rural	28.1	28.0	28.4	26.8	26.8
<b>Region</b>					
Apia urban area	28.2	a	24.2	28.0	28.3
North west Upolu	28.8	27.7	28.2	25.6	26.5
Rest of Upolu	26.8	a	28.3	25.8	26.5
Savaai	27.5	27.6	28.8	29.0	28.1
<b>Education</b>					
Primary or lower or special needs	a	25.7	25.4	24.7	24.5
Secondary	27.3	28.3	28.0	27.4	27.6
More than secondary	28.2	29.8	27.4	27.7	27.6
<b>Wealth quintile</b>					
Lowest	28.5	26.3	26.5	25.3	a
Second	27.9	29.9	27.3	27.5	24.5
Middle	26.7	a	29.4	27.6	26.7
Fourth	28.3	28.1	25.9	28.0	25.7
Highest	28.4	27.8	29.2	27.6	28.2
Total	28.1	28.4	27.4	27.1	27.2

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner

a = Omitted because less than 50 percent of the men married for the first time before reaching the beginning of the age group

### 6.3 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is sometimes seen as a proxy for a woman's first exposure to intercourse but the two events need not occur at the same time. Because women and men may engage in sexual relations prior to marriage, age at first sexual intercourse is a more reliable indicator of a woman's exposure to the risk of pregnancy than age at first marriage. In the 2014 SDHS, women and men were asked how old they were when they first had sexual intercourse and the results are shown in Table 6.4.

Table 6.4 shows the percentage of women and men aged 15-49 who had their first experience of sexual intercourse by specific exact ages, the percentage who never had intercourse, and the median age at first intercourse, according to current age. The data show a notably different trend for the two sexes. Unlike the pattern in age at first marriage, which showed that women marry at a younger age than men, males engage in sexual activities about one year earlier than females. The median age at first sexual intercourse is 19.5 for men and 20.5 for women. These data confirm that men engage in sexual intercourse earlier than women and that they have sexual intercourse long before marriage. For instance, about 3 percent of men in the 20-49 age groups had their first sexual intercourse by exact age 15 compared to 2 percent for women. Because of their earlier exposure to sexual behaviours, men are also more likely to be exposed to sexually transmitted diseases, including HIV and AIDS, at an earlier age.

**Table 6.4 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 intercourse, and median age at first intercourse, according to current age, Samoa 2014

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
<b>WOMEN</b>								
<b>Age</b>								
15-19	0.9	na	na	na	na	84.5	1,062	a
20-24	1.1	17.0	44.9	na	na	28.2	829	a
25-29	1.5	17.3	42.3	68.0	83.9	7.9	728	20.6
30-34	1.7	16.1	41.7	69.6	82.5	4.2	591	20.5
35-39	2.0	19.7	45.0	70.7	81.9	2.2	551	20.4
40-44	1.5	17.1	41.7	65.8	78.6	2.4	577	20.5
45-49	2.1	18.8	44.8	70.2	83.6	2.7	467	20.3
20-49	1.6	17.6	43.4	na	na	9.5	3,743	a
25-49	1.7	17.7	43.0	68.8	82.1	4.2	2,914	20.5
15-24	1.0	na	na	na	na	59.8	1,891	a
<b>MEN</b>								
<b>Age</b>								
15-19	3.2	na	na	na	na	73.3	348	a
20-24	1.8	22.7	62.1	na	na	21.0	298	19.4
25-29	2.2	21.2	56.7	79.0	90.5	5.4	229	19.6
30-34	4.0	25.2	63.7	83.1	90.7	3.2	211	19.3
35-39	3.0	22.9	59.8	72.3	84.4	2.9	144	19.5
40-44	3.1	22.8	51.8	77.2	88.3	2.3	179	19.8
45-49	2.3	22.5	56.0	75.1	86.4	1.9	166	19.7
20-49	2.7	22.8	58.8	na	na	7.6	1,228	19.5
25-49	2.9	22.9	57.7	77.8	88.4	3.3	930	19.5
15-24	2.6	na	na	na	na	49.2	645	a
20-54	2.7	22.5	58.5	na	na	7.2	1,321	19.5
25-54	2.9	22.5	57.4	77.5	88.1	3.2	1,024	19.6

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

Table 6.5.1 and table 6.5.2 indicate that age at first sexual intercourse is not affected much by the background characteristic of women and men. In other words, a person starts to become sexually active at about the same age as another of the same sex but different status in life. This is particularly the case among men; table 6.5.2 hardly shows any differential in median age at first sexual intercourse by background characteristic of the men.

As for women, education, and to some extent wealth status, seem to have some impact on the age at which they start having sexual intercourse. Women who have gone for higher education have higher median age at first intercourse (21.4) than women with only secondary education (20.3) a difference of about 1 year. Women from the poorest households appear to have the earliest start of



sexual activity at a median age of 19.9 which is more than a year earlier than the median age among women from the richest households (21.3).

**Table 6.5.1 Median age at first intercourse: Women**

Median age at first sexual intercourse among women by five-year age groups, age 20-49 and age 25-49, according to background characteristics, Samoa 2014

Background characteristic	Age						Women	Women
	20-24	25-29	30-34	35-39	40-44	45-49	age 20-49	age 25-49
<b>Residence</b>								
Urban	a	20.9	20.6	20.0	20.6	20.6	a	20.6
Rural	a	20.5	20.5	20.5	20.5	20.2	a	20.4
<b>Region</b>								
Apia urban area	a	20.9	20.6	20.0	20.6	20.6	a	20.6
North west Upolu	a	20.7	20.6	20.7	20.8	20.4	a	20.7
Rest of Upolu	a	20.2	20.6	20.3	20.3	19.7	a	20.3
Savaii	a	20.4	20.2	20.3	20.2	20.3	a	20.3
<b>Education</b>								
No education	a	18.0	a	a	19.5	a	a	18.0
Primary or lower or special needs	a	17.9	20.3	18.0	18.0	20.0	19.4	19.3
Secondary	19.7	20.1	20.3	20.3	20.4	20.2	a	20.3
More than secondary	a	21.5	21.2	21.2	21.8	21.5	a	21.4
<b>Wealth quintile</b>								
Lowest	19.5	19.4	20.2	20.0	19.8	20.0	19.8	19.9
Second	a	20.2	20.4	19.4	20.6	20.2	a	20.2
Middle	19.9	20.7	20.3	20.6	20.4	19.9	a	20.4
Fourth	a	20.6	20.6	20.5	20.4	20.0	a	20.5
Highest	a	21.4	21.0	21.0	21.5	21.7	a	21.3
Total	a	20.6	20.5	20.4	20.5	20.3	a	20.5

a = Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group

**Table 6.5.2 Median age at first intercourse: Men**

Median age at first sexual intercourse among men by five-year age groups, age 20-54 and age 25-54, according to background characteristics, Samoa 2014

Background characteristic	Age							Men age 20-54	Men age 25-54
	20-24	25-29	30-34	35-39	40-44	45-49	50-54		
<b>Residence</b>									
Urban	18.9	19.4	19.6	19.0	18.4	18.6	20.8	19.2	19.3
Rural	19.5	19.7	19.2	19.6	20.1	19.8	19.6	19.6	19.6
<b>Region</b>									
Apia urban area	18.9	19.4	19.6	19.0	18.4	18.6	20.8	19.2	19.3
North west Upolu	19.6	19.6	19.4	20.0	20.5	20.1	20.3	19.8	19.9
Rest of Upolu	19.3	19.7	18.9	19.4	19.1	19.4	18.7	19.2	19.2
Savaii	19.1	19.9	19.1	18.9	20.2	19.5	19.6	19.4	19.5
<b>Education</b>									
No education	a	21.6	a	a	a	a	a	a	22.5
Primary or lower or special needs	a	19.6	18.5	19.5	20.1	20.1	18.7	19.7	19.6
Secondary	19.4	19.4	19.2	19.5	19.6	19.7	19.9	19.5	19.5
More than secondary	19.0	20.2	19.5	19.4	20.3	19.4	19.9	19.6	19.8
<b>Wealth quintile</b>									
Lowest	19.3	19.7	18.5	18.9	20.3	19.6	19.7	19.5	19.5
Second	19.6	19.7	19.4	20.2	19.8	20.0	19.3	19.7	19.7
Middle	19.0	19.5	19.1	19.7	19.1	19.6	19.6	19.3	19.4
Fourth	19.4	20.0	19.4	19.3	19.6	19.1	19.6	19.5	19.5
Highest	19.7	19.4	19.6	19.5	20.0	20.9	20.6	19.7	19.8
Total	19.4	19.6	19.3	19.5	19.8	19.7	19.8	19.5	19.6

a = Omitted because less than 50 percent of the men had intercourse for the first time before reaching the beginning of the age group

## 6.4 RECENT SEXUAL ACTIVITY

In the absence of contraception, the risk of pregnancy is related to the frequency of intercourse. Information on sexual activity, therefore, can be used to refine measures of exposure to pregnancy. Women and men were asked how long ago their last sexual activity occurred, to assess whether they had a sexual intercourse in the past four weeks. The results are shown in Tables 6.6.1 and 6.6.2 for women and men, respectively.

Table 6.6.1 shows that in the four weeks preceding the survey, 48 percent of women age 15-49 were sexually active, 15 percent were sexually active in the past 12 months but not in the past four weeks, and 10 percent had not had sex for more than one year. Another 26 percent of women had never had sexual intercourse. The proportion of women who were sexually active in the four weeks preceding the survey increases with age, but declines at age 45-49.

Teenagers and women who are not currently in a marital union, as well as women who used to be married, were less likely to be sexually active in the four weeks preceding the survey than older women and women who are currently married or living with a man. Among currently married women, the proportion that had recent sexual intercourse increases slightly with marital duration up to a peak of 82 percent among those married for 10-14 years. Women in urban areas were less likely to be sexually active over the past four weeks (46 percent) than their rural counterparts (49 percent). Among the regions, Rest of Upolu and Savaii regions have the highest proportion of women who were sexually active in the four weeks before the survey (53 percent) while the North West Upolu region has the lowest (44 percent). Women at primary or lower education are less likely to be sexually

active than the well educated women. Differences by wealth status are not large and show no clear pattern.

**Table 6.6.1 Recent sexual activity: Women**

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Samoa 2014

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the last 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15-19	5.7	5.8	3.5	0.6	84.5	100.0	1,062
20-24	38.9	18.3	13.5	1.1	28.2	100.0	829
25-29	59.4	19.5	11.8	1.3	7.9	100.0	728
30-34	69.8	17.2	8.2	0.7	4.2	100.0	591
35-39	72.4	14.5	9.5	1.5	2.2	100.0	551
40-44	71.7	15.7	9.3	0.8	2.4	100.0	577
45-49	61.4	16.8	16.6	2.3	2.7	100.0	467
<b>Marital status</b>							
Never married	2.7	8.8	15.0	0.9	72.6	100.0	1,715
Married or living together	78.8	17.5	2.2	1.2	0.2	100.0	2,874
Divorced/separated/widowed	7.2	23.7	67.4	1.4	0.5	100.0	216
<b>Marital duration<sup>2</sup></b>							
0-4 years	76.1	20.4	2.0	1.0	0.5	100.0	771
5-9 years	81.1	17.0	0.8	0.8	0.2	100.0	598
10-14 years	82.3	14.4	2.1	1.2	0.0	100.0	473
15-19 years	79.6	16.2	2.6	1.7	0.0	100.0	426
20-24 years	78.2	16.6	3.4	1.8	0.0	100.0	379
25+ years	74.5	19.8	4.3	1.4	0.0	100.0	227
<b>Residence</b>							
Urban	46.3	15.3	10.0	0.4	27.9	100.0	1,000
Rural	49.0	14.5	9.6	1.3	25.6	100.0	3,805
<b>Region</b>							
Apia urban area	46.3	15.3	10.0	0.4	27.9	100.0	1,000
North west Upolu	44.4	17.5	10.9	0.9	26.4	100.0	1,733
Rest of Upolu	52.9	11.5	9.5	1.7	24.4	100.0	1,099
Savaii	52.9	12.7	7.6	1.5	25.3	100.0	973
<b>Education</b>							
No education	*	*	*	*	*	100.0	15
Primary or lower or special needs	41.2	14.8	16.2	1.2	26.6	100.0	161
Secondary	49.5	14.1	8.8	1.1	26.5	100.0	3,654
More than secondary	46.1	16.9	11.9	1.0	24.0	100.0	975
<b>Wealth quintile</b>							
Lowest	52.3	16.4	8.1	1.2	22.0	100.0	903
Second	46.8	14.8	8.7	1.6	28.0	100.0	955
Middle	50.3	13.0	10.0	1.0	25.7	100.0	954
Fourth	47.4	14.9	10.1	1.0	26.6	100.0	987
Highest	45.8	14.4	11.4	0.7	27.6	100.0	1,006
Total	48.4	14.7	9.7	1.1	26.1	100.0	4,805

<sup>1</sup> Excludes women who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes women who are not currently married

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

Table 6.6.2 shows that more than four in ten of the men age 15-49 (48 percent) were sexually active in the four weeks preceding the survey, while 19 percent reported having sexual intercourse in the past year (but not within the past 4 weeks). Eleven percent had not been sexually active in the past year, and 21 percent had never had sex. As with women, sexual activity increases with age among men, with the highest level among men age 35 and above. Men in union were much more likely to be sexually active than those who were not. There was one percent difference in recent sexual activity between men in urban and rural areas (48 vs. 47 percent); however, there was substantial variation by region, from 44 percent in the Rest of Upolu to 52 percent in the Savaii region.

Recent sexual activity is lower among men with secondary education (46 percent) than other men, and men belonging to the middle wealth quintile have the highest (51 percent). Differences by wealth status are not large and show no clear pattern for men as well.

**Table 6.6.2 Recent sexual activity: Men**

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Samoa 2014

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the last 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15-19	8.6	10.6	7.0	0.5	73.3	100.0	348
20-24	33.5	30.1	14.2	1.3	21.0	100.0	298
25-29	54.0	25.7	13.5	1.5	5.4	100.0	229
30-34	70.9	16.0	9.9	0.0	3.2	100.0	211
35-39	74.8	14.1	6.7	1.5	2.9	100.0	144
40-44	73.0	12.7	10.3	1.8	2.3	100.0	179
45-49	64.3	18.1	12.5	3.3	1.9	100.0	166
<b>Marital status</b>							
Never married	18.7	22.0	16.0	0.9	42.4	100.0	819
Married or living together	81.2	14.5	2.5	1.8	0.0	100.0	718
Divorced/separated/widowed	(32.5)	(20.5)	(47.0)	(0.0)	(0.0)	100.0	38
<b>Marital duration<sup>2</sup></b>							
0-4 years	81.0	12.8	3.4	2.8	0.0	100.0	220
5-9 years	85.6	11.7	1.9	0.8	0.0	100.0	160
10-14 years	74.4	21.1	2.6	1.9	0.0	100.0	119
15-19 years	85.2	12.6	1.0	1.2	0.0	100.0	100
20-24 years	79.2	16.9	2.6	1.2	0.0	100.0	82
25+ years	(78.3)	(15.6)	(3.4)	(2.7)	(0.0)	100.0	36
<b>Residence</b>							
Urban	48.1	19.4	10.4	1.9	20.2	100.0	318
Rural	47.4	18.3	10.6	1.1	22.5	100.0	1,257
<b>Region</b>							
Apia urban area	48.1	19.4	10.4	1.9	20.2	100.0	318
North west Upolu	46.8	21.4	11.5	0.5	19.8	100.0	563
Rest of Upolu	43.6	17.0	11.2	2.0	26.3	100.0	357
Savaii	52.4	14.6	8.7	1.2	23.1	100.0	338
<b>Education</b>							
No education	*	*	*	*	*	100.0	8
Primary or lower or special needs	48.3	17.4	10.3	1.7	22.4	100.0	116
Secondary	46.0	17.7	9.9	1.1	25.2	100.0	1,169
More than secondary	54.3	22.6	13.4	1.6	8.0	100.0	282
<b>Wealth quintile</b>							
Lowest	45.4	18.2	11.0	1.0	24.4	100.0	293
Second	48.0	16.3	11.0	1.6	23.1	100.0	298

Middle	51.2	17.9	10.4	1.6	18.9	100.0	330
Fourth	47.5	21.0	8.9	1.0	21.6	100.0	356
Highest	45.1	18.9	12.0	1.1	22.9	100.0	300
Total 15-49	47.5	18.6	10.6	1.3	22.1	100.0	1,576
50-54	54.4	20.3	18.9	3.3	3.1	100.0	93
Total men 15-54	47.9	18.7	11.1	1.4	21.0	100.0	1,669

<sup>1</sup> Excludes men who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes men who are not currently married

Note: Numbers 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

## 6.5 AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea is the interval between the birth of a child and six weeks after birth. It is the period during which the woman becomes temporarily and involuntarily infecund following childbirth. Post-partum protection from conception can be prolonged by breastfeeding, which can lengthen the duration of amenorrhoea. Delaying the resumption of post-partum sexual relations can also prolong protection. The period of voluntary sexual inactivity after childbirth is referred to as post-partum abstinence. A woman is said to be insusceptible to the risk of pregnancy if she is either amenorrhoeic or abstaining from sexual intercourse following childbirth. Women who gave birth during the three years prior to the survey were asked about their breastfeeding practices, the duration of amenorrhoea, and post-partum sexual abstinence.

Table 6.7 shows the percentage of births in the three years preceding the survey for which mothers were postpartum amenorrhoeic, abstaining and insusceptible, by number of months since the birth of the child. Mean and median durations are also shown. In Samoa, the median duration of amenorrhoea is 0.6 month or just about 2 weeks. The mean, however, is 4.4 months which means that there are also women who are amenorrhoeic for a much longer period like 1 year or more.

The median duration of postpartum abstinence among Samoan women is 2.1 months, shorter than the median duration observed in the SDHS 2009 (2.4 months).

Table 6.7 Postpartum amenorrhoea, abstinence and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Samoa 2014

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible <sup>1</sup>	
< 2	41.6	72.1	82.8	87
2-3	33.9	39.7	56.3	133
4-5	22.5	25.8	43.0	111
6-7	15.8	14.2	27.1	100
8-9	7.9	19.8	22.7	100
10-11	7.5	17.9	23.3	93
12-13	9.3	11.0	19.3	109
14-15	11.3	16.7	25.6	124
16-17	4.5	6.9	11.4	130
18-19	7.3	10.4	16.7	96
20-21	3.8	12.6	15.5	103
22-23	3.6	3.7	7.2	117
24-25	6.2	5.4	10.8	125
26-27	5.6	10.5	15.3	126
28-29	2.8	10.5	12.4	105
30-31	4.4	9.4	12.1	114
32-33	3.8	4.9	7.7	103
34-35	0.9	5.6	6.5	107
Total	10.6	16.0	22.6	1,983
Median	0.6	2.1	3.7	na
Mean	4.4	6.3	8.7	na

Note: Estimates are based on status at the time of the survey.

na = Not applicable

<sup>1</sup> Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

The two factors of postpartum amenorrhoea and abstinence result in a median duration of insusceptibility of 3.7 months. In interpreting these figures, it must be noted that the mean values for these indicators tend to be considerably higher than the medians. This indicates a distribution of responses that deviates considerably from the normal distribution, that is, there are a considerable numbers of births for which relatively long durations of amenorrhea and abstinence were reported. For instance, at 10-11 months after giving birth, 8 percent of women are still amenorrhoeic and 20 percent are abstaining. By 34 to 35 months, the effect of post-partum amenorrhoea is almost completely gone (1 percent) and insusceptibility to pregnancy is low (7 percent).

Table 6.8 shows the median duration of amenorrhoea, post-partum abstinence, and postpartum insusceptibility by background characteristics. There are no indications that these factors are significantly related to the mother's background. Differentials are not strong; however, the period of post-partum insusceptibility is shortest among women in the region of Savaii as well as among women belonging to the fourth wealth quintile.

**Table 6.8 Median duration of amenorrhoea, postpartum abstinence and postpartum insusceptibility**

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Samoa 2014

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility <sup>1</sup>
<b>Mother's age</b>			
15-29	0.6	2.4	3.7
30-49	0.7	1.6	3.6
<b>Residence</b>			
Urban	0.6	2.2	3.7
Rural	0.7	2.1	3.6
<b>Region</b>			
Apia urban area	0.6	2.2	3.7
North west Upolu	1.4	2.8	4.2
Rest of Upolu	0.6	1.6	3.5
Savaii	0.5	1.5	2.3
<b>Education</b>			
No education	*	*	*
Primary or lower or special needs	2.5	4.9	6.1
Secondary	0.7	1.9	3.6
More than secondary	0.4	2.4	3.5
<b>Wealth quintile</b>			
Lowest	1.2	2.3	4.1
Second	0.7	2.0	3.8
Middle	0.6	0.8	4.5
Fourth	0.7	2.2	2.9
Highest	0.5	2.0	3.5
Total	0.6	2.1	3.7

Note: Medians are based on the status at the time of the survey (current status)

<sup>1</sup> Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

An asterisk indicate that a figure is based on fewer than 25 unweighted cases and has been suppressed

## 6.6 MENOPAUSE

Menopause marks the onset of infecundity and is another factor influencing the risk of pregnancy. In this report, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic, and have not had a menstrual period in the past six months.

Table 6.7 shows that, overall, 7 percent of women age 30-49 are menopausal. As expected, the proportion of menopausal women increases with age. Below age 40, the proportion who have menopause is less than 5 percent. By age 48, more than one fifth of the women have already reached the age at which the risks of pregnancy no longer exist.

**Table 6.10 Menopause**

Percentage of women age 30-49 who are menopausal, by age, Samoa 2014

Age	Percentage menopausa 1	Number of women
<b>Age</b>		
30-34	3.9	591
35-39	4.2	551
40-41	3.8	239
42-43	5.0	218
44-45	10.1	216
46-47	8.6	196
48-49	22.8	175
Total	6.6	2,186

<sup>1</sup> Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey



The subject of future reproductive preferences is of fundamental importance for population policy and family planning programmes. Particularly in Samoa, where attempts to institute a population policy have so far been unsuccessful and where couples' use of family planning has remained relatively low, it is crucial to gain insight into the fertility desires of the population and assess the potential demand for family planning. In the 2014 SDHS, women and men were asked specific questions about their desire to have another child, the length of time they would like to wait before having another child, and what they considered to be the ideal number of children. The questions were designed to ascertain individual fertility preferences. Based on these data, the current chapter discusses Samoan couples' desire to cease childbearing or to delay the next pregnancy and explores the extent to which contraceptive behaviour diverges from expressed fertility desires.

A woman's fertility preferences are subjective and may not necessarily predict her reproductive behaviour, because childbearing decisions are not made solely by the woman but are frequently affected by the attitudes of other family members, particularly the husband. Survey information on fertility preferences can also be influenced by the respondent's current family size. To ascertain their childbearing desires, SDHS respondents were first asked if they wanted to have additional children, after which several additional questions were asked. The responses to these additional questions ascertain the validity of the responses given to the first question. If a woman was pregnant at the time of the survey she was asked whether she wanted to have another child after the birth of the child she was carrying. Taking into account the way in which the preference variable is defined for pregnant women, a current pregnancy is treated as being equivalent to a living child. Women who have been sterilized are classified as wanting no more children.

## 7.1 DESIRE FOR MORE CHILDREN

Women's preferences concerning future childbearing serve as indicators of future fertility. However, sterilized women and women who state that they are infecund (declared infecund) have no impact on future fertility because their potential contribution to fertility has been curtailed. The data on fertility preferences also provide information on the potential need for contraceptive services for spacing and limiting births.

Table 7.1 shows fertility preferences among currently married women and currently married men by the number of living children at the time of the survey. The findings indicate that there is considerable desire among married Samoan women and men to control the timing and especially the number of births. In Samoa, men are more inclined than women towards postponement of childbearing, while women are more inclined than men to want no more children. Twelve percent of currently married women and 19 percent of currently married men would like to wait for two or more years for the next birth, while 47 percent of women and 37 percent of men do not want to have another child. Adding to these values 7 percent of currently married women and 1 percent of currently married men who are sterilized, about six in ten of currently married Samoan women (60 percent) and more than half of men (55 percent) want to delay or limit their next birth. The similar high proportions of women and men who desire to delay or limit the next birth convey a clear message to feed the population and family planning messages in Samoa.

Only 14 percent of women and 20 percent of men would like to have another child within the next two years. The remaining women and men are uncertain about their fertility desires or say they are unable to get pregnant (infecund).

**Table 7.1 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, Samoa 2014

Desire for children	Number of living children <sup>1</sup>							Total 15-49	50-54	Total 15-54
	0	1	2	3	4	5	6+			
<b>WOMEN<sup>1</sup></b>										
Have another soon <sup>2</sup>	52.6	32.2	16.0	9.1	4.8	3.1	1.6	13.9	na	na
Have another later <sup>3</sup>	7.3	27.4	21.1	13.0	8.1	4.1	1.6	12.0	na	na
Have another, undecided when	4.2	3.2	3.6	2.1	0.7	0.5	0.6	1.9	na	na
Undecided	26.5	17.9	20.6	18.1	15.7	12.4	8.7	16.3	na	na
Want no more	0.5	17.4	34.8	48.1	61.0	68.0	70.7	46.8	na	na
Sterilized <sup>4</sup>	0.0	0.7	2.2	8.1	7.9	10.8	15.4	7.1	na	na
Declared infecund	8.5	0.9	1.3	0.8	0.9	0.0	0.6	1.3	na	na
Missing	0.5	0.2	0.4	0.6	0.9	1.0	0.8	0.7	na	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na	na
Number	210	410	451	477	433	388	504	2,874	na	na
<b>MEN<sup>5</sup></b>										
Have another soon <sup>2</sup>	66.2	30.6	20.6	21.6	14.9	2.0	4.3	20.3	5.3	18.7
Have another later <sup>3</sup>	6.7	32.2	31.4	20.5	8.4	10.1	15.5	19.1	1.5	17.3
Have another, undecided when	4.7	7.2	3.0	3.8	3.7	2.0	0.0	3.4	1.2	3.1
Undecided	10.8	15.8	23.8	19.7	20.2	19.5	12.1	17.9	16.7	17.8
Want no more	4.0	13.2	20.5	31.9	48.1	62.5	66.2	36.6	68.8	39.9
Sterilized <sup>4</sup>	0.0	0.0	0.7	1.7	2.8	1.0	0.8	1.1	1.2	1.1
Declared infecund	3.0	0.0	0.0	0.0	0.0	2.8	1.0	0.8	4.2	1.1
Missing	4.6	0.9	0.0	0.9	1.8	0.0	0.0	0.9	1.2	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	62	104	128	110	102	93	118	718	81	798

na=not applicable

<sup>1</sup> The number of living children includes current pregnancy for women

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

<sup>4</sup> Includes both female and male sterilization

<sup>5</sup> The number of living children includes one additional child if respondent's wife is pregnant.

Fertility preferences are typically closely related to the number of children a couple already has. In many countries, the proportions of women and men wanting a child soon are high for those who do not yet have any children, and tapers off with increasing numbers of living children and that is also the case for Samoa, a relatively high proportion of childless women and men who are currently married want to have a child soon (53 percent of women and 66 percent of men). The majority of childless women also appear to want another child soon. After having experienced their first birth most Samoan women want to have another soon (32 percent) and most men (32 percent) want to have another child but after two or more years.

In comparison to the 2009 SDHS, the proportion of men remain higher than women towards the postponement of childbearing while women are still more inclined than men to want no more children. There has been a significant increase in the proportion of childless currently married women and men who want to have another child soon from the 2009 to 2014 SDHS. For childless currently married women it has been increased from 20 percent in 2009 to 53 percent, respectively in 2014 and for childless currently married men it has been increased from 21 to 66 percent, respectively. (MOH, 2010)

Table 7.2.1 shows the percentage of currently married women who want no more children; including women have been sterilized, by the number of living children and background

characteristics. Overall, 54 percent of currently married Samoan women want to limit childbearing. Nearly 1 of every 5 women (18 percent) who have exactly 1 living child expressed desire to have no more children. This proportion is expected to rise as the number of living children increases. Thus, table 7.2.1 also shows that more than half of the women with 3 living children (56 percent) and 86 percent of those with at least 6 said that they do not want to have more children. These numbers suggest that there is, in fact, a relatively demand for contraception among Samoan women of reproductive age.

In general, women in urban areas, irrespective of the number of living children they already have, are just as likely as rural women to want no more children, there are no big differences across Samoa's four regions in terms of women's desire to limit childbearing. However, the desire of currently married women to limit childbearing appears to be strongly related to their education. Women who have reached a level of secondary education are much more likely to say that they want to limit childbearing compared to women who have completed secondary or have attended higher education. This is generally true even when comparing women with the same number of living children.

The differential in desire of women to stop childbearing by wealth quintile also indicates that the desire generally decreases with an increase in wealth. Assuming that the riches quintile include most of the women with higher education, then the findings on desire to limit childbearing by quintile and education are consistent.

**Table 7.2.1 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, Samoa 2014

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	0.0	16.1	39.7	55.6	80.6	75.0	83.0	55.3
Rural	0.6	18.5	36.5	56.4	66.3	79.7	86.8	53.6
<b>Region</b>								
Apia urban area	0.0	16.1	39.7	55.6	80.6	75.0	83.0	55.3
North west Upolu	0.0	22.2	39.5	56.7	70.3	79.1	86.4	52.6
Rest of Upolu	2.3	14.6	30.0	61.4	60.2	78.4	85.9	55.4
Savaai	0.0	16.3	37.9	50.9	66.3	82.4	88.6	53.2
<b>Education</b>								
No education	-	0.0	-	-	100.0	100.0	-	49.7
Primary or lower or special needs	0.0	19.7	41.9	58.0	85.9	77.4	96.7	71.0
Secondary	0.0	19.8	37.2	56.6	68.9	78.6	85.5	55.4
More than secondary	2.0	13.2	36.0	54.9	67.0	79.7	84.3	44.9
<b>Wealth quintile</b>								
Lowest	0.0	16.5	37.4	60.5	72.7	77.2	86.8	59.8
Second	0.0	22.9	43.8	58.3	70.8	87.8	87.1	58.3
Middle	2.3	22.2	35.3	51.1	66.9	78.5	81.8	51.5
Fourth	0.0	10.2	31.4	59.9	72.1	70.1	92.6	52.5
Highest	0.0	17.5	39.1	52.9	61.4	84.3	78.5	46.7
Total	0.5	18.1	37.0	56.2	68.9	78.8	86.1	53.9

Note: Women who have been sterilized are considered to want no more children.

<sup>1</sup> The number of living children includes the current pregnancy.

Table 7.2.2 shows the percentage of currently married men, including men who have been sterilized who want no more children by the number of living children and background characteristics. In general, proportionately fewer currently married men age 15-49 (38 percent) compared to women (54 percent) expressed desire to have no more children. Childbearing being the woman's role, this finding is not surprising.

There is a large difference in the proportion of men who want no more children between urban (47 percent) and rural areas (36 percent). Based on the geographic region of residence, the data show those living in Rest of Upolu region (53 percent) has the highest proportion of currently married men age 15-49 who do not want to have more children whereas men in Savaii has the lowest proportion (27 percent).

The highest percentage of men who want no more children is found among those with primary or lower education<sup>1</sup> (47 percent) compared with 33-38 percent of men in higher educational categories. Looking at wealth, men in the lowest wealth quintile are somewhat more likely to want no more children (48 percent) when compared with men in the other wealth quintiles (33-38 percent).

<sup>1</sup> primary or lower education also include education for persons with disability

**Table 7.2.2 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, Samoa 2014

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	18.2	33.3	22.1	40.0	100.0	60.9	60.5	47.1
Rural	0.0	8.9	21.0	32.3	43.3	64.1	69.1	35.6
<b>Region</b>								
Apia urban area	18.2	33.3	22.1	40.0	100.0	60.9	60.5	47.1
North west Upolu	0.0	10.0	15.2	29.6	35.7	51.9	62.9	29.8
Rest of Upolu	0.0	13.0	38.7	52.9	61.9	83.4	82.1	52.7
Savaii	0.0	3.7	11.8	20.8	40.0	60.2	52.6	26.7
<b>Education</b>								
Primary or lower or special needs	0.0	22.1	15.6	43.3	39.8	71.1	75.1	47.3
Secondary	0.0	14.2	21.5	37.2	53.2	59.6	67.1	37.9
More than secondary	15.5	5.8	21.5	19.9	47.7	75.0	57.3	32.9
<b>Wealth quintile</b>								
Lowest	0.0	8.3	32.7	53.2	46.5	69.0	68.3	47.6
Second	0.0	19.1	16.2	21.1	41.1	67.2	76.8	35.7
Middle	0.0	8.0	22.1	22.1	48.1	52.4	71.9	33.3
Fourth	0.0	11.0	11.5	41.2	70.0	58.2	61.6	34.8
Highest	18.8	23.6	29.7	35.4	47.3	68.3	43.1	37.5
Total 15-49	4.0	13.2	21.2	33.6	50.9	63.5	67.1	37.7
50-54	0.0	56.9	86.5	85.0	62.2	73.3	74.3	69.9
Total men 15-54	3.8	15.9	24.5	37.1	52.2	64.8	68.5	40.9

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.

<sup>1</sup> The number of living children includes one additional child if respondent's wife is pregnant.

## 7.2 NEED AND DEMAND FOR FAMILY PLANNING

This section discusses the extent of the need for family planning in Samoa and the potential demand for contraception to space or limit childbearing. Currently married women who do not want any more children or who want to wait two or more years before having another child, but are not using contraception, are considered to have an unmet need for family planning. Menopausal and infecund women are excluded from the unmet need calculations. Women who are using a family planning method are said to have a met need for family planning. The total demand for family planning comprises women with unmet need and met need for family planning. The unmet need for family planning is a core indicator for the International Conference for Population Development (ICPD) Programme of Action<sup>2</sup> and one of the targets under MDG 5.<sup>3</sup>

Table 7.3.1 shows the need for family planning among currently married women. Overall, 35 percent of currently married Samoan women have an unmet need for family planning. The unmet need for limiting (18 percent) is greater than the unmet need for spacing (17 percent). Overall, about three in ten of currently married women are using a method of contraception (7 percent for spacing births and 20 percent for limiting births). The total demand for family planning among women is 62 percent (24 percent for spacing births and 38 percent for limiting births). Only 44 percent of the demand for family planning is currently being met.

The total demand for family planning increases sharply with age, to reach a peak of 70 percent for women age 35-39, after which it decreases slightly. However, even at young ages there is already considerable demand for family planning among Samoan women. The total demand for family planning is 64 percent for women in the 20-24 age group, of which only one-third (22 percent) is met.

The unmet need for family planning tends to decrease with age and it is highest for women age 15-19 (50 percent). It is also relatively high (42 percent) for women age 20-24. For women of younger ages the unmet need is mostly for spacing, while for older women the unmet need is increasingly for limiting of births.

The unmet need for family planning among currently married women is slightly higher for women in the rural areas (36 percent) compared to women in the urban areas (32 percent). Among the four Samoan regions, unmet need for family planning is slightly higher for women in the North West of Upolu (36 percent) than among women in other regions. Among women with more than secondary education unmet need is the least and this is because percentage of demand satisfied among these women is highest at 48 percent. This suggest that if the family planning programme were to better satisfy the demand of limiting birth of women, it should focus on the less educated women.

The differentials in unmet need according to wealth quintiles are somewhat less consistent and pronounced. However, findings show that women in the highest wealth quintile have the lowest level of unmet need (29 percent) than women in the other wealth quintiles (31-40 percent).

---

<sup>2</sup> <http://un.org/ecosodev/gevinfo/populatin/icpd.htm>

<sup>3</sup> <http://unstats.un.org/unsd/mdg/Host.aspx?Content=Indicator/OfficialList.htm>

Table 7.3.1 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 for the demand for contraception that is satisfied, by background characteristics, Samoa 2014

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	45.2	4.7	49.9	4.8	1.2	6.0	50.0	5.9	55.9	10.7	83
20-24	29.7	12.3	42.0	14.3	7.2	21.5	44.0	19.5	63.5	33.9	403
25-29	24.1	15.4	39.5	10.0	14.7	24.8	34.1	30.2	64.3	38.5	524
30-34	15.7	16.8	32.5	10.8	20.6	31.4	26.5	37.4	63.9	49.1	487
35-39	12.2	22.0	34.2	6.4	29.1	35.5	18.6	51.1	69.7	50.9	484
40-44	9.1	22.5	31.6	1.2	27.9	29.1	10.3	50.4	60.7	47.9	505
45-49	2.8	22.9	25.7	1.0	19.9	20.9	3.9	42.8	46.7	44.9	389
<b>Residence</b>											
Urban	18.4	13.5	31.9	6.2	26.2	32.5	24.6	39.7	64.4	50.5	535
Rural	16.1	19.4	35.5	7.5	18.2	25.7	23.6	37.6	61.2	41.9	2,339
<b>Region</b>											
Apia urban area	18.4	13.5	31.9	6.2	26.2	32.5	24.6	39.7	64.4	50.5	535
North west Upolu	16.4	20.0	36.4	6.7	15.7	22.4	23.1	35.7	58.8	38.1	998
Rest of Upolu	15.7	19.2	34.9	6.9	18.7	25.6	22.6	37.9	60.5	42.3	700
Savaii	16.1	18.7	34.8	9.4	21.5	30.8	25.5	40.1	65.6	47.0	640
<b>Education</b>											
No education	*	*	*	*	*	*	*	*	*	0.0	4
Primary or lower or special needs	8.6	24.5	33.1	1.0	21.7	22.7	9.6	46.1	55.8	40.7	92
Secondary	16.2	19.4	35.6	6.9	19.7	26.6	23.1	39.1	62.1	42.7	2,235
More than secondary	19.3	12.4	31.8	9.8	19.6	29.4	29.1	32.1	61.2	48.1	543
<b>Wealth quintile</b>											
Lowest	17.1	22.8	39.9	4.2	19.1	23.3	21.3	41.9	63.2	36.9	608
Second	16.2	22.0	38.2	7.8	17.5	25.3	24.0	39.5	63.5	39.9	568
Middle	17.1	18.8	35.9	8.7	16.0	24.7	25.8	34.8	60.6	40.8	570
Fourth	16.8	14.1	30.9	7.2	24.5	31.7	24.1	38.6	62.6	50.7	581
Highest	15.5	13.3	28.8	8.5	21.4	29.8	24.0	34.7	58.7	50.9	547
Total	16.5	18.3	34.8	7.2	19.7	26.9	23.8	38.0	61.8	43.6	2,874

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

<sup>1</sup> Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrheic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth

<sup>2</sup> Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrheic women who are not using family planning, whose last child was unwanted and who do not want any more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and who want no more

children

<sup>2</sup> 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

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

---

Table 7.3.2 shows the need and demand for family planning for all women and for women who are not currently married. Considering all women age 15-49, unmet need for family planning is 22 percent, half of which is for spacing births and the other half is if limiting births.

The unmet need of women who are not currently married shows a much lower with only 2 percent of them having an unmet need, much of which is for spacing or delaying births. About two in ten of all women are using a contraceptive method (5 percent for spacing births and 12 percent for limiting births). However for not currently married women only 1 percent is using a contraceptive and less than one percent is using contraceptive methods either for spacing or for limiting. The total demand for family planning among all women is 39 percent while 4 percent for not currently married women. The percentage of demand satisfied for all women is 43 percent compared to 36 percent for not currently married women.



**Table 7.3.2 Need and demand for family planning for women who are not currently married**

Percentage of all women and not 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, Samoa 2014

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	0.8	0.0	0.8	0.0	0.1	0.1	0.8	0.1	0.9	11.5	979
20-24	2.9	0.5	3.3	1.2	0.5	1.7	4.1	0.9	5.0	33.4	426
25-29	6.0	2.4	8.4	0.0	0.0	0.0	6.0	2.4	8.4	0.0	204
30-34	5.9	1.0	7.0	2.0	2.9	4.9	7.9	4.0	11.9	41.3	103
35-39	0.0	1.4	1.4	1.4	1.4	2.9	1.4	2.9	4.3	66.7	67
40-44	0.0	0.0	0.0	0.0	5.5	5.5	0.0	5.5	5.5	100.0	73
45-49	0.0	0.0	0.0	0.0	9.3	9.3	0.0	9.3	9.3	100.0	78
<b>Residence</b>											
Urban	3.5	0.2	3.7	0.9	1.2	2.1	4.4	1.4	5.8	36.0	465
Rural	1.5	0.5	2.0	0.3	0.9	1.1	1.8	1.4	3.2	36.0	1,466
<b>Region</b>											
Apia urban area	3.5	0.2	3.7	0.9	1.2	2.1	4.4	1.4	5.8	36.0	465
North west Upolu	1.9	0.8	2.7	0.5	0.9	1.5	2.4	1.7	4.1	35.2	734
Rest of Upolu	1.3	0.5	1.8	0.0	1.0	1.0	1.3	1.5	2.8	36.4	399
Savaii	0.9	0.0	0.9	0.0	0.6	0.6	0.9	0.6	1.4	40.0	332
<b>Education</b>											
No education	*	*	*	*	*	*	*	*	*	-	11
Primary or lower or special needs	0.0	0.0	0.0	0.0	1.4	1.4	0.0	1.4	1.4	100.0	69
Secondary	1.3	0.5	1.8	0.4	1.0	1.4	1.7	1.5	3.2	43.0	1,419
More than secondary	4.5	0.5	4.9	0.7	0.7	1.4	5.2	1.2	6.4	22.4	432
<b>Wealth quintile</b>											
Lowest	2.1	1.3	3.4	0.0	0.3	0.3	2.1	1.7	3.7	9.1	295
Second	1.3	0.0	1.3	0.3	1.0	1.3	1.5	1.0	2.5	49.6	387
Middle	1.8	0.8	2.6	1.1	0.5	1.6	2.9	1.3	4.2	37.5	384
Fourth	2.8	0.0	2.8	0.0	1.5	1.5	2.8	1.5	4.4	34.9	406
Highest	1.8	0.4	2.2	0.7	1.1	1.8	2.5	1.5	4.0	44.6	459
<b>Total</b>	2.0	0.5	2.4	0.4	0.9	1.4	2.4	1.4	3.8	36.0	1,931

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

<sup>1</sup> Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrheic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth

Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrheic women who are not using family planning, whose last child was unwanted and who do not want any more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and who want no more children

<sup>2</sup> 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

---

### 7.3 IDEAL FAMILY SIZE

Respondents were asked to consider a hypothetical situation independent of their current family size and to report the number of children they would choose to have. Information on what women and men believe to be the ideal family size was elicited through two questions. Respondents who had no living children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked, "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?"

There is usually a high positive correlation observed between actual and ideal number of children. The reasons are two-fold. First, to the extent that women implement their preferences, those who want larger families tend to achieve larger families. Second, women may adjust their ideal number of children upwards as their actual number of children increases. It is also possible that women with larger families have larger ideal family sizes because of attitudes they acquired 20 or 30 years ago. Nevertheless, even though these questions are based on hypothetical situations, they give an idea of the total number of children women who have not started childbearing will have in the future, while among older women and high parity women this information provides a measure of the level of unwanted fertility.

The questions on ideal number of children were asked of all women and men in the survey sample. Ninety percent of women and 94 percent of men gave a numerical answer. Non-numerical answers are usually to the extent of "it's up to God's will." These responses are not included in the calculation of means in Tables 7.4 and 7.5.

**Table 7.4 Ideal number of 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 number of living children, Samoa 2014

Ideal number of children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>WOMEN<sup>1</sup></b>								
0	42.2	5.3	1.7	2.7	2.2	1.7	2.3	16.8
1	6.4	10.7	4.0	2.6	1.5	1.7	1.3	4.8
2	19.0	22.1	22.5	11.6	8.4	8.5	5.5	15.5
3	8.0	17.9	13.8	15.4	6.6	9.5	6.9	10.6
4	7.8	17.4	24.2	21.1	30.3	15.2	12.5	15.7
5	3.9	10.5	15.1	17.4	14.9	20.1	11.5	10.8
6+	3.1	5.6	11.3	18.5	26.7	32.8	48.2	15.9
Non-numeric responses	9.6	10.3	7.5	10.6	9.2	10.6	11.8	9.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,711	601	546	535	467	411	533	4,805
<b>Mean ideal number children for:<sup>2</sup></b>								
All	1.6	3.0	3.7	4.2	4.7	5.2	5.9	3.4
Number	1,548	539	505	478	424	368	470	4,332
Currently married	2.5	3.3	3.8	4.3	4.8	5.2	5.9	4.4
Number	201	382	423	424	390	347	441	2,608
<b>MEN<sup>3</sup></b>								
0	43.6	2.1	0.7	1.8	1.7	1.9	3.4	24.6
1	2.0	7.3	2.2	0.8	0.0	1.0	1.0	2.1
2	11.5	10.3	10.7	8.3	2.1	2.2	0.0	9.0
3	11.3	22.2	11.9	13.6	4.3	5.4	4.9	11.1
4	9.7	25.7	25.2	16.8	31.2	5.8	12.2	14.4
5	7.4	13.3	23.2	22.8	19.5	30.7	13.2	13.2
6+	8.0	13.1	20.9	24.9	33.4	48.0	62.1	19.2
Non-numeric responses	6.5	6.0	5.2	11.0	7.9	5.0	3.1	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	856	132	143	120	108	97	120	1,576
<b>Mean ideal number children for:<sup>2</sup></b>								
All	2.1	3.8	4.6	4.8	5.2	5.9	6.9	3.5
Number	800	124	136	107	99	92	116	1,474
Currently married	3.8	3.9	4.6	4.9	5.4	6.0	6.9	5.1
Number	60	99	122	98	94	88	114	675
<b>Mean ideal number children for men 15-54:</b>								
All	2.1	3.8	4.6	4.8	5.3	6.0	7.0	3.6
Number	803.6	128.4	142.5	115.3	111.3	105.3	139.8	1,557.0
Currently married	3.7	3.9	4.5	4.9	5.5	6.0	7.0	5.2
Number	63.3	104.0	128.4	106.6	105.7	101.2	137.9	747.4

<sup>1</sup> The number of living children includes current pregnancy for women

<sup>2</sup> Means are calculated excluding respondents who gave non-numeric responses.

<sup>3</sup> The number of living children includes one additional child if respondent's wife is pregnant.

The mean ideal number of children for all women age 15-49 is 3.4. It is important to note that this number is significantly lower than the observed TFR for Samoan women, which is 5.1 children per woman. This means that if women were to follow what they consider as ideal family size and had undeterred access to effective contraceptive methods, and then the TFR in Samoa would be considerably lower than the prevailing level.

The mean ideal number of children increases with the number of living children. Among all women, the ideal number of children ranges from 1.6 for those with no children to 5.9 for those with six or more children.

As expected, the proportions of women and men whose ideal number of children matches their current parity increase with increasing parities. For example, 48 percent of women and 62 percent of men with six or more children indicate that their ideal family size is the same as its current size. This reflects the tendency of the respondents to rationalize the number of children they already have. The exception to this pattern is for women (and, to a much lesser extent, men) who have no living children at the time of survey. Forty two percent of these women indicate that their ideal number of children is zero. This finding is most likely a reflection of the responses of younger and unmarried women who still do not have children at the time of the survey and have not yet shaped their ideas about ideal family size in general.

What is interesting to note is that among women who have no more than 1 child at the time of the survey and who gave a specific number as their ideal number of children, 2 was mentioned by the largest percentage of women (19 percent and 22 percent among those with 0 and 1 living child, respectively). Among women who currently have 2 or 3 living children, 4 is the ideal number of children for the largest percentage of women (24 percent and 21 percent, respectively).

Irrespective of the number of living children that men and women have, the ideal number of children for men age 15-49 is similar to that of the women. As with women also, the mean ideal number of children among men increases with the number of children and ranges from 2.1 for those with no children to 6.9 for those with six or more children. However, controlling for the number of living children that they already have, the data actually suggest that men are more pro-natalist based on what they consider as ideal number of children. In other words, the ideal number of children mentioned by men is generally higher than women's for the same number of living children. For example, the mean ideal numbers of children for men and women with exactly 5 living children are 5.9 and 5.2 respectively. Twenty five percent of men with 1 or 2 living children reported that their ideal family size is 4 children. Among those with 5 living children, nearly half (48 percent) said their ideal is at least 6 children.

Table 7.5 shows the mean ideal number of children for all women by background characteristics. Ideal family size increases with age, from 1.4 children among women age 15-19 to 5.0 children among women age 45-49. This pattern reflects to a very large extent the tendency to rationalize self achieved parities. The ideal number of children for women in urban areas, in general, and in Apia urban area, in particular, is not significantly lower than that for women in rural areas or in other rural regions. The differences are marginal; however, it must be noted that the ideal number of children for women in North west Upolu is closer to that of Apia Urban Area than to the two other rural regions, that is, Rest of Upolu and Savaii. The last two mentioned regions have significantly higher ideal number of children.

The differentials according to educational attainment are consistent, and show a steady decline in ideal number of children as educational attainment increases, from 3.5 children for women with primary or less education or special needs to 3.1 children for women with vocational or higher than secondary education. Similar differentials exist in the mean ideal number of children by wealth, although somewhat less regular. The mean ideal number of children for women in the lowest wealth quintile is 3.8, while for women in the highest quintile it is 3.0 children per woman.

#### 7.4 FERTILITY PLANNING

Women were asked a series of questions about all their children born in the five years preceding the survey, as well as any current pregnancy, to determine whether the pregnancy was planned, mistimed, or unwanted. The answers to these questions provide insight into the degree to which couples are able to control their fertility. In interpreting the data, however, it is important to remember that women may rationalize mistimed or unwanted pregnancies, declaring them as wanted after the children are born.

Table 7.6 shows the percent distribution of births (including current pregnancies) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth. The results show that 86 percent of births in the five years preceding the survey were planned (wanted then) while 13 percent were unplanned 9 percent were mistimed (wanted later) and 5 percent were not wanted.

The proportion of planned births remains nearly constant at 86-87 percent for births of the first through third order, and then drops to 85 percent for higher order births. The proportion of

Table 7.5 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Samoa 2014

Background characteristic	Mean	Number of women <sup>1</sup>
<b>Age</b>		
15-19	1.4	936
20-24	2.7	757
25-29	3.5	672
30-34	4.1	540
35-39	4.5	500
40-44	4.7	516
45-49	5.0	410
<b>Residence</b>		
Urban	3.2	951
Rural	3.4	3,381
<b>Region</b>		
Apia urban area	3.2	951
North west Upolu	3.1	1,524
Rest of Upolu	3.7	967
Savaii	3.8	889
<b>Education</b>		
No education	*	15
Primary or lower or special needs	3.5	136
Secondary	3.5	3,275
More than secondary	3.1	907
<b>Wealth quintile</b>		
Lowest	3.8	797
Second	3.4	861
Middle	3.4	841
Fourth	3.4	908
Highest	3.0	925
Total	3.4	4,332

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

<sup>1</sup> Number of women who gave a numeric response

planned births (wanted then) is lowest for births to mothers age less than 20 (81 percent) and for those age 35-39 (84 percent).

The proportion of unplanned births is highest for women age 15-19, amongst whom one in four births was either mistimed (13percent) or unwanted altogether (5 percent). Also women of age 35-39 experience relatively high rates of unplanned births, with 15 percent of births mistimed (7 percent) or unwanted (8 percent), indicating a high level of desire to terminate childbearing in this age group.

**Table 7.6 Fertility planning status**

Percent distribution of births to women 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, Samoa 2014

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
<b>Birth order</b>						
1	85.9	9.0	3.9	1.1	100.0	804
2	86.3	9.6	3.3	0.7	100.0	707
3	87.3	7.4	3.5	1.9	100.0	595
4+	85.0	8.1	5.8	1.0	100.0	1,400
<b>Mother's age at birth</b>						
<20	81.3	13.1	4.9	0.7	100.0	281
20-24	86.3	8.2	3.7	1.8	100.0	1,044
25-29	85.8	9.3	3.9	1.1	100.0	855
30-34	87.2	8.6	3.9	0.4	100.0	693
35-39	84.3	6.8	7.8	1.2	100.0	433
40-44	89.5	4.2	5.8	0.5	100.0	186
45-49	*	*	*	*	100.0	15
Total	85.9	8.5	4.5	1.1	100.0	3,507

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

Table 7.7 provides information on total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics. Unwanted births are defined as births that exceed the number considered ideal. Women who did not report a numeric ideal family size were assumed to want all their births. The total wanted fertility rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births were prevented. To the extent that women are unwilling to report an ideal family size that is lower than their actual family size, the wanted fertility rate may be an overestimate. A comparison of the total wanted fertility and total fertility rate suggests the potential demographic impact of the elimination of unwanted births.

**Table 7.7 Wanted fertility rates**

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Samoa 2014

Background characteristic	Total wanted fertility rates	Total fertility rate
<b>Residence</b>		
Urban	3.0	4.4
Rural	4.2	5.2
<b>Region</b>		
Apia urban area	3.0	4.4
North west Upolu	3.9	4.9
Rest of Upolu	4.2	5.5
Savaii	4.7	5.4
<b>Education</b>		
No education	1.2	1.2
Primary or lower or special needs	3.8	5.1
Secondary	4.2	5.4
More than secondary	3.3	4.0
<b>Wealth quintile</b>		
Lowest	5.1	6.7
Second	4.2	5.3
Middle	4.3	5.4
Fourth	3.5	4.3
Highest	2.9	3.7
Total	4.0	5.1

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 4.2.

As expected, the wanted fertility rates for Samoan women are considerably lower than the TFRs. Overall; Samoan women want 4.0 children, which coincide fairly well with the mean of the stated ideal numbers of children (3.4 children per woman). The wanted fertility for women in urban areas is lower than that for women in rural areas (4.2 versus 3.0 children). When examining the total wanted fertility rates by region, it appears that the urban-rural difference is mainly due to the relatively high wanted fertility rate among women in the Savaii region (4.7 children).

The differentials in wanted fertility according to educational attainment show unexpected patterns similar to the ones observed in Chapter 4 on fertility. In Samoa, women with no education have the lowest total wanted fertility rate (1.2 children) and TFR (1.2 children) when compared with women with higher education, a pattern that is uncommon for most countries.

The differentials in the total wanted fertility rates by wealth quintile follow the same pattern as the TFR; they tend to decrease with an increase in wealth the gap between wanted fertility rates and the TFR declines with increasing wealth. The highest gap between TFR and the wanted fertility is observed among women in the lowest wealth quintile (1.6 children), while the lowest for women in the fourth and highest wealth quintile (0.8 children). This means that women belonging to wealthier families are more able to realize their desired family size than the less wealthy women.

This chapter presents estimates on levels, trends, and differentials in neonatal, post-neonatal, infant, child, and under-five mortality in Samoa. The information used to measure these childhood mortality rates was collected from the birth history section of the Women's Questionnaire. Women of reproductive age (15-49) were asked a series of questions including, the number of biological sons and daughters living with them, the number living elsewhere, and the number who have died. In addition, for each live birth, women were asked to provide information on the sex, date of birth, whether the birth was single or multiple, and the survival status of the child. Current age was collected for living children, and age at death was collected for dead children.

Infant and child mortality rates are basic indicators of a country's socio-economic situation and quality of life, as well as specific measures of health status. Measures of childhood mortality are also useful in population projections and monitoring and evaluating population and health programmes and policies. Characteristics of childhood mortality such as age patterns and socio-economic and demographic differentials are used to highlight factors that have positive or negative impacts on child survival. Analysis of mortality measures is also useful in identifying priority health programmes for continuous efforts in improving child survival in Samoa.

## 8.1 DEFINITION, DATA QUALITY, AND METHODOLOGY

Childhood mortality estimates in DHS surveys measure the risk of dying from birth through age five. The rates of childhood mortality presented in this chapter are defined as follows:

**Perinatal mortality:** The number of fetal losses of 28 weeks gestation or more plus neonatal deaths in the first 7 days after birth, per 1,000 live births in a given year.

**Neonatal mortality (NN):** deaths during the first 28 days of life, per 1,000 live births.

**Post-neonatal mortality (PNN):** the arithmetic difference between infant and neonatal mortality; deaths to those aged 28 to 364 days, per 1,000 live births.

**Infant mortality ( ${}_1q_0$ ):** the probability of dying between birth and exact age one

**Child mortality ( ${}_4q_1$ ):** the probability of dying between exact age one and five

**Under-five mortality ( ${}_5q_0$ ):** the probability of dying between birth and exact age five.

All rates are expressed per 1,000 live births, except child mortality, which is expressed per 1,000 children surviving to age 12 months.

The reliability of mortality estimates depends on the sampling variability of the estimates and on non-sampling errors. Sampling errors for the 2014 SDHS are presented in Appendix B. With regard to sampling errors concerning infant and child mortality, it must be noted that the number of reported infant and child deaths from sample surveys in small populations like Samoa is usually small resulting in very broad confidence intervals around mortality estimates.

In addition, non-sampling errors arise from problems associated with the quality of data collection and include the completeness with which births and deaths are reported and recorded. The most common problems are misreporting of age at death, misreporting of dates of birth, and event underreporting of both the birth and death of a child. The possible occurrence of these data problems in the 2014 SDHS is discussed with reference to the data quality tables in Appendix C.



A typical problem with survey data is the misreporting of infant deaths that occur in the late post-neonatal period, as well as deaths at 12 months or one year of age (digit preference in the reporting of age). Such misreporting results in underestimation of the infant mortality rates and overestimation of child mortality rates. Table C.6 in Appendix C displays digit preference in reported deaths at 12 months or one year. This heaping took place despite the care taken in the 2014 SDHS to minimise errors of this type by requiring that age at death be recorded in days if the death took place within one month of birth, in months if the child died within 24 months of birth, and in years if the child died between age two and five.

Underreporting is usually more severe for deaths that occur early in infancy. Omission of deaths may also be more common among women who have had several children or in cases where the death took place a long time ago. 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 to infant deaths. It is hypothesised that omission will be more prevalent among children who died immediately after birth than among those who lived longer, and that omission will be more serious for events that took place in the distant past than for those in the recent past. Appendix table C.5 shows that the percentage of early neonatal deaths ranges from 50 percent for the period 15-19 years preceding the survey to 76 percent for the period 0-4 before the survey. However, the total number of neonatal deaths is quite small to draw meaningful conclusions about the trend of selective omissions over the preceding 20 years. In addition to recall errors for the more distant retrospective periods, there are structural reasons for limiting mortality estimation to recent periods, preferably to the periods 0-4, 5-9, and 10-14 years before the survey. In fact, except for the first period (0-4 years), the others are slightly biased estimates because they are based on the child mortality experiences of women age 15-44 and 15-39, respectively, instead of women age 15-49 as in the period 0-4 years preceding the survey. Therefore, estimating mortality for periods more than 10-15 years before the survey is not advisable.

## **8.2 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY**

Caution should be taken in interpreting the mortality information presented in this report because it uses information from the birth history in the woman's questionnaire to construct the rates. It is known that in some communities, women are reluctant to discuss their dead children, which could lead to underestimation of the childhood mortality rates. The rates are also based on a relatively small sample and consequently are subject to wide confidence intervals.

Table 8.1.1 presents mortality rates for cohorts of children born in three five-year periods preceding the survey. The level of under-five mortality in Samoa was 20 deaths per 1,000 births during the most recent five-year period before the survey, implying that at least 1 in every 50 children born in Samoa during the period died before reaching their fifth birthday. The infant mortality rate recorded in the survey for the same period was 15 deaths per 1,000 live births.

**Table 8.1.1 Early childhood mortality rates**

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Samoa 2014

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
0-4	7	7	15	5	20
5-9	7	7	14	6	20
10-14	2	6	9	5	14

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

**Table 8.1.2 Estimates of child mortality rates for Samoa from various sources**

Neonatal, post-neonatal, infant, child, and under-five mortality rates from various sources

Source of data	Approximate time period of estimated rates	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
SDHS 2014	2009-2014	7	7	15	5	20
Census 2011	2006-2011	-	-	16	4	20
SDHS 2009	2004-2009	5	5	9	6	15

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

Table 8.1.2 shows that the Population and Housing Census in 2011 recorded an infant mortality rate of 16 per 1,000 live births in the 12 months prior to the census date<sup>6</sup> 17 for male births and 14 for female births (Samoa Bureau of Statistics, 2012). This indicates that the estimate of IMR based on 2014 SDHS data is relatively in line with the census 2011 results. The 2009 SDHS estimated the infant mortality rate at 9 per 1,000 live births; however, the number of cases on which that estimate was based was too small to provide a reliable estimate.

Given the consistency in the reported infant and child mortality rates from the 2014 SDHS and the census 2011, we can say with some confidence that the infant mortality rate in Samoa is quite low, averaging at 15 infant deaths per 1000 live births during the period 2009 to 2014.

### 8.3 SOCIO-ECONOMIC DIFFERENTIALS IN MORTALITY

Child survival is closely related to socio-economic and demographic characteristics of mothers and children. Table 8.2 shows differentials in childhood mortality by four socio-economic variables: residence, region, mother's education, and household wealth status (quintile). To ensure a sufficient number of cases for statistical reliability, mortality rates were calculated for a ten-year period.

Mortality levels in rural areas are consistently higher than those in urban areas. In the ten-year period before the survey, infant mortality in rural areas was 16 deaths per 1,000 live births, compared with 7 deaths per 1,000 live births in urban areas. The under-five mortality rate during the same period was 22 deaths per 1,000 live births in rural areas and 13 deaths per 1,000 live births in urban areas.

Differences in mortality by region also exist. The infant mortality rate varies from 7 deaths per 1,000 live births in Apia urban area to 25 deaths per 1,000 live births in the Rest of Upolu region.

Differentials in under-five mortality show a similar pattern. For example, under-five mortality is 13 deaths per 1,000 live births in Apia urban area to a high of 31 deaths per 1,000 live births in the Rest of Upolu region.

The education of the mother is strongly associated with the status of child survival. Table 8.2 shows that children under-five who were born to mothers with primary or lower education suffer the highest mortality (41 per 1,000) and that mortality is reduced by half as mothers attained higher education. However the number of mothers with primary or less education is very small; therefore, caution is needed when interpreting these estimates.

In terms of wealth, children in households in the fourth and highest wealth quintile have the lowest mortality rates at all stages of under-five mortality relative to children in households in the lower wealth quintiles. It indicates a positive impact of increasing wealth on child survival in Samoa.

**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 characteristic, Samoa 2014

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
<b>Residence</b>					
Urban	4	3	7	6	13
Rural	8	8	16	5	22
<b>Region</b>					
Apia urban area	4	3	7	6	13
North west Upolu	3	5	9	7	15
Rest of Upolu	14	11	25	6	31
Savaii	8	10	18	3	20
<b>Mother's education</b>					
Primary	5	20	25	17	41
Secondary	8	6	15	4	19
More than secondary	2	9	11	9	19
<b>Wealth quintile</b>					
Lowest	8	12	20	5	25
Second	7	6	14	7	21
Middle	9	7	16	7	23
Fourth	4	4	9	3	12
Highest	7	6	12	5	18

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

## 8.4 DEMOGRAPHIC CHARACTERISTICS AND CHILD MORTALITY

Studies have shown that a number of demographic factors are strongly associated with the survival chances of young children. These factors include sex of child, age of mother at birth, birth order, length of preceding birth interval, and size of child at birth. Table 8.3 shows the relationship between childhood mortality and these demographic variables. Again, for all variables except birth size, mortality estimates are calculated for the ten-year period preceding the survey to reduce sampling variability. Mortality rates by birth size are for the five-year period preceding the survey because information on birth size was collected only for children born in the past five years.

Childhood mortality is slightly higher for males than females (Table 8.3). Infant mortality rates for male and female children are 15 and 14 deaths per 1,000 live births, respectively. Similar

pattern was also reflected in the census 2011 as shown in Table 8.1.2. The excess mortality among male children is most likely due to their higher biological risk during the first month of life.

The 2014 SDHS findings indicate that births to oldest mothers age 40-49 are at an elevated risk of dying. Infant mortality rate is 42 deaths per 1,000 live births for children of mothers age 40-49 compared with 19 deaths per 1,000 live births for children of younger mothers age 20-39.

The results also show that mothers with fourth and higher birth order have an elevated risk of having their babies die early compared to lower birth order mothers. The 2014 SDHS confirms that neonatal, infant, child and under-five mortality is lowest for first, second and third order births.

Mortality among children is negatively associated with the length of the previous birth interval. This is particularly the case when the birth interval is at least two years. The 2014 SDHS indicate that this pattern holds for neonatal, post-neonatal, infant, child and under-five mortality rates. For example, infant mortality among children born less than two years after a previous birth is 18 deaths per 1,000 live births compared with 10 deaths per 1,000 live births among children born after an interval of four years or more.

**Table 8.3 Early childhood mortality rates by demographic characteristics**

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Samoa 2014

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
<b>Child's sex</b>					
Male	7	8	15	6	20
Female	7	7	14	5	20
<b>Mother's age at birth</b>					
<20	2	9	12	0	12
20-29	5	9	13	6	19
30-39	10	3	14	6	19
40-49	21	15	37	5	42
<b>Birth order</b>					
1	5	7	12	2	13
2-3	4	8	11	7	18
4-6	10	7	17	8	25
7+	17	8	25	0	25
<b>Previous birth interval<sup>2</sup></b>					
<2 years	8	9	18	7	24
2 years	10	10	20	8	27
3 years	5	6	11	6	16
4+ years	6	4	10	6	16
<b>Birth size<sup>3</sup></b>					
Small/very small	11	26	37	-	-
Average or larger	6	5	11	-	-
DK/Missing	27	14	41	-	-

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

<sup>2</sup> Excludes first-order births

<sup>3</sup> Rates for the five-year period before the survey

## 8.5 PERINATAL MORTALITY

The perinatal mortality rate serves as a good indicator of the quality of maternal and newborn health care services in a country, especially at the point of child delivery. It reflects the level of utilisation of health services and the ability of women to cope with the demands of childbirth to deliver a healthy baby. Women in the 2014 SDHS were asked 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 among live births that occurred 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 that occurred within the first week of life is highly susceptible to omission and misreporting. However, retrospective surveys such as the 2014 SDHS generally provide more representative and accurate perinatal death rates than the vital registration system.

Table 8.4 shows that out of the 3,201 reported pregnancies of at least seven months gestation, 9 were stillbirths and 16 were early neonatal deaths, yielding an overall perinatal mortality rate of 8 per 1,000 pregnancies of 7 months or more duration. Perinatal mortality is highest among mothers age 40-49 (31 per 1,000 pregnancies), when the previous pregnancy interval is above 27 months (16 per 1,000 pregnancies), among women in rural areas (8 per 1,000 pregnancies) in Savaii region (11 per 1,000 pregnancies), among mothers with primary education (22 per 1,000 pregnancies), and surprisingly for those in the highest wealth quintile (12 per 1,000 pregnancies).

**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, Samoa 2014

Background characteristic	Number of stillbirths <sup>1</sup>	Number of early neonatal deaths <sup>2</sup>	Perinatal mortality rate <sup>3</sup>	Number of pregnancies of 7+ months duration
<b>Mother's age at birth</b>				
<20	0	0	0	252
20-29	2	6	5	1,733
30-39	4	7	11	1,026
40-49	3	3	31	191
<b>Previous pregnancy interval in months<sup>4</sup></b>				
First pregnancy	0	4	5	731
<15	0	1	3	345
15-26	2	4	7	904
27-38	5	3	16	487
39+	2	4	8	734
<b>Residence</b>				
Urban	3	0	5	600
Rural	6	16	8	2,601
<b>Region</b>				
Apia urban area	3	0	5	600
North west Upolu	2	5	6	1,106
Rest of Upolu	1	6	9	815
Savaii	3	5	11	680
<b>Mother's education</b>				
No education	0	0	0	3
Primary	2	0	22	96

Secondary	6	16	9	2,472
More than secondary	1	0	2	631
<b>Wealth quintile</b>				
Lowest	2	4	8	762
Second	1	6	10	670
Middle	0	3	4	662
Fourth	2	1	5	613
Highest	4	2	12	496
Total	9	16	8	3,201

<sup>1</sup> Stillbirths are fetal deaths in pregnancies lasting seven or more months.

<sup>2</sup> Early neonatal deaths are deaths at age 0-6 days among live-born children.

<sup>3</sup> 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.

<sup>4</sup> Categories correspond to birth intervals of <24 mos., 24-35 mos., 36-47 mos., and 48+ mos.

## 8.6 HIGH-RISK FERTILITY BEHAVIOUR

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. These characteristics are of particular importance because many health problems are easily avoidable at a relatively low cost. Infants and children have an elevated risk of dying if their mothers are too old (over 35 years old), if they are born after too short a birth interval (less than at least 24 months), and if they are of high birth order (has four or more children). Although first births are commonly associated with higher mortality risk, they are not included in the high-risk category because the risks associated with first births are unavoidable.

Table 8.5 shows the percent distribution of children born in the five years preceding the survey and the percent distribution of currently married women, by risk factors. About one in five (19 percent) births in Samoa is not in any high-risk category. Among those who are at risk, 21 percent of births are in an unavoidable risk category (first-order births between ages 18 and 34 years), 34 percent are in a single high-risk category, while 26 percent of births are in a multiple high-risk category.

In Samoa, 3 percent of births occur to mothers age 35 or older, 15 percent are born less than 24 months after a previous birth, and 14 percent are born to mothers who have had three or more children. About one in eight births (12 percent) occur to mothers age 35 or older and with three or more children.

The second column of Table 8.5 shows that the risk of dying for a child who falls in any avoidable high-risk category is double (2.3 times) that of a child not in any high-risk category. The risk of dying is considerably higher for births to mothers older than 34 years, with a birth interval of less than 24 months and a birth order of higher than 3. Risk ratio among these births is more than 4 times (4.4) higher than that of births which are not in any high risk category.

The final column of Table 8.5 shows the distribution of currently married women who have the potential for having a high-risk birth, by category of risk. The potential of currently married women for having a birth in a single high-risk category is 29 percent and in a multiple high-risk category is 44 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, Samoa 2014

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women <sup>1</sup>
	Percentage of births	Risk ratio	
<b>Not in any high risk category</b>	19.1	1.00	19.7
<b>Unavoidable risk category</b>			
First order births between ages 18 and 34 years	21.0	2.19	7.1
<b>Single high-risk category</b>			
Mother's age <18	1.7	0.00	0.1
Mother's age >34	2.7	1.55	9.0
Birth interval <24 months	15.2	2.27	8.8
Birth order >3	13.9	1.89	11.0
Subtotal	33.5	1.94	28.8
<b>Multiple high-risk category</b>			
Age <18 & birth interval <24 months <sup>2</sup>	0.2	0.00	0.0
Age >34 & birth interval <24 months	0.4	0.00	0.5
Age >34 & birth order >3	11.7	2.97	30.2
Age >34 & birth interval <24 months & birth order >3	3.4	4.41	5.0
Birth interval <24 months & birth order >3	10.7	2.23	8.7
Subtotal	26.4	2.79	44.4
In any avoidable high-risk category	59.9	2.32	73.2
Total	100.0	na	100.0
Number of births/women	3,192	na	2,874

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.

na = Not applicable

<sup>1</sup> 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 3 or higher.

<sup>2</sup> Includes the category age <18 and birth order >3

a Includes sterilized women

The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. This chapter presents findings on several areas related to maternal health—antenatal, delivery, and postnatal care—as well as problems in accessing care. These findings are important for designing appropriate strategies and interventions to improve maternal and newborn health care services.

The safe motherhood program in Samoa consists of combined efforts of the Ministry of Health (MOH), the National Health Service (NHS), non-governmental organizations (NGOs), public and private health practitioners, and traditional birth attendants (TBAs) to ensure high quality and standard of care during pregnancy and delivery. One of the main roles of the Ministry of Health is to monitor and check that protocols and standards of maternal health care are maintained and periodically reviewed. The MOH promotes and supports continuing professional training and education of health providers, as well as collection and analysis of health system data that enable constant monitoring of the quality of health services (MOH, 2008b).

## 9.1 ANTENATAL CARE

### 9.1.1 Antenatal Care Coverage

The major objective of antenatal care is to identify and treat problems during pregnancy such as anaemia and infections. It is during an antenatal care visit that screening for complications and advice on a range of issues including birth preparedness, place of delivery, and referral of mothers with complications occur. Information on antenatal care is of great value in identifying subgroups of women who do not use such services and is useful in planning improvements in the services. The antenatal care findings from the 2014 Samoa Demographic and Health Survey (SDHS) provide information on the type of service provider, the number of antenatal care visits, the stage of pregnancy at the time of the first visit, and the services and information provided during antenatal care, including whether tetanus toxoid was received.

Table 9.1 presents the percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by type of antenatal care provider consulted during the pregnancy for the most recent birth and by background characteristics. If a woman received antenatal care from more than one provider, the provider with the highest qualifications was recorded.

Overall, 93 percent of women who had a live birth in the five years preceding the survey received antenatal care from a trained health provider (doctor, nurse, midwife, or a nurse aide) for the pregnancy of the most recent birth. This percentage is 96 percent when ANC received by a traditional birth attendant (TBA) is included.<sup>1</sup> Coverage is almost uniformly high among mothers regardless of the various background characteristics. The majority of women (57 percent) saw a doctor for antenatal care at least once during their most recent pregnancy. Thirty four percent of mothers receive antenatal care from a nurse or a midwife, and 5 percent from a nurse aide or a traditional birth attendant. Overall, 3 percent of pregnant women did not see anyone for prenatal care during their most recent pregnancy in the past five years.

---

<sup>1</sup>The Ministry of Health of Samoa provides training to registered traditional birth attendants. The Ministry of Health 2006 Act (MOH, 2008b) mandates the Ministry to regulate and monitor services provided by TBAs to ensure quality of services.



**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, Samoa 2014

Background characteristic	Doctor	Nurse/ midwife	Enrolled nurse	Traditional birth attendant	Other	No one	Missing	Total	Percentage receiving antenatal care from a skilled provider <sup>1</sup>	Number of women
<b>Mother's age at birth</b>										
<20	54.8	38.3	1.3	3.4	0.0	2.1	0.0	100.0	94.5	144
20-34	57.0	35.1	1.8	2.6	0.1	2.9	0.3	100.0	94.0	1,419
35-49	59.1	30.0	2.0	3.7	0.0	5.0	0.2	100.0	91.1	452
<b>Birth order</b>										
1	60.1	35.1	1.4	1.2	0.2	1.7	0.2	100.0	96.7	416
2-3	56.5	35.2	1.9	2.9	0.0	3.3	0.1	100.0	93.7	716
4-5	57.3	33.3	1.7	3.5	0.2	3.5	0.6	100.0	92.3	533
6+	55.5	32.5	2.3	4.3	0.0	5.1	0.3	100.0	90.3	349
<b>Residence</b>										
Urban	54.8	42.6	0.6	0.0	0.0	2.0	0.0	100.0	98.0	369
Rural	57.9	32.3	2.1	3.6	0.1	3.6	0.4	100.0	92.3	1,645
<b>Region</b>										
Apia urban area	54.8	42.6	0.6	0.0	0.0	2.0	0.0	100.0	98.0	369
North west Upolu	56.5	35.9	0.3	2.2	0.3	4.8	0.0	100.0	92.7	707
Rest of Upolu	61.7	28.2	3.0	4.6	0.0	1.6	0.8	100.0	93.0	497
Savaai	55.8	31.2	4.0	4.6	0.0	3.9	0.4	100.0	91.0	441
<b>Mother's education</b>										
No education	67.2	32.8	0.0	0.0	0.0	0.0	0.0	100.0	100.0	3
Primary	39.3	43.8	1.7	5.0	0.0	10.2	0.0	100.0	84.8	58
Secondary	56.5	34.4	1.9	3.6	0.1	3.3	0.3	100.0	92.8	1,545
More than secondary	62.7	32.2	1.7	0.2	0.2	2.4	0.5	100.0	96.6	409
<b>Wealth quintile</b>										
Lowest	54.2	32.7	2.2	5.7	0.0	5.2	0.0	100.0	89.1	453
Second	51.4	38.1	2.4	3.6	0.0	3.6	1.0	100.0	91.8	411
Middle	57.6	32.8	1.9	3.0	0.2	4.0	0.5	100.0	92.3	419
Fourth	61.7	33.4	1.6	0.7	0.2	2.3	0.0	100.0	96.7	392
Highest	63.1	34.2	0.9	0.9	0.0	0.9	0.0	100.0	98.2	340
Total	57.3	34.2	1.8	2.9	0.1	3.3	0.3	100.0	93.3	2,014

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

<sup>1</sup> Skilled provider includes doctor, nurse/midwife and enrolled nurse

Women age 35 and older are slightly less likely (95percent) to receive antenatal care from a skilled provider, including a TBA than younger women (97to 98percent).The percentage of pregnant women in Samoa who receive ANC from a skilled health professional, including a TBA, decreases

with the birth order, from 98 percent for first-order births to 95percent for sixth- or higher-order births.

A higher proportion of women in the urban area (98 percent) use theantenatal care services by skilled health professionals than the proportion of women in the rural areas (92 percent). In addition to professional health professionals, 4 percent of rural women also receive antenatal care services from traditional birth attendants. Small differences exist among regions in the rural areas (North West Upolu, Rest of Upolu and Savaii).

According to the survey results, the use of antenatal care services is strongly related to women's educational level. Ninety-seven percent of mothers with at least secondary education receive antenatal care services from a health professional or TBA, compared with 90percent of mothers with lowereducation. There is also a positive relationship between professional antenatal care coverage and wealth quintile, with women in the highest wealth quintile being more likely to receive antenatal care from a health professional or aTBA than those in the lowest wealth quintile (99and 95percent, respectively).

### 9.1.2 Number and Timing of Antenatal Care Visits

Antenatal care is more beneficial in preventing pregnancy complications when it is sought early in the pregnancy and is continued through to delivery. Under normal circumstances, the World Health Organization (WHO) recommends that a woman without complications have at least four prenatal care visits, the first of which should take place during the first trimester. Table 9.2 presents information on prenatal care visits including the number of visits and the timing of the first visit.

In Samoa, about seven in ten (73percent) pregnant women who had a live birth in the five years preceding the survey had four or more antenatal care visits for the most recent live birth, as recommended by the WHO. About two in ten (19percent) pregnant women had 2-3 visits, while 2 percent had only one ANC visit. Overall, only 3percent of women had no ANC visits at all during their most recent pregnancy in the last five years.

The survey results show that women in Samoa receive antenatal care services late during their pregnancy. Only 12 percent of mothers obtain ANC in the first trimester, as recommended, while the majority (78percent) make their first visit between the fourth and the seventh month. Six percent of women have their first antenatal care visit in their eighth month of pregnancy or later.

The differences in antenatal care coverage between women in urban and rural areas are small. However, urban women typically receive antenatal care earlier than rural women; 17

**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, Samoa 2014

Number and timing of ANC visits	Residence		
	Urban	Rural	Total
<b>Number of ANC visits</b>			
None	2.0	3.6	3.3
1	2.7	2.2	2.3
2-3	19.9	18.6	18.8
4+	73.0	72.8	72.9
Don't know/missing	2.3	2.8	2.7
Total	100.0	100.0	100.0
<b>Number of months pregnant at time of first ANC visit</b>			
No antenatal care	2.0	3.6	3.3
<4	16.9	11.0	12.1
4-5	33.3	40.5	39.2
6-7	39.5	38.0	38.3
8+	7.9	5.2	5.7
Don't know/missing	0.3	1.7	1.4
Total	100.0	100.0	100.0
Number of women	369	1,645	2,014
Median months pregnant at first visit (for those with ANC)	5.9	5.8	5.9
Number of women with ANC	361	1,580	1,941

percent of urban women saw a provider for prenatal care in the first trimester compared with 11 percent of rural women.

### **9.1.3 Components of Antenatal Care**

Describing the content of antenatal care is essential for assessing the quality of antenatal care services. Pregnancy complications are a primary source of maternal and child morbidity and mortality. Therefore, ensuring that pregnant women receive information on the signs of complications and testing them for complications should be routinely included in all antenatal care visits. To help assess antenatal care services, respondents were asked whether they had been advised of possible pregnancy complications or whether they had received certain screening tests during at least one of the prenatal visits. Caution should be used in considering this information on the components of antenatal care because it is dependent on pregnant women's recall of events during antenatal care that may have taken place a number of years before the interview. Nevertheless, the results are useful in providing insights into the content of antenatal care.

Table 9.3 shows the percentage of women with a live birth in the five years preceding the survey who took iron tablets and drugs for intestinal parasites during the pregnancy for the most recent birth, and among women who received ANC, the percentage who received specific antenatal services, according to background characteristics.

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, Samoa 2014

Background characteristic	Among women with a live birth in the last 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 last five years, the percentage with selected services:					Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the last five years	Informed of signs of pregnancy complications	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	
<b>Mother's age at birth</b>									
<20	68.9	2.2	144	9.8	97.2	97.9	97.2	97.2	141
20-34	65.3	1.3	1,419	6.7	97.4	97.4	96.6	96.8	1,372
35-49	62.7	2.2	452	7.0	97.0	97.0	95.8	96.3	428
<b>Birth order</b>									
1	70.7	1.7	416	7.9	98.3	98.8	98.1	98.1	408
2-3	62.5	1.4	716	6.2	97.7	97.7	97.0	97.2	691
4-5	64.9	1.8	533	7.1	96.7	96.7	95.9	95.9	512
6+	63.4	1.4	349	7.3	95.8	95.8	94.3	95.5	330
<b>Residence</b>									
Urban	69.0	1.2	369	8.6	100.0	99.7	98.2	98.8	361
Rural	64.1	1.6	1,645	6.6	96.6	96.8	96.1	96.3	1,580
<b>Region</b>									
Apia urban area	69.0	1.2	369	8.6	100.0	99.7	98.2	98.8	361
North west									
Upolu	66.4	3.0	707	6.5	96.8	97.2	96.2	96.8	673
Rest of Upolu	66.3	0.8	497	8.3	95.7	95.7	94.8	94.8	485
Savaii	57.8	0.4	441	4.8	97.5	97.5	97.3	97.0	422
<b>Mother's education</b>									
No education	*	*	3	*	*	*	*	*	3
Primary	59.5	5.0	58	3.7	92.5	94.4	94.4	94.4	52
Secondary	64.7	1.6	1,545	6.7	96.8	96.8	95.9	96.3	1,490
More than secondary	66.4	1.0	409	8.4	99.5	99.7	98.7	98.7	396
<b>Wealth quintile</b>									
Lowest	64.1	2.3	453	5.2	96.1	96.3	95.4	95.9	429
Second	63.7	1.4	411	6.4	95.5	95.7	94.5	94.5	392
Middle	64.6	0.9	419	6.4	97.1	97.3	96.8	97.3	400
Fourth	65.4	0.7	392	9.1	99.0	98.7	97.9	97.9	383
Highest	67.6	2.4	340	8.2	99.1	99.1	98.2	98.5	337
Total	65.0	1.6	2,014	7.0	97.3	97.4	96.5	96.7	1,941

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

The data show that 65 percent of women with a live birth in the preceding five years took iron tablets for their most recent pregnancy, but only 2percent took intestinal parasite drugs. The percentage of women who took iron and intestinal parasite (de-worming) drugs during their most recent pregnancy decreases with age and birth order. For example, 69percent of women less than 20 years old took iron tablets for their most recent pregnancy compared with 63percent of women 35-49. Similarly, the percentage of pregnant women who took iron tablets decreases from 71percent for first-order births to 63 percent for sixth or higher-order births.

Variations by urban-rural residence show that urban women are more likely to take iron tablets (69percent) than rural women (64 percent). Slight variations also exist by region, education and wealth quintile for iron supplementation and intestinal parasite drugs. For instance, women in the Savaii region (58percent), those with primary or less education (60percent), and women in the lowest wealth quintile (64percent) are somewhat less likely than other women to have taken iron supplements during their most recent pregnancy. On the other hand, women in the Apia urban region (69percent), those with some secondary or higher education (65to 66 percent), and women in the highest wealth quintile (68percent) are the most likely to receive iron supplementation during their pregnancy.

The proportion of women who undergo basic tests during pregnancy is nearly universal throughout Samoa: 97percent of women who gave birth in the five years preceding the survey reported that, for the most recent birth, they were weighed and had their blood pressure measured, 97 percent had a blood sample taken and 96percent had their urine tested.

On the other hand, only 7 percent of these women were informed of the signs of pregnancy complications. The proportion of women who received information about pregnancy complications decreases slightly with age and birth order. The likelihood of pregnant women receiving information about pregnancy complication signs slightly varies by urban-rural residence, but regional differences are fairly notable.

Compared with data from the 2009 SDHS, there have been significant improvements in antenatal care services. More mothers receive the minimum prescribed services for antenatal care during the more recent period. Exception is in the area of counselling which has dramatically declined; the percentage of women who were informed of pregnancy complications declined from 27 percent in 2009 to only 7 percent in 2014. This indicates that this aspect of antenatal care requires review and intervention if maternal health care is to be further improved.

#### **9.1.4 Tetanus Immunisation**

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries are conducted at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) immunization is given to pregnant women to prevent neonatal tetanus. If a woman has received no previous TT injections, for full protection a pregnant woman needs two doses of TT during pregnancy. However, if a woman was immunized before she became pregnant, she may require one or no TT injections during pregnancy, depending on the number of injections she has ever received and the timing of the last injection. For a woman to have lifetime protection, a total of five doses are required. The 2014SDHS collected data on whether or not women received at least two TT injections and whether or not the pregnancy was protected against neonatal tetanus for the women's most recent live birth in the five years preceding the survey.

Table 9.4 shows that only one in four women (24percent) in Samoa receive two or more tetanus injections during pregnancy, while 30 percent of births are protected against neonatal tetanus. There is slight variation in tetanus toxoid coverage by age at birth and urban-rural residence. First-order births (34 percent) are somewhat more likely to be protected against tetanus than fourth or higher order births (27percent).The proportion of births that are protected against neonatal tetanus is higher in the North West Upolu region (37 percent) compared with 20 to 32of births in other regions.

Births to women with primary education are least likely to be protected against neonatal tetanus (19 percent) compared with 30percent of births to women with secondary and higher education. Births to women in the lowest and the highest wealth quintiles are slightly more likely to be protected against tetanus (31 percent and 33 percent, respectively) than births to women in the other three quintiles (26 to 30 percent) suggesting that there is no clear relationship between the likelihood of births being protected against neonatal tetanus and wealth status of their mothers.

**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 injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Samoa 2014

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus <sup>1</sup>	Number of mothers
<b>Mother's age at birth</b>			
<20	32.8	34.8	144
20-34	23.9	30.4	1,419
35-49	19.4	26.1	452
<b>Birth order</b>			
1	30.5	34.3	416
2-3	23.3	30.7	716
4-5	20.9	26.6	533
6+	19.5	27.0	349
<b>Residence</b>			
Urban	21.6	31.8	369
Rural	23.9	29.3	1,645
<b>Region</b>			
Apia urban area	21.6	31.8	369
North west Upolu	30.7	36.5	707
Rest of Upolu	21.4	27.2	497
Savaii	15.9	19.9	441
<b>Mother's education</b>			
No education	*	*	3
Primary	15.2	18.6	58
Secondary	23.9	29.9	1,545
More than secondary	22.4	30.0	409
<b>Wealth quintile</b>			
Lowest	26.4	31.4	453
Second	22.3	28.6	411
Middle	20.1	26.1	419
Fourth	23.3	29.8	392
Highest	25.6	33.3	340
Total	23.5	29.7	2,014

Note: An asterisk indicates that a figure is below 25 unweighted cases and has been suppressed

<sup>1</sup> Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth.

## 9.2 DELIVERY CARE

Increasing the number of babies delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic

conditions during delivery can reduce the risks of complications and infections that can cause morbidity and mortality to either the mother or the baby.

### 9.2.1 Place of Delivery

Table 9.5 presents the percent distribution of live births in the five years preceding the 2014 SDHS survey by place of delivery, according to background characteristics.

**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, Samoa 2014

Background characteristic	Health facility					Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector	Home	Others	Missing			
<b>Mother's age at birth</b>								
<20	85.6	0.0	13.2	0.8	0.4	100.0	85.6	252
20-34	82.2	1.2	15.4	0.2	1.1	100.0	83.4	2,359
35-49	72.6	1.5	25.1	0.2	0.7	100.0	74.1	581
<b>Birth order</b>								
1	89.2	1.1	8.0	0.3	1.5	100.0	90.3	739
2-3	80.5	1.7	16.9	0.2	0.8	100.0	82.1	1,187
4-5	79.0	0.5	19.3	0.2	0.9	100.0	79.6	784
6+	71.4	0.8	27.2	0.2	0.4	100.0	72.2	483
<b>Residence</b>								
Urban	93.7	2.9	2.9	0.0	0.5	100.0	96.6	597
Rural	77.8	0.7	20.2	0.3	1.0	100.0	78.5	2,596
<b>Region</b>								
Apia urban area	93.7	2.9	2.9	0.0	0.5	100.0	96.6	597
North west Upolu	82.7	0.7	15.6	0.2	0.8	100.0	83.4	1,104
Rest of Upolu	76.2	1.1	20.0	0.4	2.2	100.0	77.4	814
Savaii	71.7	0.3	27.8	0.3	0.0	100.0	72.0	677
<b>Mother's education</b>								
No education	*	*	*	*	*	100.0	*	3
Primary	65.3	1.0	32.5	1.1	0.0	100.0	66.4	93
Secondary	79.1	0.7	19.2	0.2	0.9	100.0	79.8	2,466
More than secondary	89.6	2.9	5.9	0.3	1.3	100.0	92.5	630
<b>Antenatal care visits<sup>1</sup></b>								
None	21.1	0.0	77.4	0.0	1.5	100.0	21.1	67
1-3	81.9	1.2	16.4	0.2	0.2	100.0	83.1	425
4+	86.0	1.0	12.7	0.3	0.1	100.0	87.0	1,468
Don't know/missing	52.5	3.8	36.4	1.8	5.5	100.0	56.3	54
<b>Wealth quintile</b>								
Lowest	70.8	0.3	28.3	0.0	0.6	100.0	71.0	760
Second	77.5	0.3	20.7	0.1	1.4	100.0	77.8	669
Middle	81.2	0.8	16.2	0.6	1.2	100.0	82.0	662
Fourth	88.8	1.7	9.0	0.0	0.5	100.0	90.5	610
Highest	90.0	3.4	5.2	0.4	1.0	100.0	93.4	492
Total	80.8	1.1	16.9	0.2	0.9	100.0	81.9	3,192

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

<sup>1</sup> Includes only the most recent birth in the five years preceding the survey

The data show that the majority of births in Samoa (82 percent) are delivered in a health facility, mostly public sector facilities (81 percent). Seventeen percent of births are delivered at home. Delivery at a health facility is somewhat more common for births to mothers under age 35 (83 to 86 percent), first-order births (90 percent), and for births to mothers who obtained antenatal care one or more times (83 to 87 percent). The percentage of births delivered at a health facility is significantly higher in urban areas (97 percent) than in rural areas (79 percent). The proportion of births delivered in a health facility varies by region, from 97 percent of births in the Apia urban area to only 72 percent of births in the Savaii region. There is also a strong association between mother's education and place of delivery; 93 percent of births to mothers with higher than secondary education are delivered in a health facility compared with 66 percent of births to mothers with primary or less education. The association between place of delivery and wealth quintile is also strong; the proportion of births delivered in a health facility ranges from 71 percent in the lowest wealth quintile to 93 percent in the highest quintile.

### 9.2.2 Assistance at Delivery

In addition to place of birth, assistance during childbirth is also an important variable that influences the birth outcome and the health of the mother and the infant. Assistance by a skilled health provider during delivery can greatly reduce the likelihood of sepsis and other complications of delivery. In addition to skilled health providers, there is a strong cultural system in Samoa where childbirth assistance is provided by the community members, mainly by traditional birth attendants (TBAs). Recognizing the important role of the TBAs during pregnancy and delivery, the Samoan Ministry of Health has made efforts to retain and encourage such role by providing training to registered TBAs. Additionally, the Ministry of Health 2006 Act mandates the MOH to regulate and monitor services provided by nurses, midwives and TBAs, in order to ensure quality midwifery and TBA services in Samoa (MOH, 2008b).

Table 9.6 shows the percent distribution of live births in the five years preceding the survey by person providing assistance, according to background characteristics. The data show that virtually all births (97 percent) in Samoa are delivered with the assistance of a trained health professional (doctor, nurse/midwife, nurse aide) or a traditional birth attendant, with little or no variation by background characteristics.

Table 9.6 also shows that 83 percent of births in Samoa are delivered with the help of a skilled health provider, such as a doctor, nurse/midwife, or nurse aide; close to half (49 percent) of deliveries are assisted by a doctor, one-third (33 percent) by a nurse/midwife, and less than 1 percent by a nurse aide. Overall, one in six deliveries (16 percent) is assisted by a TBA. Less than 1 percent of all births are delivered without any type of assistance at all.

There are some variations in the percentage of births assisted by a skilled health provider, excluding the TBAs. Births to mothers younger than 35 years (84 to 86 percent), and first-order births (91 percent) are more likely to be assisted by a skilled health provider than other types of birth attendants. Almost all births (99 percent) that occur in health facilities are assisted by trained providers compared with about one in twenty (6 percent) of births delivered elsewhere. Births in urban areas, as well as in the Apia urban area and North West Upolu regions are far more likely than other births to be assisted by a skilled health provider at delivery. The percentage of births attended by a skilled health provider increases significantly with mother's education from 72 percent of births to mothers with primary or less education to 93 percent of births to mothers with higher than secondary education. The same pattern is observed for wealth; the percentage of births to mothers in the lowest wealth quintile is 72 percent compared with 94 percent of births to mothers in the highest wealth quintile. However, all these variations disappear when the delivery assistance by TBAs is taken into account.



Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider and percentage delivered by caesarean-section, according to background characteristics, Samoa 2014

Background characteristic	Person providing assistance during delivery								Percentage delivered by a skilled provider <sup>1</sup>	Percentage delivered by C-section	Number of births
	Doctor	Nurse/ midwife	Enrolled nurse	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total			
<b>Mother's age at birth</b>											
<20	54.0	30.7	1.7	12.4	0.4	0.4	0.4	100.0	86.4	5.2	252
20-34	48.1	35.2	0.6	14.3	0.4	0.2	1.2	100.0	83.9	3.8	2,359
35-49	48.1	26.4	0.3	23.5	0.9	0.2	0.7	100.0	74.8	7.6	581
<b>Birth order</b>											
1	54.4	35.7	0.8	7.0	0.5	0.3	1.2	100.0	91.0	5.9	739
2-3	47.8	33.9	0.9	15.9	0.3	0.2	1.0	100.0	82.6	4.2	1,187
4-5	47.1	32.9	0.3	17.8	0.6	0.2	1.2	100.0	80.2	4.0	784
6+	43.9	28.6	0.2	25.9	0.8	0.2	0.4	100.0	72.6	4.8	483
<b>Place of delivery</b>											
Health facility	58.7	39.9	0.8	0.0	0.3	0.2	0.1	100.0	99.4	5.7	2,614
Elsewhere	2.9	2.9	0.0	92.2	1.6	0.2	0.2	100.0	5.8	0.0	548
Missing	0.0	3.7	0.0	0.0	0.0	3.3	93.0	100.0	3.7	0.0	30
<b>Residence</b>											
Urban	44.6	51.0	1.3	1.8	0.4	0.2	0.7	100.0	96.9	8.9	597
Rural	49.5	29.2	0.5	19.1	0.5	0.2	1.1	100.0	79.1	3.7	2,596
<b>Region</b>											
Apia urban area	44.6	51.0	1.3	1.8	0.4	0.2	0.7	100.0	96.9	8.9	597
North west Upolu	49.4	34.4	0.3	14.1	0.5	0.3	1.0	100.0	84.1	2.5	1,104
Rest of Upolu	51.2	26.0	0.9	19.2	0.5	0.2	2.1	100.0	78.0	3.4	814
Savaii	47.5	24.5	0.4	26.9	0.6	0.1	0.0	100.0	72.4	5.8	677
<b>Mother's education</b>											
No education	*	*	*	*	*	*	*	100.0	*	*	3
Primary	27.6	44.1	0.0	28.4	0.0	0.0	0.0	100.0	71.6	2.1	93
Secondary	48.6	31.3	0.5	18.0	0.6	0.2	1.0	100.0	80.3	4.1	2,466
More than secondary	51.9	39.3	1.4	5.4	0.2	0.5	1.3	100.0	92.7	7.0	630
<b>Wealth quintile</b>											
Lowest	43.7	27.2	0.8	26.3	1.0	0.1	0.8	100.0	71.7	2.7	760
Second	45.7	31.2	0.4	20.7	0.3	0.4	1.2	100.0	77.3	4.5	669
Middle	50.0	32.8	0.0	15.1	0.6	0.0	1.5	100.0	82.8	4.1	662
Fourth	55.2	35.4	1.0	7.6	0.3	0.0	0.5	100.0	91.6	6.0	610
Highest	49.8	43.4	1.1	4.2	0.0	0.6	1.0	100.0	94.2	6.8	492
Total	48.6	33.3	0.6	15.8	0.5	0.2	1.0	100.0	82.5	4.6	3,192

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Skilled provider includes doctor, nurse/midwife and enrolled nurse.

Comparison between the results of the 2014 and 2009 SDHS indicates that there has been a slight increase in births assisted by skilled health providers from 81 in 2009 to 83 percent to 2014 while the proportion of births assisted by traditional birth attendants remains almost at the same level of 16 percent.

### 9.2.3 Complications of Delivery

Access to caesarean section operations is a measure of access to emergency care for childbirth complications. The global estimate of a 5 to 15 percent access to caesarean sections is considered adequate in any given population.

Table 9.6 presents data on the prevalence of births by caesarean section (C-section). In Samoa, caesarean section deliveries are available to all, and they are performed at the 2 main country's hospitals (TTM in Apia urban region and MT2 in Savaii region). Overall, 5 percent of all births in the 5 years preceding the survey are delivered by C-section. This represents a marked improvement compared to the corresponding percentage estimated in the 2009 survey, which was 13 percent. Births to women 35 years or older (8 percent), first-order births (6 percent), births delivered at a health facility (6 percent), those in urban areas (9 percent), births to women with more than secondary education (7 percent), and births to the wealthiest women (7 percent) are more likely than other births to be delivered by a C-section.

## 9.3 POSTNATAL CARE

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Thus, postnatal care is important for both the mother and the child to treat possible complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. It is recommended that all women receive a check on their health within two days of delivery. The Samoa Ministry of Health recommends that women with an uncomplicated delivery should have their first postnatal check-up within the first six weeks after birth.

To assess the extent of postnatal care utilization, women who were interviewed in the 2014 SDHS were asked about their most recent birth in the five years preceding the survey, specifically, whether they received a health check-up after the delivery, the timing of the first check-up, and the type of health provider performing the postnatal check-up. This information is presented by background characteristics in Tables 9.7 and 9.8.

### 9.3.1 Timing of First Postnatal Check-up

Table 9.7 shows that postnatal coverage is relatively low in Samoa. Data show that four in ten (43 percent) mothers receive postnatal care within the first 4 hours after delivery, about one in six (14 percent) receive postnatal care 4 to 23 hours after delivery, and less than one in ten (6 percent) receive it 1 to 2 days after delivery. Overall, 63 percent of mothers in Samoa receive postnatal check-up within the recommended 48 hours after delivery.

Almost three in ten mothers (33 percent) do not receive any postnatal care within 41 days after delivery, which marks almost the end of the 6-week postnatal period.

Younger mothers less than age 20 (58 percent) and those delivering their sixth live birth (61 percent) are less likely than other mothers to receive postnatal care services within the first two days after delivery. Geographically, there is significant difference in the percentage of mothers who receive postnatal care within the first two days after delivery by urban-rural residence. Getting timely postnatal care ranges from a high of 78 percent of mothers in the Apia urban region to 58 percent in the North West of Upolu and Savaii regions.

Mothers' education is related to having more timely postnatal care. Seventy percent of mothers with higher than secondary education receive postnatal care within two days of delivery compared with 41 percent of mothers with primary or less education. There are also significant differences by wealth quintile; 74 percent of women in the highest wealth quintile receive postnatal care within two days after delivery compared with 59 percent of those in the lowest wealth quintile.

Overall, 33 percent of mothers do not receive any postnatal check-up within the 6-weeks prescribed period. It is higher than the corresponding percentage estimated in the 2009 SDHS (29 percent).

**Table 9.7 Timing of first postnatal checkup**

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, according to background characteristics, Samoa 2014

Background characteristic	Timing after delivery of mother's first postnatal checkup					No postnatal checkup <sup>1</sup>	Total	Number of women
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/missing			
<b>Mother's age at birth</b>								
<20	34.1	14.6	9.2	1.4	2.8	37.9	100.0	144
20-34	43.8	13.8	6.2	1.2	2.5	32.5	100.0	1,419
35-49	44.9	13.3	5.3	3.1	2.7	30.7	100.0	452
<b>Birth order</b>								
1	40.3	15.1	8.5	2.1	1.9	32.0	100.0	416
2-3	43.6	12.3	6.4	0.6	2.6	34.6	100.0	716
4-5	45.6	15.1	5.3	2.0	1.9	30.2	100.0	533
6+	43.1	13.3	4.5	2.5	4.4	32.1	100.0	349
<b>Residence</b>								
Urban	43.5	25.5	8.5	0.3	4.4	17.8	100.0	369
Rural	43.3	11.2	5.7	1.9	2.2	35.7	100.0	1,645
<b>Region</b>								
Apia urban area	43.5	25.5	8.5	0.3	4.4	17.8	100.0	369
North west Upolu	38.0	11.9	7.6	1.8	2.1	38.7	100.0	707
Rest of Upolu	47.8	14.5	3.8	2.4	2.4	29.0	100.0	497
Savaii	46.9	6.2	4.8	1.5	2.0	38.6	100.0	441
<b>Education</b>								
No education	*	*	*	*	*	*	100.0	3
Primary or lower or special needs	27.2	5.1	8.6	3.4	5.0	50.7	100.0	58
Secondary	43.5	13.1	5.7	1.5	2.6	33.5	100.0	1,545
More than secondary	44.8	17.6	7.9	1.9	2.0	25.7	100.0	409
<b>Wealth quintile</b>								
Lowest	41.2	12.9	5.0	1.9	2.0	36.9	100.0	453
Second	41.3	13.4	5.0	1.0	3.2	36.2	100.0	411
Middle	42.6	9.7	6.0	1.7	2.2	37.9	100.0	419
Fourth	46.6	15.3	6.7	2.2	2.9	26.3	100.0	392
Highest	46.0	18.6	9.1	1.2	2.7	22.4	100.0	340
Total	43.4	13.8	6.2	1.6	2.6	32.5	100.0	2,014

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

<sup>1</sup> Includes women who received a checkup after 41 days

### 9.3.2 Type of Provider of First Postnatal Check-up

Table 9.8 presents information on the types of postnatal care providers, according to mothers' background characteristics. In Samoa, 62percent of mothers obtain postnatal care from a skilled health professional (doctor, nurse, midwife and enrolled nurse), and 5percent get postnatal care from traditional birth attendants.

All mothers, regardless of age are almost equally likely to receive postnatal care from a skilled health professional or an enrolled nurse. However, those older than age 35 are most likely to receive postnatal care from TBA compared with younger mothers. Mothers in the North West Upolu (55 percent) and those in the Savaii region (53percent) report the lowest access to postnatal care by a

skilled health professional but have most access to TBA than women in other regions. Mothers with higher education (76 percent) are more likely to receive postnatal care from a skilled health professional, excluding a TBA, than those with primary or less education (39percent). Overall, the percentage of women who receive postnatal care from a skilled health professional is highest among mothers in the highest wealth quintile (74percent) and lowest among mothers in the lowest wealth quintile (53percent).

**Table 9.8 Type of provider of first postnatal checkup**

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check for the last live birth, according to background characteristics, Samoa 2014

Background characteristic	Type of health provider of mother's first postnatal checkup						Total	Number of women
	Doctor/nurse/midwife	Enrolled nurse	Traditional birth attendant	Other	Don't know/missing	No postnatal checkup <sup>1</sup>		
<b>Mother's age at birth</b>								
<20	60.1	1.3	0.7	0.0	0.0	37.9	100.0	144
20-34	60.7	1.1	5.0	0.0	0.8	32.5	100.0	1,419
35-49	60.3	0.4	7.4	0.2	0.9	30.7	100.0	452
<b>Birth order</b>								
1	64.7	0.5	2.8	0.0	0.0	32.0	100.0	416
2-3	58.6	1.7	4.5	0.0	0.7	34.6	100.0	716
4-5	61.7	0.6	6.4	0.2	1.0	30.2	100.0	533
6+	58.1	0.6	7.7	0.0	1.4	32.1	100.0	349
<b>Residence</b>								
Urban	79.3	0.6	1.2	0.0	1.2	17.8	100.0	369
Rural	56.4	1.0	6.1	0.1	0.7	35.7	100.0	1,645
<b>Region</b>								
Apia urban area	79.3	0.6	1.2	0.0	1.2	17.8	100.0	369
North west Upolu	54.4	0.1	5.9	0.0	0.9	38.7	100.0	707
Rest of Upolu	62.5	2.8	4.6	0.2	0.8	29.0	100.0	497
Savaii	52.6	0.4	8.1	0.0	0.2	38.6	100.0	441
<b>Education</b>								
No education	*	*	*	*	*	*	100.0	3
Primary or lower or special needs	37.6	1.7	8.4	0.0	1.7	50.7	100.0	58
Secondary	58.9	0.9	5.9	0.1	0.7	33.5	100.0	1,545
More than secondary	70.1	1.0	2.1	0.0	1.0	25.7	100.0	409
<b>Wealth quintile</b>								
Lowest	51.7	1.1	9.4	0.0	0.9	36.9	100.0	453
Second	56.2	1.7	5.2	0.0	0.7	36.2	100.0	411
Middle	55.5	1.0	4.9	0.0	0.7	37.9	100.0	419
Fourth	69.4	0.8	3.0	0.0	0.5	26.3	100.0	392
Highest	73.8	0.0	2.6	0.3	0.9	22.4	100.0	340
Total	60.6	0.9	5.2	0.0	0.8	32.5	100.0	2,014

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

<sup>1</sup> Includes women who received a checkup after 41 days

## 9.4 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 2014SDHS, women were asked whether each of the following factors would be a big problem or not a big problem in seeking medical care for themselves: getting permission to go for treatment,

getting money for treatment, distance to a health facility, having to take transportation, concern that there may not be a health provider, and concern that there may be no drugs available.

As shown in table 9.9, the most common concerns that women have in accessing health care for themselves when they are sick are related to availability of drugs (78 percent), any health provider (74 percent) and a female health provider (66 percent). Women from various backgrounds are equally likely to cite these as their concerns.

Nearly half of all women aged 15-49 (48 percent) consider money for treatment as a serious problem in getting health care. As might be expected, the lower the wealth quintile, the higher is the likelihood that a woman cites money as a problem. Moreover, younger women, those who are never married, not employed, reside in rural areas and have less than secondary education are most likely to consider money as a problem.

Distance to health facility and having to take transport are also factors that significant proportions of women - 44 percent and 35 percent, respectively - reported as serious problems in accessing health care. To some extent, these factors may have to do with monetary problems as women of similar background as those reporting money as a problem are also more likely to mention distance to health facility and taking transport as serious concerns.

Barriers with an element of gender, such as getting permission to go for treatment and not wanting to go alone, are factors mentioned by the least proportions of women. One of every 3 women mentions that she does not want to go alone while one of every five says that she needs permission if she has to go for treatment. Differentials in reporting these factors exist on the basis on woman's age, marital status, employment, education and wealth quintile. For example, proportionately more women age 15-19 (32 percent) mention getting permission to go for treatment compared to women age 35-49. Never-married women are also more likely than ever-married women to say that they do not want to go alone to get treatment (40 percent versus 23 percent).

Table 9.9 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, Samoa 2014

Background characteristic	Problems in accessing health care									Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drugs available	At least one problem accessing health care	
<b>Age</b>										
15-19	31.5	53.2	51.7	40.7	45.8	68.6	76.1	78.2	87.4	1,062
20-34	23.3	46.8	40.7	33.5	31.3	65.3	72.6	77.2	85.2	2,148
35-49	19.8	45.3	42.0	33.4	27.0	63.6	73.9	77.6	84.3	1,595
<b>Number of living children</b>										
0	26.8	49.3	45.9	36.4	40.3	66.8	74.1	77.1	86.0	1,778
1-2	22.1	46.2	40.5	33.4	29.7	64.7	71.9	75.7	83.8	1,143
3-4	23.1	45.1	40.8	33.2	26.8	62.9	72.4	77.7	84.7	976
5+	21.7	49.5	45.7	36.7	30.1	66.6	77.1	80.7	86.9	908
<b>Marital status</b>										
Never married	27.6	49.5	46.0	36.6	40.1	66.7	73.8	76.2	85.3	1,715
Married or living together	21.9	46.9	42.2	34.6	29.6	65.7	74.4	78.9	85.7	2,874
Divorced/separated/widowed	21.8	45.2	41.8	28.9	22.8	53.5	66.1	69.9	82.4	216
<b>Employed last 12 months</b>										
Not employed	25.7	51.5	46.3	37.3	34.9	67.0	74.6	78.2	86.3	3,547
Employed for cash	19.1	37.4	35.4	28.1	27.7	61.8	71.1	75.4	82.6	1,108
Employed not for cash	19.3	35.7	40.7	33.8	29.1	57.2	75.0	77.8	84.1	146
Missing	*	*	*	*	*	*	*	*	*	4
<b>Residence</b>										
Urban	24.9	39.9	40.4	31.4	34.4	66.9	74.8	77.2	85.7	1,000
Rural	23.7	49.8	44.4	36.0	32.7	65.1	73.5	77.7	85.3	3,805
<b>Region</b>										
Apia urban area	24.9	39.9	40.4	31.4	34.4	66.9	74.8	77.2	85.7	1,000
North west Upolu	16.5	41.0	33.9	24.8	22.4	53.1	63.7	70.9	80.2	1,733
Rest of Upolu	29.8	51.1	48.0	42.9	37.2	62.4	72.9	75.1	84.7	1,099
Savaii	29.8	64.2	58.9	48.3	46.1	89.6	91.8	92.6	95.1	973
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	*	15
Primary or lower or special needs										161
Secondary	25.8	50.8	46.3	37.6	34.3	66.9	75.1	78.8	86.3	3,654
More than secondary	15.6	34.1	31.7	24.4	27.6	60.0	68.3	72.2	81.2	975
<b>Wealth quintile</b>										
Lowest	27.6	60.7	53.4	45.0	37.8	67.0	77.7	80.7	88.8	903
Second	26.1	53.7	50.4	41.4	37.0	67.7	74.7	77.8	85.7	955
Middle	26.8	49.0	46.2	37.9	32.4	67.3	74.2	77.9	85.5	954
Fourth	23.0	46.2	40.5	31.6	32.9	66.9	75.2	80.2	88.7	987
Highest	16.9	30.8	28.8	20.9	25.9	59.0	67.6	71.6	78.6	1,006
Total	24.0	47.7	43.6	35.1	33.1	65.5	73.8	77.6	85.4	4,805

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

Children are the future, and thus, investing in children's health and development means investing in the future of a country. Children are an especially vulnerable group of the population whose needs must be met and rights must be protected, including the right to proper health, growth and development. Children's health is an important issue to be addressed at all levels: individual, family, larger community, national and international level. Individual countries and the larger international community are committed to improving children's health and wellbeing by adopting conventions, enacting policies and drafting strategies. However, these commitments need to be translated into stronger programs and specific actions to reduce the level of preventable morbidity, disability and mortality among children and to improve their quality of life.

Samoa has signed the Convention on the Rights of the Child (CRC) as part of the commitment to invest in children's health and development. The Government of Samoa has also joined with other nations in adopting the declaration of the Millennium Development Goals (MDGs), which outlines clear objectives and target indicators on child health and development. The MDGs have been incorporated and clearly articulated for Samoa in the Strategy for the Development of Samoa (SDS) 2012-2016 (Samoa Ministry of Finance, 2012). Furthermore, as part of its efforts to improve the health and wellbeing of Samoan children, the Ministry of Health (MOH) has initiated efforts and implemented policies that help improve the quality of health care services provided to children in Samoa. Some of the initiatives undertaken by the MOH and the Government of Samoa included areas of breastfeeding, nutrition and health promotion in schools.

In 2009, the Samoa Expanded Program on Immunization (EPI) implemented by the National Health Services added new vaccines to the recommended World Health Organisation (WHO) basic vaccination schedule. The newly introduced vaccines include Measles-Mumps-Rubella (MMR1 and MMR2) vaccine replacing Measles- (MR) which was introduced in 2003 and Hepatitis B vaccine.

This chapter presents the findings on child health from the 2014 SDHS. It focuses particularly on neonatal conditions (birth weight and size at birth), children's vaccination status, and treatment practices that are commonly used for children experiencing the three major childhood illnesses: acute respiratory infection (ARI), fever, and diarrhoea. The information on children's birth weight and size, treatment practices, and contact with health facilities when children are sick paves the way to strategic planning and implementation of programmes to reduce neonatal and infant mortality. Combined with information on childhood mortality, this information can be used to identify subgroups of women and children who face increased risk because of non-use of maternal and child health (MCH) services, and to assist with planning effective improvements for these services.

## 10.1 CHILD'S 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 the 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. Because birth weight may not be known for many babies, the mother's estimate of the baby's size at birth was also obtained. Even though it is subjective, it can be a useful proxy for the weight of the child. Table 10.1 presents information on child's weight and size at birth according to background characteristics.

Table 10.1 Child's weight and size at birth

Percent distribution of live births in the five years preceding the survey with a reported birth weight by birth weight; percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth and percentage of all births with a reported birth weight, according to background characteristics, Samoa 2014

Background characteristic	Percent distribution of births with a reported birth weight <sup>1</sup>		Total	Number of births	Percentage of all births with a reported birth weight <sup>1</sup>	Percent distribution of all live births by size of child at birth				Total	Number of births
	Less than 2.5 kg	2.5 kg or more				Very small	Smaller than average	Average or larger	Don't know/missing		
<b>Mother's age at birth</b>											
<20	6.8	93.2	100.0	189	74.9	2.0	11.5	84.8	1.7	100.0	252
20-34	4.4	95.6	100.0	1,829	77.5	1.0	10.7	85.8	2.5	100.0	2,359
35-49	6.0	94.0	100.0	406	69.8	0.7	10.6	87.2	1.6	100.0	581
<b>Birth order</b>											
1	6.5	93.5	100.0	599	81.1	1.6	14.2	80.9	3.3	100.0	739
2-3	4.1	95.9	100.0	899	75.7	1.1	9.1	87.3	2.5	100.0	1,187
4-5	4.4	95.6	100.0	596	76.0	1.0	9.8	87.6	1.5	100.0	784
6+	4.9	95.1	100.0	330	68.4	0.0	10.9	87.8	1.3	100.0	483
<b>Mother's smoking status</b>											
Smokes cigarettes/tobacco	4.4	95.6	100.0	338	73.8	1.8	8.7	87.0	2.4	100.0	458
Does not smoke	4.9	95.1	100.0	2,086	76.3	0.9	11.1	85.8	2.2	100.0	2,734
Missing	-	-	-	0	*	*	*	*	*	100.0	1
<b>Residence</b>											
Urban	5.7	94.3	100.0	529	88.6	1.1	11.4	84.5	3.1	100.0	597
Rural	4.6	95.4	100.0	1,894	73.0	1.0	10.6	86.3	2.1	100.0	2,596
<b>Region</b>											
Apia urban area	5.7	94.3	100.0	529	88.6	1.1	11.4	84.5	3.1	100.0	597
North west Upolu	3.3	96.7	100.0	852	77.2	0.4	7.3	89.4	2.8	100.0	1,104
Rest of Upolu	4.7	95.3	100.0	570	70.0	1.8	11.3	84.1	2.7	100.0	814
Savaii	6.8	93.2	100.0	473	69.8	1.0	15.0	83.8	0.1	100.0	677
<b>Mother's education</b>											
No education	-	-	-	0	*	*	*	*	*	100.0	3
Primary	10.1	89.9	100.0	59	63.3	1.0	11.8	80.9	6.3	100.0	93
Secondary	5.2	94.8	100.0	1,835	74.4	1.2	10.9	85.7	2.2	100.0	2,466
More than secondary	3.0	97.0	100.0	529	83.9	0.5	9.9	87.7	1.9	100.0	630
<b>Wealth quintile</b>											
Lowest	5.0	95.0	100.0	507	66.7	0.9	9.8	86.8	2.5	100.0	760
Second	4.8	95.2	100.0	487	72.8	1.2	12.3	84.3	2.3	100.0	669
Middle	6.5	93.5	100.0	500	75.6	1.1	11.1	85.7	2.1	100.0	662
Fourth	6.1	93.9	100.0	501	82.1	1.0	10.9	86.1	2.1	100.0	610
Highest	1.4	98.6	100.0	429	87.2	1.0	9.4	87.1	2.5	100.0	492
Total	4.9	95.1	100.0	2,423	75.9	1.0	10.7	85.9	2.3	100.0	3,192

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

<sup>1</sup> Based on either a written record or the mother's recall

Information on birth weight was obtained for 76 percent of births. Of those babies weighed at birth, 95 percent was reported to have the standard weight of at least 2.5 kilograms while 5 percent was reported as less than 2.5 kilograms. For babies less than 2.5 kilograms, the most vulnerable are births with mothers aged less than 20 years old (7 percent), mothers with first birth order (7 percent), urban mothers (6 percent), mothers living in Savaii region (7 percent) and mothers with primary and less education (10 percent). Although smoking is one of the known causes of low birth weight, the 2014 SDHS data do not reveal any significant difference in this respect between smoking and non-smoking mothers.



As birth weight may not be stated on the baby's record or the mother may not be able to recall the birth weight, information on the mother's estimate of the baby's size at birth was also obtained. Table 10.1 also shows that overall, 86 percent of births are reported as "average or larger", 11 percent as "smaller than average" and 1 percent as "very small".

The proportion of births that are reported to be of average size or larger increases with mother's age at birth (from 85 to 87 percent). It is higher for non-first births (at least 87 percent) than first-births (81 percent), and increases with mother's level of education. The region of North West Upolu has the highest proportion of "average size or larger" babies (89 percent) relative to 84 percent in all other regions. Proportionately more smoking mothers have average size or larger babies than non-smoking mothers indicating that there are many other possible factors, , that can cause lower birth weights or smaller than average babies in Samoa.

## 10.2 VACCINATION COVERAGE

The 2014 SDHS collected information on immunisation coverage for all children born in the five years before the survey. The Government of Samoa has adopted the WHO and UNICEF guidelines for vaccinating children. According to these guidelines, to be considered fully vaccinated (basic vaccination), a child should receive the following vaccinations: one dose each of BCG and measles, three doses of polio vaccine, and three doses of DPT. BCG, which protects against tuberculosis, should be given at birth or at first clinical contact. DPT, which protects against diphtheria, pertussis (whooping cough), and tetanus, and polio vaccine guidelines require three vaccinations at approximately 6, 10, and 14 weeks of age.

In addition to the basic vaccines, the hepatitis B (Hep-B) vaccine is also recommended for children in Samoa; a dose of the hepatitis B vaccine is given at birth or at first clinical contact. The Measles-Mumps-Rubella (MMR) vaccine which replaced the Measles-Rubella (MR) vaccine in 2009, should be given at 12 and 15 months of age (MMR-I and MMR-II, respectively). Currently, the pentavalent vaccine "DPT/HepB/HiB," introduced in 2009, has replaced the DPT vaccine, and it is supposed to be given in the same schedule as the DPT. The pentavalent vaccine contains in addition to DPT, the hepatitis B (Hep-B) vaccine and a vaccine against *Haemophilus influenzae* type B (HiB). It is recommended that children receive the complete schedule of vaccinations before 15 months of age.

In the 2014 SDHS, information on vaccination coverage was obtained in two ways " from health cards and from mother's verbal reports. All mothers were asked to show the interviewer the health cards on which the child's immunisations are recorded. If the card was available, the interviewer copied the dates of each vaccination received. If a vaccination was not recorded on the card, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present a card for a child, she was asked to recall whether the child had received BCG, polio, DPT, MR or MMR, Hep-B and Hib vaccinations. If the mother recalled that the child had received any of the vaccines, she was asked about the number of doses that the child received for all vaccines, except for the BCG, which is only given once at birth.

The data presented in this chapter are for children age 18-29 months, the youngest cohort of children who have reached the age by which they should be fully vaccinated, and are restricted to children who were alive at the time of the survey. The coverage for each of the three doses of Hep-B and Hib vaccines are not shown here because the pentavalent vaccine was only introduced in 2009 and will be covered in future surveys. Table 10.2 show the percentage of children age 18-29 months who received specific vaccines at any time before the survey according to the vaccination card and the mother's report.

The data reveal that 53 percent of children aged 18-29 months in Samoa are fully immunized with all basic vaccinations at any time before the survey while 8 percent of children did not receive any vaccination. The results also show that 50 percent of children have received all basic vaccinations

by 18 months of age, which is the recommended age at which children should have been fully vaccinated.

**Table 10.2 Vaccinations by source of information**

Percentage of children age 18-29 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 18 months of age, Samoa 2014

Source of information	BCG at birth	Hep-B at birth	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	MMR1	MMR2	All basic vaccinations <sup>1</sup>	No vaccinations	Number of children
<b>Vaccinated at any time before survey</b>													
Vaccination card	59.5	58.8	60.9	59.8	56.8	60.6	59.1	56.6	51.3	39.0	49.4	0.0	406
Mother's report	30.4	24.6	27.3	13.4	6.9	27.7	14.2	5.2	25.0	13.2	3.9	8.3	260
Either source	89.9	83.4	88.2	73.3	63.8	88.2	73.3	61.8	76.4	52.1	<b>53.3</b>	8.3	666
<b>Vaccinated by 18 months of age<sup>2</sup></b>	<b>89.9</b>	<b>83.4</b>	<b>88.2</b>	<b>72.7</b>	<b>62.9</b>	<b>88.2</b>	<b>72.7</b>	<b>61.0</b>	<b>71.4</b>	<b>37.8</b>	<b>50.0</b>	<b>8.3</b>	<b>666</b>

<sup>1</sup> BCG, measles (at least an MMR1/MMR2), and three doses each of DPT and Polio vaccines

<sup>2</sup> For children whose information was based on the mother's report, the proportion of vaccinations given during the first 18 months of life was assumed to be the same as for children with a written record of vaccination.

Table 10.3 shows the percentage of children age 18-29 months who received specific vaccines by mothers' background characteristics. The data show that there is no difference in the proportion of children fully vaccinated by sex of the child, while the percentage is slightly higher in the rural than in the urban residence (54 and 51 percent, respectively). Regional differences show that Savaii has the highest percentage of full vaccination (73 percent), followed by Rest of Upolu with 57 percent, Apia urban with 51 percent and the least was North West Upolu with 40 percent coverage. The number of children whose mothers received only primary education or less is too small to provide reliable estimates of vaccination coverage but between children whose mothers have some secondary education and those whose mothers have higher education, there is hardly any difference in coverage. Similarly, differences by wealth quintile are not significant. Except for the middle quintile which has the lowest percentage of children with full vaccination at 48 percent, the other quintiles have coverage levels ranging from 53 to 56 percent.

Only 61 percent of children 18-29 months had their vaccination cards shown to and seen by the enumerator at the time of the survey. It is higher in rural (62 percent) than in urban (56 percent) areas.

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, Samoa 2014

Background characteristic	BCG at birth	Hep-B at birth	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	MMR1	MMR2	All basic vaccinations <sup>1</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
<b>Sex</b>														
Male	91.1	84.3	88.2	76.3	65.8	87.7	74.8	64.7	64.9	28.6	48.7	7.8	68.2	353
Female	90.5	84.6	87.7	74.1	65.6	88.0	76.3	64.3	61.7	33.4	44.6	8.0	64.9	322
<b>Birth order</b>														
1	89.4	84.3	86.8	77.9	68.4	86.3	78.0	67.8	60.9	30.9	46.9	9.4	69.6	158
2-3	90.1	82.6	88.0	76.6	66.9	86.8	75.4	64.8	64.1	30.4	48.6	7.9	65.5	247
4-5	95.0	88.9	91.6	74.8	63.3	93.3	77.5	64.4	62.2	28.6	42.4	4.4	66.6	177
6+	87.3	80.9	82.9	68.0	62.7	83.0	68.0	58.3	67.8	36.7	49.8	11.6	64.7	93
<b>Residence</b>														
Urban	97.1	89.4	92.3	79.8	70.2	95.2	79.8	66.3	64.4	30.8	45.2	1.9	68.3	112
Rural	89.6	83.4	87.1	74.3	64.8	86.4	74.7	64.1	63.2	30.9	47.1	9.1	66.3	562
<b>Region</b>														
Apia urban area	97.1	89.4	92.3	79.8	70.2	95.2	79.8	66.3	64.4	30.8	45.2	1.9	68.3	112
North west														
Upolu	82.2	76.8	78.9	64.4	51.8	77.5	63.0	51.3	49.7	24.8	34.4	15.3	58.8	235
Rest of Upolu	94.0	88.0	91.3	79.7	71.0	91.8	83.0	69.9	71.6	35.5	53.5	5.5	66.6	183
Savaii	96.0	88.4	95.3	83.7	78.4	94.0	83.1	77.7	74.5	35.1	59.6	3.4	78.4	144
<b>Mother's education</b>														
Primary	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Secondary	90.8	85.0	86.6	74.3	64.7	86.8	74.5	64.2	62.9	30.1	47.6	8.5	66.9	522
More than secondary	91.7	82.4	93.2	79.4	69.4	91.7	80.9	66.9	67.2	33.7	45.5	5.2	66.3	132
<b>Wealth quintile</b>														
Lowest	90.1	84.5	86.9	75.1	64.8	87.4	76.8	64.8	64.3	32.6	48.7	7.5	68.5	158
Second	90.2	84.1	88.2	78.7	68.8	86.9	76.1	68.8	66.4	27.8	51.7	9.2	70.6	150
Middle	88.4	79.9	85.0	70.6	60.9	84.5	69.3	58.9	57.0	27.4	40.5	10.9	58.2	153
Fourth	98.3	93.2	92.3	80.3	72.5	95.0	83.7	68.9	65.1	32.9	47.1	1.7	70.8	116
Highest	87.8	81.4	88.8	71.3	62.0	86.7	72.5	60.9	65.3	36.1	45.3	9.1	66.0	98
Total	90.8	84.4	88.0	75.2	65.7	87.8	75.5	64.5	63.4	30.9	46.7	7.9	66.7	674

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

<sup>1</sup> BCG, measles (at least an MMR1/MMR2), and three doses each of DPT and Polio vaccines

### 10.3 TRENDS IN VACCINATION COVERAGE

Table 10.4 shows the percentage of children age 18-59 months (at the time of the survey) who received specific vaccines by 18 months of age, and the percentage with a vaccination card, by current age of child. Data show that 43 percent of children age 18-59 months received all their vaccinations by 18 months of age. Children in the oldest cohort (42-59 months) were less likely to have received all their vaccinations (36 percent) than younger children age 30-41 months (43 percent) and 18-29 months (50 percent) within the prescribed age. This indicates that there has been a small increase in vaccination coverage among children in Samoa over the past five years. The same pattern is seen for each of the specific vaccines. The proportion of children with no vaccinations has changed very little over time.

Vaccination cards were shown to interviewers for 61 percent of children age 18-29 months, compared with 56 percent of children age 30-41 months and 47 percent of the oldest children 42-59 months. The difference may be partly a result of the cards for older children having been lost or misplaced over the longer period of time.

Table 10.4 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Samoa 2014

Age in months	BCG at birth	Hep-B at birth	DPT			Polio			MMR		All basic vaccinations <sup>1</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
			1	2	3	1	2	3	1	2				
FINAL TABLE														
12-23	90.2	83.8	87.0	73.9	63.6	86.9	74.1	60.9	8.5	2.2	6.2	8.9	66.7	674
24-35	87.1	82.2	84.4	67.4	53.7	84.4	67.1	49.6	5.2	0.9	3.4	11.4	57.8	680
36-47	87.7	80.6	84.6	65.6	50.1	84.5	65.1	46.6	6.6	1.0	4.1	11.2	52.4	605
48-59	83.9	75.2	77.2	58.6	45.1	78.6	58.0	42.0	5.0	0.3	2.8	15.4	45.3	559
Total	87.5	80.8	83.7	66.9	53.7	84.0	66.7	50.3	6.6	1.2	4.2	11.4	56.1	2,518

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

<sup>1</sup> BCG, measles (at least an MMR1/MMR2), and three doses each of DPT and Polio vaccines

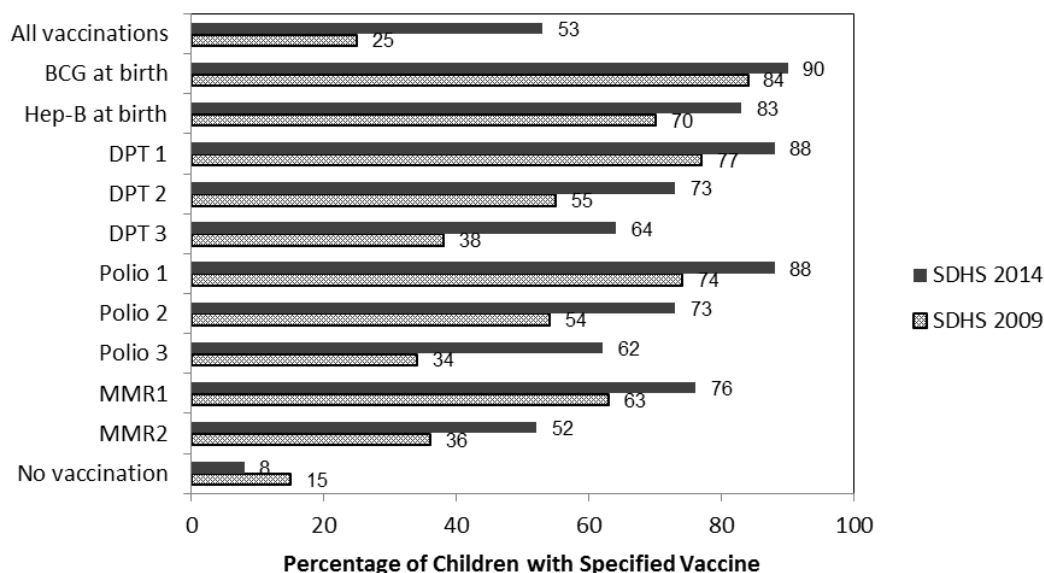
Figure 10.1 looks at the trend of the vaccination coverage between the 2009 SDHS and the 2014 SDHS for children age 18-29 months only. The graph shows that overall there has been significant improvement in the coverage of each of the different types of vaccine for all types of vaccine. Consequently, the proportion of children with no vaccination at all declined from 15 percent in the 2009 SDHS to 8 percent in the 2014 SDHS.

With respect to specific types of vaccination, figure 10.1 also shows that BCG coverage has increased from 84 percent in 2009 to 90 percent in 2014 and Hep-B from 70 to 83 percent in the same period.

The pattern of dispensing vaccinations which are to be given in more than 1 dose and at different times, such as DPT, Polio and MMR, is also shown in figure 10.1 In the 2014 SDHS, while 88 percent of children 18 months old received the first DPT dose, the second and third round of doses show a significant drop in the second round (73 percent) and third round (64 percent) doses. Similarly for the first dose of Polio, 88 percent received the first dose which is reduced to 54 and 34 percent in the second and third rounds, respectively. The same pattern also applies in the first and second doses of MMR1 and MMR2 with 76 and 52 percent, respectively.

Despite the great improvement in coverage of child immunization in the 2014 DHS compared to the 2009 SDHS, the recent immunization coverage of 50 percent for all basic vaccinations still covers only half of all children who have reached 18 months of age. Therefore vaccination coverage is only half way towards the 100 percent ideal target for all children at 18 months of age.

**Figure 10.1 Trends in Vaccination Coverage Among Children 18-29 months**



#### 10.4 ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality throughout the world and in Samoa. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2014 Samoa DHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill in the two weeks preceding the survey with a cough accompanied by short, rapid breathing that the mother considered to be chest-related. These symptoms are compatible with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on the mother’s perception of illness without validation by medical personnel.

Table 10.5 shows that only 2 percent of children under age five years are reported to have had a cough with short rapid breathing in the two weeks before the survey that was not just due to a blocked or runny nose, by background characteristics. Reported symptoms of ARI peak among children age less than 6 months (3 percent), children living in households using kerosene as cooking fuel (4 percent) children whose mothers smoke cigarettes (2 percent), those living in Apia urban area (3 percent), children born to mothers with primary education and finally it is highest for children from the wealthiest households. About nine in ten (78 percent) children with symptoms were taken to a health facility or provider for treatment. Treatment with antibiotics can often ameliorate the symptoms of ARI and can save lives. In the 2014 SDHS, over half (54 percent) of children under five who had ARI symptoms in the two weeks before the survey were reported by their mothers to have been given antibiotics for the illness.

Table 10.5 Prevalence and treatment 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 and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider and percentage who received antibiotics as treatment, according to background characteristics, Samoa 2014

Background characteristic	Children under age five		Children under age five with symptoms of ARI		
	Percentage with symptoms of ARI <sup>1</sup>	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider	Percentage who received antibiotics	Number of children
<b>Age in months</b>					
<6	3.1	331	*	*	10
6-11	1.8	291	*	*	5
12-23	2.4	674	*	*	16
24-35	1.7	680	*	*	11
36-47	1.8	605	*	*	11
48-59	0.9	559	*	*	5
<b>Sex</b>					
Male	1.8	1,644	(83.3)	(52.2)	30
Female	1.9	1,496	(72.0)	(42.2)	28
<b>Mother's smoking status</b>					
Smokes cigarettes/tobacco	2.0	450	*	*	9
Does not smoke	1.8	2,689	(79.8)	(48.0)	49
Missing	*	1	-	-	0
<b>Cooking fuel</b>					
Electricity or gas	2.4	617	*	*	15
Kerosene	4.1	202	*	*	8
Wood/Coconut parts	1.5	2,304	(71.8)	(50.6)	35
Other fuel	*	11	-	-	0
No food cooked in household	*	5	-	-	0
Missing	*	1	-	-	0
<b>Residence</b>					
Urban	2.7	590	*	*	16
Rural	1.7	2,550	(71.9)	(60.4)	42
<b>Region</b>					
Apia urban area	2.7	590	*	*	16
North west Upolu	2.0	1,089	*	*	21
Rest of Upolu	1.9	799	*	*	15
Savaii	0.9	661	*	*	6
<b>Mother's education</b>					
No education	*	3	-	-	0
Primary	3.3	92	*	*	3
Secondary	1.8	2,419	(79.7)	(46.8)	44
More than secondary	1.8	626	*	*	11
<b>Wealth quintile</b>					
Lowest	1.2	748	*	*	9
Second	0.6	652	*	*	4
Middle	1.4	651	*	*	9
Fourth	4.2	603	(92.2)	(43.2)	25
Highest	2.3	486	*	*	11
Total	1.9	3,140	77.8	47.4	58

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

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related) is considered a proxy for pneumonia.

## 10.5 FEVER

Table 10.6 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.

The prevalence of fever is highest amongst children age 6-11 months (16 percent). There is no difference between male and female children, but it is notably higher for urban (16 percent) than for rural children (8 percent). The wealth quintiles also show that the prevalence of fever increases with the increase in the wealth of the households.

Table 10.6 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 of children for whom treatment was sought from a health facility or provider, the percentage who took antimalarial drugs and the percentage who took antibiotic drugs, by background characteristics, Samoa 2014

Background characteristic	Among children under age five:		Children under age five with fever		
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider	Percentage who took antibiotic drugs	Number of children
<b>Age in months</b>					
<6	9.4	331	52.0	(25.5)	31
6-11	16.3	291	(70.2)	(44.1)	47
12-23	12.5	674	58.5	30.5	84
24-35	10.1	680	59.6	29.7	68
36-47	5.8	605	60.1	(34.4)	35
48-59	6.2	559	50.9	(26.2)	35
<b>Sex</b>					
Male	9.5	1,644	61.4	33.8	157
Female	9.6	1,496	56.9	29.8	144
<b>Residence</b>					
Urban	15.7	590	67.4	20.9	93
Rural	8.2	2,550	55.6	36.8	208
<b>Region</b>					
Apia urban area	15.7	590	67.4	20.9	93
North west Upolu	9.1	1,089	54.3	28.6	99
Rest of Upolu	8.5	799	55.9	44.1	68
Savaii	6.3	661	58.1	(44.2)	41
<b>Mother's education</b>					
No education	*	3	-	-	0
Primary	9.9	92	*	*	9
Secondary	9.2	2,419	56.2	29.4	222
More than secondary	11.1	626	74.1	37.1	69
<b>Wealth quintile</b>					
Lowest	7.6	748	36.6	22.4	57
Second	7.2	652	68.2	(31.4)	47
Middle	8.9	651	53.5	32.5	58
Fourth	13.2	603	64.2	34.4	79
Highest	12.2	486	73.0	37.6	59
Total	9.6	3,140	59.2	31.9	301

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

Table 10.6 also shows that almost six in ten children with fever (59 percent) were taken to a health facility or provider for treatment. The proportion of children with fever taken to a health provider for treatment is higher for male (61 percent) than for female children (57 percent). It is

significantly higher in urban (67 percent) than in rural (56 percent) areas and among those belonging to the wealthiest quintiles. Over one-third of children with fever are given antibiotics (32 percent).

Because of the need to treat fever quickly, it can be useful for parents to have antipyretic and other specific drugs at home. In Samoa, antipyretics such as paracetamol or panadol are readily available over the counter. However, the MOH policy requires that antibiotics be prescribed by trained health personnel after proper diagnosis. Consequently, it is not recommended for households to keep stock of antibiotics at home.

## **10.6 DIARRHOEAL DISEASE**

### **10.6.1 Incidence and Treatment of Diarrhoea**

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children, although the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhoea-causing agents is frequently related to the use of contaminated water and to unhygienic practices in food preparation and disposal of excreta. In interpreting the findings of the 2014 SDHS, it should be borne in mind that prevalence of diarrhoea varies seasonally.

Table 10.7 shows the percentage of children under five with diarrhoea in the two weeks preceding the survey according to selected background characteristics. Only 4 percent of children in Samoa had diarrhoea in the two weeks before the survey and less than 1 percent had diarrhoea with blood, a symptom of dysentery.

The prevalence of diarrhoea is highest amongst children 6-23 months old which is the age at which most children are usually weaned from breastfeeding. This may be partly due to the introduction of liquids other than breast milk and other supplementary foods which can easily facilitate the spread of disease-causing microbes

Differences in diarrhoea prevalence by background characteristics show that the most vulnerable to diarrhoea are children living in households with unimproved source of water (5 percent), unimproved toilet facility (5 percent) and children living in Rest of Upolu (5 percent) and Apia urban region (4 percent).



**Table 10.7 Prevalence of diarrhea**

Percentage of children under age five who had diarrhea in the two weeks preceding the survey, by background characteristics, Samoa 2014

Background characteristic	Diarrhea in the two weeks preceding the survey		Number of children
	All diarrhea	Diarrhea with blood	
<b>Age in months</b>			
<6	1.2	0.0	331
6-11	4.8	0.7	291
12-23	5.9	0.7	674
24-35	3.6	0.7	680
36-47	3.0	0.7	605
48-59	1.5	0.2	559
<b>Sex</b>			
Male	3.9	0.7	1,644
Female	3.0	0.4	1,496
<b>Source of drinking water<sup>1</sup></b>			
Improved	3.4	0.6	2,995
Not improved	4.8	0.0	145
<b>Toilet facility<sup>2</sup></b>			
Improved, not shared	3.4	0.5	2,967
Non-improved or shared	5.3	0.6	153
Missing	5.1	*	20
<b>Residence</b>			
Urban	4.4	0.7	590
Rural	3.2	0.5	2,550
<b>Region</b>			
Apia urban area	4.4	0.7	590
North west Upolu	2.7	0.7	1,089
Rest of Upolu	5.1	0.3	799
Savaii	1.9	0.4	661
<b>Mother's education</b>			
No education	*	*	3
Primary	3.2	0.0	92
Secondary	3.7	0.6	2,419
More than secondary	2.7	0.3	626
<b>Wealth quintile</b>			
Lowest	3.8	0.8	748
Second	3.4	0.0	652
Middle	4.0	0.8	651
Fourth	2.1	0.5	603
Highest	4.1	0.6	486
Total	3.5	0.5	3,140

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

<sup>1</sup> See Table 2.7 for definition of categories.

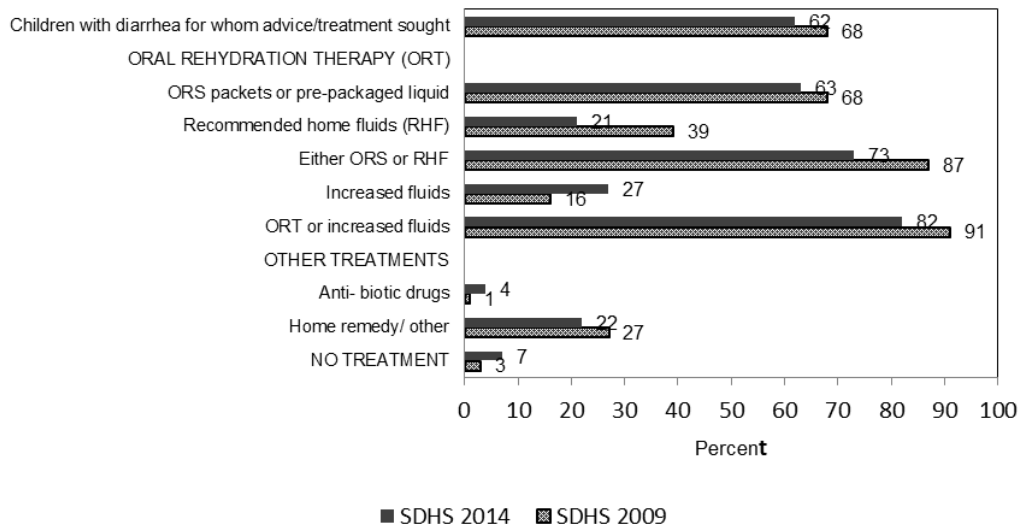
<sup>2</sup> See Table 2.8 for definition of categories.

In the 2014 SDHS, mothers of children who had diarrhoea in the preceding two weeks were asked about what was done to treat the illness. Figure 10.2 shows the percentage of children with diarrhoea who received specific treatments. Differentials in these indicators by background characteristics are not provided due to the small number of cases (109) of children with diarrhoea.

The data indicate that over two-thirds of the children who were ill with diarrhoea were taken to a health facility or provider (62 percent) in 2014 while it was 68 percent in 2009. Oral Rehydration Therapy or ORT, which in the case of Samoa includes giving oral rehydration solution (ORS) from a packet, or a Home Recommended Fluid (RHF) made of salt and sugar, or coconut juice, is a simple and effective response to diarrhoeal illness. Mothers reported that more than eight in ten (82 percent) children with diarrhoea were treated with some form of ORT or increased fluids. This was 10 percentage points lower than the proportion in 2009 (91 percent). More specifically, ORS was given to 63 percent of children and the recommended home fluids made with salt and sugar was given to 21 percent of children relative to the higher 39 percent in 2009.

Home remedies (21 percent) have been reduced from 27 percent in 2009 to 22 in 2014 but the proportion of untreated children with diarrhoea has increased from 3 percent to 7 percent in the 2014 SDHS, which is not encouraging.

**Figure 10.2 Treatment of diarrhoea among children under 5**

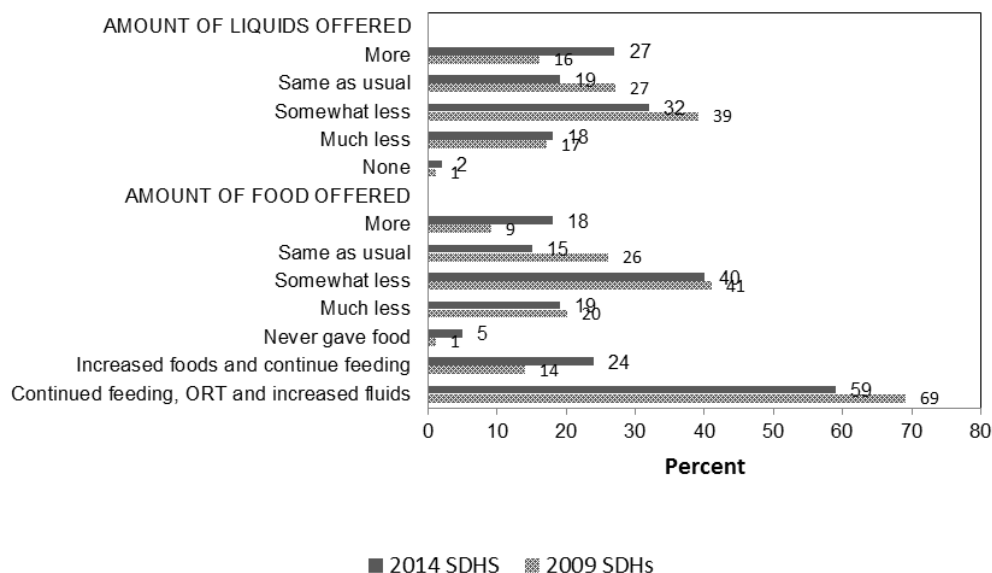


### 10.6.2 Feeding Practices

Mothers are encouraged to continue normally feeding children with diarrhoea and to increase the amount of fluids. These practices help to reduce dehydration and minimize the adverse consequences of diarrhoea on the child's nutritional status. Mothers interviewed in the 2014 SDHS were asked whether they gave the child less, the same amount, or more fluids and food than usual when their child had diarrhoea. Figure 10.3 shows the percentage of children under five who had diarrhoea in the two weeks preceding the survey by feeding practices. Similar to diarrhoea treatment, differentials in the feeding practices during diarrhoea by background characteristics are not provided due to the small number of cases of children with diarrhoea.

Figure 10.3 shows that in the 2014 SDHS, about 27 percent of children with diarrhoea are given more to drink than usual, 19 percent are given the same as usual, while 52 percent are given less to drink than usual or nothing at all. The current results suggest improved feeding practices for children with diarrhoea during the last 5 years. However, it is particularly worrying to note that still one in five children with diarrhoea (20 percent) is given much less or nothing to drink during the diarrhoeal illness.

**Figure 10.3 Feeding practices during diarrhoea among children under 5**



Food intake in the 2014 SDHS is curtailed even more than fluid intake during an episode of diarrhoea. Only 18 percent of children with diarrhoea are offered more to eat than usual, 15 percent are offered the same amount of food as usual, and 64 percent are given less food than usual or no food at all during diarrhoea (40 percent are given to eat somewhat less than usual; 19 percent are given much less than usual; and 5 percent are given nothing to eat).

The overall behaviour and response by the concerned mothers still reflects a gap in practical knowledge among mothers regarding the nutritional requirements of children during episodes of diarrhoeal illness. This indicates a need for further health education efforts to reduce the number of children becoming dehydrated or malnourished due to diarrhoea.

Overall, 24 percent of children with diarrhoea are given increased fluids and continued feeding which is much better relative to the total of 14 percent in 2009, but the decrease of 10 percentage points in relation to continued feeding, giving ORT and increasing fluids during diarrhoea from 59 percent in the 2014 SDHS relative to 69 percent in the 2009 SDHS, is again not encouraging.

## 10.7 KNOWLEDGE OF ORS PACKETS

As mentioned earlier, a simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of ORT, which may include the use of a solution prepared from packets of ORS. To ascertain how widespread knowledge of ORS is in Samoa, mothers were asked whether they know about ORS packets.

Table 10.8 shows that knowledge of ORS is low in Samoa, with only about seven in ten (69 percent) mothers having heard about ORS packets or *vai masima* (Recommended Home Fluid). Knowledge of ORS or *vai masima* is higher among urban than rural mothers (71 percent compared with 69 percent). Mothers in Savaii (76 percent) are considerably more likely than mothers in other regions to have heard of ORS or *vai masima* (62 to 73 percent). ORS or *vai masima* knowledge among mothers increases steadily with increasing education and wealth. It ranges from 46 percent of mothers with primary to 76 percent of mothers with highest education. Similarly, ORS or *vai masima*

knowledge is 65 percent among mothers in the lowest wealth quintile compared with 75 percent of mothers in the highest wealth quintile.

**Table 10.8 Knowledge of ORS packets or pre-packaged liquids**

Percentage of mothers age 15-49 who gave birth in the five years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhea by background characteristics, Samoa 2014

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
<b>Age</b>		
15-19	48.0	71
20-24	58.1	408
25-34	70.8	926
35-49	77.7	609
<b>Residence</b>		
Urban	71.3	369
Rural	69.1	1,645
<b>Region</b>		
Apia urban area	71.3	369
North west Upolu	61.8	707
Rest of Upolu	73.3	497
Savaii	76.0	441
<b>Education</b>		
No education	*	3
Primary or lower or special needs	45.5	58
Secondary	68.9	1,545
More than secondary	75.5	409
<b>Wealth quintile</b>		
Lowest	64.7	453
Second	68.4	411
Middle	68.0	419
Fourth	73.4	392
Highest	74.6	340
<b>Total</b>	<b>69.5</b>	<b>2,014</b>

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

ORS = Oral rehydration salts

## 10.8 STOOL DISPOSAL

If human faeces are left uncontained, disease may spread by direct contact or by animal contact with the faeces. 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 the stools of children under five, by background characteristics.

The results show that in Samoa the most commonly used method of disposal of young children's stools is throwing them into the garbage (63 percent). Other methods are children using a

toilet or latrine (19 percent), putting or rinsing stools into the toilet or latrine (13 percent), buried -1 percent, and putting or rinsing them into a drain or ditch (0.6 percent). Overall, just over one-third of children have their stools disposed of safely using the latrine and buried.

Table 10.9 also shows marked differentials in faecal matter disposal. For example, older children (age 2 years or older) are more likely than younger children to have their stools disposed of safely. This can be explained with the fact that younger children, especially during the first year of life, use diapers that are commonly disposed of in the garbage, which is not considered a safe way of disposal. Likewise rural children (34 percent) especially children living in the region of Savaii (45 percent) are most likely to have unsafe faecal disposal than other residential areas.

Safe faecal disposal shows no clear relationship by mother's education or wealth quintile.

**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, Samoa 2014

Background characteristic	Manner of disposal of children's stools									Percentage of children whose stools are disposed of safely	Number of mothers
	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	Missing	Total		
<b>Age in months</b>											
<6	1.2	4.3	1.6	0.9	86.9	0.0	4.3	0.7	100.0	7.1	320
6-11	0.3	4.1	1.0	0.4	89.0	0.0	5.1	0.0	100.0	5.5	285
12-23	4.9	8.4	1.8	0.9	80.3	0.2	2.5	0.9	100.0	15.2	549
24-35	31.2	19.3	1.2	0.2	44.8	0.0	2.2	1.0	100.0	51.7	404
36-47	52.4	22.7	0.8	0.0	21.7	0.0	1.6	0.8	100.0	75.9	241
48-59	54.3	26.6	0.0	0.6	14.0	0.0	2.5	1.9	100.0	81.0	159
<b>Toilet facility</b>											
Improved, not shared <sup>1</sup>	18.9	12.7	1.2	0.5	62.7	0.1	3.0	0.8	100.0	32.9	1,858
Non-improved or shared	20.2	9.4	3.3	1.1	62.7	0.0	3.3	0.0	100.0	33.0	89
Missing	*	*	*	*	*	0.0	0.0	*	100.0	*	11
<b>Residence</b>											
Urban	11.4	14.5	0.6	0.0	71.1	0.0	0.9	1.5	100.0	26.5	358
Rural	20.6	12.2	1.4	0.7	60.9	0.1	3.5	0.7	100.0	34.2	1,600
<b>Region</b>											
Apia urban area	11.4	14.5	0.6	0.0	71.1	0.0	0.9	1.5	100.0	26.5	358
North west											
Upolu	18.7	12.6	1.9	0.9	64.4	0.1	0.9	0.6	100.0	33.2	685
Rest of Upolu	14.9	9.3	2.1	0.8	69.8	0.0	1.9	1.2	100.0	26.3	485
Savaii	30.1	14.8	0.0	0.2	45.0	0.0	9.5	0.2	100.0	45.0	430
<b>Education</b>											
No education	*	0.0	0.0	0.0	*	0.0	0.0	0.0	100.0	*	3
Primary or lower or special needs	14.9	12.9	1.9	0.0	66.7	0.0	1.8	1.8	100.0	29.6	53
Secondary	19.5	12.9	1.3	0.7	61.7	0.1	3.1	0.7	100.0	33.7	1,502
More than secondary	17.1	11.5	1.2	0.3	66.1	0.0	2.8	1.0	100.0	29.8	400
<b>Wealth quintile</b>											
Lowest	18.3	14.3	2.3	0.9	59.4	0.0	4.6	0.2	100.0	34.9	441
Second	19.9	9.3	0.8	0.5	64.3	0.2	3.7	1.3	100.0	30.0	396
Middle	18.6	13.2	1.5	0.5	63.7	0.0	2.0	0.5	100.0	33.3	404
Fourth	19.7	14.3	1.0	0.8	60.1	0.0	2.8	1.3	100.0	35.0	388
Highest	18.2	11.5	0.6	0.0	67.2	0.0	1.5	1.0	100.0	30.3	329
<b>Total</b>	18.9	12.6	1.3	0.6	62.7	0.0	3.0	0.8	100.0	32.8	1,958

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

<sup>1</sup> Non-shared facilities that are of the types: flush or pour flush to septic tank or to pit latrine; ventilated improved pit latrine; pit latrine with a slab

The 2014 SDHS collected information from respondents to evaluate the nutritional status of infants, young children and women. Information on breastfeeding, complementary feeding and the intake of foods rich in micronutrients, including iron and vitamin A, was collected. For infants and young children, this included information on breastfeeding and complementary feeding. For the micronutrients iron and vitamin A, information was collected on intake levels from supplementation and food. Anthropometric measurements (height and weight) were taken for women 15-49 years and children age 5 years and below to determine their nutritional status.

Adequate nutrition is critical to child development. The period from birth to two years of age is an important one for optimal growth, health, and development. Unfortunately, this period is often marked by growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhoea and acute respiratory infections (ARI). The lack of important nutrients at critical stages of growth can predispose children to obesity and NCDs, especially when under nutrition in early life is followed by overconsumption in later years. Optimal feeding practices reported in this chapter include early initiation of breastfeeding, exclusive breastfeeding during the first 6 months of life, timely introduction of complementary feeding at 6 months of age and the frequency of feeding and diversity of foods provided during complementary feeding for children between 6 and 23 months of age. A summary indicator that describes the quality of infant and young child (age 6-23 months) feeding practices is included.

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, slow recovery from illness, and heightened risks of adverse pregnancy outcomes. Once obesity is established in a population, maternal obesity and diabetes in pregnancy also drive increasing rates of childhood obesity and subsequent chronic disease among those children. The First Thousand Days from conception through pregnancy, and up to two years of age, is a critical period in which to improve the nutritional status and health of mother and baby (Black et al., 2013). This chapter presents information on food and micronutrient intake among mothers, and information on the weekly consumption of fruits and vegetables among women and men age 15-49.

## 11.1 NUTRITIONAL STATUS OF CHILDREN

At a population level, anthropometric data from a single assessment can provide a picture of the current nutrition status within a community, and can be used to identify groups at risk of poor nutrition-related health outcomes. The 2014 SDHS collected anthropometrical data on children under five years of age. The following definitions of anthropometric indicators will be used to describe the nutritional status of these children:

- **Wasting or acute malnutrition** - Is defined as the percentage of children aged 0 to 59 months whose **weight-for-height** is below minus two standard deviations (moderate and severe wasting) and minus three standard deviations (severe wasting) from the median of the WHO Child Growth Standards. Wasting is the result of either a continuously insufficient amount of food to meet dietary energy and nutrient requirements, repeated infections or a combination of both.
- **Stunting** - reflects chronic under nutrition during the most critical periods of growth and development in early life. It is defined as the percentage of children aged 0 to 59 months whose **height-for-age** is below minus two standard deviations (moderate and severe stunting) and minus three standard deviations (severe stunting) from the median of the WHO Child

Growth Standards. Stunting develops over a long period of time as a result of prolonged under nutrition

- **Underweight** - is a composite form of under nutrition that includes elements of stunting and wasting. It is defined as the percentage of children aged 0 to 59 months whose **weight-for-age** is below minus two standard deviations (moderate and severe underweight) and minus three standard deviations (severe underweight) from the median of the WHO Child Growth Standards.
- **Overweight** - is defined as the percentage of children aged 0 to 59 months whose **weight-for-height** is above two standard deviations (overweight and obese) or above three standard deviations (obese) from the median of the WHO Child Growth Standards.

Table 11.1 shows that 4 percent of children 0-59 months are moderately and severely wasted. In well-nourished populations it would be expected that only 2.3 percent of children would fall below minus 2 standard deviation; therefore, even a "low" level of less than 5 percent wasting may be cause for concern. The most affected age group is 0-6 months, with 9 percent of children moderately wasted and 3 percent severely wasted. The next age group (6-8 months) is also significantly affected with 5 percent of children moderately wasted and 2 percent severely wasted. Because weight can fluctuate rapidly in children due to illness or inadequate food intake, weight-for-height reflects the current nutritional status of a child. In non-emergency situations, the highest prevalence of wasting generally occurs in young children 12-24 months of age. There is a strong association between underweight mothers, low birth weight and children with moderate and severe wasting. Children with moderate and severe wasting are more likely to live in a rural area, in particular North West Upolu and Rest of Upolu, and come from families in the lowest and second wealth quintiles.

Moderate and severe stunting is found to be present in 5 percent of the children aged 0-59 months. Although some stunting is present in very young children the percentage of children with moderate and severe stunting increases substantially in the 9-47 month age range. Severe stunting is present in 3 percent of children ages 18-23 months. There is a correlation between stunted children, underweight mothers, and very small and small size at birth. Stunted children are slightly more likely to live in a rural area, with Rest of Upolu recording the highest percentage of moderate and severely stunted children (6 percent). A higher percentage of children with moderate and severe stunting come from families in the lowest wealth quintile.

At population level, data on weight-for-age can be used to identify areas of highest need for interventions and to assist in the allocation of resources among communities or regions. Weight-for-age status shows that a higher percentage of underweight children live in the rural areas of North West Upolu and Rest of Upolu. The age range with the highest percentage of underweight children is from 6-18 months.

The percentage of moderately and severely overweight children aged 0 to 59 months whose weight-for-height is above two standard deviations is 5 percent. Overweight children are more likely to be male, be an average or larger size at birth and be born to mothers who are in the overweight or obese weight range. Overweight children are more likely to be born to mothers who live in the Apia Urban area, come from families in the highest wealth quintile and have more than secondary level of education. This could indicate that, at least for these categories of mothers, overconsumption is the main reason for their children to be overweight.

The nutritional status assessment of Samoan children aged 0-59 months indicates that growth faltering is occurring in the early years of life (birth to 2 years) after which it starts to correct, with a slight trend towards overweight status closer to 5 years of age. These results could be due to inadequate nutritional intake in the first 1000 days of life (conception to 2 years of age) and the formation of poor eating practices in early childhood.



The last anthropometrical data to be collected for children in this age range was from the National Nutrition Survey that was conducted in 1999.

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, Samoa 2014

Background characteristics	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percent- age below -3 SD	Percent- age below -2 SD <sup>1</sup>	Mean Z- score (SD)	Percent- age below -3 SD	Percent- age below -2 SD <sup>1</sup>	Percent- age above +2 SD	Mean Z- score (SD)	Percent- age below -3 SD	Percent- age below -2 SD <sup>1</sup>	Percent- age above +2 SD	Mean Z- score (SD)	
<b>Age in months</b>												
<6	0.7	1.8	1.4	2.6	11.1	5.1	0.2	0.7	1.5	20.3	0.8	271
6-8	0.0	0.7	1.3	2.1	7.1	4.4	0.0	0.7	3.6	13.6	0.6	142
9-11	2.1	4.8	0.8	1.4	4.2	4.2	0.1	2.1	4.9	9.7	0.4	144
12-17	1.8	5.4	0.1	2.4	4.8	4.8	0.1	1.2	4.8	6.0	0.1	331
18-23	3.3	4.8	0.2	0.0	2.6	7.8	0.3	0.0	2.2	7.8	0.3	267
24-35	1.6	5.5	0.1	0.5	2.5	5.5	0.3	0.6	2.7	4.8	0.1	630
36-47	2.8	6.7	0.1	0.7	1.9	5.7	0.4	1.1	3.0	3.3	0.2	575
48-59	0.4	3.6	0.0	0.8	1.8	4.6	0.3	0.2	1.0	2.8	0.2	500
<b>Sex</b>												
Male	2.1	5.3	0.2	1.0	2.7	6.2	0.3	0.8	2.8	7.9	0.3	1,501
Female	1.2	4.1	0.2	1.2	4.8	4.5	0.1	0.7	2.6	5.5	0.2	1,358
<b>Birth interval in months<sup>2</sup></b>												
First birth <sup>3</sup>	1.5	4.1	0.2	1.4	3.9	5.8	0.2	0.7	2.7	5.5	0.3	591
<24	2.0	5.6	0.0	0.8	3.7	4.7	0.2	0.9	3.2	5.5	0.2	750
24-47	1.4	4.6	0.2	1.3	5.0	4.0	0.1	0.7	2.5	5.6	0.2	764
48+	1.4	2.5	0.4	0.9	2.5	6.6	0.3	0.7	1.8	8.9	0.5	436
<b>Size at birth<sup>2</sup></b>												
Very small	*	*	*	*	*	*	*	*	*	*	*	24
Small	2.3	7.6	(0.3)	2.6	8.3	2.3	(0.2)	1.5	5.7	1.5	0.3	264
Average or larger	1.4	3.9	0.3	1.0	3.4	5.5	0.2	0.6	2.2	6.8	0.3	2,207
Missing	(2.2)	(4.4)	(0.1)	(0.0)	(4.5)	(2.2)	(0.2)	(2.2)	(4.5)	(0.0)	(0.2)	45
<b>Mother's interview status</b>												
Interviewed	1.6	4.4	0.2	1.1	3.9	5.1	0.2	0.7	2.6	6.1	0.3	2,541
Not interviewed but in household	4.5	8.1	0.3	0.9	0.9	8.1	0.5	0.9	5.4	11.7	0.5	110
Not interviewed, and not in the household <sup>4</sup>	1.0	6.7	0.2	1.0	1.9	7.7	0.5	0.5	1.9	11.5	0.4	208
<b>Mother's nutritional status<sup>5</sup></b>												
Thin (BMI<18.5)	*	*	*	*	*	*	*	*	*	*	*	6
Normal (BMI 18.5-24.9)	0.7	4.7	0.0	0.7	3.6	1.4	(0.2)	1.1	1.8	2.5	(0.1)	278
Overweight/obese (BMI >= 25)	1.8	4.5	0.2	1.2	4.0	5.6	0.2	0.6	3.1	6.3	0.3	1,871
Missing	1.7	4.4	0.3	0.8	2.7	6.0	0.3	0.8	1.7	8.6	0.4	481
<b>Residence</b>												
Urban	1.5	4.4	0.5	0.2	1.5	7.3	0.5	0.4	0.9	11.8	0.6	447
Rural	1.7	4.8	0.1	1.2	4.1	5.0	0.2	0.8	3.0	5.8	0.2	2,413
<b>Region</b>												
Apia urban area	1.5	4.4	0.5	0.2	1.5	7.3	0.5	0.4	0.9	11.8	0.6	447
North west Upolu	1.7	4.4	0.1	1.2	4.8	5.2	0.1	1.2	3.8	6.4	0.1	1,008
Rest of Upolu	2.2	5.7	0.1	1.9	5.5	3.7	0.0	0.4	3.3	3.5	0.1	691
Savaii	1.3	4.4	0.2	0.7	1.7	6.0	0.4	0.6	1.7	7.2	0.4	714
<b>Mother's education</b>												
No education	*	*	*	*	*	*	*	*	*	*	*	11
Primary	2.5	7.6	(0.4)	1.3	2.5	1.3	(0.1)	1.3	7.6	1.3	(0.3)	79
Secondary	1.7	4.8	0.1	1.2	4.2	4.6	0.2	0.8	3.0	5.1	0.2	2,056
More than secondary	1.2	2.6	0.6	0.6	2.4	8.0	0.4	0.2	0.6	11.8	0.6	501
Missing	*	*	*	*	*	*	*	*	*	*	*	4
<b>Wealth quintile</b>												
Lowest	1.5	6.1	(0.0)	1.2	4.1	4.0	0.1	0.7	2.8	4.1	0.1	679
Second	1.3	3.7	0.1	1.8	5.1	3.4	0.1	1.0	3.1	3.7	0.1	613

Middle	2.7	5.8	0.1	0.9	3.6	5.5	0.2	1.3	3.8	5.5	0.2	636
Fourth	1.5	4.4	0.4	0.6	3.1	6.0	0.3	0.2	1.7	7.9	0.5	517
Highest	1.2	2.6	0.7	0.7	1.7	9.6	0.6	0.2	1.4	15.7	0.8	414
Total	1.7	4.7	0.2	1.1	3.7	5.4	0.2	0.7	2.7	6.7	0.3	2,859

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 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 standards. 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.

Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

<sup>1</sup> Includes children who are below -3 standard deviations (SD) from the International Reference Population median

<sup>2</sup> Excludes children whose mothers were not interviewed

<sup>3</sup> First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

<sup>4</sup> Includes children whose mothers are deceased

<sup>5</sup> 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

<sup>6</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

## 11.2 INITIATION OF BREASTFEEDING

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces post-partum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also fosters bonding between mother and child.

Table 11.2 shows the percentage of all children born in the five years preceding the survey who were breastfed and for last-born children who ever breastfed, the timing of initial breastfeeding, by background characteristics of mothers. Overall, 94 percent of children born in the past five years have been breastfed at some time. For last-born children ever breastfed, 81 percent started breastfeeding within one hour of birth and 98 percent started breastfeeding within the first 24 hours after delivery. There are no significant differentials in the percentage of children ever breastfed by background characteristics.

The results from the 2014 SDHS show that there is no difference in early initiation (within the first hour of birth) of breastfeeding by sex of child. Children in urban areas and in Apia urban area (85.3 percent each) are considerably more likely to receive breast milk during the first hour after birth than children in rural areas (80.6 percent). The proportion of children who receive early breastfeeding is three percent lower when a health professional assists at delivery or the infant is delivered in a health facility compared with deliveries assisted by a traditional birth attendant or when the delivery occurs at home. The Baby Friendly Hospital Initiative has been promoted at both of the tertiary hospital facilities on Upolu and Savaii for the past eight years and although annual auditing has shown improvements in Baby Friendly practices, neither facility has achieved certification as yet. One of the ten steps to a Baby Friendly Facility is to promote skin-to-skin contact within the first hour of delivery, which encourages early initiation of breastfeeding. One of the barriers to achieving a higher rate of skin-to-skin contact within the first hour of birth is the patient management protocol following caesarean section deliveries, where mothers and infants are separated until the mother is discharged from the surgical recovery section. The percentage of births in a health facility that are delivered by caesarean section was reported in the 2014 SDHS as 5 percent.

**Table 11.2. Initial breastfeeding**

Percentage of children born in the five years preceding the survey who were ever breastfed, and for the last children born in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a prelacteal feed, by background characteristics, Samoa 2014

Background characteristic	Breastfeeding among children born in last five years		Among last-born children ever breastfed:			
	Percentage ever breastfed	Number of children born in last five years	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>	Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	92.8	1,671	81.6	97.4	4.9	969
Female	94.5	1,522	81.2	97.9	5.1	939
<b>Residence</b>						
Urban	90.2	597	85.3	96.8	7.0	336
Rural	94.4	2,596	80.6	97.9	4.6	1,572
<b>Region</b>						
Apia urban area	90.2	597	85.3	96.8	7.0	336
North west Upolu	94.4	1,104	80.9	98.5	3.5	676
Rest of Upolu	93.5	814	69.3	96.2	8.2	474
Savaii	95.4	677	92.7	98.6	2.3	422
<b>Mother's education</b>						
No education	*	3	*	*	*	3
Primary	91.6	93	80.5	98.2	7.3	55
Secondary	93.6	2,466	81.7	97.9	4.5	1,465
More than secondary	94.0	630	80.7	96.8	6.8	386
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	93.5	2,632	81.3	97.9	4.8	1,594
Traditional birth attendant	93.4	505	83.5	98.3	6.4	292
Other	*	16	*	*	*	13
No one	*	7	*	*	*	3
Missing	(100.0)	32	*	*	*	7
<b>Place of delivery</b>						
Health facility	93.5	2,614	81.2	97.9	4.7	1,583
At home	93.6	541	84.0	98.1	6.3	313
Other	*	7	*	*	*	6
Missing	100.0	30	*	*	*	6
<b>Wealth quintile</b>						
Lowest	94.2	760	82.5	97.9	3.7	435
Second	94.2	669	79.9	98.0	4.3	393
Middle	95.3	662	82.5	98.7	6.1	401
Fourth	90.9	610	80.0	97.0	6.8	363
Highest	92.8	492	82.0	96.4	4.4	317
Total	93.6	3,192	81.4	97.7	5.0	1,909

Note: Table is based on births in the last five years whether the children are living or dead at the time of interview. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth

<sup>2</sup> Children given something other than breast milk during the first three days of life

<sup>3</sup> Doctor, nurse/midwife, or enrolled nurse

The survey results indicate that about 5 percent of last-born babies who breastfed, received a prelacteal feed, that is, they received something other than breast milk during the first three days of life. Prelacteal feeding can result in the baby receiving insufficient breast milk and may lead to lactation failure, diarrhoea and shortening of the duration of breast-feeding. It is for these reasons that UNICEF/ WHO discourage the use of prelacteal feeding unless medically indicated. Although the rate

of prelacteal feeding is low in Samoa it was found that children whose births were assisted by a traditional birth attendant and children who were born at home, 6 percent each, were slightly more likely to receive a prelacteal feed than children whose births were assisted by a health professional and children born at health facility, 5 percent each. The practice of giving the baby a prelacteal feed is slightly more common in the Rest of Upolu (8 percent) and Apia urban area (7 percent) than in other regions. It is also practiced more commonly among children born to mothers with primary level education (7 percent).

Compared with the results from the 2009 SDHS, the percentage of children ever breastfed in Samoa has increased by 2 percent over the past 5 years. The percentage of last-born children who started breastfeeding within the first day of birth has increased slightly to 98 percent and the proportion of last-born children who received prelacteal feeds has improved from 12 percent to just 5 percent over the past five years.

### 11.3 BREASTFEEDING STATUS BY AGE

The United Nations Children's Fund (UNICEF) and World Health Organization (WHO) recommend that children be exclusively breastfed during the first 6 months of life and that they be given solid or semi-solid complementary foods in addition to continued breastfeeding from 6 months until age 24 months or older when the child is fully weaned. Exclusive breastfeeding means that an infant only receives breast milk without any additional food or drink, not even water. Exclusive breastfeeding is the optimal way to provide food for a baby's first six months of life, as it provides all the nutrients required for growth and development. Breast milk continues to provide up to half or more of a child's nutritional needs during the second half of their first year, and up to one-third during their second year of life. However, breastfeeding is so much more than food alone; breastfed infants are much less likely to die from diarrhoea, acute respiratory infections and other diseases. A non-breastfed child is 14 times more likely to die in the first six months than an exclusively breastfed child. Mothers' antibodies in breast milk support infants' immune systems and breastfeeding also helps protect children from chronic conditions later in life such as obesity and diabetes.

Breastfeeding is also an integral part of the reproductive process with important implications for the health and well-being of mothers; it helps to space children, reduces the risk of ovarian cancer and breast cancer, increases family and national resources, is a secure way of feeding and is safe for the environment. While breastfeeding is a natural act, it is also a learned behaviour. An extensive body of research has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices. WHO and UNICEF launched the "Baby-friendly Hospital Initiative (BFHI)" in 1992, to strengthen maternity practices to support breastfeeding. The foundations of the BFHI are the *Ten Steps to Successful Breastfeeding* designed to protect, promote and support breastfeeding.

Early complementary feeding or supplementation is discouraged for several reasons. First, it exposes infants to pathogens and increases their risk of infection, especially diarrhoeal diseases. Second, it decreases infants' intake of breast milk and therefore suckling, which reduces breast milk production. Third, in low-resource settings, complementary food is often nutritionally inferior. During the survey, data on complementary feeding were obtained by asking mothers about the current breastfeeding status of all children under five years of age and, for the youngest child born in the three-year period before the survey and living with the mother, foods and liquids given to the child the day and night before the survey.

Table 11.3 shows the percent distribution of youngest children less than 3 years of age living with the mother, by breastfeeding status, and the percentage of all children under three years using a bottle with a nipple, according to age in months. The results presented in Table 11.3 and Figure 11.1 show that breastfeeding was initiated in 94 percent of Samoan children born in the past five years. However, a breakdown of exclusive breastfeeding rates show that 83 percent of children under 2 months of age are exclusively breastfed, by age 2-3 months, 75 percent are still being exclusively breastfed and by age 4-5 months, the percentage of exclusively breastfed children has fallen to 55

percent. Overall, only 70 percent of children under the age of 6 months are exclusively breastfed, which is far less than the 100 percent recommended. Responses also indicate that in children under six months of age, who should still be exclusively breastfed, 12 percent of children are given complementary food (solid or mushy), 11 percent are given other (non-breast) milk, and less than 2 percent are given water plain water.

Adequate complementary feeding of children from 6 months onwards is particularly important for growth and development and the prevention of under nutrition. There is evidence that complementary feeding practices are generally poor in most developing countries, meaning that many children continue to be vulnerable to largely irreversible outcomes such as stunting and poor cognitive development, as well as to significantly increased risks of infectious diseases like diarrhoea and pneumonia. The 2014 SDHS complementary feeding data shows that at age 6-9 months, 82 percent of Samoan children are still being breastfed but only about 57 percent of children in this age group are receiving complementary foods. Similar patterns are observed for older children. For example 78 percent of children age 9-11 months are still breastfeeding but only 71 percent of children in this age group are receiving complementary foods.

Comparisons with the 2009 SDHS survey show that breastfeeding initiation has increased by 2 percent and the rate of exclusive breastfeeding up to the age of 6 months has increased by 19 percent. These results indicate that MOH population health campaigns promoting exclusive breastfeeding to 6 months of age have been successful and should be continued, as there is further capacity for improvement in this important health indicator.

**Table 11.3 Breastfeeding status by age**

Percent distribution of youngest children under three years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under three years using a bottle with a nipple, according to age in months, Samoa 2014

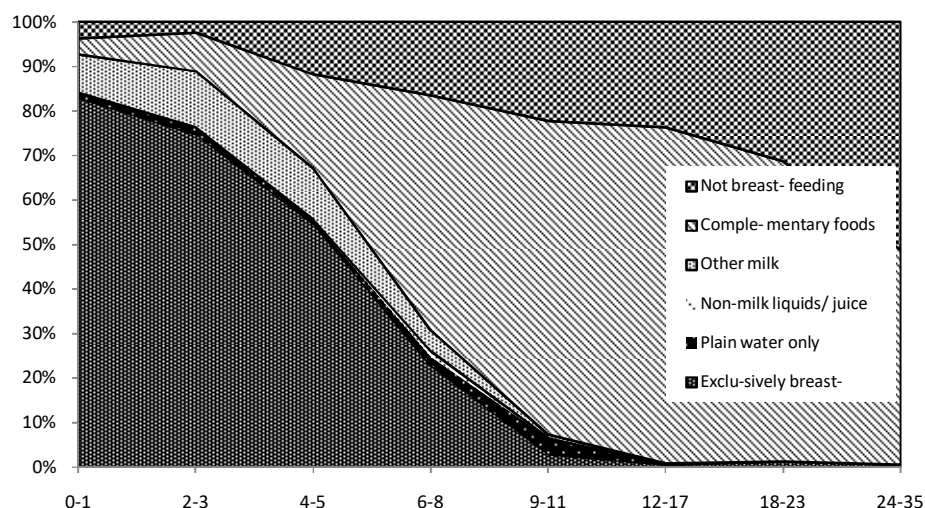
Age in months	Breastfeeding and consuming							Total	Percent-age currently breastfeeding	Number of youngest child under three years	Percent-age using a bottle with a nipple	Number of children
	Not breast-feeding	Exclusively breast-fed	Plain water only	Non-milk liquids/juice	Other milk	Complementary foods						
0-1	3.7	82.9	1.2	0.0	8.6	3.6	100.0	96.3	85	12.1	87	
2-3	2.4	74.8	1.5	0.0	12.6	8.7	100.0	97.6	129	13.2	133	
4-5	11.8	54.6	0.9	0.0	11.5	21.2	100.0	88.2	106	20.4	111	
6-8	16.5	22.8	1.9	1.3	4.7	52.8	100.0	83.5	149	24.3	151	
9-11	22.2	2.9	3.6	0.0	0.8	70.6	100.0	77.8	136	28.0	140	
12-17	23.7	0.6	0.0	0.0	0.3	75.4	100.0	76.3	319	24.9	363	
18-23	31.3	1.3	0.0	0.0	0.0	67.3	100.0	68.7	230	22.9	311	
24-35	51.2	0.5	0.0	0.0	0.0	48.3	100.0	48.8	404	18.4	680	
0-3	2.9	78.0	1.4	0.0	11.0	6.7	100.0	97.1	214	12.8	220	
0-5	5.8	70.3	1.3	0.0	11.2	11.5	100.0	94.2	320	15.3	331	
6-9	17.9	18.5	1.5	1.0	3.6	57.4	100.0	82.1	194	24.2	198	
12-15	24.1	0.9	0.0	0.0	0.5	74.5	100.0	75.9	208	23.7	233	
12-23	26.9	0.9	0.0	0.0	0.2	72.0	100.0	73.1	549	24.0	674	
20-23	33.1	1.4	0.0	0.0	0.0	65.5	100.0	66.9	144	22.7	213	

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, breastfeeding and consuming plain water, non-milk liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

Children fed using infant feeding bottles are at greater risk of gastrointestinal infections. Infant feeding bottles and nipples are very difficult to clean and can frequently become contaminated. The infrequent use of infant feeding bottles can also have a negative effect on breastfeeding as a baby fed from a feeding bottle may begin to refuse the breast and as suckling stimulates milk production regular refusal could lead to insufficient milk being produced. Feeding a child via a bottle also overrides appetite control in the child as they are often encouraged to finish the bottle or the bottle is left with them to finish over time. Practices such as putting a baby to sleep with a bottle of milk or other liquid can also have a detrimental effect on the infant's teeth causing decay and displacement. It is recommended to use an ordinary cup to feed baby except breast milk or any form of artificial feed.

Use of infant feeding bottles is practiced to a certain extent in Samoa, with 15 percent of children under 6 months of age being fed using a bottle with a nipple. The percentage of children who use a bottle with a nipple is lowest among children under 2 months of age (12 percent) but it rises steadily to peak at 28 percent for children 9-11 months. It was reported that 18 percent of children aged 24-35 months continue to receive fluid via a feeding bottle with a nipple. A comparison of results from the 2009 SDHS shows that although the use of feeding bottles is still common, there has been an overall reduction in the practice in all age groups, except 9-11 months, over the past five years.

**Figure 11.1 Infant Feeding Practices by Age**



#### 11.4 DURATION AND FREQUENCY OF BREASTFEEDING

Table 11.4 shows the median duration of breastfeeding by selected background characteristics. The estimates of median duration and mean frequency of breastfeeding are based on current status data, that is, the proportion of children born in the three years preceding the survey who were being breastfed at the time of the survey.

The median duration of any breastfeeding in Samoa is long, at 21 months, and the median duration of exclusive breastfeeding is 5 months. Differences in both these durations by sex are small. Children in rural areas are breastfed longer than children in urban areas (21 months versus 15 months

for any breastfeeding, and 5 months versus 3 months for exclusive breastfeeding). These differences could be attributed to the mothers' employment status and her access to maternity leave or workplace breastfeeding support. It should also be noted that in the highest wealth quintile, the median duration of any breastfeeding is about half the average for all children and the median rate of exclusive breastfeeding in this wealth quintile is two percent lower than the average for all children. Again these differences could be attributed to the barriers to continued breastfeeding that women face when returning to work.

Frequency data show that more than eight in ten (86 percent) of breastfeeding children under 6 months of age, were breastfed at least six times in the 24 hours preceding the survey. On average, children are fed the same number of times during the night and day (about 5 times). The frequency of breastfeeding varies only slightly by background characteristics.

Table 11.4 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Samoa 2014

Background characteristic	Median duration (months) of breastfeeding among children born in the last three years <sup>1</sup>				Frequency of breastfeeding among children under six months <sup>2</sup>		
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding <sup>3</sup>	Percentage breastfed 6+ times in last 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
<b>Sex</b>							
Male	21.6	4.5	4.7	84.3	4.6	4.5	141
Female	20.1	4.9	5.0	87.9	4.6	4.9	160
<b>Residence</b>							
Urban	14.5	2.8	2.8	83.2	5.0	3.9	65
Rural	21.4	5.1	5.3	87.0	4.5	5.0	236
<b>Region</b>							
Apia urban area	14.5	2.8	2.8	83.2	5.0	3.9	65
North west Upolu	20.3	4.8	4.9	83.8	4.4	4.4	108
Rest of Upolu	23.8	5.3	5.5	90.6	4.7	6.6	74
Savaii	20.7	5.4	5.6	88.7	4.4	3.9	53
<b>Mother's education</b>							
No education	28.5	23.5	23.5	*	*	*	0
Primary	*	*	*	100.0	*	*	7
Secondary	21.2	4.8	5.0	90.0	4.8	4.8	221
More than secondary	10.2	4.1	4.1	73.6	4.0	4.5	73
<b>Wealth quintile</b>							
Lowest	22.0	4.5	5.0	95.7	4.8	5.0	70
Second	21.4	5.1	5.2	86.7	4.6	5.5	60
Middle	21.5	4.7	4.7	89.3	4.9	4.5	57
Fourth	20.8	5.2	5.3	83.6	4.6	4.8	68
Highest	10.8	3.4	3.5	71.5	3.9	3.6	47
Total	20.9	4.7	4.8	86.2	4.6	4.7	301
Mean for all children	20.9	5.4	5.6	*	*	*	*

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

<sup>1</sup> It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding

<sup>2</sup> Excludes children without a valid answer on the number of times breastfed

<sup>3</sup> Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

## 11.5 TYPES OF COMPLEMENTARY FOODS

UNICEF and WHO recommend the introduction of solid foods to infants around the age of 6 months because by that age breast milk alone is no longer sufficient to maintain a child's optimal growth. Weaning is the transition from exclusive breastfeeding to eating the same food as the rest of the family. During this transition period (age 6-23 months), the prevalence of malnutrition increases substantially in many countries due to poor feeding practices and increased infections caused by the introduction of unhygienic feeding utensils. Cup feeding is recommended over bottle feeding when a child cannot suckle efficiently at the breast or if the child is receiving milk other than breast milk or a breast milk substitute formula.

Table 11.5 provides information on the types of foods and liquids given to the mother's youngest child under three years of age, living with her on the day and night preceding the interview, according to breastfeeding status. Results show that for children in the transition period, from 6-23 months of age, 90 percent of breastfeeding children received solid or semi-solid foods in the day or night preceding the interview. The most common complementary foods were: food made from grains (74 percent); fruits and vegetables rich in vitamin A (72 percent); food made from roots and tubers (69 percent); and meat, fish, poultry and eggs (69 percent). Consumption of anything cooked with oil, fat, coconut cream or butter begins at 4-5 months (6 percent) and increases rapidly from the age of 9-11 months (22 percent) to 44 percent of children in the age group 24-35 months. In the critical transition period (6-23 months of age), where children are at a higher risk of malnutrition as they develop their eating skills and behaviours, 17 percent consumed sugary foods and 29 percent consumed food made with oil, fat and butter. During weaning too much of these types of foods can lead to early satiety and therefore reduce the appetite of the young child as well as encourage the development of unhealthy eating behaviours that are continued into adulthood.

The 2014 SDHS (Table 11.5) found that in the non-breastfeeding category 98 percent of non-breastfeeding children in the transition phase of complementary feeding (6-23 months) received solid or semi-solid foods in the day and night preceding the interview. The four most commonly consumed foods were foods made from grains, fruits and vegetables rich in vitamin A, foods made from roots and tuber and meat, fish, poultry and eggs. Children in the non-breastfeeding category consume more of these foods than children still being breastfed. The consumption of foods made with oil, fat and butter were similar for both categories but the non-breastfed children in the weaning stage (6-12 months) reported a higher consumption of sugary foods (19 percent).

Comparison of data from 2009 SDHS in both breastfed and non-breastfed children, shows a substantial reduction in the consumption of foods prepared with fats and in sugary foods, but it also shows an across the board reduction in other complementary foods in the critical weaning period (6-23 months), which indicates that complementary feeding practices have worsen over the past five years.



Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under three 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, Samoa 2014

Age in months	Liquids			Solid or semi-solid foods											Number of children
	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Fortified baby foods	Food made from grains <sup>3</sup>	Fruits and vegetables rich in vitamin A <sup>4</sup>	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry, and eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Food made with oil, fat and butter	Sugary foods	
<b>BREASTFEEDING CHILDREN</b>															
0-1	5.3	6.1	1.2	0.0	2.4	3.7	1.3	2.4	0.0	1.2	0.0	3.7	0.0	0.0	82
2-3	11.3	13.6	1.6	1.7	5.7	4.0	0.0	2.5	0.0	5.6	0.0	8.9	0.0	0.9	126
4-5	8.7	16.4	6.5	5.7	13.2	18.7	1.2	7.5	0.0	6.5	2.2	23.0	5.6	1.2	93
6-8	14.7	17.1	24.7	12.8	45.6	44.6	4.7	40.9	0.0	33.7	4.1	63.3	7.4	5.7	125
9-11	8.6	22.7	58.0	16.7	78.5	70.9	7.4	66.4	1.8	65.5	3.0	89.8	22.3	9.6	106
12-17	5.3	15.3	75.5	14.6	82.7	80.7	11.1	78.4	2.4	79.0	5.8	98.8	36.5	20.3	243
18-23	6.4	13.1	84.9	14.1	81.0	82.3	13.9	79.2	5.1	83.1	3.8	98.1	37.9	23.6	158
24-35	5.1	13.4	87.9	17.2	74.6	83.9	18.2	84.3	4.7	79.5	6.7	99.0	44.2	27.0	197
6-23	8.0	16.3	64.9	14.5	74.3	72.3	9.9	69.2	2.5	68.8	4.5	90.1	28.7	16.5	632
Total	7.7	14.8	52.4	11.7	56.4	57.3	8.9	54.5	2.2	53.6	3.9	70.8	24.2	14.1	1,130
<b>NON-BREASTFEEDING CHILDREN</b>															
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
6-8	(75.6)	(62.1)	(29.1)	(41.5)	(79.3)	(79.2)	(26.0)	(62.5)	(0.0)	(66.5)	(17.4)	(91.6)	(16.0)	(0.0)	25
9-11	(72.9)	(82.9)	(49.9)	(33.7)	(87.0)	(86.8)	(17.2)	(63.9)	(0.0)	(73.9)	(16.6)	(96.8)	(30.5)	(17.2)	30
12-17	30.8	41.9	79.9	33.2	84.4	78.8	17.2	67.4	5.4	72.1	16.0	98.7	33.3	18.9	76
18-23	25.8	30.1	72.4	32.8	93.0	80.3	6.8	80.0	3.0	87.4	7.1	98.5	26.9	27.1	72
24-35	11.0	22.5	87.4	20.7	80.2	79.6	17.6	80.0	9.4	87.9	10.9	96.2	41.6	28.9	207
6-23	40.8	46.3	66.6	34.2	87.3	80.5	14.6	70.8	3.1	77.1	13.1	97.5	28.5	19.3	202
Total	27.5	35.9	73.7	26.9	80.8	76.9	15.4	72.1	6.0	79.0	11.5	93.6	33.6	23.1	428

Note: Breastfeeding status and food consumed refer to a 24-hour<sup>a</sup> period (yesterday and last night). 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.

<sup>1</sup> Other milk includes fresh, tinned and powdered cow or other animal milk

<sup>2</sup> Doesn't include plain water

<sup>3</sup> Includes fortified baby food

<sup>4</sup> Includes pumpkin, carrots, squash, breadfruit (yellow or orange inside), cabbage, pele leaves, other dark green leafy vegetables, pawpaw, mango, orange, and ripe breadfruit

## 11.6 INFANT AND YOUNG CHILD FEEDING PRACTICES

Infant and young child feeding (IYCF) practices include the timely introduction of solid/semi-solid foods from the age of 6 months and gradual increasing of the consistency, frequency, amount and variety of foods as the child gets older, while maintaining frequent breastfeeding. During the period of complementary feeding, children are at high risk of under nutrition. Complementary foods are often of inadequate nutritional quality, or they are given too early or too late, in too small amounts, or not frequently enough. Premature cessation or low frequency of breastfeeding also contributes to insufficient nutrient and energy intake in infants beyond 6 months of age (WHO, 2009)

Table 11.6 presents the results of the 2014 SDHS according to IYCF practices for breastfed and non-breastfed children living with their mother. The indicators focus on the percentage 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 a child is fed), and
- Consumption of breast milk or other milks or milk products.

Breastfed children are considered fed in accordance with the minimum IYCF standards if they consume at least three food groups and receive foods other than breast milk at least twice per day in the case of children age 6-8 months and at least three times per day in the case of children age 9-23 months. Non-breastfed children are considered to be fed in accordance with the minimum IYCF standards if they consume milk or milk products, are fed from four food groups (including milk products), and are fed at least four times per day.

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 upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Samoa 2014

Background characteristic	Among breastfed children 6-23 months, percentage fed:			Number of breastfed children 5-23 months	Among non-breastfed children 6-23 months, percentage fed:				Number of non-breastfed children 6-23 months	Among all children 6-23 months, percentage fed:				Number of all children 6-23 months
	3+ food groups <sup>1</sup>	Minimum times or more <sup>2</sup>	Both 3+ food groups and minimum times or more		Milk or milk products <sup>3</sup>	4+ food groups	4+ times or more	With 3 IYCF practices <sup>4</sup>		Breast-milk or milk products <sup>3</sup>	3+ or 4+ food groups <sup>5</sup>	Minimum times or more <sup>6</sup>	With all 3 IYCF practices	
6-8	34.4	47.9	28.0	125	*	*	*	*	25	96.6	39.2	43.5	26.9	149
9-11	65.3	50.0	36.0	106	(89.7)	(64.3)	(19.7)	(13.3)	30	97.7	65.1	43.3	31.0	136
12-17	76.8	61.2	49.1	243	52.4	46.9	25.5	9.6	76	88.7	69.7	52.8	39.7	319
18-23	77.3	52.5	41.3	158	41.5	48.4	33.6	14.0	72	81.7	68.3	46.6	32.7	230
<b>Sex</b>														
Male	66.0	56.6	41.4	334	58.8	53.7	29.6	15.3	99	90.6	63.2	50.4	35.5	433
Female	67.4	52.3	40.1	298	56.0	50.4	24.4	10.9	104	88.7	63.1	45.1	32.5	402
<b>Residence</b>														
Urban	70.5	51.3	43.6	84	77.8	72.3	24.0	18.5	58	90.9	71.2	40.1	33.3	142
Rural	66.1	55.0	40.4	548	49.1	43.9	28.2	10.9	144	89.4	61.5	49.4	34.2	692
<b>Region</b>														
Apia urban area	70.5	51.3	43.6	84	77.8	72.3	24.0	18.5	58	90.9	71.2	40.1	33.3	142
North west Upolu	64.3	46.6	34.1	227	52.9	45.1	14.4	7.8	63	89.8	60.2	39.6	28.4	289
Rest of Upolu	62.3	50.6	34.1	170	(43.6)	(39.3)	(26.3)	(8.9)	46	88.0	57.4	45.4	28.7	216
Savaii	73.0	72.8	56.9	151	(49.7)	(47.6)	(55.1)	(19.0)	35	90.4	68.2	69.5	49.7	186
<b>Mother's education</b>														
Primary	*	*	*	18	*	*	*	*	7	(88.0)	(55.7)	(51.8)	(39.7)	25
Secondary	66.5	55.6	40.9	516	47.7	50.1	26.0	8.5	132	89.3	63.1	49.6	34.3	649
More than secondary	66.8	47.7	38.8	98	77.7	60.1	28.9	22.6	63	91.2	64.2	40.3	32.4	161
<b>Wealth quintile</b>														
Lowest	66.2	57.5	40.4	161	(27.1)	(40.3)	(36.8)	(3.8)	25	90.2	62.7	54.8	35.5	186
Second	67.8	52.9	41.5	147	(50.7)	(38.0)	(41.0)	(16.3)	32	91.2	62.5	50.8	37.0	179
Middle	70.7	52.1	39.3	146	(50.9)	(46.5)	(20.8)	(4.3)	48	87.8	64.7	44.3	30.6	194
Fourth	60.8	52.2	38.6	109	(54.3)	(54.4)	(21.4)	(10.9)	38	88.2	59.1	44.3	31.5	147
Highest	66.1	60.0	46.8	69	81.0	67.6	23.9	23.9	59	91.2	66.8	43.3	36.2	128
Total	66.7	54.5	40.8	632	57.4	52.1	27.0	13.1	202	89.7	63.1	47.8	34.1	834

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.

<sup>1</sup> Food groups: a. infant formula, milk other than breastmilk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge, fortified baby food from grains; c. vitamin A-rich fruits and vegetables; d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts; h. foods made with oil, fat, butter.

<sup>2</sup> At least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months

<sup>3</sup> Includes commercial infant formula, fresh, tinned and powdered animal milk, and cheese, yogurt and other milk products

<sup>4</sup> Nonbreastfed children ages 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least the minimum number of food groups.

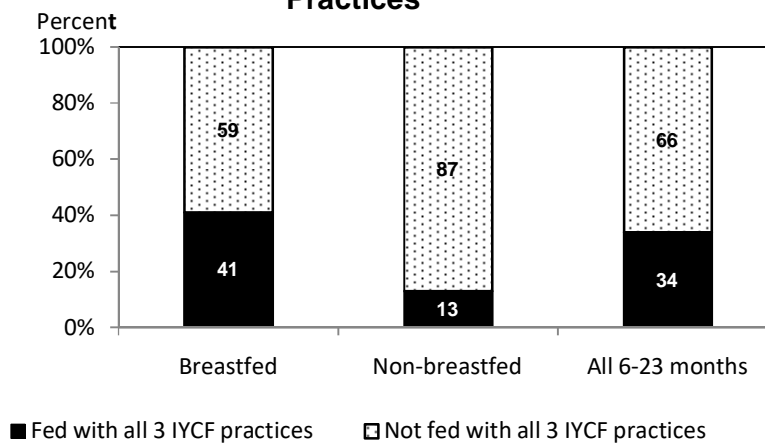
<sup>5</sup> 3+ food groups for breastfed children and 4+ food groups for non-breastfed children

<sup>6</sup> Fed solid or semi-solid food at least twice a day for infants 6-8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children

Among breastfed children age 6-23 months, only 41 percent meet the minimum IYCF standards with respect to food diversity and feeding frequency in the past 24 hours. The proportion of breastfed children who receive the minimum recommended variety and number of feeds a day increases with children's age from 28 percent among children age 6-8 months to 49 percent among those age 12-17 months. There is only slight variation in the proportion of breastfed children who meet both criteria by sex of child and by urban rural residence. However, when a regional breakdown is applied there are more substantial differences between sites. The percentage of breastfed children aged 6-23 months, who meet both IYCF practices is 57 percent in Savaii, 44 percent in the Apia urban area, while it is lower in both the North West of Upolu and Rest of Upolu regions at 34 percent. A possible causal factor for Savaii achieving this indicator at a much high rate than the Apia urban area could be the isolation from supermarkets and more limited transport options, leading to more meals being consumed at home and more of a reliance on home gardens. However, this would not explain the low rates seen in other rural areas on Upolu. Among the quintile groups the households in the highest wealth quintiles are more likely to meet the IYCF criteria.

Among non-breastfed children age 6-23 months, only 13 percent of children were considered to have met the minimum standards with respect to food diversity, feeding frequency and the consumption of milk or milk products. The practice that is least commonly met is the number of times the child is feed each day, with only 27 percent of children receiving 4+ feeds per days. A regional breakdown of the data shows that Savaii is again meeting this indicator at a much higher rate (55 percent) than other sites (14-26 percent).

**Figure 11.2 Infant and Young Child Feeding Practices**



The results in Table 11.6 and Figure 11.2 indicate that the majority of young children in Samoa are not being fed appropriately. Overall, feeding practices meet the minimum standards for only 34 percent of children age 6-23 months. The most common problem with feeding practices is inadequate number of feedings; less than half (48 percent) of all children are fed the minimum number of times. Approximately nine in ten (90 percent) of all children age 6-23 months receive breast milk or milk products and about six in ten (63 percent) receive foods from the recommended number of food groups for their age. Appropriate feeding practices are more common for breastfed children than non-breastfed children (41 and 13 percent, respectively). These results would indicate that there is an over reliance on milk (breast milk or non-breast milk options) to meet the nutritional requirements of children aged 6-23 months. Improvements in this indicator could be made by identifying growth faltering issues or micronutrient deficiencies in this age group and providing education on appropriate IYCF practices.

Compared with the 2009 SDHS the proportion of all children age 6-23 months who receive the recommended variety of foods the minimum number of times a day in Samoa has dropped from 40 to 34 percent. Samoa's economic growth and absence of recent adverse climatic events that could have impacted the agricultural sector would indicate that the underlying factors in poor complementary feeding practices could be due to knowledge deficits or individual/family food security issues rather than national food security issues.

## **11.7 MICRONUTRIENT INTAKE AMONG CHILDREN**

Micronutrient deficiency is a serious contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 11.7 shows indicators used to estimate children's intake of several key micronutrients.

Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency can cause eye damage. Vitamin A deficiency can also increase the severity of infections such as measles and diarrhoeal diseases in children and slow down recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, mangoes, papayas, carrots, pumpkins, yellow-orange sweet potatoes, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for 4-6 months. Periodic dosing (usually every 6 months) of vitamin A supplements is one method of ensuring that children at risk do not develop vitamin A deficiency. There is currently no routine vitamin A supplementation for children in Samoa.

Iron is essential for cognitive development. Low iron intake can also contribute to anaemia. Iron requirements are greatest between the ages of 6 and 12 months, when growth is extremely rapid. The 2014 SDHS collected information on the consumption of foods rich in vitamin A and foods rich in iron.

Table 11.7 shows that about nine in ten (89 percent) children age 6-35 months living with their mother consumed foods rich in vitamin A in the 24 hours preceding the survey, and more than seven in ten (75 percent) consumed foods rich in iron. There is an increase with age in the proportion of children who eat foods rich in vitamin A, from 56 percent of children 6-8 months to approximately 95 percent of those aged 9-35 months. The intake of iron rich foods shows a steady increase from 39 percent of children 6-8 months to 84 percent of those aged 24-35 months.

The percentages of both male and female children who consumed foods rich in vitamin A and iron are similar, at 89 percent and 75 percent, respectively. Children who are not breastfeeding are slightly more likely to consume foods rich in vitamin A (94 percent) and iron (84 percent), compared with their breastfeeding counterparts (87 and 71 percent, respectively). The difference could be due to non-breastfed children being in an older age range, which would be consistent with the increase in consumption with age, previously mentioned. Results indicate that the age of mothers is not related to the consumption of foods rich in vitamin A and iron. Consumption of vitamin A rich foods does not differ between urban and rural areas; however, the consumption of iron rich foods is 10 percentage points higher among children in urban areas than children in rural areas. Consumption of vitamin A-rich foods was highest among children living in Savaii (93 percent), but the consumption of iron-rich foods was highest in the Apia urban area (84 percent).

Table 11.7 Micronutrient intake among children

Among youngest children age 6-35 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, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the last seven days, and 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, Samoa 2014

Background characteristic	Among youngest children age 6-35 months living with the mother:			Among all children age 6-59 months:			Among children age 6-59 months living in households tested for iodized salt	
	Percentage who consumed foods rich in vitamin A in last 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in last 24 hours <sup>2</sup>	Number of children	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months <sup>3</sup>	Number of children	Percentage living in households with adequately iodized salt <sup>4</sup>	Number of children
<b>Age in months</b>								
6-8	55.8	39.1	149	2.6	0.7	151	93.7	147
9-11	82.6	67.3	136	0.7	2.8	140	93.6	138
12-17	94.7	77.4	319	2.4	1.9	363	94.0	350
18-23	96.1	84.4	230	1.3	2.6	311	94.1	299
24-35	95.8	83.8	404	1.6	1.3	680	92.1	666
36-47	-	-	0	2.6	2.0	605	91.9	594
48-59	-	-	0	3.2	2.0	559	95.3	545
<b>Sex</b>								
Male	89.8	74.8	643	1.7	2.0	1,484	92.8	1,448
Female	88.7	75.3	595	2.8	1.6	1,325	94.0	1,290
<b>Breastfeeding status</b>								
Breastfeeding	87.3	71.4	829	2.3	1.6	960	93.6	931
Not breastfeeding	93.6	83.6	380	2.3	2.0	1,568	93.3	1,533
Missing	(89.8)	(68.9)	29	1.8	1.8	280	92.8	274
<b>Residence</b>								
Urban	90.3	83.5	210	1.0	2.1	515	92.5	504
Rural	89.1	73.3	1,028	2.5	1.8	2,295	93.5	2,235
<b>Region</b>								
Apia urban area	90.3	83.5	210	1.0	2.1	515	92.5	504
North west Upolu	86.4	71.9	438	3.2	2.4	974	89.8	955
Rest of Upolu	89.6	71.9	310	2.7	2.5	715	97.3	696
Savaii	92.7	77.2	280	1.1	0.0	606	95.2	583
<b>Mother's education</b>								
No education	*	*	2	*	*	3	*	3
Primary	(84.7)	(71.9)	38	1.2	0.0	84	91.8	84
Secondary	89.5	75.9	952	2.4	2.1	2,176	93.0	2,112
More than secondary	89.0	72.3	246	1.8	1.3	547	94.7	540
<b>Mother's age at birth</b>								
15-19	89.1	73.3	100	2.6	0.9	225	92.4	220
20-29	87.9	74.1	625	1.7	1.9	1,516	92.9	1,483
30-39	90.8	76.9	434	3.1	2.0	903	94.3	875
40-49	92.6	75.2	79	1.8	2.5	165	93.7	161
<b>Wealth quintile</b>								
Lowest	88.3	72.4	290	2.6	1.9	672	89.5	643
Second	88.7	74.4	254	2.7	2.7	585	92.2	574
Middle	90.2	77.9	273	2.0	1.4	588	95.0	575
Fourth	87.6	74.9	218	1.5	1.3	531	93.6	515
Highest	92.0	76.0	203	2.1	1.9	434	97.9	431
Total	89.3	75.1	1,238	2.2	1.9	2,809	93.3	2,738

Note: Information on vitamin A and iron supplements and deworming medication is based on the mother's recall. 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.

na = Not applicable

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrot, squash, breadfruits, dark green leafy vegetables, papaya, mango, orange, ripe breadfruit

<sup>2</sup> Includes meat (including organ meat), fish, poultry and eggs.

<sup>3</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

<sup>4</sup> Salt containing 15 parts per million of iodine or more. Excludes children in households in which salt was not tested.

The 2014 SDHS also collected information on iron supplementation among children 6-59 months. Mothers were asked if in the past seven days their child had taken any iron syrup. The Samoan translation used in the questionnaire for iron syrupö was *övai faatupu toto.ö*. As shown in Table 11.7, only 2 percent of all children age 6-59 months reportedly received an iron supplement in the seven days preceding the survey. None of the other variables considered in this analysis showed a significant relationship with the provision of iron supplements. These results must be interpreted with caution, though as there may have been some confusion over the term *övai faatupu toto.ö*. Although this term literally means iron syrupö, in some instances it also refers to the children's multivitamin syrup distributed by community nurses. Given the possible confusion over the term *övai faatupu toto.ö*, the fact that iron syrup is only available in private pharmacies in Apia, and that there is no routine iron supplementation in place for children in Samoa, it is highly unlikely that all children being reported as having taken iron syrup actually did. However, as there was no change to the survey question between 2009 and 2014 SDHS survey, the comparable results show the percentage of children receiving iron supplementation in the last 7 days has decreased from 8 percent to 2 percent.

Intestinal worms can contribute to both anaemia and vitamin A deficiency. The 2014 SDHS collected information on whether children age 6-59 months had been given de-worming medication in the six months preceding the survey. Routine de-worming medication is not required by a child care protocol in Samoa. The results, shown in Table 11.7, indicate that only 2 percent of children age 6-59 months received de-worming medication in the six months preceding the survey. The proportion of children receiving de-worming medication does not vary much with regard to background characteristics, however it is important to note that none of the 583 children sampled from Savaii were given de-worming medication in the previous six months.

## 11.8 PREVALENCE OF ANAEMIA IN CHILDREN

Anaemia is a condition in which the body does not have enough healthy red blood cells. Red blood cells provide oxygen to body tissues and haemoglobin is the oxygen-carrying protein inside red blood cells. People with anaemia do not have enough haemoglobin. The body needs certain vitamins, minerals, and nutrients to make enough red blood cells. Iron, vitamin B12, and folic acid are three of the most important ones.

Iron deficiency anaemia is the most common cause of anaemia and can be caused by low iron intake, poor absorption of dietary iron due to other micronutrient deficiencies, disease or infection or chronic diarrhoea. Surveillance of iron deficiency involves an ongoing process of recording and assessing iron status in an individual or a community. Worldwide, the most common method of screening individuals or populations for iron deficiency involves determining the prevalence of anaemia by measuring blood haemoglobin or haematocrit levels. A major limitation of each of these two tests, however, lies in the fact that anaemia is not a specific indication of iron deficiency, as other nutrient deficiencies and most infectious diseases can also result in significant anaemia (WHO, 2001).

Iron deficiency anaemia should be regarded as a subset of iron deficiency. That is, it represents the extreme lower end of the distribution of iron deficiency. Because anaemia is the most common indicator used to screen for iron deficiency, the terms anaemia, iron deficiency, and iron deficiency anaemia are sometimes used interchangeably. There are, however, milder forms of iron deficiency in which, although anaemia is absent, tissues are still functionally impaired.

Table 11.8 gives the prevalence of anaemia in children aged 6-59 months in Samoa. Anaemia status has been classified as mild, moderate or severe. Anaemia of any form is identified in 44 percent of all children in the 6-59 month age range. Anaemia prevalence was 8 percent higher in urban areas than in rural areas, with Savaii recording the lowest prevalence for any anaemia and within each status level.

Mild and moderate anaemia is highest in the 6-8 month age group, which could reflect low iron stores at birth due to maternal anaemia or inadequate complementary feeding practices. Anaemia prevalence is at its lowest by age 48-59 months, when children are preparing to enter primary school, but, at 22 percent, this still represents moderate level public health significance. Anaemia levels in Samoa are not found to be influenced by mother's education level or wealth quintile.

**Table 11.8 Prevalence of anemia in children**

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Samoa 2014

Background characteristic	Anemia status by hemoglobin level			Any anemia	Number of children
	Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)		
<b>Age in months</b>					
6-8	33.8	40.6	0.7	75.1	148
9-11	33.2	38.3	0.6	72.1	154
12-17	29.9	37.4	1.9	69.2	357
18-23	31.1	23.9	2.1	57.0	284
24-35	26.8	15.6	1.0	43.5	676
36-47	21.7	7.4	0.2	29.3	605
48-59	15.3	6.3	0.2	21.7	542
<b>Sex</b>					
Male	25.1	18.7	1.2	45.0	1,467
Female	24.9	17.7	0.5	43.1	1,298
<b>Mother's interview status</b>					
Interviewed	25.3	19.0	0.8	45.1	2,357
Not interviewed but in household	25.5	15.5	0.0	41.0	148
Not interviewed, and not in the household	22.0	12.7	1.9	36.6	260
<b>Residence</b>					
Urban	26.1	23.3	1.2	50.6	420
Rural	24.8	17.3	0.8	43.0	2,345
<b>Region</b>					
Apia urban area	26.1	23.3	1.2	50.6	420
North west Upolu	24.0	17.7	0.6	42.3	957
Rest of Upolu	27.7	18.9	1.3	47.9	699
Savaii	23.0	15.3	0.6	38.9	690
<b>Mother's education</b>					
No education	*	*	*	*	10
Primary	21.3	30.6	1.3	53.2	75
Secondary	25.5	18.6	0.7	44.8	1,947
More than secondary	24.8	18.2	1.1	44.1	471
Missing	*	*	*	*	3
<b>Wealth quintile</b>					
Lowest	22.9	19.0	1.4	43.3	649
Second	25.3	18.4	0.8	44.5	589
Middle	25.4	18.9	0.6	44.9	623
Fourth	25.6	17.4	0.8	43.8	498
Highest	26.5	16.9	0.5	43.9	407
Total	25.0	18.2	0.9	44.1	2,765

Note: Table is based on children who slept in the household the night before the interview. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Hemoglobin in grams per deciliter (g/dl). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Includes children whose mothers are deceased

<sup>2</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.



## 11.9 PRESENCE OF IODIZED SALT IN HOUSEHOLD

Iodine deficiency can lead to a variety of health and developmental problems, known as iodine deficiency disorders (IDDs). Iodine deficiency is especially damaging during the early stages of pregnancy and in early childhood. In their most severe forms, IDDs can lead to cretinism, stillbirth and miscarriage; even mild deficiency can cause a significant loss of learning ability. Salt iodization has been the most widely used strategy to control and eliminate IDDs and the target for consumption of adequately iodized salt, is set at more than 90 per cent of households (UNICEF, 2008).

Among all households taking part in the 2014 SDHS, 96 percent had salt tested for iodine content. Of those 3529 households, 93 percent of the salt samples tested were found to have an adequate level of iodine (15+ ppm). This means that 89 percent of all households surveyed have an adequate level of iodine in the salt that they use, barely reaching the target of 90 percent.

Urban and rural households are equally likely to have an adequate level of iodine in their salt. Least likely to have adequate levels are those living in North west Upolu (88 percent) and those belonging to the lowest wealth quintile (90 percent).

**Table 11.9 Presence of iodized salt in household**

Among all households, percentage of households tested for iodine content and percentage of households with no salt; and among households with salt tested, the percent distribution by level of iodine in salt (parts per million or ppm), according to background characteristics, Samoa 2014

Background characteristic	Among all households, the percentage		Number of households	Among households with tested salt, the percent distribution by iodine content of salt			Total	Number of households
	With salt tested	With no salt		None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)		
<b>Residence</b>								
Urban	94.1	5.9	771	2.9	4.8	92.4	100.0	725
Rural	97.0	3.0	2,889	1.5	5.7	92.7	100.0	2,803
<b>Region</b>								
Apia urban area	94.1	5.9	771	2.9	4.8	92.4	100.0	725
North west Upolu	98.4	1.6	1,234	1.2	10.4	88.4	100.0	1,215
Rest of Upolu	96.3	3.7	816	0.9	2.4	96.7	100.0	786
Savaii	95.6	4.4	840	2.7	1.9	95.4	100.0	803
<b>Wealth quintile</b>								
Lowest	94.9	5.1	769	2.3	7.9	89.7	100.0	730
Second	96.8	3.2	689	1.4	7.7	90.9	100.0	668
Middle	96.8	3.2	653	2.1	3.8	94.1	100.0	632
Fourth	96.8	3.2	711	2.2	4.8	93.0	100.0	688
Highest	96.8	3.2	839	1.2	3.6	95.2	100.0	812
Total	96.4	3.6	3,660	1.8	5.5	92.7	100.0	3,529

## 11.10 NUTRITIONAL STATUS OF WOMEN

The 2014 SDHS collected anthropometric data on women aged 15-49 in order to calculate their nutritional status, represented as body mass index (BMI). Results show that more than 8 in ten women (83 percent) from 15-49 years of age were classified as overweight or obese (BMI > 25). Twenty five percent of women were classified as overweight and 57 percent classified as obese, with the mean BMI for all women being 32.2 kg/m<sup>2</sup>. At ages 20-29, which is the peak child-bearing age for Samoan women, the mean BMI for women is 31 kg/m<sup>2</sup> and 53 percent are classified as obese.

Excessive weight gain during pregnancy and retention of that weight following delivery are strong risk factors for later obesity in women. Retention of pregnancy weight gain could be a contributor to the substantial increase in the percentage of women with obesity from the age group 15-19 (21 percent) to 20-29 years (53 percent) and again in the 30-39 year age group (75 percent). Given that 40 percent of women entering their childbearing years (age 15-19) are currently classified in the overweight or obese weight range, this presents a significant public health issue for Samoa. Obesity was found to be 4 percent higher in rural areas than in urban areas, with Savaii being the region with the highest percentage of obese women aged 15-49 years. Obesity rates are seen to increase along with the level of women's education and similarly with wealth quintiles.

Once obesity is established in a population, maternal obesity and diabetes in pregnancy also drive increasing rates of childhood obesity and subsequent chronic disease in those children later in life. Maternal obesity increases the risk of a number of pregnancy complications including gestational diabetes, preeclampsia and caesarean delivery. The foetus is at risk of stillbirth and congenital anomalies. The First Thousand Days from conception through pregnancy, and up to two years of age, is a critical period in which to improve the nutritional status and health, of mother and baby (Black et al., 2013)

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, Samoa 2014

Background characteristic	Height		Mean Body Mass Index (BMI)	Body Mass Index <sup>1</sup>							Number of women
	Percentage below 145 cm	Number of women		18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	>=25.0 (Total overweight or obese)	25.0-29.9 (Overweight)	>=30.0 (Obese)	
<b>Age</b>											
15-19	0.4	772	26.8	39.1	0.1	0.1	0.0	60.8	40.1	20.7	754
20-29	0.3	1,055	31.3	17.4	0.7	0.7	0.0	81.8	29.0	52.8	960
30-39	0.0	818	35.1	7.3	0.4	0.3	0.1	92.3	17.4	75.0	768
40-49	0.1	813	35.8	5.0	0.5	0.2	0.3	94.6	14.6	79.9	807
<b>Residence</b>											
Urban	0.5	663	32.1	18.8	0.5	0.3	0.2	80.7	27.2	53.5	625
Rural	0.1	2,796	32.3	16.5	0.4	0.4	0.1	83.0	24.9	58.2	2,663
<b>Region</b>											
Apia urban area	0.5	663	32.1	18.8	0.5	0.3	0.2	80.7	27.2	53.5	625
North west Upolu	0.0	1,213	32.1	17.6	0.4	0.3	0.2	82.0	25.4	56.6	1,162
Rest of Upolu	0.5	771	32.4	15.7	0.4	0.4	0.0	83.9	26.3	57.6	716
Savaii	0.0	812	32.4	15.8	0.5	0.5	0.0	83.7	22.8	61.0	785
<b>Education</b>											
No education	*	*	*	*	*	*	*	*	*	*	8
Primary or lower or special needs	0.8	129	31.5	24.4	1.6	1.6	0.0	74.0	18.8	55.2	122
Secondary	0.1	2,751	32.3	16.8	0.3	0.3	0.1	82.8	25.6	57.3	2,619
More than secondary	0.4	571	32.3	15.9	0.7	0.5	0.2	83.4	25.6	57.8	540
<b>Wealth quintile</b>											
Lowest	0.4	691	31.0	19.9	0.4	0.4	0.0	79.7	27.8	51.9	654
Second	0.2	714	32.0	16.7	0.2	0.2	0.0	83.1	27.0	56.2	673
Middle	0.1	731	31.9	17.4	1.0	0.7	0.3	81.6	26.2	55.4	692
Fourth	0.2	679	32.8	15.8	0.5	0.3	0.2	83.7	22.9	60.8	651
Highest	0.2	645	33.6	14.9	0.2	0.2	0.0	85.0	22.4	62.6	618
<b>Total</b>	0.2	3,459	32.2	17.0	0.5	0.4	0.1	82.6	25.3	57.3	3,288

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months

---

## 11.11 FOODS CONSUMED BY MOTHERS

The quality and quantity of foods consumed by mothers has a direct impact on their health and that of their children, especially during pregnancy and breastfeeding. The 2014 SDHS included questions on the types of foods consumed by mothers of children under age three during the day and night preceding the interview. Table 11.11 shows that the foods most commonly consumed are: meat, fish, shellfish, poultry, and eggs (91 percent); foods made from roots and tubers (87 percent); vitamin A-rich fruits and vegetables (80 percent); and foods made from grains (72 percent). Furthermore, about one in eight mothers consumed foods made from legumes (13 percent), while only one in six (16 percent) reported eating other fruits and vegetables. Foods cooked with oil, fat, coconut cream or butter were eaten by more than half of mothers (51 percent) and sugary foods were consumed by 22 percent of mothers.

Differences in consumption of these food groups by background characteristics are not large, although the consumption of most food groups is higher among women in urban areas than those in rural areas, except for the consumption of foods made from roots and tubers. Consumption of foods cooked with oil, fat, coconut cream or butter is highest in Savaii region at 62 percent, compared with 45 percent among women in the North West Upolu region. No clear differences among wealth quintiles in consumption pattern is observed; however, respondents in the highest wealth quintile did report substantially higher intakes in milk, cheese/yoghurt, vitamin A rich fruits and vegetables, other fruits and vegetables and sugary foods.

The findings indicate that only 8 percent of mothers consumed milk in the 24 hours preceding the interview, a reduction of 14 percentage points from 2009 SDHS. Women in urban areas (24 percent) are more likely to drink milk than women in rural areas (5 percent). At the regional level, the percentage of women drinking milk is highest in the Apia urban area (24 percent) and lowest in the Savaii region (2 percent). Sixty four percent of women drank tea or coffee, which is a reduction from the 77 percent found in the 2009 SDHS. Tea and coffee contain iron binders that can reduce the availability of dietary or supplementary iron sources.

Table 11.11 Foods consumed by mothers in the day or night preceding the interview

Among mothers age 15-49 with a child under age three years living with them, the percentage who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Samoa 2014

Background characteristic	Liquids			Solid or semi-solid foods									Number of women	
	Milk	Tea/ coffee	Other liquids	Foods made from grains	Foods made from roots/ tubers	Foods made from legumes	Meat/ fish/ shellfish/ poultry/ eggs	Cheese/ yogurt	Vitamin A -rich fruits/ vegetables <sup>1</sup>	Other fruits/ vegetables	Other solid or semi-solid food	Foods made with oil/ fat/ butter		Sugary foods
<b>Age</b>														
15-19	4.6	65.1	64.4	68.0	87.7	10.8	90.9	6.4	71.7	11.1	15.1	49.3	16.9	65
20-29	9.0	65.5	65.6	71.8	87.1	13.3	91.0	8.3	80.6	16.8	14.5	50.5	23.3	781
30-39	8.2	63.6	68.1	73.9	86.7	13.5	91.7	8.4	81.2	15.9	13.8	52.4	22.5	553
40-49	7.8	58.9	67.5	65.8	91.2	8.9	88.9	5.6	80.6	17.7	13.7	51.9	12.5	159
<b>Residence</b>														
Urban	23.6	65.7	66.4	81.3	82.8	19.5	93.5	16.4	79.8	25.2	11.5	51.2	38.1	283
Rural	5.0	63.8	66.7	69.6	88.4	11.4	90.5	6.1	80.6	14.4	14.8	51.3	18.0	1,275
<b>Region</b>														
Apia urban area	23.6	65.7	66.4	81.3	82.8	19.5	93.5	16.4	79.8	25.2	11.5	51.2	38.1	283
North west Upolu	6.4	66.0	61.7	68.2	85.7	9.7	90.1	7.2	78.6	15.2	9.6	45.1	14.5	552
Rest of Upolu	5.4	70.0	62.7	67.4	88.9	7.7	87.4	1.6	74.6	10.8	19.1	50.6	14.7	390
Savaii	2.3	53.0	79.8	74.5	92.4	18.4	94.8	9.7	90.8	17.2	18.6	62.3	27.6	333
<b>Education</b>														
No education	*	*	*	*	*	*	*	*	*	*	*	*	*	2
Primary or lower or special needs	(4.5)	(56.6)	(71.8)	(60.7)	(91.4)	(8.9)	(82.7)	(4.3)	(65.1)	(13.2)	(4.5)	(50.0)	(6.7)	45
Secondary	7.1	65.3	66.5	71.6	88.7	13.0	91.5	7.1	80.0	15.1	15.3	52.2	20.7	1,186
More than secondary	13.7	60.8	66.2	74.1	81.9	12.9	90.6	11.9	84.3	21.5	11.8	48.1	27.4	324
<b>Wealth quintile</b>														
Lowest	3.8	60.3	66.7	65.1	90.5	12.2	86.7	5.2	78.7	12.0	15.8	44.7	15.1	363
Second	5.1	63.7	66.1	70.8	87.2	11.2	90.1	4.2	79.4	9.7	15.5	52.0	18.6	319
Middle	5.3	62.9	65.6	69.7	91.0	12.3	94.6	7.2	78.6	12.8	15.2	58.4	16.1	332
Fourth	12.9	69.8	66.5	78.7	83.4	14.4	92.7	10.5	80.0	19.3	14.3	50.4	29.1	290
Highest	17.9	65.3	68.8	77.3	83.2	14.7	92.0	14.9	87.1	32.2	8.8	51.4	33.6	254
Total	8.4	64.2	66.7	71.7	87.4	12.8	91.0	8.0	80.4	16.4	14.2	51.3	21.6	1,558

Note: Foods consumed in the last "24-hour" period (yesterday and last night). 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.

<sup>1</sup> Includes pumpkin, carrots, squash, breadfruit (yellow or orange inside), cabbage, pele leaves, other dark green leafy vegetables, pawpaw, mango, orange, and ripe breadfruit

## 11.12 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for them and their children. Iron supplementation for women during pregnancy protects the mother and infant against anaemia. It is estimated that one-fifth of perinatal mortality and one-tenth of maternal mortality are attributable to iron deficiency anaemia. Anaemia also results in an increased risk of premature delivery and low birth weight. Breastfeeding children also benefit from micronutrient supplementation that mothers receive, especially vitamin A.

Table 11.12 presents a number of measures that are useful in assessing the extent to which women are receiving adequate intake of foods rich in vitamin A and iron, and the percentage of women with a child born in the last five years, who took iron and de-worming medications during pregnancy. The first two columns show the percentage of women with children under three years who reported that they consumed foods rich in vitamin A and iron during the 24-hour period before the interview. In Samoa, the great majority of mothers with young children reported consuming foods that are rich in vitamin A (97 percent) and iron (91 percent). There are but small variations in the percentage of mothers who consumed vitamin A and iron-rich foods by background characteristics. For example, mothers aged 15-19; those have less than secondary education and those who belong to the lowest wealth quintile are less likely to consume foods that are rich in vitamin A and iron compared to mothers in other groups.

Table 11.12 Micronutrient intake among mothers

Among women age 15-49 with a child under age three years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among women age 15-49 with a child born in the last five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child; among mothers age 15-49 who during the pregnancy of the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets or syrup for specific numbers of days, and the percentage who took deworming medication; and among women age 15-49 with a child born in the last five years, who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Samoa 2014

Background characteristic	Among women with a child under three years living with her					Number of days women took iron tablets or syrup during pregnancy of last birth					Percent-age of women who took deworming medication during pregnancy of last birth <sup>4</sup>	Among women with a child born in the last five years, who live in households that were tested for iodized salt		
	Percent-age Vitamin A rich foods <sup>1</sup>	Percent-age iron-rich foods <sup>2</sup>	Number of women	Night blindness reported	Night blindness adjusted <sup>3</sup>	None	<60	60-89	90+	Don't know/missing		Number of women	Percent-age living in households with adequately iodized salt <sup>5</sup>	Number of women
<b>Age</b>														
15-19	95.4	90.9	65	2.9	0.0	25.1	68.1	0.0	0.0	6.8	1.4	71	93.0	69
20-29	97.3	91.0	781	3.4	2.0	32.8	59.4	1.1	0.7	6.0	0.9	921	93.2	905
30-39	96.7	91.7	553	3.8	1.5	35.8	55.9	1.5	0.8	5.9	2.2	739	93.1	715
40-49	98.8	88.9	159	3.6	1.8	37.0	54.5	1.0	1.1	6.4	2.1	282	94.6	278
<b>Residence</b>														
Urban	96.2	93.5	283	7.3	2.3	30.4	64.0	1.2	0.6	3.8	1.2	369	93.2	362
Rural	97.4	90.5	1,275	2.7	1.5	35.1	56.3	1.2	0.8	6.6	1.6	1,645	93.4	1,605
<b>Region</b>														
Apia urban area	96.2	93.5	283	7.3	2.3	30.4	64.0	1.2	0.6	3.8	1.2	369	93.2	362
North west Upolu	96.8	90.1	552	2.5	1.5	32.9	59.7	1.0	1.0	5.6	3.0	707	89.8	695
Rest of Upolu	96.1	87.4	390	3.4	1.6	31.9	59.7	2.2	0.4	5.8	0.8	497	96.9	482
Savaii	99.7	94.8	333	2.4	1.5	42.2	47.2	0.4	1.1	9.0	0.4	441	95.2	428
<b>Education</b>														
No education	*	*	2	*	*	*	*	*	*	*	*	3	*	3
Primary or lower or special needs	89.2	82.7	45	3.5	1.7	38.8	56.1	1.7	0.0		5.0	58	93.2	58
Secondary	97.3	91.5	1,186	3.3	1.5	34.4	57.4	1.2	0.8	6.2	1.6	1,545	93.0	1,503
More than secondary	97.7	90.6	324	4.5	2.2	33.1	59.4	1.2	0.7	5.6	1.0	409	94.5	403
<b>Wealth quintile</b>														
Lowest	94.8	86.7	363	3.4	2.4	34.8	56.9	1.3	0.9	6.2	2.3	453	90.7	435
Second	97.8	90.1	319	3.0	2.0	35.1	54.6	1.7	1.2	7.4	1.4	411	91.0	406
Middle	98.8	94.6	332	2.4	0.7	34.6	58.3	1.2	0.7	5.2	0.9	419	94.7	409
Fourth	97.2	92.7	290	5.5	2.1	34.3	59.2	0.8	0.5	5.1	0.7	392	93.3	379
Highest	97.5	92.0	254	3.6	1.2	31.7	60.2	0.9	0.6	6.5	2.4	340	97.9	338
Total	97.2	91.0	1,558	3.6	1.7	34.2	57.7	1.2	0.8	6.1	1.6	2,014	93.3	1,967

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrot, squash, breadfruits, dark green leafy vegetables, papaya, mango, orange, ripe breadfruit

<sup>2</sup> Includes meat (and organ meat), fish, poultry, eggs

<sup>3</sup> Women who reported night blindness but did not report difficulty with vision during the day

<sup>4</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis

<sup>5</sup> Salt containing 15 ppm of iodine or more. Excludes women in households where salt was not tested.

A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Night blindness is an indicator of vitamin A deficiency that pregnant women are especially prone to experience. Table 11.12 shows that 2 percent of women with a child born in the past five years experienced night blindness during pregnancy for the last birth. Although low, this percentage has increased by 1 percent from the 2009 SDHS. In urban areas a slightly lower percentage of women reported consuming vitamin A rich

foods and a slightly higher percentage of urban women experienced night blindness in their last pregnancy, than their rural counterparts.

Pregnant women have the highest dietary iron requirements by age and sex, and are most likely to benefit from iron supplements. Iron requirements for pregnant women are a third higher than those of non-pregnant women because of increased blood volume during pregnancy and blood loss during delivery. In Samoa, health policy requires that only pregnant women who are anaemic (Hb < 11.0g/dl)<sup>1</sup> are provided with iron supplements. Table 11.12 presents data on the number of days that pregnant women in Samoa took iron supplementation in the form of tablets or syrup during the pregnancy leading to the most recent birth in the five years preceding the survey. Only 60 percent of women reported taking some form of iron supplementation during the pregnancy of their most recent birth, and the majority of these women (58 percent), reported taking the supplements for less than 60 days. One percent of women reported taking iron supplements for 60-89 days and one percent for 90 days or more. Younger women and women in the Apia urban area are more likely to have taken iron supplements during their last pregnancy than other women. Thirty four percent of women did not take any supplemental iron during their last pregnancy. A comparison with 2009 SDHS results shows that the percentage of women taking iron supplements is unchanged; however, the length time that supplements are taken has reduced.

The percentage of women who reported taking de-worming medication during their most recent pregnancy has decreased since the 2009 SDHS from 5 percent to only 2 percent in 2014.

### **11.13 PREVALENCE OF ANAEMIA IN WOMEN**

Iron deficiency in childbearing women increases the risk of maternal mortality, prenatal and perinatal infant loss, and premature labour. Globally, forty percent of all maternal perinatal deaths are linked to anaemia. Poor pregnancy outcomes occur more often in anaemic mothers, and their infants have much lower iron reserves at birth. These infants require more iron than can be supplied by breast milk, at an earlier age.<sup>5</sup>

Table 11.13 shows that 33 percent of women aged 15-49 in Samoa have anaemia and they are more likely to live in an urban area (37 percent). Region wise, the lowest rate of anaemia is in Savaii (28 percent). Although table 11.12 shows that 60 percent of women took an iron supplement during their last pregnancy, anaemia rates during pregnancy were found to be 14 percent higher than for non-pregnant, non-breastfeeding women and rates in women who were currently breastfeeding were 5 percent higher than non-pregnant, non-breastfeeding women.. Anaemia rates are stable from age 15 to age 39, but begin to decline in the 40-49 year age range, probably due to a reduced rate of childbearing and menopausal changes. Comparisons by other background characteristics and anaemia status in women aged 15-49 show that moderate and severe anaemia is most common in women with six or more children, but smoking status, education level and wealth quintile do not seem to influence anaemia rates.

---

<sup>1</sup>Government of Samoa, 2001. *Obstetric Care Protocols. Part of Safe Motherhood Initiative with assistance from WHO*, Apia. Samoa

Table 11.13 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Samoa 2014

Background characteristic	Anemia status by hemoglobin level			Any anemia	Number of women
	Mild anemia	Moderate anemia	Severe anemia		
<b>Age</b>					
15-19	28.0	5.4	0.1	33.5	771
20-29	26.3	6.4	0.6	33.3	1,171
30-39	24.2	8.9	0.8	33.8	883
40-49	21.0	7.3	0.8	29.2	813
<b>Number of children ever born</b>					
0	26.7	5.2	0.2	32.2	1,213
1	26.6	6.9	0.7	34.2	436
2-3	24.0	8.2	0.7	32.9	840
4-5	23.7	7.5	0.7	31.9	681
6+	22.3	8.8	1.1	32.2	466
<b>Maternity status</b>					
Pregnant	24.4	17.9	1.6	43.9	246
Breastfeeding	27.2	6.8	0.8	34.8	985
Neither	24.1	5.9	0.4	30.4	2,406
<b>Using IUD</b>					
Yes	*	*	*	*	8
No	24.9	7.0	0.6	32.5	3,629
<b>Smoking status</b>					
Smokes cigarettes/tobacco	24.9	7.7	0.2	32.8	451
Does not smoke	25.0	6.9	0.7	32.5	3,183
Missing	*	*	*	*	3
<b>Residence</b>					
Urban	27.9	8.1	0.6	36.6	691
Rural	24.3	6.7	0.6	31.6	2,946
<b>Region</b>					
Apia urban area	27.9	8.1	0.6	36.6	691
North west Upolu	23.4	7.0	0.5	31.0	1,275
Rest of Upolu	27.1	8.2	0.6	35.9	808
Savaii	22.7	4.9	0.7	28.4	863
<b>Education</b>					
No education	*	*	*	*	10
Primary or lower or special needs	30.4	3.8	1.6	35.8	133
Secondary	24.0	7.3	0.5	31.8	2,873
More than secondary	28.1	6.4	0.7	35.2	621
<b>Wealth quintile</b>					
Lowest	23.2	8.4	0.8	32.4	726
Second	27.5	6.4	0.5	34.4	746
Middle	24.0	7.0	0.4	31.3	766
Fourth	25.5	6.7	1.0	33.2	730
Highest	24.5	6.4	0.3	31.1	669
Total	24.9	7.0	0.6	32.5	3,637

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC, 1998. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



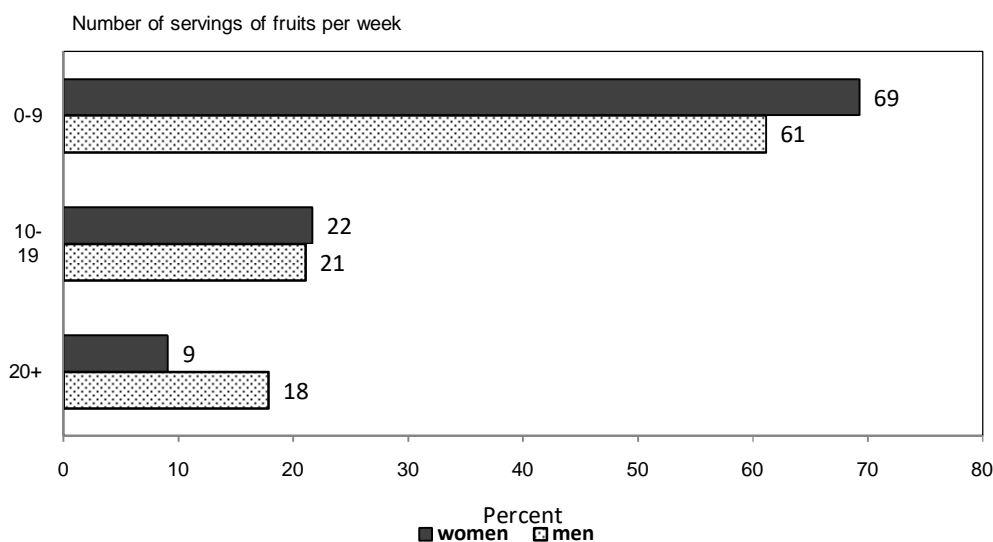
## 11.14 CONSUMPTION OF FRUITS AND VEGETABLES BY WOMEN AND MEN

The Ministry of Health is actively promoting *healthy eating and better lifestyle* through nutrition promotion programmes, vegetable gardens and other projects aiming to change the eating habits of Samoan people and to combat health problems associated with increase in non-communicable diseases. The Ministry recommends eating at least 5 servings of fruits and vegetables on a daily basis or at least 35 servings a week. Consuming a variety of fruits and vegetables each day will contribute dietary fibre, and important vitamins and minerals (micronutrients) that are essential for good health and wellbeing.

All women and men age 15-49 in the 2014 SDHS were asked: *How many servings of fruits/vegetables do you usually have in a week?* One serving of fruit was broadly defined to the respondents as 1/2 cup of fruits, while one serving of vegetables was defined as 1/2 cup of cooked vegetables or 1 cup of green salad.

Figure 11.3 shows the number of servings of fruit consumed weekly by women and men age 15-49 years. The consumption of fruit is generally low in Samoa. Two thirds of the respondents (69 percent of women and 61 percent of men), reported that they consumed between 0 and 9 serves of fruit per week, which is a slight improvement from the 2009 SDHS results, but is only about half of what is recommended for a healthy balanced diet. Although the MOH health message is a combined total of 5+ serves of fruit and vegetables a day, the optimal amount of fruit serves per week would be approximately 14 serves. The graph shows that the percent of people consuming 10-19 serves of fruit per week has dropped slightly from the 2009 SDHS to 22 percent of women and 21 percent of men.

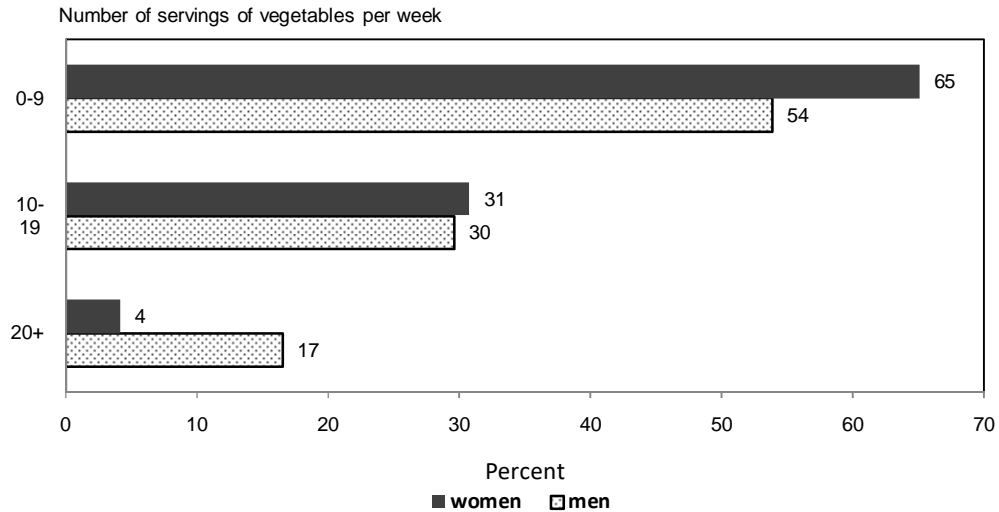
**Figure 11.3 Number of servings of fruits consumed per week by women and men age 15-49, 2014**



With regard to vegetable consumption, figure 11.4 shows the same pattern as fruit consumption for both men and women. In general, consumption of vegetables is also low in Samoa. Sixty five percent of women and 54 percent of men consume less than 10 servings of vegetables a week.

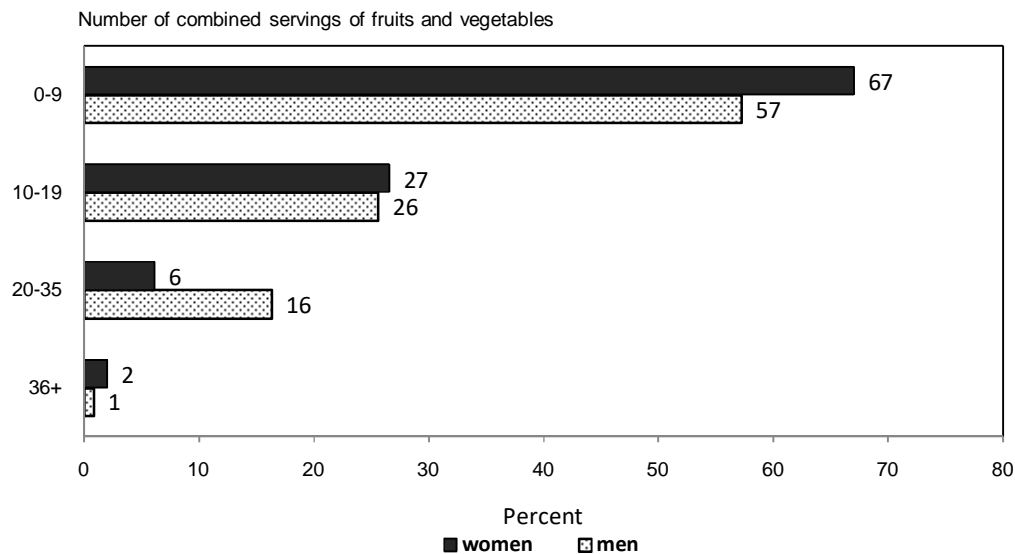
In line with the MOH 5+ servings of fruits and vegetables message, the optimal amount of vegetable serves per week would be 21 or more. The graph shows that only four percent of women (no change from 2009 SDHS) and 17 percent of men (a seven percentage point improvement from 2009 SDHS) are meeting this recommendation.

**Figure 11.4 Number of servings of vegetables consumed per week by women and men age 15-49, 2014**



In Figure 11.5 it can be seen that the majority of respondents (67 percent of women and 57 percent of men), aged 15-49 years of age, reported that in a usual week, they consumed less than 10 servings of fruits and vegetables. This level of consumption equates to approximately 1 serving of fruit and vegetables per day, which is significantly lower than the 5+ servings recommended by the Samoan MOH. Only a quarter of this population group reported consumption levels at up to half the recommended intake of fruits and vegetables and only 1 percent of women and 2 percent of men reported meeting the recommended 5 or more servings for a healthy diet.

**Figure 11.5 Number of servings of fruits and vegetables consumed per week by women and men age 15-49, 2014**



These findings are quite disturbing in light of the increasing obesity and lifestyle related NCDs being seen in the population. The findings from the 2013 STEP survey, report that only 8 percent of females and males, aged 18 - 64 consume the recommended 5+ serves of fruit and vegetables per day in a typical week. The slight difference seen in the survey results could be due to question structure, length of recall or serves size estimates however both surveys show that very few Samoans are consuming the recommended amounts of fruits and vegetables for a healthy, balanced diet.

Acquired Immune Deficiency Syndrome (AIDS) was first recognised internationally in 1981, and the first case was diagnosed in Samoa in 1990. AIDS is caused by the human immunodeficiency virus (HIV) which compromises the body's immune system. People with HIV infection are more prone to opportunistic infections, and these infections, if left untreated, can ultimately lead to death.

The Government of Samoa has adopted a multi-sectoral approach to ensure a comprehensive and unified response to HIV/AIDS. Collaborative national efforts have been guided by the 2001 HIV/AIDS National Plan of Action (The Samoa National AIDS Coordinating Council, 2001). This response is further enhanced by the new HIV/AIDS National Policy and Plan of Action, 2009. The new national policy and action plan emphasise the need to collectively coordinate sectoral responses to minimise the effects of HIV in Samoa, and to address weaknesses identified by the previous policy and plan.

Currently, the national response involves participation of entities at the local and national level, including the various government ministries such as the Ministry of Women, Social and Community Development; the Non-Governmental Organisations (NGOs) such as the Samoa AIDS Foundation (SAF), the Samoa Family Health Association (SFHA), the civil society organisations (CSOs), the Samoa Red Cross Society (SRCS); the private sector; and the research and academic institutions.

These entities coordinate their responses, either under the oversight of the National AIDS Council (NAC) or through the Technical AIDS Committee (TAC), where issues pertaining to HIV prevention, treatment and care are discussed. These two important bodies were formulated in the early 1990s when the first HIV case in Samoa was detected. Simultaneously, strategic directions and effective decision making are deliberated by these committees in order to enhance services provided by all sector partners and to find ways to strengthen responses improve the health of the Samoan people.

Samoa is considered a low HIV prevalence country. The main route of transmission is via heterosexual contact between men and women, with some subsequent mother to child transmission associated as a result of this contact. Transmission via male to male sexual contact has also been identified. Injecting drug use remains negligible in Samoa, as in many other Pacific Island countries. This low prevalence combined with standard precautions in health care settings, means that blood exposure is not an important mode of transmission in Samoa. Results from the 2008 Second Generation Surveillance Survey (MOH, 2008c) confirm that the prevalence of HIV in Samoa is very low, with 19 cases diagnosed and a cumulative incidence of 10.4 cases per population of 100,000 in 2008. The ratio of male to female infections is 2:1. Three cases of transmission from mother to child have been reported in Samoa. In 2009, a further three HIV cases were confirmed; increasing the total number of HIV infected cases in Samoa to 22. Of these cases, 14 are still alive (3 cases are paediatric), while 8 have died.

Various factors may have worked in favour of containing HIV prevalence in Samoa. A relatively high level of health promotion and protection programs and services offered by both the Samoan Government and NGOs may have contributed to this containment. Another factor that may minimise the viral load and risk of infection in people living with HIV/AIDS is that the anti-retroviral therapy (ART) and other treatments for opportunistic infections are offered for free. Voluntary and confidential counselling and testing (VCCT) sites are available to encourage people to have an HIV test and to learn about their HIV status, thus improving their own chances of living longer and healthier lives and preventing further infection of others. The Global Fund to Fight AIDS, Tuberculosis and Malaria has supported refurbishment of five additional VCCT sites around the

country, increasing access for persons presenting with symptoms of sexually transmitted infections (STIs) and/or risk of HIV. Other factors that may have contributed to low HIV prevalence in Samoa include the universal screening of blood products, standard precautions in health care settings, the low rate of injecting drug use in the community, almost universal male circumcision of boys by around 5 years of age, and possibly the relative geographic isolation of Samoa.

Challenges nevertheless exist. The Second Generation Surveillance (SGS) surveys in Samoa have identified extremely high prevalence of sexually transmitted infections (STIs) such as Chlamydia, especially in young people under age 25. Rates of teenage pregnancy are also relatively high (see Chapter 4). Both these factors indicate high levels of unprotected sex, especially in young people. Thus, if and where HIV is introduced to the population, there is potential for rapid and extensive spread.

Condom use rates in Samoa are generally low, mostly due to lack of awareness and access, and lack of acceptance of condoms. Religious leaders and other community gatekeepers are often not supportive of sex education programmes for young people and HIV prevention programmes that include condom promotion. Stigma and discrimination against people living with HIV/AIDS and against high-risk population groups, such as men who have sex with men, transgendered individuals (*faafafine*), and female sex workers, is high in the Samoan communities. In addition, there is often fear associated with HIV/AIDS along with specific misconceptions about HIV/AIDS and how the infection may be spread. These factors act as barriers, both to providing preventive services to people at high risk and to providing services to people who go for testing at VCCT sites, potentially leading HIV-infected individuals to infect others unknowingly.

Gender-based violence is also a concern in Samoa as evidenced by a survey in 2007 often leading to non-consensual sex for women, with associated risk of HIV and STI transmission. Condom use rates in Samoa are generally low mostly due to lack of awareness, access and wide acceptance of condoms. Religious leaders and other community gatekeepers are often not supportive of sex education programmes for young people and HIV prevention programmes that include condom promotion. Stigma and discrimination against people living with HIV (PLHIV) and against higher-risk population groups, such as men who have sex with men, transgendered individuals (*faafafine*) and female sex workers, is high in the Samoan communities. In addition, there is often a fear about HIV/AIDS in general, misconceptions about HIV/AIDS and lack of knowledge of how the infection may be spread. These factors act as barriers, both to providing preventive services to people at high risk, as well as to people who go for testing at VCCT sites, potentially leading HIV-infected individuals infecting others unknowingly.

The 2014 Samoa DHS can assist by providing useful population data on knowledge, attitudes and behaviours about HIV/AIDS and associated risks. The SDHS collected a variety of information on HIV/AIDS related knowledge, including social stigmatisation, misconceptions about HIV transmission, levels of exposure to messages via media, and other findings. The principal objective of this chapter is to establish the level of relevant knowledge, perceptions, and behaviours at the national level, and within geographic and socio-economic sub-populations. Such information should go a long way toward better targeting of interventions for effective prevention, treatment, care and support for those groups most in need of information and most at risk of HIV in Samoa.

## **12.1 KNOWLEDGE OF AIDS**

Respondents in the 2014 SDHS were asked whether they had heard of AIDS. Those who reported having heard of AIDS were asked a series of questions about whether AIDS can be avoided and how. Table 12.1 shows the percent distribution of women and men age 15-49 who have heard of AIDS, by background characteristics. Ninety-one percent of women and 85 percent of men have heard about AIDS, indicating that awareness of AIDS in Samoa is high. In 2009, levels of awareness were 85 percent among women and 87 percent among men indicating that while more women are becoming aware of AIDS, the opposite can be said of men.

Knowledge of HIV/AIDS is somewhat less among women (86 percent) and men (78 percent) age 15-24 when compared with older respondents (95-84 percent) age 25-29. There are no major variations in the knowledge of HIV/AIDS by women's marital status, while among men, those who have never married (81 percent) have a lower level of knowledge than men who are currently married (90 percent) or previously married (88 percent). Among women, knowledge of HIV/AIDS ranges from 86 percent of women in the Rest of Upolu to 96 percent of women in the Apia Urban Area. Among men, it is lowest in Savaii (75 percent) and highest in the Rest of Upolu region (92 percent). Awareness of AIDS increases with level of education. Ninety-eight percent of women and 93 percent of men with more than secondary education have heard about AIDS, compared with 65 percent of women and 66 percent of men with primary or less education. Similarly, women and men in the higher wealth quintiles are more likely to have heard of AIDS than those in the lowest wealth quintile.

**Table 12.1 Knowledge of AIDS**

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Samoa 2014

Background characteristic	Women		Men	
	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
<b>Age</b>				
15-24	85.7	1,891	77.8	645
..15-19	82.6	1,062	73.9	348
..20-24	89.6	829	82.3	298
25-29	94.8	728	84.3	229
30-39	93.2	1,142	91.6	356
40-49	93.5	1,044	92.8	345
<b>Marital status</b>				
Never married	87.1	1,715	80.5	819
..Ever had sex	92.8	469	87.4	472
..Never had sex	84.9	1,246	71.1	348
Married/Living together	92.7	2,874	90.3	718
Divorced/Separated/Widowed	89.0	216	(87.9)	38
<b>Residence</b>				
Urban	95.9	1,000	89.8	318
Rural	89.1	3,805	84.0	1,257
<b>Region</b>				
Apia urban area	95.9	1,000	89.8	318
North west Upolu	90.7	1,733	84.4	563
Rest of Upolu	86.3	1,099	92.2	357
Savaii	89.6	973	74.6	338
<b>Education</b>				
No education	*	15	*	8
Primary or lower or special needs	64.7	161	66.4	116
Secondary	89.8	3,654	85.2	1,169
More than secondary	97.6	975	92.9	282
<b>Wealth quintile</b>				
Lowest	83.0	903	81.9	293
Second	87.9	955	79.8	298
Middle	90.6	954	88.1	330
Fourth	93.6	987	84.8	356
Highest	96.8	1,006	90.8	300
Total 15-49	90.6	4,805	85.2	1,576
50-54	na	na	85.5	93
Total men 15-54	na	na	85.2	1,669

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.  
na = Not applicable

## 12.2 KNOWLEDGE OF HIV PREVENTION METHODS

In Samoa, HIV in adults is mainly transmitted by heterosexual contact between a partner who is HIV positive and a partner who is HIV negative. Consequently, HIV prevention programmes focus their messages and efforts on three important aspects of behaviour: using condoms, limiting the number of sexual partners or staying faithful to one partner, and delaying sexual debut for young persons (abstinence).

To determine whether programmes have effectively communicated these messages, the 2014 SDHS respondents were specifically asked if people can reduce their chances of getting the AIDS virus by using a condom every time they have sex, by having just one HIV-negative sexual partner who has no other sexual partners, and by not having sexual intercourse at all. Table 12.2 shows that 71 percent of women and 68 percent of men age 15-49 know that consistent use of condoms is a means of preventing the spread of HIV. Furthermore, 86 percent of women and 80 percent of men know that limiting sexual intercourse to one HIV-negative and faithful partner can reduce the chances of contracting HIV. The proportion of women who said that people can reduce the chances of getting the AIDS virus by using condoms and limiting sex to one HIV-negative partner is higher (69 percent) than that of men (66 percent). Seventy-five percent of women and 65 percent of men age 15-49 know that abstinence is a way of reducing the chances of getting HIV.

Knowledge of each of the HIV prevention methods is lowest among those aged 15-24, which happens to be the most vulnerable group. Table 12.2 further shows that, in general, those who are least likely to report knowledge of ways to prevent the transmission of HIV are women and men who have never married (in particular, those who have never had sex), who reside in Savaii, and who are least educated and who come from the poorest households.

In 2009, knowledge was higher among men than women for each of the above specified methods of preventing HIV (2009 SDHS) but this has been reversed in 2014. In fact, as shown in the previous section, general awareness of AIDS among women has increased during the past 5 years while it has declined among men. Information campaign on HIV/AIDS during the recent past may have leaned more towards women as targets which explains why women have become more knowledgeable about HIV/AIDS. Given that the sexual behaviour of men exposes them to higher risks of getting HIV, there is a need to also give more attention in educating men about HIV and the ways of preventing the spread of the disease.

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, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, Samoa 2014

Background characteristic	Women					Men				
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of women	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of men
<b>Age</b>										
15-24	63.1	78.9	61.1	66.7	1,891	61.6	71.9	59.3	55.2	645
..15-19	56.9	74.3	55.1	60.8	1,062	55.7	67.4	54.1	49.9	348
..20-24	71.0	84.8	68.8	74.2	829	68.5	77.2	65.5	61.5	298
25-29	80.2	92.6	79.0	83.0	728	64.5	80.0	62.8	64.6	229
30-39	75.8	89.1	74.2	78.3	1,142	75.5	87.8	73.2	74.9	356
40-49	73.6	89.1	71.9	79.8	1,044	75.0	88.2	73.8	71.6	345
<b>Marital status</b>										
Never married	63.4	79.7	61.4	66.6	1,715	63.0	74.5	61.0	58.1	819
..Ever had sex	75.3	87.1	73.3	77.9	469	70.5	81.8	68.2	65.3	472
..Never had sex	59.0	77.0	56.9	62.3	1,246	52.8	64.7	51.2	48.2	348
Married/Living together	75.3	89.1	73.7	79.4	2,874	73.9	86.7	72.0	72.1	718
Divorced/Separated/Widowed	73.9	85.2	72.9	77.8	216	(69.0)	(82.3)	(65.8)	(64.5)	38
<b>Residence</b>										
Urban	70.9	90.1	68.5	82.3	1,000	65.8	81.6	61.6	65.4	318
Rural	71.0	84.4	69.4	72.8	3,805	68.7	79.9	67.3	64.4	1,257
<b>Region</b>										
Apia urban area	70.9	90.1	68.5	82.3	1,000	65.8	81.6	61.6	65.4	318
North west Upolu	76.4	88.0	75.5	79.1	1,733	74.0	80.8	72.6	72.5	563
Rest of Upolu	70.1	82.8	68.9	75.3	1,099	76.5	88.5	75.7	72.9	357
Sava'i'i	62.5	79.9	59.3	58.8	973	51.5	69.3	49.5	42.0	338
<b>Education</b>										
No education	*	*	*	*	15	*	*	*	*	8
Primary or lower or special needs	48.6	58.6	46.2	52.4	161	53.3	63.8	52.5	53.7	116
Secondary	70.1	84.7	68.5	73.6	3,654	68.4	80.1	66.4	64.0	1,169
More than secondary	78.0	93.3	76.0	82.9	975	73.2	87.7	70.8	72.1	282
<b>Wealth quintile</b>										
Lowest	65.9	79.1	64.9	67.9	903	67.6	75.8	65.4	59.4	293
Second	67.8	82.8	66.6	71.6	955	61.4	75.9	61.1	60.9	298
Middle	72.6	85.2	70.5	75.4	954	71.6	85.3	70.6	68.9	330
Fourth	74.2	88.3	72.0	76.7	987	69.3	78.8	66.5	64.3	356
Highest	73.9	91.7	71.8	81.5	1,006	70.0	85.2	66.7	69.1	300
Total 15-49	71.0	85.6	69.2	74.8	4,805	68.1	80.3	66.2	64.6	1,576
50-54	na	na	na	na	na	63.6	83.5	63.6	70.4	93
Total men 15-54	na	na	na	na	na	67.8	80.4	66.0	65.0	1,669

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.

na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners



### 12.3 BELIEFS ABOUT AIDS

In addition to knowing about effective ways to avoid contracting HIV, it is also useful to be able to identify incorrect beliefs about AIDS to eliminate misconceptions. Misconceptions about AIDS and HIV transmission are among the factors that result in discrimination and stigmatisation. The 2014 SDHS included questions on common misconceptions about HIV/AIDS. Misconceptions about AIDS in Samoa include the idea that HIV-positive people always appear ill, the belief that the virus cannot be transmitted by sharing a needle or syringe that has already been used, that it can be transmitted by mosquito bites, by sharing food with or by the saliva of someone who is HIV positive, by witchcraft and other supernatural means, and that HIV can only be transmitted by gay men or drag queens (*faafafines*). Respondents were asked about these misconceptions and the results are presented in Tables 12.3.1 and 12.3.2 for women and men, respectively.

The results in Tables 12.3.1 and 12.3.2 indicate that only about six in ten women (59 percent) and one of every two men (53 percent) know that a healthy-looking person can have the AIDS virus. Awareness that the AIDS virus cannot be transmitted through mosquito bites nor through sharing of food with a person who has AIDS is generally low. Only 19 percent of women and 21 percent of men correctly agree that mosquito bites cannot transmit the AIDS virus while only about one of four women (28 percent) and about one of three men (31 percent) are aware that food sharing with an infected person is not a means of transmission. On the other hand about half of male and female respondents do not believe that AIDS can be transmitted through supernatural means, and rightly so.

Tables 12.3.1 and 12.3.2 provide an assessment of the level of comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is defined as: (1) knowing that both condom use and limiting sexual partners to one HIV-negative person are HIV/AIDS prevention methods, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions. Using this definition, the results of the survey show that only a very small proportion of the respondents, about 6 percent each of women and men age 15-49, have comprehensive knowledge of HIV/AIDS prevention and transmission. Comparison with the findings of the 2009 SDHS, which showed 4 percent and 7 percent, respectively, as the levels of comprehensive knowledge of women of men, suggests that very little has been achieved during the last 5 years in terms of disseminating information about the means of transmission of HIV/AIDS.

Comprehensive knowledge about AIDS is lowest among the youngest respondents age 15-19, those living in rural areas, especially those who reside in Savaii region.

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 AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Samoa 2014

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	53.2	18.4	51.3	26.1	7.0	5.2	1,891
..15-19	47.3	18.0	48.6	23.1	5.4	3.6	1,062
..20-24	60.7	19.0	54.7	30.0	9.0	7.3	829
25-29	63.9	17.5	58.5	26.6	7.8	5.9	728
30-39	63.1	20.8	59.0	29.9	10.8	8.3	1,142
40-49	61.0	18.0	61.6	30.4	9.4	7.3	1,044
<b>Marital status</b>							
Never married	52.2	19.1	52.0	27.0	7.1	5.3	1,715
..Ever had sex	59.9	17.7	56.9	30.5	8.7	8.3	469
..Never had sex	49.3	19.6	50.1	25.8	6.5	4.1	1,246
Married/Living together	62.9	18.7	59.2	28.5	9.4	7.2	2,874
Divorced/Separated/Widowed	58.5	17.3	55.9	29.4	9.5	7.2	216
<b>Residence</b>							
Urban	70.0	24.1	57.5	39.6	14.4	11.2	1,000
Rural	55.9	17.4	56.2	25.0	7.0	5.3	3,805
<b>Region</b>							
Apia urban area	70.0	24.1	57.5	39.6	14.4	11.2	1,000
North west Upolu	66.5	18.9	51.7	28.6	9.1	7.2	1,733
Rest of Upolu	58.1	14.4	50.8	21.9	6.6	4.9	1,099
Savaii	34.6	18.0	70.4	22.1	3.7	2.1	973
<b>Education</b>							
No education	*	*	*	*	*	*	15
Primary or lower or special needs	40.1	8.1	32.1	17.9	3.1	1.2	161
Secondary	56.6	17.6	55.5	24.4	7.2	5.4	3,654
More than secondary	70.1	24.8	64.0	43.3	14.7	11.6	975
<b>Wealth quintile</b>							
Lowest	52.0	13.7	49.7	19.9	6.0	4.8	903
Second	54.8	17.6	54.8	22.8	6.5	4.9	955
Middle	56.7	16.1	57.4	24.2	6.2	4.4	954
Fourth	61.3	17.9	57.7	28.8	8.0	5.9	987
Highest	68.6	27.8	62.0	43.1	15.5	12.1	1,006
Total 15-49	58.9	18.8	56.5	28.0	8.5	6.5	4,805

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.

<sup>1</sup> Two most common local misconceptions: mosquito bites and by sharing food

<sup>2</sup> 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 AIDS transmission or prevention.

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 AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Samoa 2014

Background characteristic	Percentage of respondents who say that:					Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person 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 <sup>1</sup>		
<b>Age</b>							
15-24	46.7	18.5	47.8	27.0	7.8	5.7	645
..15-19	42.2	16.9	45.0	24.9	5.6	3.5	348
..20-24	52.0	20.3	51.1	29.4	10.4	8.3	298
25-29	56.7	22.8	50.0	31.4	10.8	6.8	229
30-39	58.1	20.8	61.2	35.4	11.7	8.3	356
40-49	57.3	24.3	52.2	36.3	11.0	6.3	345
<b>Marital status</b>							
Never married	49.9	19.8	49.7	30.3	9.1	6.2	819
..Ever had sex	57.8	22.0	55.2	34.8	11.9	7.7	472
..Never had sex	39.2	16.8	42.3	24.1	5.4	4.2	348
Married/Living together	56.9	21.9	55.1	32.9	10.7	7.3	718
Divorced/Separated/Widowed	(50.3)	(26.9)	(46.4)	(33.2)	(8.2)	(2.4)	38
<b>Residence</b>							
Urban	55.4	31.7	61.0	39.8	14.7	7.0	318
Rural	52.5	18.2	49.8	29.5	8.6	6.5	1,257
<b>Region</b>							
Apia urban area	55.4	31.7	61.0	39.8	14.7	7.0	318
North west Upolu	60.7	17.9	47.1	29.6	9.5	8.0	563
Rest of Upolu	60.6	26.5	68.6	31.8	13.4	9.5	357
Savaii	30.3	9.8	34.6	26.8	2.0	0.8	338
<b>Education</b>							
No education	*	*	*	*	*	*	8
Primary or lower or special needs	42.5	13.9	51.1	26.5	5.2	2.5	116
Secondary	51.7	18.7	49.6	28.6	8.1	5.5	1,169
More than secondary	62.7	33.3	62.8	45.6	19.1	12.8	282
<b>Wealth quintile</b>							
Lowest	51.3	12.4	48.6	25.0	5.5	5.2	293
Second	50.9	19.1	49.9	29.9	9.1	6.4	298
Middle	52.8	23.3	54.5	32.2	9.9	6.2	330
Fourth	50.3	18.7	48.7	28.1	6.4	4.1	356
Highest	60.6	31.0	59.1	43.1	18.7	11.5	300
Total 15-49	53.1	20.9	52.1	31.6	9.8	6.6	1,576
50-54	54.1	18.5	44.6	20.0	7.5	3.1	93
Total men 15-54	53.1	20.8	51.7	30.9	9.7	6.4	1,669

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.

<sup>1</sup> Two most common local misconceptions: mosquito bites and by sharing food

<sup>2</sup> 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 AIDS transmission or prevention.

Education strongly correlates with the correct understanding of the means of HIV virus transmission and with comprehensive knowledge of HIV/AIDS prevention but only when education is higher or lower than secondary level. Thus, as tables 3.2.1 and 3.2.2 show, respondents with more than secondary education are at least twice more likely to have comprehensive knowledge of HIV/AIDS than those who did not reach that level of education. With respect to wealth, the survey also shows that the richest quintile has a distinctively higher level of comprehensive knowledge compared with the other quintiles.

#### **12.4 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV**

Increasing the level of general knowledge of transmission of HIV from mother to child and reducing the risk of transmission through antiretroviral drugs is critical to the prevention of mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents in the 2014 SDHS were asked if the virus that causes AIDS can be transmitted from a mother to her baby during pregnancy, delivery, or breastfeeding and whether they know of any special drugs a mother with HIV can take to reduce the risk of transmission to the baby.

Table 12.4 shows that women are more likely than men to know of the risk of mother-to-child transmission of HIV through breastfeeding (66 and 52 percent, respectively). However, far fewer women and men are aware that the risk of mother-to-child transmission of HIV can be reduced by the mother taking special drugs during pregnancy, that is, 25 and 20 percent, respectively.

Overall, 22 percent of women and 18 percent of men know that HIV can be transmitted through breastfeeding and that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy. Knowledge that HIV can be transmitted by breastfeeding and that the risk of MTCT can be reduced by mother taking special drugs during pregnancy is lowest among respondents age 15-19 (14 percent of women and 12 percent of men) and those who have never married (17 percent of women and 15 percent of men). Pregnant women are more knowledgeable about MTCT transmission and prevention (25 percent) than non-pregnant women (22 percent). There is no significant difference between urban and rural women in terms of their knowledge about MTCT. In the case of men, those who reside in the urban area are much more likely than rural men (35 percent as against 13 percent) to know that HIV can be transmitted by breastfeeding and that the risk of MTCT can be reduced by special drugs to be taken by women during pregnancy. Men from Rest of Upolu region have the lowest understanding of MTCT (5 percent). Respondents' socio-economic status, as measured by level of education and wealth quintile, has a positive correlation with knowledge of MTCT.

Table 12.4 Knowledge of prevention of mother to child transmission of HIV

Percentage of women and men 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 mother taking special drugs during pregnancy, by background characteristics, Samoa 2014

Background characteristic	Women				Men			
	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
<b>Age</b>								
15-24	53.3	19.2	17.3	1,891	40.8	17.1	14.5	645
..15-19	47.2	15.2	13.8	1,062	38.3	13.5	11.6	348
..20-24	61.1	24.3	21.8	829	43.9	21.2	17.9	298
25-29	73.1	28.5	26.1	728	53.8	19.7	16.5	229
30-39	73.0	27.1	23.9	1,142	59.3	25.5	21.3	356
40-49	75.5	28.3	25.3	1,044	61.8	21.2	19.8	345
<b>Marital status</b>								
Never married	53.2	18.6	16.8	1,715	42.4	17.1	14.5	819
..Ever had sex	60.6	24.4	21.3	469	44.7	19.5	16.2	472
..Never had sex	50.4	16.4	15.1	1,246	39.3	13.9	12.2	348
Married/Living together	73.4	27.7	25.0	2,874	61.7	24.2	21.2	718
Divorced/Separated/Widowed	64.2	27.4	23.1	216	(54.6)	(13.7)	(11.3)	38
<b>Currently pregnant</b>								
Pregnant	70.3	27.0	24.7	314	na	na	na	na
Not pregnant or not sure	65.5	24.3	21.8	4,491	na	na	na	na
<b>Residence</b>								
Urban	63.2	25.7	21.4	1,000	65.8	38.7	35.2	318
Rural	66.5	24.1	22.1	3,805	47.9	15.6	13.0	1,257
<b>Region</b>								
Apia urban area	63.2	25.7	21.4	1,000	65.8	38.7	35.2	318
North west Upolu	61.9	28.9	26.3	1,733	41.2	14.1	12.3	563
Rest of Upolu	62.4	23.2	21.6	1,099	48.4	9.5	4.7	357
Savaii	79.3	16.6	15.2	973	58.4	24.5	22.9	338
<b>Education</b>								
No education	*	*	*	15	*	*	*	8
Primary or lower or special needs	46.1	11.9	8.1	161	47.3	13.7	12.0	116
Secondary	65.1	22.6	20.5	3,654	50.5	19.0	16.3	1,169
More than secondary	71.8	33.7	30.0	975	57.2	28.7	25.0	282
<b>Wealth quintile</b>								
Lowest	60.2	17.1	15.6	903	52.3	12.1	10.8	293
Second	64.3	22.4	20.5	955	42.0	12.5	10.2	298
Middle	67.7	25.9	23.2	954	53.4	21.3	19.8	330
Fourth	68.7	25.5	23.6	987	49.7	25.1	21.4	356
Highest	67.7	30.7	26.3	1,006	60.1	29.2	24.1	300
Total 15-49	65.8	24.5	22.0	4,805	51.5	20.3	17.5	1,576
50-54	na	na	na	na	61.6	24.2	22.1	93
Total men 15-54	na	na	na	na	52.1	20.5	17.7	1,669

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.

na = Not applicable

## 12.5 STIGMA ASSOCIATED WITH AIDS AND ATTITUDES RELATED TO HIV/AIDS

Widespread stigma and discrimination in a population can adversely affect people's willingness to be tested for HIV as well as their adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important impetus to the success of programmes targeting HIV/AIDS prevention and control.

To assess the level of stigma, SDHS respondents who had heard of AIDS were asked if they would be willing to care for a family member with AIDS virus in their home, if they would buy fresh vegetables from a shopkeeper who has the AIDS virus, if they thought a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and if they would not want to keep secret that a family member has the AIDS virus. Tables 12.5.1 and 12.5.2 show the results for women and men, respectively.

Women and, especially men, tend to express positive attitudes about caring for a family member with AIDS virus; fifty-two percent of women and 63 percent of men admit that they are willing to care for a family member sick with AIDS in their home. Moreover, a large proportion of women (92 percent) and men (86 percent) say they would not keep it a secret if a family member gets infected with the AIDS virus. If a family member had AIDS, differences in terms of acceptance exist between those below age 25 years of age and those above for both women and men. For example, among those below 25 years of age, 49 percent of women and 58 percent of men say they are willing to care for a family member with AIDS in their home; 89 percent of women and 82 percent of men say they would not keep it a secret if a family member. The corresponding proportions among older women and men are significantly higher. Under similar circumstances, urban respondents tend to have more positive attitude than their rural counterparts.

Women who have more than secondary education are more willing to take care of a family member with AIDS than their less educated counterparts. This is also true among men although the pattern is not as clear. Differentials based on wealth also exist with the proportion willing to care for a family member with AIDS being significantly larger in the highest wealth quintile compared to the other quintiles. In general, there are no differences by background characteristic in wanting to keep secret that a family member has AIDS.

Empowering persons living with AIDS by fostering acceptance by the general public is also a critical programme area. Unfortunately, the prevailing attitude towards non-family members who are infected with the virus is still one of non-acceptance. For example, only 12 percent of women and 19 percent of men say they do not mind buying fresh vegetables from a shopkeeper who has the AIDS virus. Among women, those who are less likely to do this are women in the rural areas, particularly, North West Upolu and Savaii (about 9 percent each); those with no more than secondary education; and, those from the lowest to fourth wealth quintile. Among men, rural residents (17 percent) are also less likely than urban residents (27 percent) to buy vegetables from a shopkeeper with AIDS. However, Savaii men (35 percent) appear to be more tolerant of other people having AIDS than do men from the other regions. With respect to education and wealth quintile, similar pattern of differential is observed among men as that of the women.

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 AIDS, by background characteristics, Samoa 2014

Background characteristic	Percentage of respondents who:				Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
	Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus and 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		
<b>Age</b>						
15-24	49.1	11.1	6.2	89.3	2.3	1,620
..15-19	47.5	10.7	6.2	87.0	2.6	878
..20-24	51.0	11.6	6.2	92.0	2.1	742
25-29	54.1	11.1	6.0	92.9	2.1	691
30-39	54.1	13.1	9.5	93.2	3.6	1,064
40-49	54.4	12.0	5.5	94.1	2.5	976
<b>Marital status</b>						
Never married	50.8	12.4	7.1	89.2	3.0	1,493
..Ever had sex	54.9	15.0	8.6	90.2	4.7	435
..Never had sex	49.2	11.4	6.4	88.8	2.2	1,058
Married/Living together	53.1	11.6	6.5	93.5	2.5	2,666
Divorced/Separated/Widowed	53.2	10.0	8.6	90.1	2.7	192
<b>Residence</b>						
Urban	58.9	16.1	13.5	93.1	4.9	959
Rural	50.4	10.6	4.9	91.6	2.0	3,392
<b>Region</b>						
Apia urban area	58.9	16.1	13.5	93.1	4.9	959
North west Upolu	51.5	9.2	4.5	91.2	1.6	1,571
Rest of Upolu	51.3	13.9	7.0	92.5	3.6	949
Savaii	47.6	9.5	3.5	91.2	1.0	871
<b>Education</b>						
No education	*	*	*	*	*	14
Primary or lower or special needs	49.7	9.5	4.8	91.5	1.9	104
Secondary	50.0	10.3	5.1	91.7	2.1	3,282
More than secondary	60.8	17.3	13.1	92.8	4.8	951
<b>Wealth quintile</b>						
Lowest	47.1	10.2	4.1	89.6	2.0	750
Second	49.3	9.6	5.0	92.1	2.1	840
Middle	51.2	11.4	5.8	92.0	1.8	864
Fourth	53.2	10.9	6.7	92.6	2.1	924
Highest	59.2	16.3	11.3	92.7	4.8	974
Total 15-49	52.3	11.8	6.8	91.9	2.6	4,351

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

If a female teacher had AIDS but not sick, only 7 percent of women and 11 percent of men believe that such a teacher should be allowed to continue teaching. This is also another indication that, in Samoa, acceptance of AIDS victims is still very low. Based on background characteristics, the same pattern of discriminatory attitude by respondents is expressed in this hypothetical situation as in the situation discussed in the previous paragraph.

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, Samoa 2014

Background characteristic	Percentage of respondents who:				Percentage expressing attitudes on all four indicators	Number of respondents who have heard of AIDS
	Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus and 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		
<b>Age</b>						
15-24	57.8	17.9	10.4	81.5	1.0	502
..15-19	54.1	15.0	10.1	80.3	0.4	257
..20-24	61.5	21.0	10.6	82.8	1.7	245
25-29	63.0	15.0	9.8	88.2	3.7	193
30-39	66.6	20.6	13.4	87.9	5.2	326
40-49	66.1	22.3	9.4	88.2	4.0	320
<b>Marital status</b>						
Never married	59.8	19.3	11.8	82.5	2.2	660
..Ever had sex	64.5	22.7	13.5	82.6	3.2	412
..Never had sex	52.0	13.5	8.9	82.3	0.4	247
Married/Living together	65.4	19.2	9.5	89.0	3.9	648
Divorced/Separated/Widowed	(64.2)	(16.4)	(15.5)	(82.5)	(7.3)	34
<b>Residence</b>						
Urban	62.0	27.1	18.1	90.1	5.6	286
Rural	62.8	17.0	8.8	84.4	2.4	1,056
<b>Region</b>						
Apia urban area	62.0	27.1	18.1	90.1	5.6	286
North west Upolu	60.5	10.8	8.3	78.2	1.2	475
Rest of Upolu	55.5	12.1	3.6	91.8	0.9	329
Savaii	76.8	35.2	16.5	86.6	6.8	252
<b>Education</b>						
No education	*	*	*	*	*	6
Primary or lower or special needs	75.8	10.2	4.8	90.1	2.4	77
Secondary	59.8	18.3	9.4	85.2	2.5	996
More than secondary	69.2	25.7	18.1	85.5	5.5	262
<b>Wealth quintile</b>						
Lowest	62.6	16.8	6.4	88.3	2.9	240
Second	59.1	18.7	8.0	86.0	2.4	238
Middle	63.4	20.7	11.4	85.6	2.7	291
Fourth	60.3	18.0	10.7	82.8	3.0	302
Highest	67.7	21.3	16.5	86.1	4.6	272
Total 15-49	62.7	19.2	10.8	85.6	3.1	1,342
50-54	76.1	24.7	17.2	91.7	6.6	80
Total men 15-54	63.4	19.5	11.2	86.0	3.3	1,422

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.

To summarize the overall nature of attitude among the respondents towards AIDS, the percentages that expressed acceptance on all the four different circumstances are presented in table 12.5.1 and table 12.5.2. The data indicate that only 3 percent each of women and men have accepting attitude towards people with AIDS. These proportions have not changed much since the 2009 survey (2 percent and 3 percent for women and men, respectively).

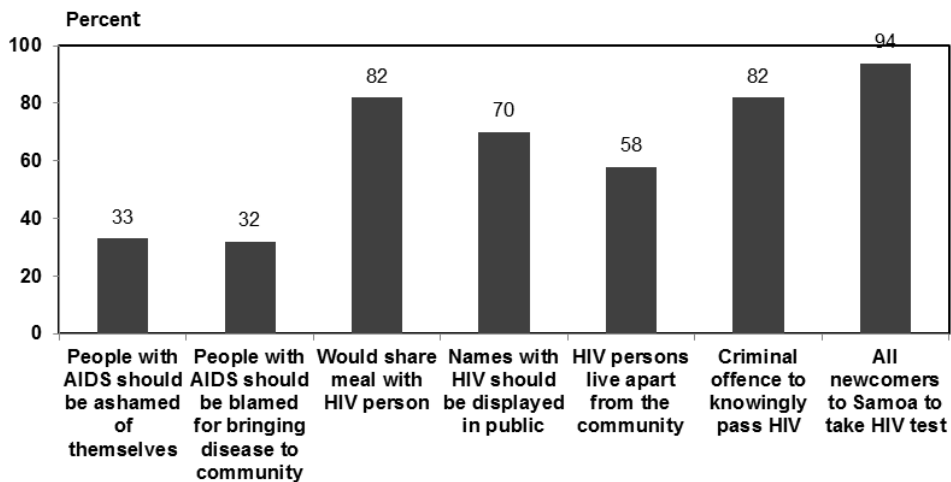


In addition to the questions discussed above, the SDHS respondents who had heard of AIDS were asked a number of additional questions to help further identify and measure attitudes towards people living with HIV. Results are presented in figures 12.1 and 12.2.

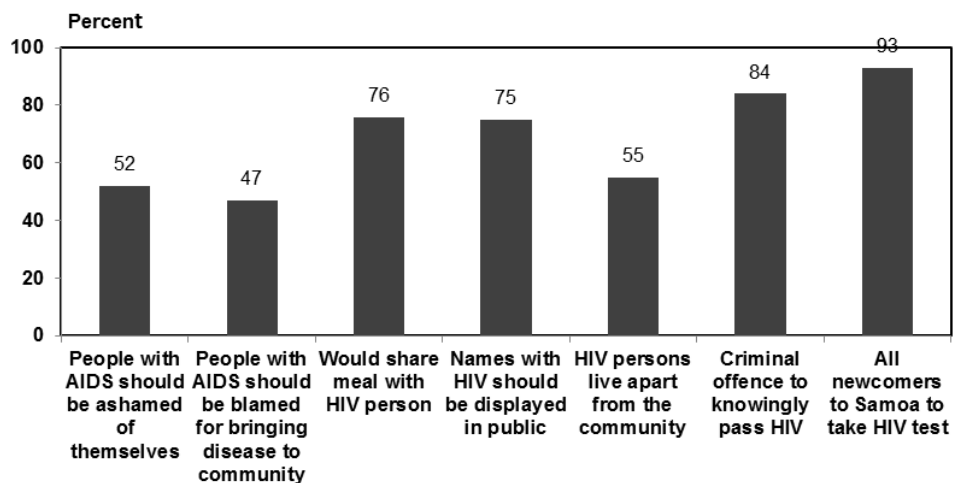
Women and men almost equally share the belief that it is a criminal offence to unknowingly pass HIV virus (82 percent among women and 84 percent men). Women, more than men, are tolerant with a person with HIV and would share a meal with that person. Figures 12.1 and 12.2, nevertheless, show that stigma and negative attitudes towards people living with HIV are rather widespread. About 9 of every 10 men and 9 of every 10 women are of the opinion that all newcomers to Samoa should have themselves tested for HIV. To a large extent, they also believe that persons with HIV/AIDS should have their names displayed in public and that such persons should live apart from the community. Nearly half of the men say that people with AIDS should be ashamed of themselves (52 percent) and that they should be blamed for bringing the disease to the community (47 percent) while one each of every three women place such type of stigma on people with AIDS.

The analysis in this section clearly points to the need to increase programme efforts to address the misconceptions and the stigma that the general public has on people living with HIV/AIDS. There is need, as well as opportunity, to encourage more tolerant attitude towards people living with HIV/AIDS and dispel various myths and misconceptions about HIV/AIDS.

**Figure 12.1 Attitudes towards People Living with HIV/AIDS among Women Age 15-49 Who have Heard of HIV/AIDS**



**Figure 12.2 Attitudes towards People Living with HIV/AIDS among Men Age 15-49 Who have Heard of HIV/AIDS**



## 12.6 ATTITUDES TOWARDS NEGOTIATING SAFER SEX

Knowledge about HIV transmission and ways to prevent it are of little use if people feel powerless to negotiate safer sex practices with their partners. In an effort to assess the ability of women to negotiate safer sex with a spouse who has a sexually transmitted disease or STI, women and men were asked if they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has an STI.

Table 12.6 shows that men are more likely than women to agree that a wife is justified in refusing sexual intercourse if she knows that her husband has STI (41 percent of men compared to 27 percent of women). This kind of attitude varies by characteristics of the respondents. Among women, the proportion that agrees with the wife's right to refuse sex with her husband who has STI increases with age. This pattern also holds among men although not as clear. Those currently married have the highest proportion, compared to those with different marital status, who believe on the wife's right to refuse sex (33 percent of women and 49 percent of men). There is also a clear differential by urban-rural in attitudes towards the wife's right to negotiate safer sex. Urban men have a higher proportion of persons with positive attitude (60 percent) compared to rural men (36 percent) but region-wise, the highest proportion is observed in Savaii. In general, education is a factor strongly associated with favourable attitude towards wives negotiating for safer sex,

Table 12.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that, if a husband has a sexually transmitted disease, his wife is justified in refusing to have sexual intercourse with him, by background characteristics, Samoa 2014

Background characteristic	Women		Men	
	Refusing to have sexual intercourse (STD)	Number of women	Refusing to have sexual intercourse (STD)	Number of men
<b>Age</b>				
15-24	16.1	1,891	33.0	645
..15-19	9.8	1,062	25.3	348
..20-24	24.1	829	41.9	298
25-29	31.9	728	46.6	229
30-39	34.2	1,142	49.1	356
40-49	34.2	1,044	44.8	345
<b>Marital status</b>				
Never married	16.1	1,715	34.4	819
..Ever had sex	25.3	469	44.2	472
..Never had sex	12.6	1,246	21.2	348
Married/Living together	32.9	2,874	48.5	718
Divorced/Separated/Widowed	28.4	216	(47.9)	38
<b>Residence</b>				
Urban	29.4	1,000	59.9	318
Rural	26.0	3,805	36.4	1,257
<b>Region</b>				
Apia urban area	29.4	1,000	59.9	318
North west Upolu	23.8	1,733	27.9	563
Rest of Upolu	26.9	1,099	25.9	357
Savaii	28.8	973	61.7	338
<b>Education</b>				
No education	*	15	*	8
Primary or lower or special needs	18.0	161	32.7	116
Secondary	23.6	3,654	39.0	1,169
More than secondary	39.6	975	54.1	282
Total 15-49	26.7	4,805	41.2	1,576
50-54	na	na	32.3	93
Total men 15-54	na	na	40.7	1,669

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.  
na = Not applicable

## 12.7 COVERAGE OF PRIOR HIV TESTING

For persons who are HIV negative, knowledge of their HIV status helps them to make specific decisions that will reduce the risk of getting HIV, lead to safer sex practices, and enable them to remain disease free. For those who are HIV positive, knowledge of their HIV status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. In the 2014 SDHS, respondents were asked whether they had ever been tested for HIV. If they had, they were asked when they were most recently tested, whether they had received the results of their last test, and where they had been tested. If they had never been tested, they were asked if they knew a place where they could go to be tested.

Tables 12.7.1 and 12.7.2 show that 40 percent of women and 49 percent of men age 15-49 know where to get an HIV test. However, the proportions ever tested are much smaller; only 4 percent of women and 3 percent of men age 15-49 have ever been tested for HIV, and of those who were tested, only 1 percent of women and even less in the case of men received the results of their test. The proportions that had their last HIV test taken in the past 12 months and received the results of such test are even smaller. Since the percentages are so small, there are no major variations in the proportion of respondents ever tested for HIV by background characteristics.

Table 12.7.1 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 received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Samoa 2014

Background characteristic	Percent distribution of women/men by testing status and whether they received the results of the last test					Total	Percentage ever tested	Percentage who received results from last HIV test taken in the past 12 months	Number of women
	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested did not receive results	Never tested <sup>1</sup>					
<b>Age</b>									
15-24	33.7	3.1	0.3	96.7	100.0	3.3	0.4	1,891	
..15-19	27.5	0.9	0.0	99.1	100.0	0.9	0.0	1,062	
..20-24	41.7	5.8	0.6	93.6	100.0	6.4	0.9	829	
25-29	52.2	6.3	1.9	91.7	100.0	8.3	1.6	728	
30-39	53.8	5.9	1.5	92.6	100.0	7.4	0.8	1,142	
40-49	51.4	3.9	1.0	95.1	100.0	4.9	0.5	1,044	
<b>Marital status</b>									
Never married	36.0	2.6	0.5	97.0	100.0	3.0	0.4	1,715	
..Ever had sex	48.3	7.1	0.9	92.1	100.0	7.9	0.9	469	
..Never had sex	31.4	0.9	0.3	98.8	100.0	1.2	0.2	1,246	
Married/Living together	50.1	5.6	1.2	93.2	100.0	6.8	0.9	2,874	
Divorced/Separated/Widowed	52.5	3.4	1.8	94.8	100.0	5.2	0.0	216	
<b>Residence</b>									
Urban	48.6	9.2	0.9	90.0	100.0	10.0	1.7	1,000	
Rural	44.3	3.2	1.0	95.8	100.0	4.2	0.4	3,805	
<b>Region</b>									
Apia urban area	48.6	9.2	0.9	90.0	100.0	10.0	1.7	1,000	
North west Upolu	50.5	3.0	0.6	96.5	100.0	3.5	0.1	1,733	
Rest of Upolu	38.5	3.4	1.7	94.9	100.0	5.1	0.7	1,099	
Savaii	39.6	3.3	0.9	95.8	100.0	4.2	0.7	973	
<b>Education</b>									
No education	*	*	*	*	100.0	*	*	15	
Primary or lower or special needs	27.3	2.5	0.6	96.9	100.0	3.1	0.6	161	
Secondary	42.6	3.3	0.9	95.7	100.0	4.3	0.7	3,654	
More than secondary	58.3	8.9	1.2	89.9	100.0	10.1	0.9	975	
<b>Wealth quintile</b>									
Lowest	36.4	2.2	1.1	96.7	100.0	3.3	0.3	903	
Second	42.0	2.2	0.4	97.4	100.0	2.6	0.3	955	
Middle	43.4	3.6	1.3	95.2	100.0	4.8	0.8	954	
Fourth	46.3	5.1	1.1	93.8	100.0	6.2	0.7	987	
Highest	56.7	8.7	0.9	90.4	100.0	9.6	1.3	1,006	
Total 15-49	45.2	4.4	1.0	94.6	100.0	5.4	0.7	4,805	

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

<sup>1</sup> Includes 'don't know/missing'

Table 12.7.2 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 received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Samoa 2014

Background characteristic	Percent distribution of women/men by testing status and whether they received the results of the last test				Total	Percentage ever tested	Percentage who received results from last HIV test taken in the past 12 months	Number of men
	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested did not receive results	Never tested <sup>1</sup>				
<b>Age</b>								
15-24	24.3	0.7	0.1	99.1	100.0	0.9	0.0	645
..15-19	18.9	0.3	0.0	99.7	100.0	0.3	0.0	348
..20-24	30.6	1.3	0.3	98.4	100.0	1.6	0.0	298
25-29	35.5	3.2	0.9	95.8	100.0	4.2	0.5	229
30-39	37.9	4.7	0.7	94.6	100.0	5.4	0.0	356
40-49	44.4	5.8	0.6	93.6	100.0	6.4	0.0	345
<b>Marital status</b>								
Never married	27.1	1.2	0.1	98.6	100.0	1.4	0.0	819
..Ever had sex	34.2	2.1	0.3	97.6	100.0	2.4	0.0	472
..Never had sex	17.3	0.0	0.0	100.0	100.0	0.0	0.0	348
Married/Living together	39.3	4.9	0.8	94.3	100.0	5.7	0.2	718
Divorced/Separated/Widowed	(57.8)	(9.0)	(2.4)	(88.6)	100.0	(11.4)	(0.0)	38
<b>Residence</b>								
Urban	38.6	9.7	1.5	88.8	100.0	11.2	0.4	318
Rural	32.1	1.4	0.2	98.3	100.0	1.7	0.0	1,257
<b>Region</b>								
Apia urban area	38.6	9.7	1.5	88.8	100.0	11.2	0.4	318
North west Upolu	35.9	1.0	0.0	99.0	100.0	1.0	0.0	563
Rest of Upolu	25.7	0.8	0.0	99.2	100.0	0.8	0.0	357
Savaai	32.4	2.8	0.8	96.4	100.0	3.6	0.0	338
<b>Education</b>								
No education	*	*	*	*	100.0	*	*	8
Primary or lower or special needs	17.6	0.8	0.0	99.2	100.0	0.8	0.0	116
Secondary	31.3	1.7	0.5	97.8	100.0	2.2	0.0	1,169
More than secondary	48.7	9.8	0.8	89.4	100.0	10.6	0.4	282
<b>Wealth quintile</b>								
Lowest	27.0	1.6	0.0	98.4	100.0	1.6	0.0	293
Second	27.2	0.3	0.3	99.3	100.0	0.7	0.0	298
Middle	33.9	1.4	0.0	98.6	100.0	1.4	0.0	330
Fourth	34.5	3.6	1.0	95.5	100.0	4.5	0.0	356
Highest	44.0	8.6	1.1	90.3	100.0	9.7	0.4	300
Total 15-49	33.4	3.1	0.5	96.4	100.0	3.6	0.1	1,576
50-54	32.5	0.0	0.0	100.0	100.0	0.0	0.0	93
Total men 15-54	33.4	2.9	0.5	96.6	100.0	3.4	0.1	1,669

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.

<sup>1</sup> Includes 'don't know/missing'

### 12.7.1 HIV Testing during Antenatal Care

One of the tragic consequences of HIV in women is the transmission of the virus from mother-to-child. This can occur during pregnancy, at the time of delivery, or through breastfeeding. Worldwide, the effects of mother-to-child transmission of HIV are staggering. As part of the strategy for the prevention of mother-to-child transmission of HIV, women are counselled about HIV/AIDS during antenatal care visits and offered an HIV test. In the 2014 SDHS, women age 15-49 who gave birth in the two years preceding the survey were asked whether they received counselling during ANC visits for their most recent birth, whether they were offered and accepted a test for HIV as part of their antenatal care, and if tested, whether they received the test results.

Table 12.8 shows that, among women who gave birth in the two years preceding the survey, less than a fifth (24 percent) received HIV counselling during antenatal care for their most recent birth. The 2009 SDHS reported a higher percentage of 32 percent indicating that antenatal care services provided in recent years have somewhat slid backwards. With respect to background characteristics of the mothers, table 12.8 reveal that teenage mothers, those living in rural area, particularly in North West Upolu region, those with incomplete secondary education are somewhat less likely than other women to have received counselling during antenatal care for their most recent birth in the preceding 2 years.

Overall, just 4 percent of women who gave birth in the two years preceding the survey were counselled, were offered and voluntarily accepted an HIV test, and received the test results with little variation by background characteristics.

Table 12.8 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV counselling during antenatal care for their most recent birth, and percentage who accepted an offer of HIV testing by whether they received their test results, according to background characteristics, Samoa 2014

Background characteristic	Percentage who received HIV counselling during antenatal care <sup>1</sup>	Percentage who were offered and accepted an HIV test during antenatal care and who: <sup>2</sup>		Percentage who were counselled, were offered and accepted an HIV test, and who received results <sup>2</sup>	Number of women who gave birth in the last two years <sup>3</sup>
		Received results	Did not receive results		
<b>Age</b>					
15-24	24.6	8.3	0.8	5.3	381
..15-19	19.1	9.4	0.0	6.3	64
..20-24	25.7	8.0	1.0	5.1	317
25-29	24.6	6.2	1.2	3.1	321
30-39	22.9	7.0	1.5	3.9	399
40-49	23.5	5.0	0.0	3.1	97
<b>Residence</b>					
Urban	39.5	13.2	0.0	7.3	221
Rural	20.4	5.7	1.3	3.3	976
<b>Region</b>					
Apia urban area	39.5	13.2	0.0	7.3	221
North west Upolu	12.5	4.0	0.5	2.8	416
Rest of Upolu	24.8	6.8	2.6	4.2	311
Savaai	28.2	7.1	1.2	3.2	249
<b>Education</b>					
Primary or lower or special needs	(6.0)	(3.1)	(0.0)	(0.0)	32
Secondary	23.1	6.6	1.3	3.9	916
More than secondary	29.5	9.0	0.4	5.4	249
Total 15-49	23.9	7.0	1.1	4.1	1,197

Note: Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> In this context, "counselled" means that someone talked with the respondent about all three of the following topics: 1) babies getting the AIDS virus from their mother, 2) preventing the virus, and 3) getting tested for the virus

<sup>2</sup> Only women who were offered the test are included here; women who were either required or asked for the test are excluded from the numerator of this measure

<sup>3</sup> Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years

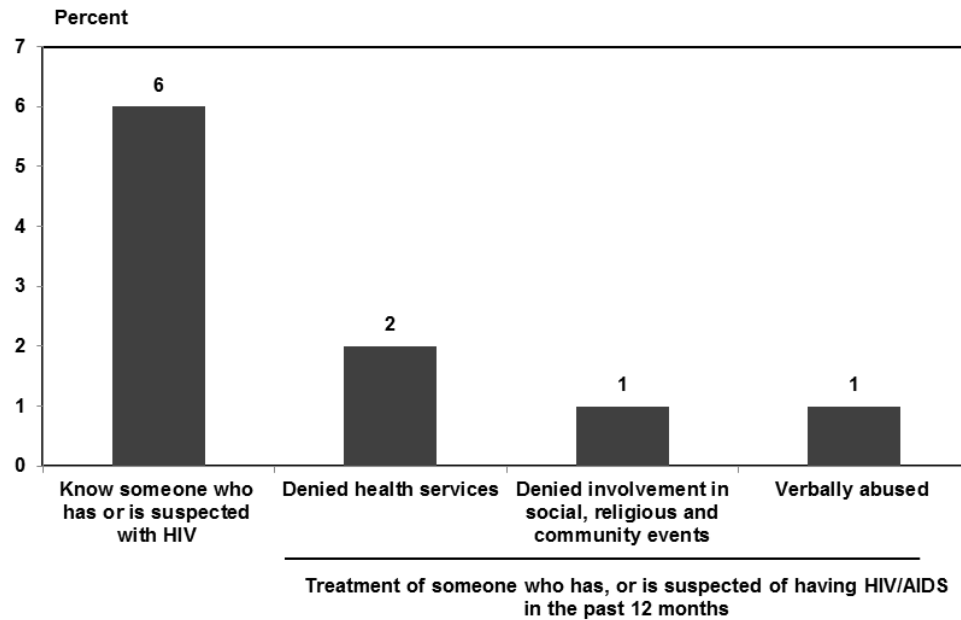
## 12.8 TREATMENT OF INDIVIDUALS WITH HIV/AIDS

Women and men in the 2014 SDHS were asked if they personally know of someone who has or is suspected of having HIV/AIDS. If a respondent said yes, he or she was further asked about specific treatments the infected individual had been subjected to in the preceding 12 months. Results are shown in Figures 12.3 and 12.4.

Six percent of women and 5 percent of men reported that they personally know of someone who has or is suspected of having HIV/AIDS. Among those reported by the women, 2 percent were denied health services, 1 percent was denied involvement in social, religious, or community events, while 37 percent were verbally abused or teased. Men reported somewhat similar level of discrimination against persons who have or are suspected of having HIV/AIDS.

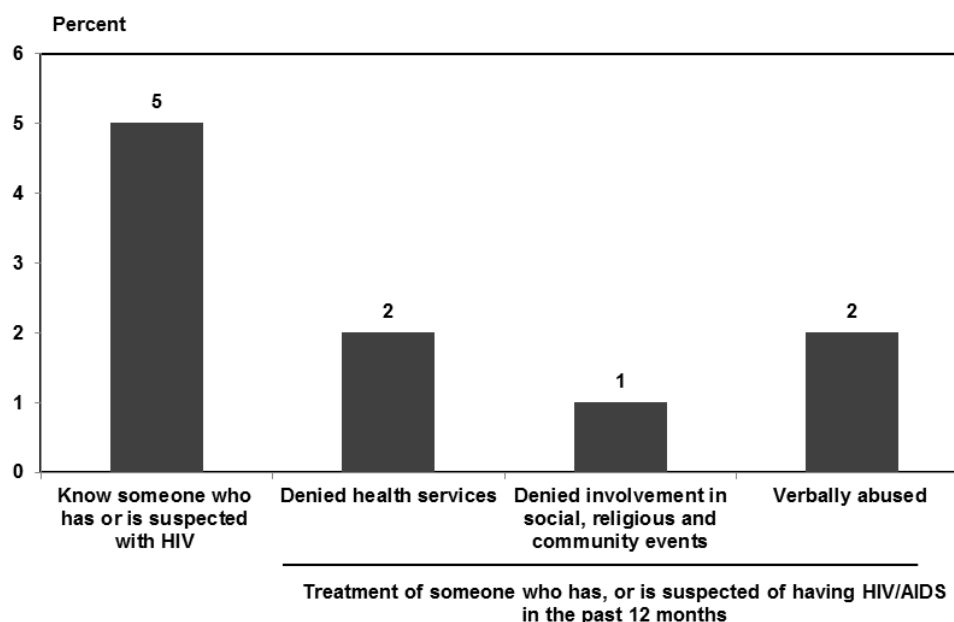
It is encouraging to note that, based on the reports of the respondents, there has been a substantial decline in discriminatory treatment of persons with, or suspected of having, HIV/AIDS since the 2009 survey. For example, in 2009, 37 percent of persons personally known to women respondents as having, or suspected of having, HIV/AIDS were denied health services whereas the corresponding proportion in 2014 is only 2 percent.

**Figure 12.3 Treatment of individuals with HIV/AIDS: Reported by Women Age 15-49**





**Figure 12.4 Treatment of individuals with HIV/AIDS: Reported by Men Age 15-49**



## 12.9 PREVALENCE OF MEDICAL INJECTIONS

Injection overuse in a health care setting can contribute to the transmission of blood-borne pathogens because it amplifies the effect of unsafe practices, such as reuse of injection equipment. To measure the potential risk of transmission of HIV associated with medical injections, respondents in the 2009 SDHS were asked if they had received an injection in the past 12 months. It should be noted that medical injections can be self-administered (e.g., insulin for diabetes). These injections were not included in the calculation.

Table 12.9 shows that 14 percent of women and 10 percent of men age 15-49 received a medical injection, for whatever reason, in the past 12 months. The average number of injections was less than 1 for both women and men. Majority of the women respondents (92 percent) reported that, for their last medical injection in the past 12 months, the syringe and needle were taken from a new and unopened package. Slightly less, but still comprising a large majority of the male respondents (87 percent) reported the same.

Among women who received an injection in the past 12 months, those residing in the urban area are more likely than those from the rural area to report that the syringe and needle came from a new and unopened package (97 against 91 percent). Men, on the other hand, reported the opposite with a higher percentage of safe practice in rural area (91 percent) than in urban area (80 percent). Interpretation of this finding, however, should be taken with caution since the number of unweighted cases of men who received an injection in the past 12 months is less than 50. Region-wise, and based on women's experience with medical injection, North West Upolu and Savaii have the lowest proportions in terms of using syringe and needle from a new and unopened package when medical injections are given.

Table 12.9 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 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, Samoa 2014

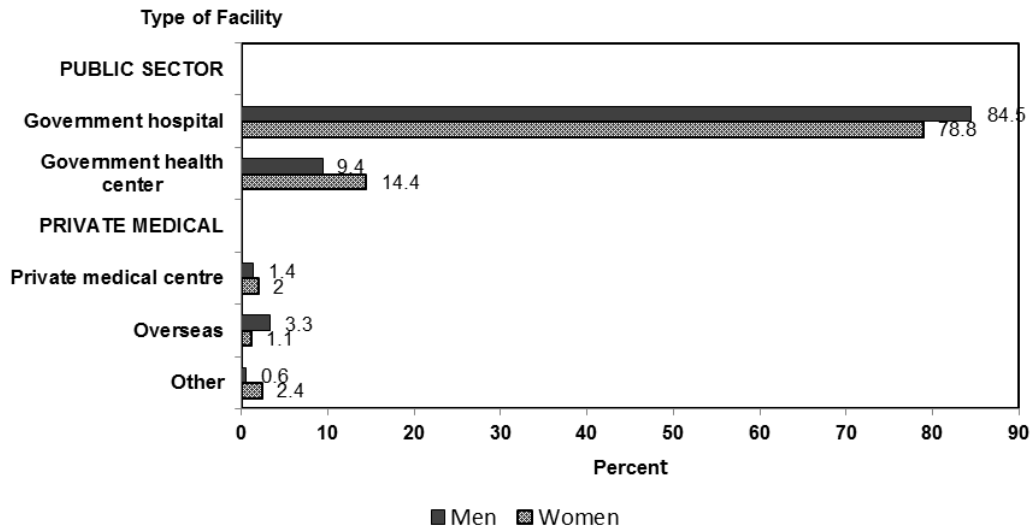
Background characteristic	Women					Men				
	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months
<b>Age</b>										
15-24	11.7	0.3	1,891	94.6	222	9.1	0.2	645	83.6	59
..15-19	8.5	0.2	1,062	96.6	90	8.9	0.2	348	(82.1)	31
..20-24	15.9	0.4	829	93.3	132	9.3	0.2	298	(85.2)	28
25-29	19.4	0.5	728	91.7	141	9.3	0.2	229	*	21
30-39	16.3	0.4	1,142	91.4	186	11.0	0.3	356	(93.7)	39
40-49	11.2	0.3	1,044	90.8	117	8.9	0.2	345	(80.7)	31
<b>Residence</b>										
Urban	17.5	0.5	1,000	96.9	175	15.4	0.3	318	(80.0)	49
Rural	12.9	0.3	3,805	90.8	492	8.0	0.2	1,257	90.6	101
<b>Region</b>										
Apia urban area	17.5	0.5	1,000	96.9	175	15.4	0.3	318	(80.0)	49
North west Upolu	15.6	0.3	1,733	89.1	270	7.0	0.1	563	(85.7)	39
Rest of Upolu	13.0	0.4	1,099	94.4	143	6.7	0.1	357	*	24
Savaii	8.1	0.2	973	90.3	79	11.1	0.3	338	(92.5)	38
<b>Education</b>										
No education	*	*	15	*	1	*	*	8	*	1
Primary or lower or special needs	9.9	0.2	161	*	16	*	*	116	*	6
Secondary	12.9	0.3	3,654	91.4	473	9.3	0.2	1,169	88.4	109
More than secondary	18.1	0.5	975	95.0	177	11.9	0.2	282	(80.5)	34
<b>Wealth quintile</b>										
Lowest	13.4	0.3	903	89.2	121	7.1	0.2	293	(77.3)	21
Second	13.1	0.3	955	91.4	125	5.9	0.1	298	*	18
Middle	12.3	0.3	954	91.7	117	11.3	0.3	330	(88.3)	37
Fourth	16.7	0.5	987	92.6	164	10.0	0.2	356	(81.8)	36
Highest	13.8	0.3	1,006	96.4	139	12.9	0.2	300	(90.5)	39
Total 15-49	13.9	0.4	4,805	92.4	667	9.5	0.2	1,576	87.2	150
Total men 15-54	na	na	na	na	na	9.7	0.2	1,669	88.1	161

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. na = Not applicable

The types of facility where the respondents received their last medical injection in the past 12 months are shown in figure 12.5. Majority of the respondents said they received their last medical injection from a government hospital while a smaller proportion said they received it from a

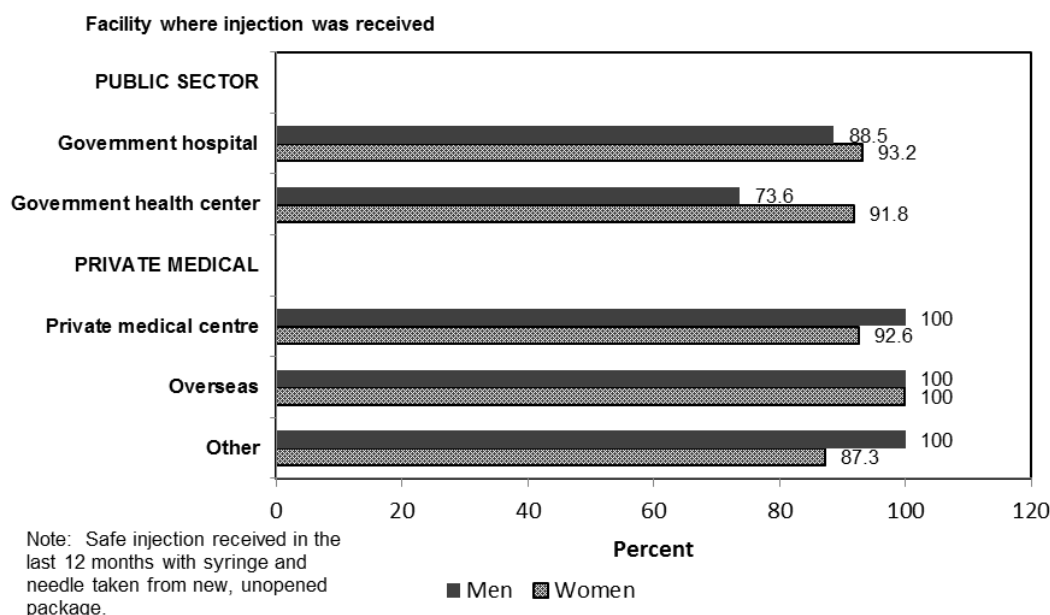
government health center. Very small proportions of the respondents received their medical injections from private sector facilities including those from overseas.

**Figure 12.5 Source of last medical injection Received by Women and Men Age 15-49**



The practice of giving safe medical injection is critical in preventing the spread of the HIV virus and this is ensured by using syringe and needle that are new and not previously used on other persons. During the survey, the respondents were asked whether or not the health personnel that them the injection used syringe and needle from a new and unopened package. Their responses are shown in figure 12.6 by type of facility where they received the medical injection. Women respondents who received the injection from a public health facility, most (more than 90 percent) said that the syringe and needle used were new. However, among men who received their injection from a government hospital, only 86 percent reported that it was safe and among those who received it from a government health center, only 74 percent said that this was the case. Although cases where injection was received from a private medical facility were few, both men and women respondents reported that the practice of safe injection was enforced.

**Figure 12.6 Safe Injection Received by Women and Men Age 15-49**



## 12.10 HIV/AIDS-RELATED KNOWLEDGE AMONG YOUTH

Knowledge of HIV/AIDS issues and related sexual behaviour 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 experimentation that may involve risky behaviours. They are therefore often at greater risk because they may have shorter relationships and more partners, or engage in other risky behaviours. Special attention is paid to this group because it accounts for a large proportion of all new HIV cases worldwide. For this reason, knowledge of HIV among youth is one of the Millennium Development Goals (MDGs) indicators that should be monitored periodically by all developing countries.

### 12.10.1 KNOWLEDGE ABOUT HIV/AIDS AND SOURCE OF CONDOMS

Knowledge on how HIV is transmitted is crucial in enabling young people to avoid contracting the virus. This section explores the level of comprehensive knowledge about AIDS, and knowledge of a source of condoms among young men. As discussed earlier, comprehensive knowledge of HIV is defined as knowing that consistent use of condoms during sexual intercourse and having just one faithful, HIV-negative partner can reduce the likelihood of getting HIV; knowing that a healthy-looking person can have HIV, the virus that causes AIDS; and rejecting the two most common local misconceptions about HIV transmission or prevention.

Table 12.10 shows the percentages of young women and men who have comprehensive knowledge about HIV/AIDS and among men, knowledge of a place where they can get condom. It shows that only a very small percentage, 5 percent of young women and 6 percent of young men, have comprehensive knowledge of AIDS. Knowledge increases with age. Among women, the proportion with comprehensive knowledge ranges from 2 percent among those aged 15-17 to 8 percent among those aged 20-22. In the case of men, the range is from 3 percent (age 15-17) to 9 percent (age 23-24). Education is strongly related to the level of comprehensive knowledge; young persons, whether male or female, who have more than secondary education are at least twice more likely to have

comprehensive knowledge of HIV/AIDS compared with those who are less educated. With respect to marital status, a greater proportion of ever-married youth have comprehensive knowledgeable of HIV/AIDS than the never-married. And among the never-married, the proportion having comprehensive knowledge is higher among those who have experienced sex than among those who have not. Differences between urban and rural youth also exist; urban residence being more favorable in terms of giving comprehensive knowledge of HIV/AIDS.

Table 12.10 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, Samoa 2014

Background characteristic	Women		Men		
	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Number of respondents	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of respondents
<b>Age</b>					
15-19	3.6	1,062	3.5	25.1	348
..15-17	2.4	617	2.6	17.6	195
..18-19	5.3	444	4.6	34.6	153
20-24	7.3	829	8.3	52.7	298
..20-22	7.8	515	8.0	52.4	194
..23-24	6.5	314	8.9	53.4	104
<b>Marital status</b>					
Never married	4.9	1,386	5.4	35.9	582
..Ever had sex	8.1	261	7.2	54.5	264
..Never had sex	4.1	1,125	3.8	20.4	317
Ever married	6.2	505	9.0	55.4	64
<b>Residence</b>					
Urban	6.8	409	7.1	46.4	141
Rural	4.8	1,482	5.3	35.5	505
<b>Region</b>					
Apia urban area	6.8	409	7.1	46.4	141
North west Upolu	6.9	711	6.1	41.7	231
Rest of Upolu	4.4	409	8.3	33.7	145
Savaii	1.1	361	0.7	26.3	129
<b>Education</b>					
No education	*	9	*	*	4
Primary or lower or special needs	(0.0)	48	(0.0)	(25.2)	33
Secondary	4.2	1,459	4.7	33.8	520
More than secondary	10.0	375	13.9	67.1	88
<b>Wealth quintile</b>					
Lowest	4.5	349	3.5	35.0	116
Second	3.7	404	7.0	34.9	124
Middle	4.6	386	4.0	41.1	124
Fourth	5.2	377	3.1	37.9	154
Highest	8.1	375	11.4	40.1	127
Total	5.2	1,891	5.7	37.9	645

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.

<sup>1</sup> 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 AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2

<sup>2</sup> For this table, the following responses are not considered sources for condoms: friends, family members and home

Condom use plays an important role in the prevention of STIs and HIV transmission, as well as prevention of unwanted pregnancies. Knowledge of a source of condoms helps young people to obtain and use condoms. Table 12.10 shows that 38 percent of young men know at least one source of condoms. Knowledge of a condom source generally increases with age and is higher among the ever-married young men (55 percent) than those who never married (36 percent). Knowledge of a condom source is much higher among men in urban areas (46 percent) than men in rural areas (36 percent). Young men from Savaii region are least aware of sources of condom.

### **12.10.2 AGE AT FIRST SEXUAL INTERCOURSE AMONG YOUTH**

Age at first sex among young adults age 15-24 is an important indicator in HIV/AIDS prevention programmes especially in countries where transmission of the virus is mostly through sexual contact between an HIV-positive and an HIV-negative individual. Age at first sex marks the point in time when most individuals are first exposed to the risk of contracting HIV.

Table 12.11 shows the proportion of youth currently aged 15-24 who had sexual intercourse before age 15 and the proportion among those currently aged 18-24 who had sex before age 18. Sex before age 15 in Samoa is very rare with only 1 percent of young women and 2 percent of young men reporting that they had sexual intercourse before age 15.

Among women, those who reported that they had sex before age 15 are now currently married or had been married (2 percent) but it is not clear from the data whether or not they were already married when they had their first sexual intercourse. Among men, those who reported having their first sex before age 15 are still never married (3 percent) at the time of the survey.

Urban youth are more likely to have experienced sex before age 15 than their rural counterparts. However, as a region, Rest of Upolu has the highest proportion of young women who had already experienced sex at a very young age (2 percent) while it is Savaii for young men (4 percent).

Sex by age 18 is somewhat prevalent among persons who are now aged 18-24. Eighteen percent of women and 24 percent of men in this age group reported that they had their first sex before they turned 18 years of age. Even among those who are still unmarried at the time of the survey, 22 percent of the men have already engaged in sex prior to their 18<sup>th</sup> birthday. The proportion among the unmarried women is much less at 7 percent. Although these results are not surprising, they are nevertheless alarming especially if these young people do not practice safe sex. High level of education could lead young women to put off engaging in sexual intercourse. This is what the survey results, which show a much smaller proportion of young women who have more than secondary education (4 percent) having experienced sex before age 18 compared to that of women who have not completed secondary level (23 percent), seem to suggest. With men, education does not make a significant difference on early initiation to sexual activity.

Table 12.11 Age at first sexual intercourse among youth

Percentage of young women and of young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and of young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Samoa 2014

Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
<b>Age</b>								
15-19	0.9	1,062	-	-	3.2	348	-	-
..15-17	0.7	617	na	na	3.2	195	na	na
..18-19	1.1	444	18.5	444	3.3	153	26.8	153
20-24	1.1	829	17.0	829	1.8	298	22.7	298
..20-22	1.2	515	15.9	515	2.3	194	22.8	194
..23-24	1.0	314	18.8	314	0.9	104	22.3	104
<b>Marital status</b>								
Never married	0.5	1,386	6.7	781	2.9	582	22.5	387
Ever married	2.2	505	34.6	492	0.0	64	33.6	64
<b>Knows condom source<sup>1</sup></b>								
Yes	-	0	-	0	3.7	244	29.4	210
No	1.0	1,891	17.5	1,273	1.9	401	19.4	241
<b>Residence</b>								
Urban	1.3	409	16.6	287	4.4	141	31.2	95
Rural	0.9	1,482	17.8	986	2.1	505	22.1	356
<b>Region</b>								
Apia urban area	1.3	409	16.6	287	4.4	141	31.2	95
North west Upolu	0.5	711	16.4	483	1.2	231	22.8	176
Rest of Upolu	2.0	409	19.2	271	1.4	145	18.5	97
Savaii	0.3	361	19.1	232	4.4	129	25.0	83
<b>Education</b>								
No education	*	9	*	6	*	4	*	2
Primary or lower or special needs	(4.1)	48	*	23	(2.8)	33	(28.7)	24
Secondary	1.0	1,459	23.0	874	2.5	520	23.2	338
More than secondary	0.3	375	4.4	371	2.8	88	26.8	86
<b>Wealth quintile</b>								
Lowest	2.0	349	24.7	216	0.8	116	23.0	78
Second	0.5	404	19.7	269	5.4	124	26.5	92
Middle	1.0	386	16.7	263	2.5	124	28.3	92
Fourth	0.0	377	15.7	253	2.2	154	23.6	104
Highest	1.4	375	12.1	272	1.9	127	18.3	84
Total	1.0	1,891	17.5	1,273	2.6	645	24.1	451

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.

na = Not available

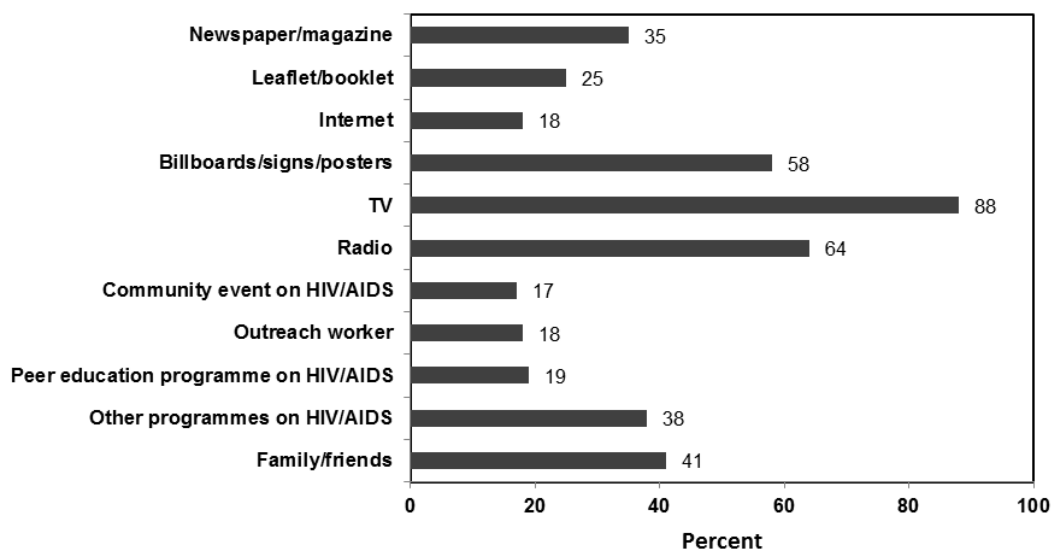
<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

## 12.11 EXPOSURE TO MESSAGES ABOUT HIV/AIDS

A wide variety of information, education and communication (IEC) sources on HIV/AIDS are available in Samoa. The 2014 SDHS all respondents aged 15-49 were asked if they had ever seen, read or heard and HIV/AIDS messages on various printed and electronic media. Findings are shown in figures 12.7 and 12.8.

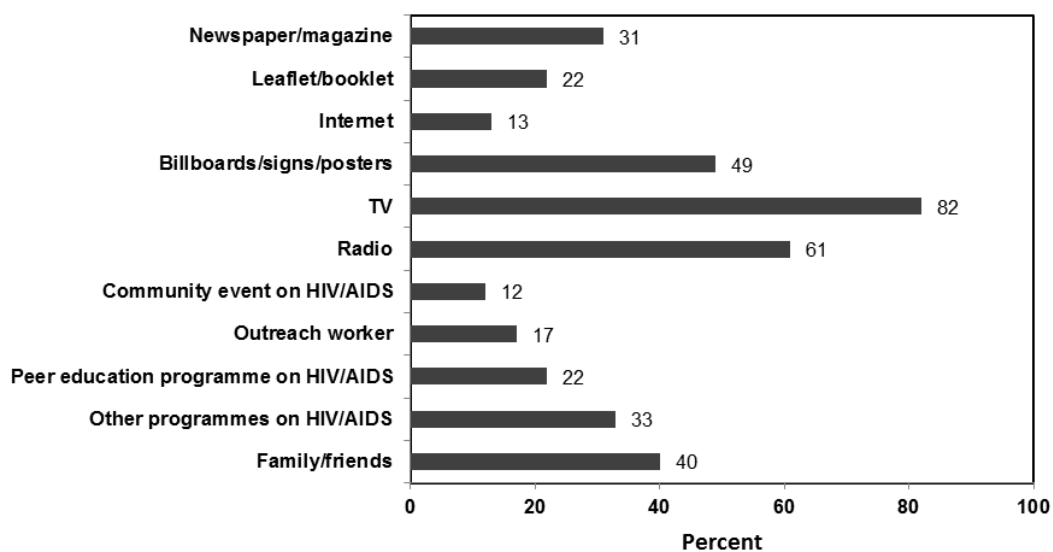
The charts show that, in general, women are more exposed to messages about HIV/AIDS than are men, regardless of the source of the message. The most widely accessed sources of information on HIV/AIDS are television (seen by 88 percent of women and 82 percent of men) and radio (heard by 64 percent of women and 61 percent of men). Billboards, signs and posters bearing HIV/AIDS messages are also major sources of information. A family member or a friend is a source of information on HIV/AIDS for 4 of every 10 respondents. This underscores the need to target the adult population in general, and not just the population at risk, in IEC and advocacy efforts so that the correct and appropriate messages are shared by everyone. Outreach workers and peers are less often the source of information on HIV/AIDS - reported only by one of every five respondents.

**Figure 12.7 Exposure to messages about HIV/AIDS: Women**





**Figure 12.8 Exposure to messages about HIV/AIDS: Men**



Samoa is committed to promoting women's empowerment and gender equality in all aspects of life. It has made great strides in this regard, among which, the most notable is the introduction of an amendment to the constitution guaranteeing a minimum of 10 percent of seats for women in the Parliament. Legislative measures have been passed such as mandating the use of gender-neutral language in all legislations, broadening the definition of rape to include rape in all orifices, by any object and by any person, making available restraining orders for victims of domestic violence irrespective of marital status and abolishing archaic means of obtaining divorce<sup>1</sup>. In 2013, the *Labor and Employment Relations Act* was enacted which provides, among others, that male employees shall be entitled to paternity leave of 5 days and that employers' shall provide maternity leave for 6 weeks with 4 weeks of full pay.<sup>2</sup>

Despite the progress noted, there remain a number of challenges that continue to impede the full realization of gender equality in the country such as people's continued adherence to traditional attitudes and values towards women, as well as, the lack of technical and financial capacity to formulate and implement gender-related programmes. The Ministry of Women, Community and Social Development (MWCSD), as the government's focal point on gender, continue to explore opportunities to mainstream gender in all areas of work of the government.

This section examines some aspects of women's empowerment, attitudes and beliefs on gender equality and other gender-related issues. The 2014 Samoa Demographic and Health Survey (SDHS) collected information not only on the general characteristics of respondents (age, education, wealth quintile, and employment status), but also information specific to women's empowerment such as receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband, and control over the use of her own earnings and those of her spouse.

## 13.1 EMPLOYMENT AND FORMS OF EARNINGS

Employment can be a source of empowerment for both women and men. It is particularly so for women if it puts them in control of the household income. In the 2014 SDHS, respondents were asked whether they were employed at the time of the survey and, if not, whether they were employed in the 12 months preceding the survey. Questions were also asked regarding type of earnings they received, that is, whether in cash, in-kind or both.

Table 13.1 shows that currently married women age 15-49 have a much lower participation in economic work than currently married men in the same age group. Only 28 percent of these women were employed at the time of the survey or within the 12 months preceding the survey, compared to 70 percent of the men. Age pattern of work participation by currently married women is quite clear. From a low of about 15 percent at age 15-19, the proportion steadily increases, peaking at 33 percent by age 35-39 and then dropping to about 27 to 28 percent by the time they are in their forties. In the case of currently married men, work participation rate does not vary much by age.

Women are slightly more likely than men to be paid in cash. Among currently married

---

<sup>1</sup>SAMOA Country Report 2014 On Progress in Implementing the Pacific Leaders Declaration for Gender Equality

<sup>2</sup> Ibid.

respondents employed in the past 12 months, 84 percent of women and 78 percent of men received earnings in cash or cash and in-kind. One in six currently married women while one in five currently married men employed in the past 12 months does not get paid for their work. These are workers who are self-employed or who work in their own, or their family's farm or business. Among women, the proportion of this type of workers increases with age. Among men, however, the age pattern for unpaid work is not as clear.

**Table 13.1 Employment and cash earnings of currently married women**

Percentage of currently married women and men age 15-49 who were employed at any time in the last 12 months and the percent distribution of currently married women and men employed in the last 12 months by type of earnings, according to age, Samoa 2014

Age	Currently married respondents:		Percent distribution of currently married respondents employed in the last 12 months, by type of earnings					Total	Number of women
	Percentage employed	Number of women	Cash only	Cash and in-kind	In-kind only	Not paid	Missing		
<b>WOMEN</b>									
<b>Age</b>									
15-19	14.6	83	*	*	*	*	*	100.0	12
20-24	22.9	403	81.6	8.7	0.0	9.7	0.0	100.0	92
25-29	27.0	524	80.2	11.9	0.0	7.1	0.7	100.0	142
30-34	32.4	487	76.1	8.1	0.0	15.1	0.7	100.0	158
35-39	33.1	484	71.2	9.0	0.6	18.5	0.6	100.0	160
40-44	27.0	505	72.3	6.7	0.7	20.3	0.0	100.0	136
45-49	28.2	389	69.1	9.2	1.8	20.0	0.0	100.0	110
Total 15-49	28.2	2,874	75.1	8.8	0.5	15.2	0.4	100.0	810
<b>MEN</b>									
<b>Age</b>									
15-19	*	5	*	*	*	*	*	100.0	3
20-24	60.8	59	(54.8)	(18.3)	(2.6)	(24.3)	(0.0)	100.0	36
25-29	65.9	109	62.3	20.1	1.7	13.2	2.7	100.0	72
30-34	74.2	146	67.7	12.1	0.0	20.2	0.0	100.0	108
35-39	69.4	123	67.9	11.8	1.1	19.2	0.0	100.0	85
40-44	81.8	147	56.5	18.3	0.0	25.2	0.0	100.0	120
45-49	60.7	129	60.8	14.7	0.0	24.5	0.0	100.0	79
Total 15-49	70.0	718	62.1	15.8	0.6	21.0	0.4	100.0	503
50-54	52.4	81	(66.3)	(15.5)	(0.0)	(18.2)	(0.0)	100.0	42
Total men 15-54	68.2	798	62.5	15.8	0.6	20.8	0.4	100.0	545

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

## 13.2 CONTROL OVER WOMEN'S AND MEN'S EARNINGS

Currently married women who were employed and received cash for their work were asked who the main decision-maker is in the family regarding use of their earnings. They were also asked the relative magnitude of their earnings compared with those of their husband. Women whose husbands were employed for cash were asked who usually decides how his earnings are used. Men were also asked who mainly decides how their earnings are to be used. These pieces of information provide insight into women's level of empowerment in the family and the extent of their control over decision-making regarding the use of household income. It is expected that employment and cash

earnings are more likely to empower women if they control their own earnings and perceive their earnings as important, relative to those of their husband, and to the welfare of the household.

Table 13.2.1 shows the women's responses to the questions on the extent of their control over their cash earnings and the magnitude of their earnings relative to those of their husband. Only 9 percent of currently married women who were employed in the past 12 months say that their cash earnings are mainly controlled by their husband. Majority of the time, the woman has a say on how to use her cash earnings either by herself mainly (40 percent) or jointly with her husband (47 percent). These results speak much of the extent of empowerment Samoan women have in this aspect of family life.

Having their husbands as the main decision-maker with respect to their cash earnings is more common among women age 45-49, those who have no children, those who reside in urban areas, those with no more than secondary level of education and those in the 2 highest wealth quintile.

It is interesting to note that in Samoa, and based on the report by the women themselves, they bring more cash earnings into the family than their husband does. Thirty-nine percent of currently married women who worked in the past 12 months say that they have more cash earnings than their working husband while 18 percent say that she and her husband have about the same cash earnings.

Rural women, compared to their urban counterparts, are more likely to have more cash earnings than their husband. This is probably because their husband may be working in their own farm or own business from which cash earnings are not usually derived. Nearly half of the respondents with more than secondary education (46 percent) say that they have more cash earnings than their husband. Based on wealth quintile, there are no clear differences in terms of the proportion of women earning more than their husband.

Table 13.2.1 Control over women's cash earnings and relative magnitude of women's 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 wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Samoa 2014

Background characteristic	Person who decides how the wife's cash earnings are used:					Total	Women's cash earnings compared with husband's cash earnings:					Total	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing		More	Less	About the same	Husband/partner has no earnings	Don't know/ Missing		
<b>Age</b>													
15-19	*	*	*	*	*	100.0	*	*	*	*	*	100.0	11
20-24	36.2	46.8	8.5	4.7	3.8	100.0	39.9	34.8	15.4	6.2	3.8	100.0	83
25-29	38.7	52.7	7.1	0.0	1.5	100.0	40.5	31.9	19.2	6.9	1.5	100.0	131
30-34	45.2	45.0	6.8	0.0	3.0	100.0	35.4	31.4	20.3	8.4	4.5	100.0	133
35-39	40.5	47.0	8.7	0.8	3.1	100.0	47.0	25.7	13.3	10.9	3.1	100.0	129
40-44	35.2	52.9	8.4	0.0	3.6	100.0	39.5	26.7	22.8	5.5	5.5	100.0	108
45-49	47.5	36.9	14.5	0.0	1.1	100.0	34.1	27.8	15.1	20.7	2.3	100.0	86
<b>Number of living children</b>													
0	33.5	49.2	10.8	4.3	2.2	100.0	38.9	26.7	24.8	6.3	3.3	100.0	93
1-2	40.5	47.4	9.7	0.8	1.7	100.0	40.6	32.9	15.0	9.4	2.1	100.0	233
3-4	42.2	47.5	6.3	0.0	4.0	100.0	39.2	28.5	19.3	9.0	4.0	100.0	225
5+	42.1	46.3	9.3	0.0	2.2	100.0	37.7	28.1	17.2	12.4	4.5	100.0	129
<b>Residence</b>													
Urban	48.4	39.3	10.4	0.5	1.4	100.0	37.5	38.4	16.1	6.2	1.9	100.0	227
Rural	36.4	51.5	7.8	1.1	3.2	100.0	40.3	25.3	19.2	11.1	4.1	100.0	453
<b>Region</b>													
Apia urban area	48.4	39.3	10.4	0.5	1.4	100.0	37.5	38.4	16.1	6.2	1.9	100.0	227
North west Upolu	34.2	56.4	7.0	0.8	1.6	100.0	37.4	27.6	25.7	7.4	1.9	100.0	251
Rest of Upolu	42.2	44.1	8.8	2.0	2.9	100.0	46.1	21.6	12.7	13.7	5.9	100.0	102
Savaii	35.8	46.9	8.7	1.0	7.7	100.0	41.8	23.3	9.6	17.5	7.7	100.0	100
<b>Education</b>													
Primary or lower or special needs	*	*	*	*	*	100.0	*	*	*	*	*	100.0	8
Secondary	40.9	46.0	9.9	0.6	2.7	100.0	34.2	32.8	19.2	9.8	4.0	100.0	366
More than secondary	39.9	49.5	7.0	1.0	2.7	100.0	46.3	25.8	17.4	7.9	2.7	100.0	306
<b>Wealth quintile</b>													
Lowest	40.9	47.0	6.7	4.0	1.3	100.0	44.4	25.4	16.3	11.2	2.7	100.0	73
Second	40.7	50.0	7.4	0.9	0.9	100.0	37.8	28.2	17.1	15.0	1.9	100.0	106
Middle	46.6	43.9	5.2	0.9	3.4	100.0	36.7	27.2	19.7	12.1	4.2	100.0	116
Fourth	35.0	46.9	12.2	0.0	5.9	100.0	41.8	31.1	12.7	8.5	5.9	100.0	152
Highest	40.5	48.5	9.2	0.4	1.3	100.0	38.2	32.0	22.0	5.7	2.2	100.0	234
Total	40.4	47.4	8.7	0.9	2.6	100.0	39.4	29.7	18.2	9.4	3.4	100.0	680

Note: An asterisks indicates that a figure based on fewer than 25 unweighted cases that has been suppressed

With regard to control over husband's cash earnings, currently married men age 15-49 who receive cash earnings and currently married women age 15-49 whose husbands receive cash earnings were asked who decides how the husband's cash earnings are spent. Table 13.2.2 clearly shows that women do exercise control, to a large extent, over their husband's income. Eighty-nine percent of the women whose husband has cash earnings claim that they decide, either mainly (37 percent) or jointly

with their husband (52 percent), on how to use those cash earnings. Even the husbands themselves report similar indication of women's empowerment, that is, their wife's participation in making decisions how to use their cash earnings (82 percent).

The older the husband, the more likely it is that his wife exercises greater control over his earnings. This is apparent from table 13.2.2 which shows declining proportions of men with increasing age (of wife) who report that they have main control of their earnings. The same pattern holds with increasing number of living children. Men whose wife has reached only secondary level of education are less likely to share decision-making power with their wife compared to men married to a woman who has more than secondary education; that is, 17 percent of the former say that they mainly control their cash earnings compared to only 10 percent of the latter.

Compared to the results of the 2009 SDHS, there appears to be some remarkable progress in women's empowerment in terms of decision making in the use of both the woman's own earnings and those of her husband's. Even husbands are now more willing to share control over their earnings. For example, in 2009, it was reported that 71 percent of the husbands with cash earnings give their wife control, mainly or jointly with him, over how such earnings would be spent. The corresponding proportion observed in the 2014 survey is much higher at 89 percent.

Table 13.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women 15-49 whose husbands receive cash earnings, by person who decides how men's cash earnings are used, according to background characteristics, Samoa 2014

Background characteristic	Women						Total Number	Men						Total Number
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing			Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing		
<b>Age</b>														
15-19	32.2	45.8	12.3	2.4	7.3	100.0	81	*	*	*	*	*	100.0	3
20-24	39.5	49.0	8.8	1.0	1.7	100.0	397	(19.3)	(45.4)	(31.5)	(0.0)	(3.8)	100.0	26
25-29	36.5	53.1	8.9	0.2	1.4	100.0	508	22.5	54.1	17.0	3.2	3.2	100.0	59
30-34	34.9	52.8	11.2	0.0	1.1	100.0	470	27.4	53.0	17.5	2.2	0.0	100.0	86
35-39	34.0	57.1	8.1	0.4	0.4	100.0	463	19.4	68.7	10.1	1.8	0.0	100.0	68
40-44	40.1	52.2	6.8	0.2	0.6	100.0	494	22.3	62.4	13.2	0.0	2.1	100.0	90
45-49	37.0	51.4	10.8	0.0	0.8	100.0	366	26.3	57.1	13.2	0.0	3.4	100.0	59
<b>Number of living children</b>														
0	32.6	50.4	13.0	1.2	2.8	100.0	246	(4.7)	(59.5)	(23.6)	(6.1)	(6.2)	100.0	46
1-2	35.4	52.8	9.4	0.3	2.0	100.0	841	28.9	52.2	17.2	0.8	0.9	100.0	113
3-4	38.5	52.9	7.8	0.1	0.7	100.0	862	26.5	56.9	14.2	1.0	1.6	100.0	128
5+	37.8	52.5	9.0	0.4	0.4	100.0	829	22.1	66.0	11.1	0.0	0.9	100.0	105
<b>Residence</b>														
Urban	44.5	42.6	11.2	0.2	1.5	100.0	511	19.4	63.7	15.8	1.1	0.0	100.0	109
Rural	35.1	54.8	8.6	0.4	1.1	100.0	2,267	25.0	56.2	15.1	1.3	2.4	100.0	283
<b>Region</b>														
Apia urban area	44.5	42.6	11.2	0.2	1.5	100.0	511	19.4	63.7	15.8	1.1	0.0	100.0	109
North west Upolu	34.2	55.3	8.8	0.3	1.5	100.0	971	18.6	68.1	10.8	0.6	1.8	100.0	155
Rest of Upolu	34.7	54.7	9.3	0.1	1.2	100.0	681	26.7	49.9	17.2	0.0	6.2	100.0	64
Savaii	37.1	54.0	7.7	0.8	0.5	100.0	615	38.5	33.7	23.4	4.4	0.0	100.0	64
<b>Education</b>														
No education	*	*	*	*	*	100.0	4	*	*	*	*	*	100.0	1
Primary or lower or special needs	27.4	57.8	11.4	0.0	3.4	100.0	87	(26.8)	(56.4)	(16.8)	(0.0)	(0.0)	100.0	19
Secondary	37.8	51.4	9.3	0.4	1.1	100.0	2,170	24.9	54.8	17.4	0.7	2.3	100.0	259
More than secondary	34.3	56.4	7.7	0.2	1.4	100.0	517	19.8	66.2	10.4	2.8	0.8	100.0	113
<b>Wealth quintile</b>														
Lowest	35.4	53.6	9.4	0.3	1.3	100.0	590	38.2	43.7	14.6	0.0	3.5	100.0	55
Second	36.5	55.4	6.6	0.0	1.4	100.0	550	25.6	65.1	9.3	0.0	0.0	100.0	67
Middle	38.6	50.2	9.1	1.1	1.1	100.0	547	19.6	61.8	14.1	2.2	2.4	100.0	84
Fourth	36.6	50.8	12.1	0.0	0.5	100.0	563	26.2	49.8	19.7	1.1	3.2	100.0	89
Highest	37.2	52.7	8.2	0.4	1.5	100.0	528	14.1	66.7	16.9	2.2	0.0	100.0	96
Total 15-49	36.8	52.5	9.1	0.4	1.2	100.0	2,778	23.4	58.3	15.3	1.3	1.7	100.0	392
50-54	na	na	na	na	na	na	na	(25.6)	(58.1)	(16.3)	(0.0)	(0.0)	100.0	35
Total men 15-54	na	na	na	na	na	na	na	23.6	58.3	15.4	1.2	1.6	100.0	426

na = Not Applicable

Note: Numbers in parentheses are based on 25-49 unweighted cases, an asterisk indicates that a figure based on fewer than 25 unweighted cases and has been suppressed.

With regard to control over husband's cash earnings, currently married men age 15-49 who receive cash earnings and currently married women age 15-49 whose husbands receive cash earnings were asked who decides how the husband's cash earnings are spent. Table 13.2.2 clearly shows that women do exercise control, to a large extent, over their husband's income. Eighty-nine percent of the women whose husband has cash earnings claim that they decide, either mainly (37 percent) or jointly with their husband (52 percent), on how to use those cash earnings. Even the husbands themselves report similar indication of women's empowerment, that is, their wife's participation in making decisions on how to use their cash earnings (82 percent).

Table 13.3 shows the decision-making process on how the wife's and the husband's cash earnings are used under different situations that consider the magnitude of the wife's earnings relative to that of her husband. Data in this table are based on the responses of currently married women age 15-49.

Table 13.3 Women's control over her own earnings and over those of her husband

Percent distributions of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the woman's cash earnings are used and 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 woman's and husband's cash earnings, Samoa 2014

Women's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:						Number of women	Person who decides how husband's cash earnings are used:						Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total <sup>1</sup>	
More than husband/partner	48.2	43.4	7.7	0.4	0.4	100.0	268	40.6	51.7	6.2	0.4	1.1	100.0	267
Less than husband/partner	41.6	46.8	10.6	1.0	0.0	100.0	202	38.3	48.4	12.8	0.0	0.5	100.0	202
Same as husband partner	24.7	64.7	9.0	1.7	0.0	100.0	124	25.7	67.6	5.8	0.9	0.0	100.0	122
Husband/ partner has no cash earnings/did not work	42.7	48.2	7.6	1.6	0.0	100.0	64	na	na	na	na	na	0.0	0
Woman has no cash earnings	na	na	na	na	na	0.0	0	40.3	47.8	9.5	0.0	2.4	100.0	127
Woman did not work in last 12 months	na	na	na	na	na	0.0	0	36.7	52.4	9.3	0.4	1.2	100.0	2,039
Don't know/ Missing	*	*	*	*	*	100.0	23	*	*	*	*	*	100.0	22
Total	40.4	47.4	8.7	0.9	2.6	100.0	680	36.8	52.5	9.1	0.4	1.2	100.0	2,778

na = Not Applicable

<sup>1</sup> Excludes cases where a woman or her husband/partner has no earnings and includes cases where a woman does not know whether she earned more or less than her husband/partner

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

The findings show that having more earnings than one's husband is more empowering for a woman. In this situation, the proportion of women who mainly decide how to use her earnings is highest at 48 percent. It is also highest (41 percent) even when it comes to the use of her husband's cash earnings although there are more joint decisions involved in the disposal of husband's earnings. On the other hand, if the woman earns less than her husband, there is less likelihood that she is the main decision maker on how to use her own earnings and that of her husband. Nevertheless, she is still has a hand in making decisions but jointly with her husband this time. If they both have the same earnings, it is more likely that joint decisions are made on the wife's earnings (65 percent) and those of the husband (68 percent) than either of them having more control over the use of their own earnings.

If the woman has no cash earnings or if she did not work in the past 12 months, she is still has considerable control over her husband's earnings as main decision maker or jointly with her husband.



### 13.3 WOMEN'S PARTICIPATION IN HOUSEHOLD DECISION-MAKING

The ability to make decisions about one's own life is important to women's empowerment. In addition to information on women's control over cash earnings, the 2014 SDHS collected information from both women and men on other measures of women's empowerment. Respondents were asked about women's role in household decision-making, acceptance of wife beating, and their opinions about whether a wife can deny sex to her husband for specific reason. Such information provides insight into women's control over their environment and their attitudes towards gender roles, both of which are relevant to understanding women's ability to make independent decisions about their own health care and that of their children.

To assess women's decision-making autonomy, information was collected on their participation in four types of household decisions: making health care decisions, making large household purchases, making household purchases for daily needs, and visiting her family or relatives. Having a final say in the decision-making process is the highest degree of autonomy. Women are considered to participate in a decision if they usually make that decision alone or jointly with their husband. Table 13.4.1 shows the percent distribution of currently married women age 15-49 by the person in the household who usually makes decisions about four types of issues affecting them.

Women in Samoa are usually involved in all four specific decisions, although the extent of their involvement depends on the issue being decided. Twenty-eight percent of women say they alone make decisions about their own health and 37 percent make decision about the purchase of daily household needs; however, slightly over half of women usually make these decisions jointly with their husbands. Decisions about the major household purchases, and visits to the wife's family or relatives are usually made jointly by the husband and wife (75 and 81 percent, respectively)

In all four issues for decision making, the table shows that proportionately more women are the main decision makers except when it comes to major household purchases. In this case, the proportion of husbands who mainly makes the decision is higher than the proportion of women who has the power to do so.

Table 13.4.1 Women's participation in decision making

Percent distribution of currently married women by person who usually makes decisions about four kinds of issues, Samoa 2014

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
Own health care	28.3	64.9	5.5	0.4	0.0	0.9	100.0	2,874
Major household purchases	9.5	74.8	11.6	2.7	0.6	0.8	100.0	2,874
Purchases of daily household needs	37.2	53.5	6.8	1.6	0.2	0.8	100.0	2,874
Visits to her family or relatives	9.5	80.8	7.8	0.5	0.7	0.8	100.0	2,874

In the 2014 SDHS, men were asked whether the wife, the husband, or both equally should have the greater say in five specific issues for decision-making: major household purchases, making daily household purchases, deciding when to visit the wife's family or relatives, deciding what to do with the money the wife earns, and deciding how many children to have. Table 13.4.2 shows the percent distribution of currently married men age 15-49 by the person they think should have the greater say in making decisions about five types of issues.

Table 13.4.2 shows that for most decisions, the majority of currently married men age 15-49 think that the husband and wife should have equal say in making decisions. This is especially true for decisions about the number of children to have (87 percent). Fourty percent of married men say that the wife should have the greater say in making decisions about purchases of daily household needs, and 53 percent think the husband and wife should have equal say. On the other hand, only 5 percent of married men say that the wife should have the greater say in making decisions about major household purchases, while 14 percent of men think that the husband should have the greater say. The majority (81percent) thinks that the husband and wife should have equal say on this particular matter.

Since the 2009 SDHS, it seems that men are now more open to give women greater say in decision-making on matters affecting their family. For example, in 2009, 27 percent of the men believed that the husband has a greater say when it comes to major household purchases. This has now decreases to 14 percent. Similarly, the proportion of men who say that the husband should decide on visits to the wife's family or relatives declined from 18 percent to 14 percent. At the same time, proportionately more men in 2014 (7 percent) admit that the wife has greater say in deciding how many children to have compared to just 3 percent in 2009. All told, it appears that there has been a shift in men's attitude towards a more egalitarian sharing of power within the family.

**Table 13.4.2 Women's participation in decision making according to men**

Percent distribution of currently married men 15-49 by person who they think should have a greater say in making decisions about five kinds of issues, Samoa 2014

Decision	Wife	Wife and husband equally	Husband	Don't know/depends	Missing	Total	Number of men
Major household purchases	4.6	81.1	13.6	0.6	0.1	100.0	718
Purchases of daily household needs	39.7	52.8	7.0	0.4	0.1	100.0	718
Visits to wife's family or relatives	5.9	80.2	12.9	0.7	0.3	100.0	718
What to do with the money wife earns	18.1	70.6	9.7	1.4	0.3	100.0	718
How many children to have	6.6	87.4	5.3	0.4	0.3	100.0	718

Table 13.5.1 shows the percentage of married women who participate in the four decisions specified for female respondents, according to background characteristics. As noted above, a woman is considered to participate in a decision if she says she usually makes the decision alone or jointly with her husband.

Ninety three percent of currently married women age 15-49 say they make decisions about their own health care either by themselves or jointly with their husbands and 84 percent of women say they participate in decisions about major household purchases. Ninety one percent of married women say they participate in decisions about daily household needs and ninety percent say they participate in decisions about visits to their own family or relatives. Overall, 76 percent of currently married women participate in all four decisions and less than 3 percent do not participate at all.

Older women are more likely than younger women to participate in all four kinds of decisions. Employed women are slightly more likely to participate in all four decisions (79 percent) than women who are not employed (75 percent). Women with five or more children are more likely to participate in all four decisions (80 percent) than women with no children (63 percent).

Table 13.5.1 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, Samoa 2014

Background characteristic	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives	Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
<b>Age</b>							
15-19	85.5	67.7	79.5	82.1	60.4	8.3	83
20-24	91.2	78.5	85.9	89.2	70.6	4.1	403
25-29	93.5	83.0	90.3	89.3	75.9	3.2	524
30-34	93.8	86.2	90.3	90.9	77.0	2.9	487
35-39	94.8	84.2	93.1	91.9	77.8	2.1	484
40-44	92.8	87.4	92.4	90.4	77.7	2.9	505
45-49	94.1	89.4	93.6	90.9	79.1	0.8	389
<b>Employment (last 12 months)</b>							
Not employed	93.2	84.0	89.9	90.5	75.3	2.9	2,062
Employed for cash	93.9	85.7	93.3	91.3	78.7	2.3	680
Employed not for cash	89.9	82.6	90.4	81.1	72.5	3.9	127
Missing	*	*	*	*	*	*	5
<b>Number of living children</b>							
0	87.6	71.6	81.1	85.1	62.9	5.3	261
1-2	92.2	82.8	89.6	89.1	74.7	3.8	867
3-4	93.6	86.4	92.0	89.9	77.0	2.2	888
5+	95.4	87.4	93.2	93.3	80.1	1.8	858
<b>Residence</b>							
Urban	90.4	84.6	88.6	88.0	77.1	4.7	535
Rural	93.8	84.2	91.1	90.7	75.7	2.4	2,339
<b>Region</b>							
Apia Urban Area	90.4	84.6	88.6	88.0	77.1	4.7	535
North West Upolu	94.3	84.6	90.6	93.5	75.9	2.9	998
Rest of Upolu	93.0	87.1	90.8	88.1	76.8	3.0	700
Savaii	93.8	80.4	92.2	89.3	74.1	1.1	640
<b>Education</b>							
No education	*	*	*	*	*	*	4
Primary or lower or special needs	85.0	84.0	86.1	88.2	73.3	7.5	92
Secondary	93.2	84.0	90.2	89.9	74.9	2.6	2,235
More than secondary	94.4	85.8	93.0	91.9	80.9	3.3	543
<b>Wealth quintile</b>							
Lowest	92.9	85.6	90.0	90.6	77.0	2.9	608
Second	93.4	84.1	92.3	89.4	75.5	2.6	568
Middle	94.1	82.9	89.4	89.3	73.4	2.6	570
Fourth	92.5	83.2	91.3	90.8	75.5	3.0	581
Highest	93.0	85.8	90.2	91.0	78.5	3.2	547
Total	93.2	84.3	90.6	90.2	76.0	2.9	2,874

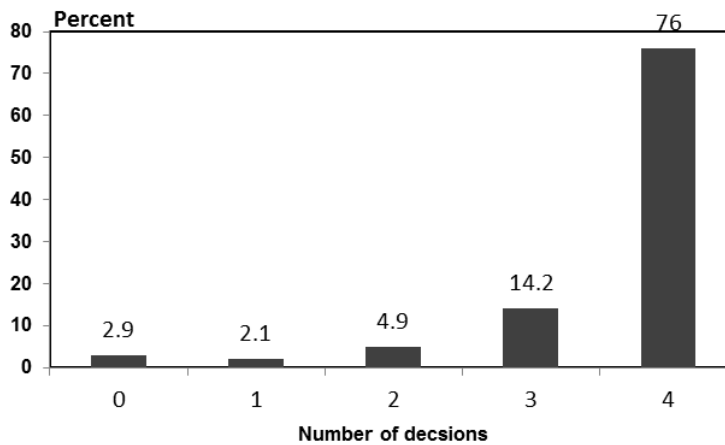
Note: An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

Urban and rural women appear to be equally empowered in the sense that the proportions among them who participate in decision making on all four areas are almost the same. There are also no significant differences in this indicator across regions. As a woman becomes more educated, the more she is empowered to participate in decision making. Evidence of this can be gleaned from table 13.5.2 which shows that 81 percent of women with more than secondary level of education are able to

participate in making decisions on all of the areas under consideration whereas among those that have less educational attainment, the proportions who are allowed to do so is lower.

Of the four areas considered for decision making, a woman may have a say in a few, in all or in none of them. The proportions of currently married women who participate in decision making by the number of areas in which they participate are shown in figure 13.1. This figure shows yet another indication that Samoan women do have a certain degree of power to make decisions in the family setting. Only 3 percent of these women do not have a say at all in any of the four types of decisions while an overwhelming majority (76 percent) do have a say, either alone or jointly with their husband, in all four areas. Another 14 percent participate in 3 of the 4 areas for decision-making.

**Figure 13.1 Number of decisions<sup>1</sup> in which women participate**



<sup>1</sup>Decision points are: wife's health care, major household purchases, purchases for daily household needs and visits to her family/relatives

Table 13.5.2 presents data on men's attitude toward wives' participation in decision making. It shows that the percentage of currently married men age 15-49 who think the wife should have the greater or equal say as her husband on five specific kinds of decisions. Seventy-two percent of men think that the wife should participate, either alone or equally with her husband, in all five decisions. Only a small fraction of married men, less than 2 percent, think that the wife should have no say at all in any of those situations.

With regard to decisions like the number of children to have and purchases for daily household needs, about nine in ten men think that wives should have the greater say or equal say as their husband. Slightly fewer but a still a large majority of men maintain that position when it comes to decisions involving visits to the wife's family (86 percent), what to do with the money she earns (89 percent) and major household purchases (86 percent).

**Table 13.5.2 Men's attitude toward wives' participation in decision making**

Percentage of currently married men age 15-49 who think a wife should have the greater say alone or equal say with her husband on five specific kinds of decisions, by background characteristics, Samoa 2014

Background characteristic	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives	What to do with the money the wife earns	How many children to have	All five decisions	None of the five decisions	Number of men
<b>Age</b>								
15-19	*	*	*	*	*	*	*	5
20-24	77.4	89.8	84.5	82.5	90.5	65.0	3.2	59
25-29	84.5	92.2	82.2	90.1	94.0	73.1	2.6	109
30-34	87.0	91.1	87.0	86.9	92.3	70.3	0.7	146
35-39	83.3	91.3	84.7	85.8	92.0	71.1	3.1	123
40-44	88.7	94.4	88.8	91.5	95.9	75.5	0.8	147
45-49	87.9	94.8	87.6	91.1	97.0	75.8	0.8	129
<b>Employment (last 12 months)</b>								
Not employed	87.1	92.8	90.3	88.4	95.9	79.3	2.2	215
Employed for cash	85.7	92.9	86.3	89.6	93.6	71.5	1.5	392
Employed not for cash	82.4	90.2	77.1	85.6	91.8	61.5	0.9	109
Missing	*	*	*	*	*	*	*	2
<b>Number of living children</b>								
0	83.8	90.2	84.6	90.2	95.3	70.1	1.1	87
1-2	83.2	93.6	83.8	87.3	92.8	69.5	2.2	217
3-4	87.9	92.4	87.5	91.1	95.6	78.1	2.2	215
5+	86.8	92.3	87.8	86.7	93.0	70.5	0.6	198
<b>Residence</b>								
Urban	84.9	94.4	82.2	89.5	93.3	67.0	0.9	131
Rural	85.8	92.1	87.0	88.4	94.2	73.6	1.8	587
<b>Region</b>								
Apia Urban Area	84.9	94.4	82.2	89.5	93.3	67.0	0.9	131
North West Upolu	92.9	94.1	94.1	91.8	96.0	85.2	1.8	254
Rest of Upolu	86.6	93.0	86.6	90.1	94.7	74.3	1.8	170
Savaai	73.9	87.8	76.2	81.4	90.7	54.8	1.7	162
<b>Education</b>								
No education	*	*	*	*	*	*	*	1
Primary or lower or special needs	88.6	92.4	88.9	95.4	97.0	76.4	0.0	63
Secondary	84.7	92.4	85.8	86.7	93.1	71.6	1.9	510
More than secondary	88.6	92.6	85.8	92.4	95.9	74.3	1.3	143
<b>Wealth quintile</b>								
Lowest	83.4	89.4	85.2	86.4	96.5	67.7	0.7	144
Second	87.0	92.7	86.5	90.7	95.7	76.4	2.8	134
Middle	85.7	93.1	84.6	90.0	92.6	73.3	1.8	156
Fourth	86.4	96.2	85.6	88.0	94.2	72.6	0.6	159
Highest	85.7	90.4	89.1	88.1	90.8	72.4	2.5	126
Total 15-49	85.6	92.5	86.1	88.6	94.0	72.4	1.6	718
50-54	94.1	93.5	83.4	91.0	94.1	76.0	1.2	81
Total men 15-54	86.5	92.6	85.8	88.9	94.0	72.8	1.6	798

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed

There is a strong positive relationship between men's age and their attitude towards women's participation in decision making. The older the men, the more likely that they subscribe to the idea

that women should have greater or equal say as men in making decisions. The percentage of men who think that women should be empowered is higher in rural (74 percent) than in urban area (67 percent); higher in North West Upolu (85 percent) than in all other regions; and higher among men with more than secondary education (74 percent) than those who have not completed secondary education. .

There has been some improvement between 2009 and 2014 with regard to men's attitude towards their wives participation in all five decisions. In 2009, the proportion of men who believed that women should participate in all of the five decision points was 61 percent while in 2014, the proportion is 72 percent. Such improvement could be the result of the awareness and advocacy programmes of the government on women's empowerment as well as increased recognition of women's basic rights as individuals.

### **13.4 ATTITUDES TOWARDS WIFE BEATING**

Another measure of women's empowerment derives from the idea that gender equity is essential to empowerment. Responses that indicate a view that the beating of wives by husbands is justified reflect a low status of women. They signify acceptance of norms that give men the right to use force against women, which is a violation of women's human rights. Violence against women has serious consequences for their mental and physical well-being, including their reproductive and sexual health (Heise et al., 1999).

As a member of the International Convention on the Elimination of violence against women, Samoa through its mandated Ministry, the Ministry of Women and its stakeholders has strongly supported violence against women through national mechanisms such as legislative reforms, national policies, women village representatives as well as other activity-level mechanisms such as awareness and advocacy programmes in the community.

The 2014 SDHS gathered information on women's and men's attitudes toward wife beating, a proxy for women's status. Respondents who believe that a husband is justified in hitting or beating his wife for whatever reason may have the wrong view those women are low in status, both absolutely and relative to men. Such a perception could act as a barrier for women in accessing health care for themselves and their children, and could affect women's attitudes towards contraceptive use as well as their general well-being. Respondents were asked whether a husband is justified in beating his wife under a number of specified circumstances: wife burns the food; wife argues with him, wife goes out without telling him, wife neglects the children, and wife refuses to have sex with him. Table 13.6.1 and 13.6.2 show the kinds of attitude that women and men, respectively, have towards wife beating under these five specific circumstances.

There is still a considerable level of acceptance of wife beating even among the women themselves. One in ten women (10 percent) think that wife beating is justified even for such minor transgressions such as unintentional burning of food or arguing with her husband. An even larger proportion of women (29 percent) find justification for wife beating if the wife neglects in taking care of the children. Refusal to have sex with her husband is believed by 8 percent of the women as a justification for a husband to beat his wife.

On the whole, about one third of women (37 percent) agree that wife beating is justified even for at least one of the specified reasons. Women in their early thirties, rural women, those with primary or less education, and women in the lower wealth quintiles are more likely than other women to agree with at least one reason for wife beating. In addition, women who are not employed, women with four or fewer children and those with five or more children are more likely than other women to agree with at least one of the reasons for wife beating. Women living in the Rest of Upolu region (46 percent) is the most likely to agree with at least one specified reason for wife beating.

Table 13.6.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Samoa 2014

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Age</b>							
15-19	10.6	9.9	12.6	26.8	5.8	34.1	1,062
20-24	10.2	11.8	15.8	28.1	6.8	36.7	829
25-29	9.5	13.5	17.2	31.0	8.7	38.4	728
30-34	12.2	16.4	21.2	33.2	11.1	40.6	591
35-39	8.6	9.9	14.4	23.9	7.2	33.0	551
40-44	10.6	11.4	18.1	28.6	6.9	36.4	577
45-49	9.9	12.9	21.1	29.0	11.4	37.5	467
<b>Employment (last 12 months)</b>							
Not employed	11.1	12.6	17.5	29.1	8.3	37.5	3,542
Employed for cash	7.7	10.4	13.7	26.8	6.8	33.3	1,108
Employed not for cash	10.7	11.1	16.4	29.2	7.3	36.5	146
Missing	*	*	*	*	*	*	9
<b>Marital status</b>							
Never married	10.2	10.5	12.1	26.2	5.7	33.3	1,715
Married or living together	10.3	13.3	19.7	30.4	9.3	38.9	2,874
Divorced/separated/widowed	10.1	6.9	11.1	22.7	7.0	30.1	216
<b>Number of living children</b>							
0	10.5	10.5	13.0	26.5	5.8	33.8	1,778
1-2	9.8	12.6	16.8	29.4	8.4	37.7	1,143
3-4	9.6	11.6	19.9	30.4	9.6	38.4	976
5+	11.2	14.8	19.8	29.4	9.6	38.2	908
<b>Residence</b>							
Urban	3.1	6.1	7.1	18.1	2.5	23.1	1,000
Rural	12.2	13.6	19.1	31.3	9.3	40.0	3,805
<b>Region</b>							
Apia Urban Area	3.1	6.1	7.1	18.1	2.5	23.1	1,000
North West Upolu	10.3	13.2	13.1	27.6	7.8	36.3	1,733
Rest of Upolu	17.7	17.9	22.8	35.9	15.5	45.9	1,099
Savaii	9.2	9.5	25.6	32.7	5.2	40.0	973
<b>Education</b>							
No education	*	*	*	*	*	*	15
Primary or lower or special needs	11.1	15.4	18.4	26.9	7.4	39.3	161
Secondary	11.1	12.4	17.6	29.1	8.5	37.7	3,654
More than secondary	7.3	10.0	12.8	26.9	5.7	31.5	975
<b>Wealth quintile</b>							
Lowest	10.5	13.5	19.1	28.9	8.6	39.7	903
Second	13.2	13.7	20.3	33.5	8.8	42.3	955
Middle	11.2	12.3	20.1	31.7	8.6	38.9	954
Fourth	9.5	11.7	13.9	26.7	8.6	34.9	987
Highest	7.1	9.4	10.2	22.4	5.2	27.4	1,006
Total	10.3	12.0	16.6	28.5	7.9	36.5	4,805

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed

Compared with the results of the 2009 SDHS, the more recent survey indicates that the proportions of women agreeing to each of the five specified reasons have declined. This seems to suggest that government efforts to combat violence against women may have gained some grounds.

Interestingly; the Table 13.6.2 shows that men are less likely (30 percent) than women (36 percent) to think that a husband is justified in beating his wife for any of the specified reasons. Only 4 percent of men age 15-49 think that a husband is justified in beating the wife if she refuses to have sex with him, compared with 8 percent of women. They agree that wife beating is justified if she burns the food (6 percent), or if she argues with him (9percent). Twelve percent of men think that a husband is justified in beating the wife if she goes out without telling him and 22 percent think that beating is justified if the wife neglects the children. Neglecting children remains to be the main reason where beating is justified.

There are some differences in the percentage of men who think wife beating is justified for any of the specified reasons. Younger men, those who are employed, and those residing in urban areas are more likely to agree with at least one of the reasons for wife beating than other men. As with women, male respondents who reside in the Rest of Upolu and Savaii regions are most likely to agree with at least one of the reasons for wife beating. Acceptance of wife beating is lowest among the most educated men and those in the highest wealth quintile.



Table 13.6.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Samoa 2014

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Age</b>							
15-19	4.9	9.8	11.8	21.3	3.9	27.6	348
20-24	6.2	9.2	12.2	25.0	2.4	33.4	298
25-29	4.2	9.7	10.7	20.4	2.6	29.6	229
30-34	7.1	11.5	10.0	25.8	4.0	35.7	211
35-39	9.4	8.1	12.1	18.2	5.2	28.1	144
40-44	6.6	7.5	12.8	26.0	4.6	32.2	179
45-49	2.3	4.8	12.7	16.8	2.6	24.5	166
<b>Employment (last 12 months)</b>							
Not employed	4.9	8.5	10.4	21.8	3.8	28.8	748
Employed for cash	6.4	9.0	12.8	22.7	3.3	31.9	645
Employed not for cash	6.2	11.1	12.8	23.1	3.2	31.2	179
Missing	*	*	*	*	*	*	4
<b>Marital status</b>							
Never married	6.6	9.9	11.1	23.3	3.6	30.2	819
Married or living together	4.3	8.1	12.3	21.2	3.6	30.3	718
Divorced/separated/widowed	11.2	5.0	12.9	19.6	0.0	32.7	38
<b>Number of living children</b>							
0	6.4	9.8	11.2	22.4	4.0	30.0	882
1-2	5.6	7.3	11.7	23.7	1.9	31.4	259
3-4	4.9	8.0	12.2	20.2	3.2	28.8	230
5+	3.6	8.4	13.2	22.0	3.9	32.0	204
<b>Residence</b>							
Urban	9.8	8.9	15.2	34.2	2.8	42.7	318
Rural	4.6	9.0	10.8	19.2	3.7	27.2	1,257
<b>Region</b>							
Apia Urban Area	9.8	8.9	15.2	34.2	2.8	42.7	318
North West Upolu	4.6	8.6	9.8	19.9	4.6	26.7	563
Rest of Upolu	5.6	10.9	13.7	20.7	3.3	29.6	357
Savaai	3.6	7.5	9.5	16.5	2.5	25.4	338
<b>Education</b>							
No education	*	*	*	*	*	*	8
Primary or lower or special needs	7.1	12.6	11.4	24.2	7.6	36.7	116
Secondary	5.5	9.3	12.3	22.3	3.4	30.1	1,169
More than secondary	5.9	6.1	9.6	21.6	2.2	29.2	282
<b>Wealth quintile</b>							
Lowest	3.9	11.7	11.0	23.3	5.2	33.9	293
Second	6.1	6.6	7.7	17.8	2.7	24.3	298
Middle	6.5	10.1	11.6	21.6	4.4	27.9	330
Fourth	5.3	10.4	13.4	20.8	3.1	30.4	356
Highest	6.6	5.7	14.3	28.2	2.2	35.4	300
Total 15-49	5.7	9.0	11.7	22.2	3.5	30.3	1,576
50-54	8.9	3.5	12.4	18.2	3.1	25.0	93
Total men 15-54	5.8	8.7	11.7	22.0	3.5	30.0	1,669

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed

### 13.5 ATTITUDES TOWARDS REFUSING SEX WITH HUSBAND

Beliefs about whether and when a woman can refuse to have sex with her husband reflect issues of gender equity regarding sexual rights and bodily integrity. Besides yielding an important measure of empowerment, information about women's and men's attitudes towards women's sexual rights is useful for improving and monitoring reproductive health programmes that depend on women's willingness and ability to control their own sexual lives.

The extent of control that women have over when and with whom they have sex has important implications for outcomes such as transmission of HIV and other sexually transmitted infections. To measure beliefs about sexual empowerment, female and male respondents in the SDHS were asked whether they think it is justifiable for a wife to refuse sexual intercourse with her husband when she knows her husband has a sexually transmitted infection.

Table 13.7.1 suggests that men have a more tolerant attitude towards women refusing sex with their husband if they know that their husband has a sexually transmitted infection (STI). Forty one percent of men agree that a wife can refuse to have sexual intercourse with her husband if she knows her husband has a sexually transmitted infection compared to only 27 percent of women.

Young men and women age 15-19 are the ones least likely to agree that a wife is justified in refusing sex with her husband if she knows that he has STI ó 10 percent of women and 25 percent of men. Differences in the proportions agreeing among the older age groups do not follow a clear pattern, neither among women nor men. However, there are clear differences in attitude between the employed and the unemployed, between the unmarried and the ever-married, and between the less educated and the more educated. For men and women, the unemployed, the never married and the less educated are least likely to agree that wives can refuse sex on the ground that their husband has sexually transmitted disease.

A large proportion of men from the urban area believe that a wife can refuse sex with her husband with STI (60 percent) compared to their rural counterparts (36 percent). But among women, there is not much difference in attitude based on whether they are from the urban or rural area.

Table 13.7.1 Attitude toward refusing sexual intercourse with husband

Percentage of women and men age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Samoa 2014

Background characteristic	Women:		Number of Women	Men		Number of Men
	Percentage agree	Percentage disagree		Percentage agree	Percentage disagree	
	Wife is justified in refusing intercourse with her husband if she knows husband has a sexually transmitted disease			Wife is justified in refusing intercourse with her husband if she knows husband has a sexually transmitted disease		
<b>Age</b>						
15-19	9.8	90.2	1,062	25.3	74.7	348
20-24	24.1	75.9	829	41.9	58.1	298
25-29	31.9	68.1	728	46.6	53.4	229
30-34	30.7	69.3	591	49.4	50.6	211
35-39	37.8	62.2	551	48.6	51.4	144
40-44	32.7	67.3	577	48.3	51.7	179
45-49	36.1	63.9	467	40.9	59.1	166
<b>Employment (last 12 months)</b>						
Not employed	22.9	77.1	3,542	29.6	70.4	748
Employed for cash	37.6	62.4	1,108	51.0	49.0	645
Employed not for cash	36.2	63.8	146	55.1	44.9	179
Missing	*	*	9	*	*	4
<b>Marital status</b>						
Never married	16.1	83.9	1,715	34.4	65.6	819
Married or living together	32.9	67.1	2,874	48.5	51.5	718
Divorced/separated/widowed	28.4	71.6	216	(47.9)	(52.1)	38
<b>Number of living children</b>						
0	17.8	82.2	1,778	36.8	63.2	882
1-2	28.6	71.4	1,143	47.0	53.0	259
3-4	33.8	66.2	976	50.7	49.3	230
5+	34.1	65.9	908	42.2	57.8	204
<b>Residence</b>						
Urban	29.4	70.6	1,000	59.9	40.1	318
Rural	26.0	74.0	3,805	36.4	63.6	1,257
<b>Region</b>						
Apia urban area	29.4	70.6	1,000	59.9	40.1	318
North west Upolu	23.8	76.2	1,733	27.9	72.1	563
Rest of Upolu	26.9	73.1	1,099	25.9	74.1	357
Savaii	28.8	71.2	973	61.7	38.3	338
<b>Education</b>						
No education	*	*	15	*	*	8
Primary or lower or special needs	18.0	82.0	161	32.7	67.3	116
Secondary	23.6	76.4	3,654	39.0	61.0	1,169
More than secondary	39.6	60.4	975	54.1	45.9	282
<b>Wealth quintile</b>						
Lowest	23.5	76.5	903	35.5	64.5	293
Second	22.8	77.2	955	31.7	68.3	298
Middle	25.8	74.2	954	45.7	54.3	330
Fourth	27.0	73.0	987	41.2	58.8	356
Highest	33.8	66.2	1,006	51.1	48.9	300
Total	26.7	73.3	4,805	41.2	58.8	1,576
50-54	na	na	na	32.3	67.7	93
Total men 15-54	na	na	na	40.7	59.3	1,669

Note: Numbers in parentheses are based on 25-49 unweighted cases an asterisk denotes a figure based on fewer cases that has been suppressed

In the 2014 SDHS, male respondents were also asked if they thought that a husband has the right to take actions - like getting angry and reprimanding her, refusing financial support, using force to have sex, or having sex with another woman - when his wife refuses to have sexual intercourse with him. Their responses are summarized in table 13.7.2. Overall, 95 percent of men rejected all four of the specified actions. Only 1 percent of men think that it is acceptable for a husband to get angry and reprimand his wife if she refuses to have sex with him or think that it is alright for a husband to use force to have sex to have sexual intercourse with his wife; 2 percent think that a husband has the right to refuse financial support if his wife refuses to have sexual intercourse; and 3 percent think that it is acceptable for a husband to have sex with another woman if his wife refuses to have sex with him. Differences by background characteristics are minimal. There are no men who agree with all the specified actions of the husband when the wife refuses to have sex with him.

Table 13.7.2 Men's attitude toward a husband's rights when his wife refuses to have sexual intercourse

Percentage of men age 15-49 who consider that a husband has the right to certain behaviors when a woman refuses to have sex with him when he wants her to, by background characteristics, Samoa 2014

Background characteristic	When a woman refuses to have sex with her husband, he has the right to:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Get angry and reprimand her	Refuse her financial support	Use force to have sex	Have sex with another woman			
<b>Age</b>							
15-19	1.4	2.2	1.1	3.1	1.1	95.4	348
20-24	0.6	1.7	0.3	3.2	0.3	95.8	298
25-29	0.5	2.7	1.8	1.8	0.5	95.2	229
30-34	1.9	3.6	0.4	2.1	0.0	93.8	211
35-39	0.0	0.7	0.7	4.5	0.0	94.8	144
40-44	1.1	2.8	0.6	1.9	0.0	95.9	179
45-49	0.6	0.6	2.4	2.5	0.0	94.6	166
<b>Employment (last 12 months)</b>							
Not employed	1.2	2.9	1.0	2.6	0.5	94.9	748
Employed for cash	0.5	1.1	0.5	3.0	0.2	95.8	645
Employed not for cash	1.6	2.8	2.7	2.3	0.5	93.8	179
Missing	*	*	*	*	*	*	4
<b>Marital status</b>							
Never married	1.3	2.7	1.1	3.4	0.7	94.5	819
Married or living together	0.4	1.4	0.9	1.7	0.0	96.1	718
Divorced/separated/widowed	2.4	4.8	0.0	5.6	0.0	92.0	38
<b>Number of living children</b>							
0	1.4	2.7	1.1	3.0	0.7	94.5	882
1-2	0.4	1.1	0.4	1.9	0.0	97.0	259
3-4	0.0	0.9	0.4	3.4	0.0	95.8	230
5+	0.9	2.4	1.9	1.5	0.0	94.6	204
<b>Residence</b>							
Urban	1.2	1.5	0.4	6.6	0.4	91.9	318
Rural	0.9	2.3	1.1	1.7	0.4	96.0	1,257
<b>Region</b>							
Apia urban area	1.2	1.5	0.4	6.6	0.4	91.9	318
North west Upolu	1.5	2.3	1.2	2.2	0.8	96.2	563
Rest of Upolu	0.8	3.1	2.0	1.1	0.0	94.7	357
Savaii	0.0	1.4	0.3	1.7	0.0	96.9	338
<b>Education</b>							
No education	*	*	*	*	*	*	8
Primary or lower or special needs	0.9	4.4	0.0	2.7	0.0	93.1	116
Secondary	1.0	1.9	1.2	2.7	0.4	95.3	1,169
More than secondary	0.7	2.2	0.7	2.8	0.3	95.3	282
<b>Wealth quintile</b>							
Lowest	0.3	1.3	0.3	1.0	0.0	97.4	293
Second	0.0	1.4	0.3	0.4	0.0	98.3	298
Middle	2.4	3.8	2.3	2.0	1.1	94.4	330
Fourth	1.1	2.2	1.2	5.4	0.6	92.7	356
Highest	0.7	1.8	0.6	4.3	0.0	93.6	300
Total 15-49	1.0	2.1	1.0	2.7	0.4	95.1	1,576
50-54	1.3	1.1	0.0	1.3	0.0	96.4	93
Total men 15-54	1.0	2.1	0.9	2.6	0.4	95.2	1,669

Note: Numbers in parentheses are based on 25-49 unweighted cases an asterisk denotes a figure based on fewer cases that has been suppressed

## 13.6 WOMEN'S EMPOWERMENT INDICATORS

The three sets of empowerment indicators, namely women's participation in making household decisions, their attitude towards wife beating, and their attitude towards a wife's right to refuse sexual intercourse with her husband, can be summarized in three separate indices. All three indices are based on women's responses.

The first index shows the number of decisions in which women participate alone or jointly with their husband/partner (see Table 13.5.1 for the list of decisions). This index ranges in value from 0 to 4 and is positively related to women's empowerment. It reflects the degree of decision-making control that women are able to exercise in areas that affect their lives and environments.

The second index is the number of reasons for which the respondent thinks that a husband is justified in beating his wife (see Table 13.6.1 for the list of reasons). This index ranges in value from 0 to 5. A low score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem, and higher status of women.

The final index reflects whether the respondent thinks that a woman is justified in refusing sexual intercourse with her husband or partner if she knows that he has a sexually transmitted infection (STI) (see Table 13.7.1). This index ranges in value from 0 to 1 and is positively related to women's sense of self-esteem and empowerment. It reflects perceptions of sexual roles and women's rights over their bodies.

Table 13.8 shows these three indicators of women's empowerment and how they relate to each other. It shows the percentage of married women age 15-49 who participate in all decision-making, the percentage of women who disagree with all the specified reasons for justifying wife beating, and the percentage of women who agree with the specified reason for a wife refusing to have sexual intercourse with her husband, by the value on each of the indicators. In general, the expectation is that women who participate in making household decisions are more likely to have gender-egalitarian beliefs.

The findings on women's empowerment indicate that more than half of women who participate in one or two of the specified household decisions are the least likely to disagree with all the reasons for justifying wife beating (50 percent) compared with women who participate in none or in three or four decisions (66 and 62 percent, respectively). However, women who participate in three or four of the specified household decisions are more likely to justify their right to refuse sexual intercourse with their husband if he has an STI. Women who do not support wife beating for any reason at all are most likely to participate in all the decision-making in the household (79 percent) and women who support wife beating for all the five reasons are most likely to agree with women's right to refuse sexual intercourse with the husband (34 percent). Although the differences are small, women who agree with the reason to refuse sexual intercourse with the husband are more likely to participate in all four decisions (80 percent), and disagree with all the reasons for wife beating (63 percent), compared with women who do not agree with the reason given for refusing sexual intercourse with their husband (74 and 64 percent, respectively). Overall, women who agree with the reason to refuse sexual intercourse with her husband and women who do not agree with the reason given for refusing sexual intercourse with their husbands are the least likely to disagree with all the specified reasons for justifying wife beating.

**Table 13.8 Indicators of women's empowerment**

Percentage of women age 15-49 who participate in all decision making, percentage who disagree with all reasons for justifying wife-beating, and percentage who agree with all reasons for refusing sexual intercourse with husband, by value on each of the indicators of women's empowerment, Samoa 2014

Empowerment indicator	Currently married women		Percentage who disagree with all the reasons justifying wife-beating	Percentage who agree with all the reasons for refusing sexual intercourse with husband	Number of women
	Percentage who participate in all decision making	Number of women			
<b>Number of decisions in which women participate<sup>1</sup></b>					
0	0.0	82	66.4	26.1	82
1-2	0.0	200	50.2	27.5	200
3-4	84.2	2,592	61.8	33.5	2,592
<b>Number of reasons for which wife-beating is justified<sup>2</sup></b>					
0	78.9	1,757	100.0	26.5	3,052
1-2	69.8	763	0.0	26.2	1,239
3-4	76.5	286	0.0	27.7	422
5	66.9	69	0.0	34.3	92
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>3</sup></b>					
0	74.0	1,928	63.6	0.0	3,522
1-2	79.9	946	63.2	100.0	1,283

<sup>1</sup> Restricted to currently married women. See Table 15.5.1 for the list of decisions.

<sup>2</sup> See Table 15.6.1 for the list of reasons

<sup>3</sup> See Table 15.7.1 for the list of reasons

### 13.7 CURRENT USE OF CONTRACEPTION BY WOMEN'S STATUS

A woman's desire and ability to control her fertility and her choice of contraceptive method are in part affected by her status in the household and her own sense of empowerment. A woman who feels that she is unable to control her life may be less likely to feel she can make and carry out decisions about her fertility. She may also feel the need to choose methods that are less obvious or that do not depend on her husband's cooperation. Table 13.9 shows the distribution of currently married women by contraceptive method used, according to the three empowerment indicators.

The findings suggest that there is a positive relationship between use of contraception and participation in household decision-making. For example, current use of contraceptive methods increases from 19 percent among women who participate in none of the household decisions to 27 percent each among women who participate in one or two and in three or more household decisions.

Further, women who participate in one or two and three or four of the specified household decision are most likely to use temporary modern female methods (18-17 percent), compared with women who participate in none or fewer decisions (14 percent).

Women who do not believe in any justification of wife beating are more likely to be users of modern methods of contraception, including female sterilization, than women who think that wife beating is justified for all five specified reasons.

**Table 13.9 Current use of contraception by women's status**

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Samoa 2014

Empowerment indicator	Any method	Any modern method	Modern methods				Any traditional method	Not currently using	Total	Number of women
			Female sterilization	Male sterilization	Temporary modern female methods <sup>1</sup>	Male condom				
<b>Number of decisions in which women participate<sup>2</sup></b>										
0	18.8	17.3	3.8	0.0	13.5	0.0	1.5	81.2	100.0	82
1-2	26.9	24.4	5.6	0.0	17.8	1.0	2.5	73.1	100.0	200
3-4	27.2	24.5	7.3	0.0	17.0	0.2	2.7	72.8	100.0	2,592
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>										
0	27.6	25.3	8.0	0.1	17.1	0.2	2.3	72.4	100.0	1,757
1-2	27.2	23.7	6.4	0.0	17.1	0.1	3.5	72.8	100.0	763
3-4	22.9	20.5	4.2	0.0	15.6	0.7	2.4	77.1	100.0	286
5	24.3	21.5	4.3	0.0	17.2	0.0	2.8	75.7	100.0	69
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>										
0	25.2	23.6	6.6	0.0	16.8	0.2	1.6	74.8	100.0	1,928
1-2	30.4	25.7	8.1	0.0	17.2	0.3	4.7	69.6	100.0	946
Total	26.9	24.3	7.1	0.0	16.9	0.2	2.6	73.1	100.0	2,874

Note: If more than one method is used, only the most effective method is considered in this tabulation.

<sup>1</sup> Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly and lactational amenorrhea method

<sup>2</sup> See Table 15.5.1 for the list of decisions.

<sup>3</sup> See Table 15.6.1 for the list of reasons

<sup>4</sup> See Table 15.7.1 for the list of reasons

The association between contraceptive use and a woman's right to refuse sexual intercourse with her husband is not clearly evident from the data, since only one reason was specified in Samoa (if a husband has an STI) instead of the three standard reasons. Nevertheless, the data show some trends. For example, women who agree that a wife can refuse sexual intercourse with her husband if he has an STI are somewhat more likely to use any contraception (30 percent) and any modern contraception (26 percent) than women who disagree with the specified reason (25 and 24 percent).



### 13.8 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

The ability of women to make household decisions has important implications for their fertility preferences and the practice of family planning. Increases in women's status and empowerment are recognized as important in efforts to reduce fertility.

Table 13.10 shows how women's ideal family size and unmet need for family planning are related to women's status indicators. The findings indicate that there is only a slight positive association between ideal family size and one of the three empowerment indicators. Ideal family size is slightly higher among women who think that wife beating is justified for all five specified reasons (3.7 children) compared with women who do not believe in any justification (3.4 children). However, there are no expected relationships between ideal family size and participation in household decision-making or a woman's right to refuse sexual intercourse with her husband, which indicates that not all women's empowerment indicators yield the expected negative relationship.

Looking at the relationship between unmet need and women's empowerment indicators, the findings show that unmet need for family planning is lower for women scoring higher on the two empowerment indicators: women who believe wife beating is never justified (34 percent) and women who believe that a woman can refuse to have sexual intercourse with her husband when he has an STI (32 percent) compared with women who participate in one to two household decision making (26 percent)

**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 indicators of women's empowerment, Samoa 2014

Empowerment indicator	Mean ideal number of children <sup>1</sup>	Number of women	Percentage of currently married women with an unmet need for family planning <sup>2</sup>			Number of women
			For spacing	For limiting	Total	
<b>Number of decisions in which women participate<sup>3</sup></b>						
0	3.9	75	25.5	7.2	32.6	82
1-2	4.0	183	16.0	10.5	26.5	200
3-4	4.5	2,349	16.3	19.2	35.5	2,592
<b>Number of reasons for which wife-beating is justified<sup>4</sup></b>						
0	3.4	2,775	16.5	17.1	33.6	1,757
1-2	3.3	1,110	15.5	20.7	36.2	763
3-4	3.6	369	17.3	18.9	36.2	286
5	3.7	78	25.8	19.8	45.6	69
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>5</sup></b>						
0	3.2	3,188	17.5	18.5	36.0	1,928
1-2	3.8	1,144	14.6	17.8	32.4	946
Total	3.4	4,332	16.5	18.3	34.8	2,874

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.

<sup>2</sup> See table 7.3.1 for the definition of unmet need for family planning

<sup>3</sup> Restricted to currently married women. See Table 15.5.1 for the list of decisions.

<sup>4</sup> See Table 15.6.1 for the list of reasons

<sup>5</sup> See Table 15.7.1 for the list of reasons

## 13.9 REPRODUCTIVE HEALTH CARE AND WOMEN'S EMPOWERMENT STATUS

Table 13.11 examines whether women's use of antenatal, delivery, and postnatal care services from health professionals varies by level of empowerment as measured by the three indicators of women's empowerment.

Table 13.11 shows that there is no difference in accessing to maternal health services between mothers who participate in three or four household decisions and women who participate in none of the household decisions. . Women who think that wife beating is justified for all five reasons are the most likely to have received assistance at delivery ( 87 percent) and postnatal care soon after delivery ( 67 percent), compared with women who agree with none of the reasons justifying wife beating (83 and 59 percent, respectively). Women who have more gender-egalitarian views regarding sexual behaviour within a marriage are slightly more likely to receive postnatal care soon after delivery (63 percent) than women who disagree with the reason for a wife to refuse sex with her husband (57 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 health personnel for the most recent birth, by indicators of women's empowerment, Samoa 2014

Empowerment indicator	Received antenatal care from health personnel	Received delivery assistance from health personnel	Received postnatal care from health personnel within the first two days since delivery <sup>1</sup>	Number of women with a child born in the last five years
<b>Number of decisions in which women participate<sup>2</sup></b>				
0	92.2	84.3	62.4	50
1-2	92.8	75.0	53.5	109
3-4	93.4	83.6	58.5	1,601
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>				
0	92.7	83.4	58.6	1,237
1-2	94.2	85.1	58.3	540
3-4	94.1	80.7	56.8	183
5	96.3	87.0	66.6	53
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>				
0	93.4	83.6	56.7	1,406
1-2	93.2	84.0	62.8	608
Total	93.3	83.7	58.6	2,014

Note: 'Health personnel' includes doctor, nurse, midwife, or auxiliary nurse or auxiliary midwife.

<sup>1</sup> Includes deliveries in a health facility and not in a health facility

<sup>2</sup> Restricted to currently married women. See Table 15.5.1 for the list of decisions.

<sup>3</sup> See Table 15.6.1 for the list of reasons

<sup>4</sup> See Table 15.7.1 for the list of reasons

Almost all Samoan women (93 percent) received antenatal care from a health professional with little variation by women's status, indicating that Samoan women have equal access for antenatal care from a trained health provider regardless of their own sense of empowerment.

In Samoa, where health care is widespread, women's empowerment may not affect their access to reproductive health services; in other societies, however, increased empowerment of women is likely to increase their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood.

## REFERENCES

---

- Black, R. E., Victoria, C. G., Walker, S. P., Bhutta, Z. A., Christian, P., De Onis, M., Ezzati, M., Grantham-McGregor, S., Katz, J., Martorell, R. & Uauy, R. 2013. Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*, 382, 427-451.
- Department of Statistics, Government of Samoa and Population/Demographic Programme Secretariat of the Pacific Community, 1999. Analytical Report, Samoa Demographic and Health Survey 1999. Noumea, New Caledonia.
- Evans, Nicholas. *Dying Words ó Endangered Languages and What Have to Tell us* United Kingdom, 2010, Wiley-Blackwell
- Field, Michael J. 1984. *Mau - Samoa's Struggle for freedom*, Auckland, New Zealand: Reed.
- Government of Samoa. 2008. Tobacco Control Act 2008. Available at [www.parliament.gov.ws](http://www.parliament.gov.ws)
- Heise, L. M. Ellsberg, and M. Gottemoeller. 1999. Ending violence against women. *Population Reports, Series L, No. 11*. Baltimore, Maryland, USA.: Johns Hopkins University School of Public Health, Population Information Program.
- Levin, M.J., and R.D. Retherford. 1986. Recent fertility trends in the Pacific Islands. Honolulu, Hawaii: East-West Center.
- Ministry of Commerce Industry and Labour (MCIL). 2013. The Labour and Employment Relations Act 2013 (L.E.R.A 2013) Apia, Samoa. Available at [www.mcil.gov.ws](http://www.mcil.gov.ws)
- Ministry of Finance. 2012. Strategy for the Development of Samoa 2012-2016, Apia, Samoa: Ministry of Finance.
- Ministry of Health. 2008a. Health Sector Plan 2008-2018, Apia, Samoa . Available at [www.parliament.gov.ws](http://www.parliament.gov.ws)
- Ministry of Health. 2008b. Ministry of Health 2006 Act, Apia, Samoa: Ministry of Health
- Ministry of Health, Samoa, 2008c. Second Generation Surveillance Surveys for Antenatal Mothers in Samoa. Final Report. Apia, Samoa: Ministry of Health
- Ministry of Health of Samoa (MOH). 2009. Health Sector Tsunami Response Report, 2009, Samoa, Apia: Ministry of Health
- Ministry of Women, Community and Social Development (MWCSD). 2014. Samoa Country Report 2014 on progress in implementing the Pacific Leaders Declaration for Gender Equality, Apia, Samoa: Ministry of Women, Community and Social Development
- Ministry of Health (Samoa), Bureau of Statistics (Samoa), and ICF Macro. 2010. Samoa Demographic and Health Survey 2009. Apia, Samoa: Ministry of Health, Samoa.
- National Population Policy Council, 1998, National Population Policy, Ministry of Health, Apia, Samoa

Rutstein, S., K. Johnston, and D. Gwatkin. 2000. Poverty, health inequality, and its health and demographic effects. Paper presented at the 2000 annual meeting of the Population Association of America, Los Angeles, California.

Rutstein, S.O. 2005. Effects of preceding birth intervals on neonatal, infant and under-five years mortality and nutritional status in developing countries: Evidence from the demographic and health surveys. *International Journal of Gynecology & Obstetrics* 89(Suppl. 1): S7-24.

Samoa Bureau of Statistics, 2008, Report of the Population and Housing Census 2006, Apia, Samoa: Samoa Bureau of Statistics

Samoa Bureau of Statistics, 2012, Report of the Population and Housing Census 2011, Apia, Samoa: Samoa Bureau of Statistics

Samoa Bureau of Statistics, 2015, Gross Domestic Product Report (December 2014 Quarter), Apia, Samoa: Samoa Bureau of Statistics

Samoa National AIDS Coordinating Council. 2001. HIV/AIDS national policy and plan of action 2001. Apia, Samoa: Samoa National AIDS Coordinating Council

Samoa National Health Accounts, 2006/2007. Health Sector Situational Analysis 2006. Apia, Samoa: National Health Account

United Nations General Assembly. 1989. Convention on the rights of the child. Document A/RES/44/25 (12 December 1989), New York, New York: United Nations General Assembly.

United Nation International Children Education Fund (UNICEF). 2008. Sustainable elimination of Iodine deficiency, UNICEF

Western Samoa Census Commissioner's Office, 1968, Population Census 1966, Apia, Samoa: Western Samoa Commissioner's Office.

Western Samoa Department of Statistics, 1972, Census of Population and Housing 1971, Apia, Samoa : Western Samoa Department of Statistics

Western Samoa Department of Statistics, 1979, Census of Population and Housing 1976, Apia, Samoa: Western Samoa Department of Statistics

Western Samoa Department of Statistics, 1990, Census of Population and Housing 1986, Apia, Samoa: Western Samoa Department of Statistics

Western Samoa Department of Statistics, 1993, Census of Population and Housing 1991, Apia, Samoa, Western Samoa Department of Statistics

World Health Organisation (WHO). 2001. Iron Deficiency Anaemia, Assessment, Prevention and Control: A guide for programme managers: World Health Organisation.

World Health Organization (WHO). 2006. Birth spacing: Report from a WHO technical consultation. Geneva: World Health Organization.

World Health Organisation (WHO). 2009. Infant and young child feeding: Model Chapter for textbooks for medical students and allied health professionals. Geneva: World Health Organisation

There are 4 statistical regions in Samoa, namely Apia urban area (AUA), North west Upolu (NWU), Rest of Upolu (ROU) and Savaii. AUA is the urban area, while the other three regions are rural areas. Each region is subdivided into political districts, each district into villages, and each village into census enumeration areas (EA).

The sample for the 2014 SDHS is a stratified sample selected in two stages from the Samoa Population and Housing Census (PHC), 2011 frame. The four regions are treated as the sampling strata and the census EAs as the primary sampling units (PSU). Implicit stratifications and proportional allocation are achieved at each of the lower geographic/administrative levels by sorting the sampling frame according to the geographic/administrative order.

In the first stage of selection, a pre-determined number of EA from each stratum was selected independently with probability proportional to the EA's measure of size. As a result, a total of 458 EA was finally selected. In the selected EAs, the list of households obtained from the latest census 2011 was used to select sample households, instead of compiling a fresh list of households. This was made because the Samoan households rarely change their place of usual residence unless circumstances were very critical hence in order to save time and additional costs to the survey, a fresh household list was not seen necessary.

In the second stage of selection, a fixed number of 7 households per cluster in the urban areas and 10 households per cluster in the rural areas were selected from the list of household using equal probability systematic selection. The survey interviewer was instructed to interview only the pre-selected households. No replacement and no changes of the pre-selected households are allowed in the implementing stages in order to prevent bias.

Overall, a total of 458 primary sampling units or clusters was selected, 132 in urban areas and 326 in rural areas.

The major survey domains distinguished in the tabulation of important characteristics for the eligible female population are:

- Samoa as a whole
- Each of four regions defined in Samoa, namely: 1) Apia urban area, 2) North west Upolu, 3) Rest of Upolu, and 4) Savaii
- Urban and rural areas of Samoa (each as a separate domain).

The population covered in the 2014 SDHS is defined as the universe of all women age 15-49 in Samoa in a sample of 4,171 selected households. Every third household selected for the women's sample was eligible for the men's sample (men age 15-54).

The sample was designed to cover at least 900 women aged 15-49 per region. This was made mainly to have sufficient cases to provide information on two additional new modules in the 2014 SDHS namely: Anthropometrical data on children under 5 and Disabilities. Hence the total sample was made up 16 percent of the households in rural areas and 17 percent of households in urban areas. The sample permitted detailed analysis for most indicators for the national level, for urban and rural areas separately, and for each of the four regions (Apia urban area, North west Upolu, the Rest of Upolu, and Savaii).

The 2014 SDHS fieldwork was carried out from 7<sup>th</sup> July to 29 August. A total of 4,171 households were selected, of which 3,853 (92 percent) were found occupied at the time of the

fieldwork. A total of 3,660 households were successfully interviewed, yielding a household response rate of 95 percent (Table A.1). A total of 5,319 women were identified as eligible for the individual interview, of whom 4,805 were interviewed with an individual women's response rate of 90 percent, and an overall response rate the product of the household and individual response rates<sup>6</sup> of 86 percent for the entire country. The overall response rate for women is higher in rural (89 percent) than in urban areas (74 percent). By region, the overall response rates for women range from 74 percent in Apia urban area, 87 percent in the Rest of Upolu and 90 percent each in North west Upolu and Savaii.

<b>Table A.1 Sample implementation: Women</b>							
Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and region, Samoa 2014							
Result	Residence		Region				Total
	Urban	Rural	Apia urban area	North west Upolu	Rest of Upolu	Savaii	
<b>Selected households</b>							
Completed (C)	84.7	88.6	84.7	89.0	88.5	88.2	87.7
Household present but no competent respondent at home (HP)	9.2	2.7	9.2	3.2	2.2	2.4	4.1
Postponed (P)	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Refused (R)	0.4	0.1	0.4	0.1	0.1	0.1	0.2
Dwelling not found (DNF)	0.1	0.4	0.1	0.7	0.2	0.1	0.3
Household absent (HA)	0.1	0.7	0.1	0.5	1.3	0.4	0.6
Dwelling vacant/address not a dwelling (DV)	2.8	5.3	2.8	5.7	6.0	3.9	4.7
Dwelling destroy (DD)	2.1	1.9	2.1	0.6	1.2	4.6	2.0
Other (O)	0.5	0.3	0.5	0.2	0.4	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	920	3,251	920	1,366	929	956	4,171
Household response rate (HRR) <sup>1</sup>	89.6	96.5	89.6	95.7	97.2	97.1	95.0
<b>Eligible women</b>							
Completed (EWC)	82.8	92.4	82.8	93.8	89.6	93.1	90.3
Not at home (EWNH)	14.1	5.3	14.1	3.9	7.9	4.7	7.1
Postponed (EWP)	0.0	0.1	0.0	0.1	0.3	0.1	0.1
Refused (EWR)	0.2	0.1	0.2	0.0	0.1	0.5	0.2
Partly completed (EWPC)	0.0	0.2	0.0	0.3	0.2	0.0	0.2
Incapacitated (EWI)	1.9	1.2	1.9	1.1	1.1	1.7	1.4
Other (EWO)	1.1	0.7	1.1	0.9	0.9	0.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,120	4,199	1,120	1,892	1,226	1,081	5,319
Eligible women response rate (EWRR) <sup>2</sup>	82.8	92.4	82.8	93.8	89.6	93.1	90.3
Overall women response rate (OWRR) <sup>3</sup>	74.2	89.2	74.2	89.8	87.0	90.4	85.8
<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:							
$\frac{100 * C}{C + HP + P + R + DNF}$							
<sup>2</sup> Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:							
$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$							
<sup>3</sup> The overall response rate (ORR) is calculated as:							
$OWRR = HRR * EWRR/100$							



For men, a total of 1,390 households were selected, of which 1,300 were found, yielding a household response rate of 94 percent (Table A.2). A total of 2,025 men were identified as eligible for the individual interview, of whom 1,669 were successfully interviewed, yielding a response rate of 82 percent and an overall response rate the product of the household and individual response rates<sup>6</sup> of 77 percent for the entire country. Different from women, the overall response rate for men in urban areas is very low (59 percent) than for men in rural areas (82 percent). By region, the overall response rates for men range from 59 percent in Apia urban area, to 79 percent in Rest of Upolu and 84 and 83 percent in North west Upolu and Savaii regions, respectively.

Table A.2 Sample implementation: Male							
Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and region, Samoa 2014							
Result	Residence		Region				Total
	Urban	Rural	Apia urban area	North west Upolu	Rest of Upolu	Savaii	
<b>Selected households</b>							
Completed (C)	84.0	86.0	84.0	87.1	85.4	85.0	85.5
Household present but no competent respondent at home (HP)	9.8	4.6	9.8	5.9	3.2	4.1	5.8
Refused (R)	0.0	0.1	0.0	0.0	0.3	0.0	0.1
Dwelling not found (DNF)	0.0	0.1	0.0	0.0	0.3	0.0	0.1
Household absent (HA)	0.0	0.7	0.0	0.4	1.3	0.6	0.6
Dwelling vacant/address not a dwelling (DV)	3.6	5.7	3.6	5.5	6.8	5.0	5.3
Dwelling destroy (DD)	1.6	2.4	1.6	1.1	1.9	4.7	2.2
Other (O)	1.0	0.4	1.0	0.0	0.6	0.6	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	306	1,084	306	456	309	319	1,390
Household response rate (HRR) <sup>1</sup>	89.5	94.7	89.5	93.6	95.7	95.4	93.5
<b>Eligible men</b>							
Completed (EMC)	66.1	86.6	66.1	89.4	82.2	86.9	82.4
Not at home (EMNH)	24.7	10.0	24.7	7.2	14.8	9.5	13.0
Refused (EMR)	2.2	0.3	2.2	0.1	0.2	0.7	0.7
Partly completed (EMPC)	0.0	0.2	0.0	0.3	0.0	0.2	0.1
Incapacitated (EMI)	2.4	1.9	2.4	1.6	1.9	2.5	2.0
Other (EMO)	4.6	0.9	4.6	1.4	0.9	0.2	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	413	1,612	413	705	465	442	2,025
Eligible men response rate (EMRR) <sup>2</sup>	66.1	86.6	66.1	89.4	82.2	86.9	82.4
Overall men response rate (OMRR) <sup>3</sup>	59.2	82.0	59.2	83.7	78.6	82.9	77.1
<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:							
$\frac{100 * C}{C + HP + P + R + DNF}$							
<sup>2</sup> Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:							
$\frac{100 * EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$							
<sup>3</sup> The overall response rate (ORR) is calculated as:							
$OMRR = HRR * EMRR/100$							

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 2014 Samoa DHS (SDHS) 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 2014 SDHS 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.

A 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 2014 SDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2014 SDHS is a Macro SAS procedure. This procedure used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. 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  $h^{\text{th}}$  stratum,
- $y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,
- $x_{hi}$  is the sum of the weighted number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  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 2014JIDHS, there were 422 non-empty clusters. Hence, 422 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 422 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 421 clusters ( $i^{\text{th}}$  cluster excluded), and  
 $k$  is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is calculated, which 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. The relative standard error and confidence limits for the estimates are also calculated.

Sampling errors for the 2014SDHS 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, and for the four geographical 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 to B.8 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the standard error considering 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 child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women aged 40-49*) can be interpreted as follows: the overall average from the national sample is 4.474 and its standard error is 0.076. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $4.474 \pm 2 \times 0.076$ . 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 4.322 and 4.626.

For the total sample, the value of the DEFT, averaged over all variables, is 1.05. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.05 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Samoa 2014

Variable	Estimate	Base population
WOMEN		
Urban	Proportion	All women
No education, or primary	Proportion	All women
Vocational, secondary education or higher	Proportion	All women
Never married/in union	Proportion	All women
Currently married/in union	Proportion	All women
Currently pregnant	Mean	All women
Children ever born	Mean	All women
Children surviving	Mean	Women age 40-49
Children ever born to women age 40-49	Proportion	Currently married women
Know any contraceptive method	Proportion	Currently married women
Know any modern contraceptive method	Proportion	Currently married women
Ever used any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using a modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using injectables	Proportion	Currently married women
Currently using female sterilization	Proportion	Current users of modern methods
Used public sector source	Proportion	Currently married women
Want no more children	Proportion	Currently married women
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	All women
Last birth was protected against tetanus	Proportion	Women with at least one live birth in five years before survey
Mothers received medical assistance at delivery	Proportion	Births occurring in five years before survey
Had diarrhea in two weeks before survey	Proportion	Children age 0-59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhea in two weeks before interview
Vaccination card seen	Proportion	Children age 18-29 months
Received BCG	Proportion	Children age 18-29 months
Received DPT (3 doses)	Proportion	Children age 18-29 months
Received Polio (3 doses)	Proportion	Children age 18-29 months
Received measles	Proportion	Children age 18-29 months
Accepting attitudes towards people with HIV	Proportion	All women who has heard of HIV/AIDS
Has heard of HIV/AIDS	Proportion	All women
Knows about condoms	Proportion	All women
Knows about limiting partners	Proportion	All women
Comprehensive knowledge on HIV transmission	Proportion	All women
Comprehensive knowledge on HIV transmission among youth	Proportion	Women age 15-24
Had an injection in past 12 months	Proportion	All women
Had HIV test and received results in past 12 months	Proportion	All women
Total fertility rate (3 years)	Rate	Women years of exposure
Neonatal mortality (0-4 years) <sup>1</sup>	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (0-4 years) <sup>1</sup>	Rate	Children exposed to the risk of mortality
Infant mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Child mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Under-five mortality (0-4 years) <sup>1</sup>	Rate	Children exposed to the risk of mortality
MEN		
Urban	Proportion	All men 15-49
No education, or primary	Proportion	All men 15-49
Vocational, 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
Know any contraceptive method	Proportion	Currently married men 15-49
Ever used any contraceptive method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay birth at least 2 years	Proportion	Currently married men 15-49
Ideal family size	Mean	All men 15-49
Accepting attitudes towards people with HIV	Proportion	All men 15-49 who have heard of HIV/AIDS
Knows about condoms	Proportion	All men 15-49
Knows about limiting partners	Proportion	All men 15-49
Comprehensive knowledge on HIV transmission	Proportion	All men 15-49
Comprehensive knowledge on HIV transmission among youth	Proportion	All men age 15-24
Had an injection in past 12 months	Proportion	All men 15-49
Had HIV test and received results in past 12 months	Proportion	All men 15-49

<sup>1</sup>Mortality rates are calculated for last 5 years at national level and past 10 years at the regional level in Table B8 and B9.

**Table B.2 Sampling errors formational sample, Samoa 2014**

FEMALE													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.208	0.010	4805	4805	0.006	0.406	1.696	0.181	0.048	0.188	0.228	4805	11.4
NOEDUC	0.036	0.003	4805	4805	0.003	0.188	1.037	0.007	0.077	0.031	0.042	4805	11.4
SECOND	0.964	0.003	4805	4805	0.003	0.188	1.037	0.007	0.003	0.958	0.969	4805	11.4
NEVMAR	0.357	0.007	4805	4805	0.007	0.479	1.003	0.001	0.019	0.343	0.371	4805	11.4
CURMAR	0.598	0.007	4805	4805	0.007	0.490	1.026	0.005	0.012	0.584	0.613	4805	11.4
PREGNANT	0.065	0.003	4805	4805	0.004	0.247	0.905	-0.017	0.049	0.059	0.072	4805	11.4
EVBORN	2.262	0.034	4805	4805	0.035	2.430	0.962	-0.007	0.015	2.194	2.329	4805	11.4
SURVIV	2.215	0.033	4805	4805	0.034	2.374	0.965	-0.007	0.015	2.149	2.281	4805	11.4
EV40	4.474	0.076	1047	1044	0.078	2.528	0.972	-0.037	0.017	4.322	4.626	1047	2.5
KMETHO	0.934	0.004	2879	2874	0.005	0.248	0.968	-0.011	0.005	0.925	0.943	2879	6.8
KMODME	0.929	0.005	2879	2874	0.005	0.257	0.952	-0.016	0.005	0.920	0.938	2879	6.8
EVUSE	0.482	0.010	2879	2874	0.009	0.500	1.091	0.033	0.021	0.461	0.502	2879	6.8
CUSE	0.269	0.009	2879	2874	0.008	0.444	1.114	0.041	0.034	0.251	0.288	2879	6.8
CUMODE	0.243	0.009	2879	2874	0.008	0.429	1.084	0.030	0.036	0.226	0.260	2879	6.8
CUPILL	0.059	0.005	2879	2874	0.004	0.235	1.077	0.028	0.081	0.049	0.068	2879	6.8
CUCOND	0.002	0.001	2879	2874	0.001	0.046	0.996	-0.001	0.404	0.000	0.004	2879	6.8
CUINJ	0.104	0.006	2879	2874	0.006	0.306	1.049	0.017	0.057	0.092	0.116	2879	6.8
CUFSTER	0.071	0.005	2879	2874	0.005	0.257	1.032	0.011	0.070	0.061	0.081	2879	6.8
PSOURC	0.920	0.010	716	717	0.010	0.272	1.006	0.018	0.011	0.899	0.940	716	1.7
NOMORE	0.468	0.01	2879	2874	0.009	0.499	1.117	0.042	0.022	0.447	0.488	2879	6.8
DELAY	0.120	0.006	2879	2874	0.006	0.325	1.020	0.007	0.052	0.107	0.132	2879	6.8
IDEAL	3.384	0.046	4328	4332	0.040	2.655	1.135	0.031	0.014	3.292	3.476	4328	10.3
TETANU	0.235	0.010	2017	2014	0.009	0.424	1.071	0.039	0.043	0.215	0.255	4805	4.8
MEDELI	0.825	0.011	3195	3192	0.008	0.479	1.242	0.082	0.013	0.803	0.846	4805	7.6
DIAR2W	0.035	0.004	3142	3140	0.003	0.191	1.071	0.023	0.105	0.027	0.042	4805	7.4
ORSTRE	0.629	0.046	108	109	0.048	0.504	0.947	0.138	0.073	0.537	0.721	4805	0.3
MEDTRE	0.619	0.052	108	109	0.050	0.515	1.054	-0.149	0.084	0.514	0.723	4805	0.3
HCARD	0.610	0.019	667	666	0.019	0.494	1.020	0.070	0.032	0.571	0.649	4805	1.6
BCG	0.899	0.013	667	666	0.012	0.306	1.074	0.266	0.014	0.874	0.925	4805	1.6
DPT	0.638	0.020	667	666	0.019	0.487	1.051	0.179	0.031	0.598	0.677	4805	1.6
POLIO	0.618	0.019	667	666	0.019	0.492	1.021	0.072	0.031	0.579	0.657	4805	1.6
MEASLE	0.764	0.018	667	666	0.017	0.430	1.111	0.402	0.024	0.727	0.801	4805	1.6
FULLY	0.597	0.020	667	666	0.019	0.495	1.037	0.131	0.033	0.557	0.637	4805	1.6
HACCEPT	0.026	0.002	4347	4351	0.002	0.160	0.946	-0.011	0.087	0.022	0.031	4347	10.3
HHEARD	0.906	0.005	4805	4805	0.004	0.293	1.138	0.028	0.005	0.896	0.915	4805	11.4
HCONDOM	0.710	0.008	4805	4805	0.007	0.454	1.153	0.032	0.011	0.695	0.725	4805	11.4
HLIMIT	0.856	0.006	4805	4805	0.005	0.351	1.090	0.018	0.006	0.845	0.867	4805	11.4
HCOMP	0.065	0.004	4805	4805	0.004	0.246	1.116	0.024	0.061	0.057	0.073	4805	11.4
HCOMPY	0.052	0.006	1890	1891	0.005	0.222	1.108	0.065	0.109	0.041	0.063	1890	4.5
HINyec	0.139	0.006	4805	4805	0.005	0.346	1.104	0.021	0.040	0.128	0.150	4805	11.4
HTEST	0.007	0.001	4805	4805	0.001	0.083	1.063	0.013	0.184	0.004	0.009	4805	11.4

**MALE**

Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.202	0.013	1576	1576	0.010	0.402	1.315	0.241	0.066	0.175	0.229	1576	4.0
NOEDUC	0.079	0.007	1576	1576	0.007	0.270	1.046	0.031	0.090	0.065	0.093	1576	4.0
EDUC	0.921	0.007	1576	1576	0.007	0.270	1.046	0.031	0.008	0.907	0.935	1576	4.0
NEVMAR	0.520	0.012	1576	1576	0.013	0.500	0.977	-0.015	0.024	0.495	0.545	1576	4.0
CURMAR	0.456	0.012	1576	1576	0.013	0.498	0.993	-0.005	0.027	0.431	0.480	1576	4.0
KMETHO	0.899	0.011	721	718	0.011	0.302	0.936	-0.146	0.012	0.878	0.920	721	1.8
EVUSE	0.273	0.018	721	718	0.017	0.446	1.083	0.204	0.066	0.237	0.309	721	1.8
NOMORE	0.366	0.019	721	718	0.018	0.482	1.084	0.206	0.053	0.327	0.405	721	1.8
DELAY	0.191	0.016	721	718	0.015	0.393	1.099	0.247	0.084	0.159	0.223	721	1.8
IDEAL	3.479	0.075	1472	1474	0.076	2.900	0.989	-0.008	0.021	3.329	3.628	1472	3.8
HACCEPT	0.031	0.005	1337	1342	0.005	0.174	1.069	0.059	0.163	0.021	0.041	1337	3.4
HCONDOM	0.681	0.013	1576	1576	0.012	0.466	1.137	0.096	0.020	0.654	0.708	1576	4.0
HLIMIT	0.803	0.011	1576	1576	0.010	0.398	1.136	0.096	0.014	0.780	0.825	1576	4.0
HCOMP	0.066	0.007	1576	1576	0.006	0.248	1.143	0.101	0.108	0.052	0.080	1576	4.0
HCOMPY	0.057	0.010	643	645	0.009	0.232	1.105	0.344	0.177	0.037	0.077	643	1.6
HINyec	0.095	0.008	1576	1576	0.007	0.293	1.127	0.089	0.088	0.078	0.112	1576	4.0
HTEST	0.001	0.001	1576	1576	0.001	0.028	1.104	0.072	0.996	0.000	0.002	1576	4.0

na = Not applicable

**Table B.3 Sampling errors for urban sample, Samoa 2014**

FEMALE													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	1.000	0.000	927	1000	0.000	0.000	-NaN	-0.142	0.000	1.000	1.000	927	8.1
NOEDUC	0.020	0.005	927	1000	0.005	0.142	0.982	-0.005	0.223	0.011	0.030	927	8.1
SECON2	0.980	0.005	927	1000	0.005	0.142	0.982	-0.005	0.005	0.970	0.989	927	8.1
NEVMAR	0.414	0.017	927	1000	0.016	0.493	1.031	0.009	0.040	0.381	0.447	927	8.1
CURMAR	0.535	0.017	927	1000	0.016	0.499	1.034	0.010	0.032	0.502	0.569	927	8.1
PREGNANT	0.062	0.007	927	1000	0.008	0.242	0.940	-0.016	0.120	0.047	0.077	927	8.1
EVORB	2.079	0.079	927	1000	0.078	2.379	1.005	0.001	0.038	1.922	2.236	927	8.1
SURVIV	2.044	0.077	927	1000	0.077	2.332	1.009	0.002	0.038	1.890	2.199	927	8.1
EV40	4.186	0.194	178	192	0.195	2.596	0.996	-0.015	0.046	3.798	4.573	178	1.5
KMETHO	0.992	0.004	496	535	0.004	0.089	0.970	-0.018	0.004	0.984	1.000	496	4.3
KMODME	0.990	0.004	496	535	0.004	0.100	0.954	-0.027	0.004	0.981	0.999	496	4.3
EVUSE	0.543	0.024	496	535	0.022	0.499	1.078	0.049	0.044	0.495	0.591	496	4.3
CUSE	0.325	0.020	496	535	0.021	0.469	0.970	-0.018	0.063	0.284	0.366	496	4.3
CUMODE	0.282	0.020	496	535	0.020	0.451	0.970	-0.018	0.070	0.243	0.322	496	4.3
CUPILL	0.061	0.012	496	535	0.011	0.239	1.104	0.066	0.195	0.037	0.084	496	4.3
CUCOND	0.002	0.002	496	535	0.002	0.045	1.001	0.001	1.003	0.000	0.006	496	4.3
CUINJ	0.075	0.012	496	535	0.012	0.263	1.039	0.024	0.164	0.050	0.099	496	4.3
CUFSTER	0.135	0.015	496	535	0.015	0.342	0.985	-0.009	0.112	0.105	0.165	496	4.3
PSOURC	0.891	0.024	148	160	0.026	0.312	0.917	-0.554	0.026	0.844	0.938	148	1.3
NOMORE	0.418	0.026	496	535	0.022	0.494	1.156	0.102	0.061	0.366	0.469	496	4.3
DELAY	0.125	0.016	496	535	0.015	0.331	1.050	0.031	0.125	0.094	0.156	496	4.3
IDEAL	3.218	0.113	882	951	0.087	2.572	1.308	0.106	0.035	2.991	3.444	882	7.7
TETANU	0.216	0.024	342	369	0.022	0.412	1.069	0.072	0.110	0.168	0.264	342	3.0
MEDELI	0.969	0.009	553	597	0.008	0.190	1.058	0.031	0.009	0.952	0.986	553	4.8
DIAR2W	0.044	0.008	547	590	0.009	0.206	0.909	-0.046	0.183	0.028	0.060	547	4.8
ORSTRE	0.625	0.099	24	26	0.099	0.485	1.003	-0.007	0.159	0.426	0.824	24	0.2
MDTRE	0.583	0.101	24	26	0.101	0.494	1.003	-0.007	0.173	0.381	0.785	24	0.2
HCARD	0.564	0.044	110	119	0.048	0.506	0.914	3.781	0.078	0.476	0.652	110	1.0
BCG	0.955	0.023	110	119	0.023	0.245	0.991	0.433	0.024	0.908	1.001	110	1.0
DPT	0.600	0.050	110	119	0.048	0.500	1.059	-2.810	0.084	0.500	0.701	110	1.0
POLIO	0.573	0.050	110	119	0.048	0.504	1.043	-2.026	0.088	0.473	0.674	110	1.0
MEASLE	0.809	0.043	110	119	0.039	0.409	1.112	-5.430	0.054	0.723	0.896	110	1.0
FULLY	0.546	0.051	110	119	0.048	0.507	1.060	-2.819	0.094	0.443	0.649	110	1.0
HACCEPT	0.049	0.007	889	959	0.007	0.217	0.951	-0.014	0.140	0.036	0.063	889	7.7
HHEARD	0.959	0.007	927	1000	0.007	0.199	1.087	0.026	0.007	0.945	0.973	927	8.1
HCONDOM	0.709	0.016	927	1000	0.015	0.455	1.093	0.028	0.023	0.676	0.742	927	8.1
HLIMIT	0.901	0.010	927	1000	0.010	0.299	1.014	0.004	0.011	0.881	0.921	927	8.1
HCOMP	0.112	0.011	927	1000	0.010	0.316	1.084	0.025	0.100	0.090	0.135	927	8.1
HCOMPY	0.068	0.014	379	409	0.013	0.253	1.097	0.089	0.208	0.040	0.097	379	3.3
HINyec	0.175	0.013	927	1000	0.012	0.380	1.075	0.022	0.077	0.148	0.202	927	8.1
HTEST	0.017	0.004	927	1000	0.004	0.131	1.042	0.012	0.258	0.008	0.026	927	8.1
MALE													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	1.000	0.000	258	318	0.000	0.000	-NaN	-0.536	0.000	1.000	1.000	258	2.9
NOEDUC	0.043	0.012	258	318	0.013	0.203	0.951	-0.051	0.280	0.019	0.067	258	2.9
EDUC	0.957	0.012	258	318	0.013	0.203	0.951	-0.051	0.013	0.933	0.981	258	2.9
NEVMAR	0.558	0.031	258	318	0.031	0.498	1.014	0.015	0.056	0.495	0.621	258	2.9
CURMAR	0.411	0.032	258	318	0.031	0.493	1.045	0.049	0.078	0.347	0.475	258	2.9
KMETHO	0.942	0.021	106	131	0.023	0.234	0.909	-0.972	0.022	0.901	0.984	106	1.2
EVUSE	0.529	0.059	106	131	0.049	0.502	1.216	2.698	0.112	0.411	0.648	106	1.2
NOMORE	0.471	0.046	106	131	0.049	0.502	0.935	-0.706	0.097	0.379	0.562	106	1.2
DELAY	0.197	0.038	106	131	0.039	0.400	0.978	-0.245	0.193	0.121	0.273	106	1.2
IDEAL	3.487	0.129	252	311	0.145	2.304	0.889	-0.116	0.037	3.229	3.745	252	2.8
HACCEPT	0.056	0.015	232	286	0.015	0.230	0.985	-0.019	0.266	0.026	0.086	232	2.6
HCONDOM	0.658	0.032	258	318	0.030	0.475	1.087	0.097	0.049	0.594	0.723	258	2.9
HLIMIT	0.816	0.028	258	318	0.024	0.388	1.155	0.179	0.034	0.761	0.872	258	2.9
HCOMP	0.070	0.016	258	318	0.016	0.256	1.002	0.002	0.228	0.038	0.102	258	2.9
HCOMPY	0.071	0.024	114	141	0.024	0.258	1.010	0.072	0.343	0.022	0.120	114	1.3
HINyec	0.154	0.022	258	318	0.023	0.362	0.995	-0.005	0.145	0.110	0.199	258	2.9
HTEST	0.004	0.004	258	318	0.004	0.062	0.977	-0.025	0.979	0.000	0.011	258	2.9

na = Not applicable

**Table B.4 Sampling errors for rural sample, Samoa 2014**

FEMALE													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	3878	3805	0.000	0.000	-NaN	-0.086	-NaN	0.000	0.000	3878	12.6
NOEDUC	0.041	0.003	3878	3805	0.003	0.198	1.046	0.008	0.082	0.034	0.047	3878	12.6
SECOND	0.959	0.003	3878	3805	0.003	0.198	1.046	0.008	0.003	0.953	0.966	3878	12.6
NEVMAR	0.342	0.008	3878	3805	0.008	0.474	0.998	-0.000	0.022	0.327	0.357	3878	12.6
CURMAR	0.615	0.008	3878	3805	0.008	0.487	1.026	0.004	0.013	0.599	0.631	3878	12.6
PREGNANT	0.066	0.004	3878	3805	0.004	0.249	0.893	-0.017	0.054	0.059	0.073	3878	12.6
EVBORN	2.310	0.037	3878	3805	0.039	2.441	0.956	-0.007	0.016	2.235	2.385	3878	12.6
SURVIV	2.260	0.037	3878	3805	0.038	2.383	0.957	-0.007	0.016	2.187	2.334	3878	12.6
EVB40	4.539	0.082	869	852	0.085	2.510	0.968	-0.035	0.018	4.374	4.703	869	2.8
KMETHO	0.921	0.005	2383	2339	0.006	0.270	0.965	-0.010	0.006	0.910	0.932	2383	7.8
KMODME	0.915	0.005	2383	2339	0.006	0.279	0.951	-0.014	0.006	0.904	0.926	2383	7.8
EVUSE	0.468	0.011	2383	2339	0.010	0.499	1.090	0.028	0.024	0.445	0.490	2383	7.8
CUSE	0.257	0.010	2383	2339	0.009	0.437	1.148	0.047	0.040	0.236	0.277	2383	7.8
CUMODE	0.234	0.010	2383	2339	0.009	0.423	1.111	0.035	0.041	0.215	0.253	2383	7.8
CUPILL	0.058	0.005	2383	2339	0.005	0.234	1.068	0.021	0.088	0.048	0.068	2383	7.8
CUCOND	0.002	0.001	2383	2339	0.001	0.046	0.995	-0.002	0.441	0.000	0.004	2383	7.8
CUIJN	0.111	0.007	2383	2339	0.006	0.314	1.054	0.016	0.061	0.097	0.125	2383	7.8
CUFSTER	0.056	0.005	2383	2339	0.005	0.231	1.028	0.008	0.086	0.047	0.066	2383	7.8
PSOURC	0.928	0.011	568	558	0.011	0.259	1.038	0.090	0.012	0.905	0.950	568	1.9
NOMORE	0.479	0.011	2383	2339	0.010	0.500	1.110	0.034	0.024	0.456	0.502	2383	7.8
DELAY	0.118	0.007	2383	2339	0.007	0.323	1.011	0.003	0.057	0.105	0.132	2383	7.8
IDEAL	3.431	0.049	3446	3381	0.046	2.677	1.075	0.015	0.014	3.333	3.529	3446	11.2
TETANU	0.239	0.011	1675	1645	0.010	0.426	1.070	0.032	0.047	0.217	0.262	3878	5.5
MEDELI	0.791	0.012	2642	2596	0.010	0.509	1.260	0.077	0.016	0.766	0.816	3878	8.6
DIAR2W	0.032	0.004	2595	2550	0.004	0.187	1.116	0.033	0.126	0.024	0.041	3878	8.5
ORSTRE	0.630	0.052	84	83	0.056	0.511	0.928	0.191	0.082	0.527	0.734	3878	0.3
MEDTRE	0.630	0.061	84	83	0.057	0.523	1.071	-0.203	0.097	0.508	0.752	3878	0.3
HCARD	0.620	0.022	557	547	0.021	0.490	1.048	0.120	0.035	0.577	0.664	3878	1.8
BCG	0.887	0.015	557	547	0.013	0.316	1.087	0.223	0.016	0.858	0.916	3878	1.8
DPT	0.646	0.021	557	547	0.020	0.483	1.051	0.129	0.033	0.603	0.689	3878	1.8
POLIO	0.628	0.021	557	547	0.021	0.488	1.019	0.048	0.034	0.586	0.670	3878	1.8
MEASLE	0.754	0.020	557	547	0.018	0.434	1.113	0.295	0.027	0.713	0.795	3878	1.8
FULLY	0.608	0.022	557	547	0.021	0.491	1.037	0.092	0.035	0.565	0.651	3878	1.8
HACCEPT	0.020	0.002	3458	3392	0.002	0.139	0.942	-0.011	0.113	0.015	0.024	3458	11.3
HHEARD	0.891	0.006	3878	3805	0.005	0.311	1.142	0.026	0.006	0.880	0.903	3878	12.6
HCONDOM	0.710	0.009	3878	3805	0.007	0.454	1.168	0.031	0.012	0.693	0.727	3878	12.6
HLIMIT	0.844	0.006	3878	3805	0.006	0.363	1.106	0.019	0.008	0.831	0.857	3878	12.6
HCOMP	0.053	0.004	3878	3805	0.004	0.223	1.127	0.023	0.077	0.044	0.061	3878	12.6
HCOMPY	0.048	0.006	1511	1482	0.005	0.213	1.107	0.057	0.127	0.036	0.060	1511	4.9
HINYEC	0.129	0.006	3878	3805	0.005	0.336	1.113	0.020	0.046	0.117	0.141	3878	12.6
HTEST	0.004	0.001	3878	3805	0.001	0.064	1.034	0.006	0.258	0.002	0.006	3878	12.6

MALE													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	1318	1257	0.000	0.000	-NaN	-0.296	-NaN	0.000	0.000	1318	4.4
NOEDUC	0.088	0.008	1318	1257	0.008	0.283	1.067	0.041	0.095	0.071	0.105	1318	4.4
EDUC	0.912	0.008	1318	1257	0.008	0.283	1.067	0.041	0.009	0.895	0.929	1318	4.4
NEVMAR	0.510	0.013	1318	1257	0.014	0.500	0.960	-0.023	0.026	0.484	0.537	1318	4.4
CURMAR	0.467	0.013	1318	1257	0.014	0.499	0.973	-0.016	0.029	0.440	0.493	1318	4.4
KMETHO	0.889	0.012	615	587	0.013	0.315	0.948	-0.097	0.014	0.865	0.913	615	2.0
EVUSE	0.215	0.017	615	587	0.017	0.411	1.038	0.074	0.080	0.181	0.250	615	2.0
NOMORE	0.343	0.021	615	587	0.019	0.475	1.116	0.236	0.062	0.300	0.386	615	2.0
DELAY	0.189	0.018	615	587	0.016	0.392	1.125	0.255	0.094	0.154	0.225	615	2.0
IDEAL	3.476	0.088	1220	1163	0.087	3.041	1.013	0.009	0.025	3.300	3.653	1220	4.1
HACCEPT	0.024	0.005	1105	1056	0.005	0.154	1.074	0.057	0.204	0.014	0.034	1105	3.7
HCONDOM	0.687	0.015	1318	1257	0.013	0.464	1.140	0.088	0.021	0.658	0.716	1318	4.4
HLIMIT	0.799	0.012	1318	1257	0.011	0.401	1.127	0.080	0.016	0.774	0.824	1318	4.4
HCOMP	0.065	0.008	1318	1257	0.007	0.247	1.178	0.115	0.123	0.049	0.081	1318	4.4
HCOMPY	0.053	0.011	529	505	0.010	0.225	1.132	0.371	0.208	0.031	0.075	529	1.8
HINYEC	0.080	0.009	1318	1257	0.007	0.272	1.183	0.118	0.110	0.062	0.098	1318	4.4
HTEST	0.000	0.000	1318	1257	0.000	0.000	-NaN	-0.296	-NaN	0.000	0.000	1318	4.4

na = Not applicable



**Table B.5 Sampling errors for Apia urban area, Samoa 2014**

<b>FEMALE</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	1.000	0.000	927	1000	0.000	0.000	--NaN	-0.142	0.000	1.000	1.000	927	8.1
NOEDUC	0.020	0.005	927	1000	0.005	0.142	0.982	-0.005	0.223	0.011	0.030	927	8.1
SECON	0.980	0.005	927	1000	0.005	0.142	0.982	-0.005	0.005	0.970	0.989	927	8.1
NEVMAR	0.414	0.017	927	1000	0.016	0.493	1.031	0.009	0.040	0.381	0.447	927	8.1
CURMAR	0.535	0.017	927	1000	0.016	0.499	1.034	0.010	0.032	0.502	0.569	927	8.1
PREGNANT	0.062	0.007	927	1000	0.008	0.242	0.940	-0.016	0.120	0.047	0.077	927	8.1
EVBOR	2.079	0.079	927	1000	0.078	2.379	1.005	0.001	0.038	1.922	2.236	927	8.1
SURVIV	2.044	0.077	927	1000	0.077	2.332	1.009	0.002	0.038	1.890	2.199	927	8.1
EVBA	4.186	0.194	178	192	0.195	2.596	0.996	-0.015	0.046	3.798	4.573	178	1.5
KMETHO	0.992	0.004	496	535	0.004	0.089	0.970	-0.018	0.004	0.984	1.000	496	4.3
KMODME	0.990	0.004	496	535	0.004	0.100	0.954	-0.027	0.004	0.981	0.999	496	4.3
EVUSE	0.543	0.024	496	535	0.022	0.499	1.078	0.049	0.044	0.495	0.591	496	4.3
CUSE	0.325	0.020	496	535	0.021	0.469	0.970	-0.018	0.063	0.284	0.366	496	4.3
CUMODE	0.282	0.020	496	535	0.020	0.451	0.970	-0.018	0.070	0.243	0.322	496	4.3
CUPI	0.061	0.012	496	535	0.011	0.239	1.104	0.066	0.195	0.037	0.084	496	4.3
CUCOND	0.002	0.002	496	535	0.002	0.045	1.001	0.001	1.003	0.000	0.006	496	4.3
CUINJ	0.075	0.012	496	535	0.012	0.263	1.039	0.024	0.164	0.050	0.099	496	4.3
CUFSTER	0.135	0.015	496	535	0.015	0.342	0.985	-0.009	0.112	0.105	0.165	496	4.3
PSOURC	0.891	0.024	148	160	0.026	0.312	0.917	-0.554	0.026	0.844	0.938	148	1.3
NOMORE	0.418	0.026	496	535	0.022	0.494	1.156	0.102	0.061	0.366	0.469	496	4.3
DELAY	0.125	0.016	496	535	0.015	0.331	1.050	0.031	0.125	0.094	0.156	496	4.3
IDEAL	3.218	0.113	882	951	0.087	2.572	1.308	0.106	0.035	2.991	3.444	882	7.7
TETANU	0.216	0.024	342	369	0.022	0.412	1.069	0.072	0.110	0.168	0.264	342	3.0
MEDELI	0.969	0.009	553	597	0.008	0.190	1.058	0.031	0.009	0.952	0.986	553	4.8
DIAR2W	0.044	0.008	547	590	0.009	0.206	0.909	-0.046	0.183	0.028	0.060	547	4.8
ORSTRE	0.625	0.099	24	26	0.099	0.485	1.003	-0.007	0.159	0.426	0.824	24	0.2
MEDTRE	0.583	0.101	24	26	0.101	0.494	1.003	-0.007	0.173	0.381	0.785	24	0.2
HCARD	0.564	0.044	110	119	0.048	0.506	0.914	3.781	0.078	0.476	0.652	110	1.0
BCG	0.955	0.023	110	119	0.023	0.245	0.991	0.433	0.024	0.908	1.001	110	1.0
DPT	0.600	0.050	110	119	0.048	0.509	1.059	-2.810	0.084	0.500	0.701	110	1.0
POLIO	0.573	0.050	110	119	0.048	0.504	1.043	-2.026	0.088	0.473	0.674	110	1.0
MEASLE	0.809	0.043	110	119	0.039	0.409	1.112	-5.430	0.054	0.723	0.896	110	1.0
FULLY	0.546	0.051	110	119	0.048	0.507	1.060	-2.819	0.094	0.443	0.649	110	1.0
HACCEP	0.049	0.007	889	959	0.007	0.217	0.951	-0.014	0.140	0.036	0.063	889	7.7
HHEARD	0.959	0.007	927	1000	0.007	0.199	1.087	0.026	0.007	0.945	0.973	927	8.1
HCOND	0.709	0.016	927	1000	0.015	0.455	1.093	0.028	0.023	0.676	0.742	927	8.1
HLIMIT	0.901	0.010	927	1000	0.010	0.299	1.014	0.004	0.011	0.881	0.921	927	8.1
HCOMP	0.112	0.011	927	1000	0.010	0.316	1.084	0.025	0.100	0.090	0.135	927	8.1
HCOMPY	0.068	0.014	379	409	0.013	0.253	1.097	0.089	0.208	0.040	0.097	379	3.3
HINyec	0.175	0.013	927	1000	0.012	0.380	1.075	0.022	0.077	0.148	0.202	927	8.1
HTEST	0.017	0.004	927	1000	0.004	0.131	1.042	0.012	0.258	0.008	0.026	927	8.1

<b>MEN</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	1.000	0.000	258	318	0.000	0.000	--NaN	-0.536	0.000	1.000	1.000	258	2.9
NOEDUC	0.043	0.012	258	318	0.013	0.203	0.951	-0.051	0.280	0.019	0.067	258	2.9
EDUC	0.957	0.012	258	318	0.013	0.203	0.951	-0.051	0.013	0.933	0.981	258	2.9
NEVMAR	0.558	0.031	258	318	0.031	0.498	1.014	0.015	0.056	0.495	0.621	258	2.9
CURMAR	0.411	0.032	258	318	0.031	0.493	1.045	0.049	0.078	0.347	0.475	258	2.9
KMETHO	0.942	0.021	106	131	0.023	0.234	0.909	-0.972	0.022	0.901	0.984	106	1.2
EVUSE	0.529	0.059	106	131	0.049	0.502	1.216	2.698	0.112	0.411	0.648	106	1.2
NOMORE	0.471	0.046	106	131	0.049	0.502	0.935	-0.706	0.097	0.379	0.562	106	1.2
DELAY	0.197	0.038	106	131	0.039	0.400	0.978	-0.245	0.193	0.121	0.273	106	1.2
IDEAL	3.487	0.129	252	311	0.145	2.304	0.889	-0.116	0.037	3.229	3.745	252	2.8
HACCEP	0.056	0.015	232	286	0.015	0.230	0.985	-0.019	0.266	0.026	0.086	232	2.6
HCOND	0.658	0.032	258	318	0.030	0.475	1.087	0.097	0.049	0.594	0.723	258	2.9
HLIMIT	0.816	0.028	258	318	0.024	0.388	1.155	0.179	0.034	0.761	0.872	258	2.9
HCOMP	0.070	0.016	258	318	0.016	0.256	1.002	0.002	0.228	0.038	0.102	258	2.9
HCOMPY	0.071	0.024	114	141	0.024	0.258	1.010	0.072	0.343	0.022	0.120	114	1.3
HINyec	0.154	0.022	258	318	0.023	0.362	0.995	-0.005	0.145	0.110	0.199	258	2.9
HTEST	0.004	0.004	258	318	0.004	0.062	0.977	-0.025	0.979	0.000	0.011	258	2.9

na = Not applicable

**Table B.6**Sampling errors for North West Upolu sample, Samoa 2014

<b>WOMEN</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
-													
URBAN	0.000	0.000	1774	1733	0.000	0.000	-NaN	-0.071	-NaN	0.000	0.000	1774	15.0
NOEDUC	0.044	0.005	1774	1733	0.005	0.206	1.078	0.012	0.119	0.034	0.055	1774	15.0
SECOND	0.956	0.005	1774	1733	0.005	0.206	1.078	0.012	0.006	0.945	0.966	1774	15.0
NEVMAR	0.375	0.012	1774	1733	0.011	0.484	1.021	0.003	0.031	0.351	0.398	1774	15.0
CURMAR	0.576	0.012	1774	1733	0.012	0.494	1.054	0.008	0.021	0.551	0.601	1774	15.0
PREGNANT	0.064	0.005	1774	1733	0.006	0.245	0.852	-0.019	0.077	0.054	0.074	1774	15.0
EVBORN	2.058	0.054	1774	1733	0.054	2.286	0.996	-0.001	0.026	1.950	2.166	1774	15.0
SURVIV	2.027	0.053	1774	1733	0.053	2.252	0.989	-0.002	0.026	1.921	2.133	1774	15.0
EVB40	4.207	0.131	365	357	0.124	2.366	1.056	0.055	0.031	3.946	4.469	365	3.1
KMETHO	0.905	0.009	1022	998	0.009	0.293	0.997	-0.001	0.010	0.887	0.923	1022	8.7
KMODME	0.895	0.009	1022	998	0.010	0.306	0.953	-0.012	0.010	0.877	0.914	1022	8.7
EVUSE	0.402	0.017	1022	998	0.015	0.491	1.098	0.027	0.042	0.368	0.436	1022	8.7
CUSE	0.224	0.015	1022	998	0.013	0.417	1.146	0.041	0.067	0.194	0.254	1022	8.7
CUMODE	0.198	0.013	1022	998	0.012	0.399	1.054	0.014	0.066	0.172	0.225	1022	8.7
CUPILL	0.054	0.007	1022	998	0.007	0.227	1.050	0.013	0.137	0.039	0.069	1022	8.7
CUCOND	0.001	0.001	1022	998	0.001	0.031	0.999	-0.000	1.000	0.000	0.003	1022	8.7
CUINJ	0.077	0.008	1022	998	0.008	0.267	1.001	0.000	0.108	0.061	0.094	1022	8.7
CUFSTER	0.058	0.007	1022	998	0.007	0.234	0.955	-0.011	0.121	0.044	0.072	1022	8.7
PSOURC	0.896	0.022	211	207	0.021	0.306	1.031	0.079	0.024	0.853	0.940	211	1.8
NOMORE	0.468	0.018	1022	998	0.016	0.499	1.161	0.045	0.039	0.432	0.504	1022	8.7
DELAY	0.118	0.011	1022	998	0.010	0.323	1.069	0.019	0.091	0.097	0.140	1022	8.7
IDEAL	3.082	0.082	1560	1524	0.074	2.937	1.098	0.017	0.026	2.918	3.245	1560	13.2
TETANU	0.307	0.018	723	707	0.017	0.461	1.026	0.010	0.057	0.272	0.342	723	6.1
MEDELI	0.841	0.017	1129	1104	0.013	0.444	1.264	0.070	0.020	0.808	0.874	1129	9.6
DIAR2W	0.027	0.006	1114	1089	0.005	0.172	1.209	0.055	0.232	0.014	0.039	1114	9.4
ORSTRE	0.700	0.084	30	29	0.086	0.472	0.972	0.073	0.120	0.532	0.868	30	0.3
MEDTRE	0.767	0.074	30	29	0.086	0.471	0.864	0.339	0.097	0.618	0.915	30	0.3
HCARD	0.550	0.038	240	235	0.032	0.501	1.179	0.377	0.069	0.474	0.626	240	2.0
BCG	0.821	0.028	240	235	0.025	0.384	1.125	0.256	0.034	0.765	0.877	240	2.0
DPT	0.521	0.038	240	235	0.032	0.502	1.164	0.344	0.072	0.445	0.596	240	2.0
POLIO	0.512	0.036	240	235	0.032	0.502	1.123	0.253	0.071	0.440	0.585	240	2.0
MEASLE	0.604	0.036	240	235	0.032	0.490	1.135	0.278	0.059	0.532	0.676	240	2.0
FULLY	0.500	0.036	240	235	0.032	0.502	1.119	0.245	0.073	0.427	0.573	240	2.0
HACCEPT	0.016	0.003	1609	1571	0.003	0.124	1.017	0.003	0.202	0.009	0.022	1609	13.6
HHEARD	0.907	0.008	1774	1733	0.007	0.291	1.194	0.030	0.009	0.890	0.923	1774	15.0
HCONDOM	0.764	0.013	1774	1733	0.010	0.425	1.263	0.042	0.017	0.738	0.789	1774	15.0
HLIMIT	0.880	0.008	1774	1733	0.008	0.325	1.094	0.014	0.010	0.863	0.897	1774	15.0
HCOMP	0.072	0.007	1774	1733	0.006	0.259	1.160	0.025	0.099	0.058	0.086	1774	15.0
HCOMPY	0.069	0.010	728	711	0.009	0.253	1.107	0.044	0.151	0.048	0.089	728	6.2
HINYEC	0.156	0.009	1774	1733	0.009	0.363	1.046	0.007	0.058	0.138	0.174	1774	15.0
HTEST	0.001	0.001	1774	1733	0.001	0.024	0.996	-0.001	0.997	0.000	0.002	1774	15.0

<b>MEN</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	602	563	0.000	0.000	-NaN	-0.239	-NaN	0.000	0.000	602	5.2
NOEDUC	0.083	0.011	602	563	0.011	0.276	1.003	0.001	0.136	0.060	0.105	602	5.2
EDUC	0.917	0.011	602	563	0.011	0.276	1.003	0.001	0.012	0.895	0.940	602	5.2
NEVMAR	0.525	0.020	602	563	0.020	0.500	0.969	-0.014	0.038	0.486	0.565	602	5.2
CURMAR	0.451	0.020	602	563	0.020	0.498	0.987	-0.006	0.044	0.411	0.491	602	5.2
KMETHO	0.842	0.020	272	254	0.022	0.365	0.908	-0.131	0.024	0.802	0.882	272	2.3
EVUSE	0.126	0.023	272	254	0.020	0.332	1.150	0.239	0.184	0.079	0.172	272	2.3
NOMORE	0.287	0.032	272	254	0.027	0.453	1.181	0.294	0.113	0.222	0.352	272	2.3
DELAY	0.147	0.028	272	254	0.022	0.355	1.281	0.476	0.187	0.092	0.202	272	2.3
IDEAL	2.776	0.131	580	543	0.124	2.994	1.054	0.028	0.047	2.514	3.038	580	5.0
HACCEPT	0.012	0.006	508	475	0.005	0.108	1.263	0.176	0.514	0.000	0.024	508	4.4
HCONDOM	0.740	0.023	602	563	0.018	0.439	1.279	0.152	0.031	0.694	0.786	602	5.2
HLIMIT	0.808	0.020	602	563	0.016	0.394	1.271	0.147	0.025	0.767	0.849	602	5.2
HCOMP	0.080	0.014	602	563	0.011	0.271	1.275	0.149	0.176	0.052	0.108	602	5.2
HCOMPY	0.061	0.018	247	231	0.015	0.239	1.165	0.316	0.293	0.025	0.096	247	2.1
HINYEC	0.070	0.013	602	563	0.010	0.255	1.267	0.144	0.189	0.043	0.096	602	5.2
HTEST	0.000	0.000	602	563	0.000	0.000	-NaN	-0.239	-NaN	0.000	0.000	602	5.2

na = Not applicable

**Table B.7 Sampling errors for Rest of Upolu sample, Samoa 2014**

<b>WOMEN</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	1098	1099	0.000	0.000	-NaN	-0.093	-NaN	0.000	0.000	1098	11.8
NOEDUC	0.039	0.006	1098	1099	0.006	0.194	1.016	0.003	0.152	0.027	0.051	1098	11.8
SECOND	0.961	0.006	1098	1099	0.006	0.194	1.016	0.003	0.006	0.949	0.973	1098	11.8
NEVMAR	0.314	0.014	1098	1099	0.014	0.464	0.988	-0.002	0.044	0.286	0.342	1098	11.8
CURMAR	0.637	0.015	1098	1099	0.015	0.481	1.016	0.003	0.023	0.607	0.666	1098	11.8
PREGNANT	0.075	0.007	1098	1099	0.008	0.263	0.924	-0.014	0.098	0.060	0.089	1098	11.8
EVBORN	2.663	0.075	1098	1099	0.081	2.671	0.934	-0.012	0.028	2.513	2.814	1098	11.8
SURVIV	2.589	0.074	1098	1099	0.078	2.593	0.944	-0.010	0.029	2.441	2.736	1098	11.8
EVB40	5.243	0.149	247	247	0.164	2.575	0.911	-0.102	0.028	4.944	5.541	247	2.7
KMETHO	0.939	0.009	699	700	0.009	0.240	0.984	-0.005	0.010	0.921	0.956	699	7.5
KMODME	0.934	0.010	699	700	0.009	0.248	1.027	0.008	0.010	0.915	0.954	699	7.5
EVUSE	0.460	0.021	699	700	0.019	0.499	1.094	0.030	0.045	0.419	0.502	699	7.5
CUSE	0.256	0.019	699	700	0.017	0.437	1.160	0.053	0.075	0.218	0.294	699	7.5
CUMODE	0.229	0.017	699	700	0.016	0.420	1.100	0.032	0.076	0.194	0.264	699	7.5
CUPILL	0.046	0.009	699	700	0.008	0.209	1.131	0.043	0.196	0.028	0.064	699	7.5
CUCOND	0.006	0.003	699	700	0.003	0.075	0.984	-0.005	0.491	0.000	0.011	699	7.5
CUINJ	0.111	0.013	699	700	0.012	0.315	1.056	0.018	0.113	0.086	0.137	699	7.5
CUFSTER	0.064	0.011	699	700	0.009	0.245	1.136	0.045	0.164	0.043	0.085	699	7.5
PSOURC	0.909	0.024	164	164	0.023	0.289	1.056	0.150	0.026	0.861	0.956	164	1.8
NOMORE	0.489	0.020	699	700	0.019	0.500	1.078	0.025	0.042	0.449	0.530	699	7.5
DELAY	0.116	0.011	699	700	0.012	0.320	0.944	-0.017	0.099	0.093	0.139	699	7.5
IDEAL	3.652	0.082	966	967	0.078	2.410	1.055	0.012	0.022	3.488	3.815	966	10.4
TETANU	0.214	0.020	496	497	0.018	0.410	1.069	0.033	0.092	0.174	0.253	1098	5.3
MEDELI	0.780	0.024	813	814	0.019	0.541	1.241	0.070	0.030	0.733	0.827	1098	8.7
DIAR2W	0.051	0.009	798	799	0.008	0.235	1.057	0.016	0.171	0.034	0.069	1098	8.6
ORSTRE	0.585	0.074	41	41	0.083	0.534	0.883	0.394	0.126	0.438	0.733	1098	0.4
MEDTRE	0.537	0.096	41	41	0.084	0.540	1.144	-0.553	0.180	0.344	0.729	1098	0.4
HCARD	0.601	0.036	178	178	0.037	0.492	0.965	-0.074	0.059	0.529	0.672	1098	1.9
BCG	0.926	0.021	178	178	0.020	0.261	1.077	0.176	0.023	0.884	0.969	1098	1.9
DPT	0.696	0.036	178	178	0.035	0.461	1.033	0.073	0.051	0.625	0.767	1098	1.9
POLIO	0.657	0.037	178	178	0.036	0.476	1.027	0.060	0.056	0.583	0.730	1098	1.9
MEASLE	0.820	0.034	178	178	0.030	0.394	1.164	0.388	0.042	0.751	0.889	1098	1.9
FULLY	0.645	0.037	178	178	0.036	0.480	1.023	0.050	0.057	0.572	0.719	1098	1.9
HACCEPT	0.036	0.006	948	949	0.006	0.186	0.913	-0.018	0.154	0.025	0.047	948	10.2
HHEARD	0.863	0.012	1098	1099	0.010	0.344	1.119	0.023	0.013	0.840	0.887	1098	11.8
HCONDOM	0.701	0.016	1098	1099	0.014	0.458	1.154	0.031	0.023	0.669	0.732	1098	11.8
HLIMIT	0.828	0.013	1098	1099	0.011	0.378	1.162	0.032	0.016	0.801	0.854	1098	11.8
HCOMP	0.049	0.007	1098	1099	0.007	0.216	1.033	0.006	0.137	0.036	0.063	1098	11.8
HCOMPY	0.044	0.010	409	409	0.010	0.205	1.022	0.013	0.236	0.023	0.065	409	4.4
HINyec	0.130	0.013	1098	1099	0.010	0.337	1.233	0.048	0.096	0.105	0.155	1098	11.8
HTEST	0.007	0.003	1098	1099	0.003	0.085	1.084	0.016	0.382	0.002	0.013	1098	11.8
<b>MEN</b>													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	358	357	0.000	0.000	-NaN	-0.346	-NaN	0.000	0.000	358	3.9
NOEDUC	0.095	0.017	358	357	0.016	0.293	1.080	0.057	0.177	0.061	0.128	358	3.9
EDUC	0.905	0.017	358	357	0.016	0.293	1.080	0.057	0.018	0.872	0.939	358	3.9
NEVMAR	0.494	0.025	358	357	0.026	0.501	0.927	-0.049	0.050	0.445	0.543	358	3.9
CURMAR	0.478	0.025	358	357	0.026	0.500	0.930	-0.047	0.051	0.429	0.527	358	3.9
KMETHO	0.941	0.019	171	170	0.018	0.236	1.057	0.136	0.020	0.903	0.979	171	1.9
EVUSE	0.111	0.024	171	170	0.024	0.315	1.014	0.034	0.220	0.062	0.160	171	1.9
NOMORE	0.521	0.042	171	170	0.038	0.501	1.088	0.214	0.080	0.438	0.604	171	1.9
DELAY	0.216	0.034	171	170	0.032	0.413	1.067	0.161	0.156	0.149	0.283	171	1.9
IDEAL	4.316	0.144	326	325	0.159	2.867	0.907	-0.070	0.033	4.028	4.604	326	3.5
HACCEPT	0.009	0.005	330	329	0.005	0.095	1.002	0.002	0.577	0.000	0.020	330	3.6
HCONDOM	0.765	0.027	358	357	0.022	0.424	1.217	0.166	0.036	0.711	0.820	358	3.9
HLIMIT	0.885	0.017	358	357	0.017	0.319	1.019	0.013	0.019	0.851	0.920	358	3.9
HCOMP	0.095	0.016	358	357	0.016	0.293	1.063	0.045	0.174	0.062	0.128	358	3.9
HCOMPY	0.083	0.025	145	145	0.023	0.276	1.097	0.354	0.305	0.032	0.133	145	1.6
HINyec	0.067	0.014	358	357	0.013	0.250	1.058	0.041	0.209	0.039	0.095	358	3.9
HTEST	0.000	0.000	358	357	0.000	0.000	-NaN	-0.346	-NaN	0.000	0.000	358	3.9

na = Not applicable

**Table B.8 Sampling errors for Savaii sample, Samoa 2014**

WOMEN													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	1006	973	0.000	0.000	-NaN	-0.105	-NaN	0.000	0.000	1006	10.5
NOEDUC	0.036	0.006	1006	973	0.006	0.186	0.995	-0.001	0.163	0.024	0.047	1006	10.5
SECOND	0.964	0.006	1006	973	0.006	0.186	0.995	-0.001	0.006	0.953	0.976	1006	10.5
NEVMAR	0.315	0.014	1006	973	0.015	0.465	0.934	-0.014	0.043	0.287	0.342	1006	10.5
CURMAR	0.658	0.014	1006	973	0.015	0.475	0.941	-0.012	0.021	0.630	0.686	1006	10.5
PREGNANT	0.060	0.007	1006	973	0.008	0.238	0.922	-0.016	0.115	0.046	0.074	1006	10.5
EVBORN	2.359	0.064	1006	973	0.075	2.387	0.848	-0.030	0.027	2.231	2.487	1006	10.5
SURVIV	2.305	0.063	1006	973	0.073	2.320	0.856	-0.028	0.027	2.180	2.430	1006	10.5
EV40	4.313	0.133	257	248	0.157	2.516	0.851	-0.165	0.031	4.046	4.580	257	2.7
KMETHO	0.927	0.009	662	640	0.010	0.260	0.856	-0.045	0.009	0.910	0.944	662	6.9
KMODME	0.924	0.009	662	640	0.010	0.265	0.845	-0.048	0.009	0.907	0.941	662	6.9
EVUSE	0.578	0.020	662	640	0.019	0.494	1.031	0.011	0.034	0.539	0.618	662	6.9
CUSE	0.308	0.020	662	640	0.018	0.462	1.130	0.047	0.066	0.268	0.349	662	6.9
CUMODE	0.295	0.021	662	640	0.018	0.456	1.177	0.065	0.071	0.253	0.337	662	6.9
CUPILL	0.077	0.011	662	640	0.010	0.268	1.043	0.015	0.140	0.056	0.099	662	6.9
CUCOND	0.000	0.000	662	640	0.000	0.000	-NaN	-0.170	-NaN	0.000	0.000	662	6.9
CUINJ	0.163	0.016	662	640	0.014	0.370	1.095	0.034	0.097	0.131	0.194	662	6.9
CUFSTER	0.046	0.008	662	640	0.008	0.209	0.985	-0.005	0.176	0.030	0.061	662	6.9
PSOURC	0.979	0.010	193	187	0.010	0.142	0.965	-0.067	0.010	0.960	0.999	193	2.0
NOMORE	0.485	0.020	662	640	0.019	0.500	1.049	0.017	0.042	0.444	0.526	662	6.9
DELAY	0.122	0.013	662	640	0.013	0.327	0.989	-0.004	0.103	0.097	0.147	662	6.9
IDEAL	3.789	0.082	920	889	0.079	2.401	1.033	0.008	0.022	3.626	3.953	920	9.6
TETANU	0.159	0.019	456	441	0.017	0.366	1.100	0.056	0.118	0.122	0.197	1006	4.8
MEDELI	0.724	0.027	700	677	0.021	0.547	1.304	0.111	0.037	0.670	0.778	1006	7.3
DIAR2W	0.019	0.005	683	661	0.005	0.136	1.004	0.001	0.276	0.008	0.029	1006	7.1
ORSTRE	0.615	0.125	13	13	0.135	0.488	0.923	0.172	0.203	0.366	0.865	1006	0.1
MEDTRE	0.615	0.125	13	13	0.135	0.488	0.923	0.172	0.203	0.366	0.865	1006	0.1
HCARD	0.769	0.034	139	134	0.036	0.425	0.956	-0.193	0.045	0.700	0.838	1006	1.4
BCG	0.950	0.018	139	134	0.018	0.217	0.961	-0.172	0.019	0.914	0.985	1006	1.4
DPT	0.797	0.033	139	134	0.034	0.405	0.968	-0.139	0.042	0.731	0.864	1006	1.4
POLIO	0.790	0.031	139	134	0.035	0.410	0.901	-0.420	0.040	0.728	0.853	1006	1.4
MEASLE	0.928	0.021	139	134	0.022	0.259	0.976	-0.105	0.023	0.885	0.971	1006	1.4
FULLY	0.747	0.038	139	134	0.037	0.435	1.027	0.122	0.051	0.672	0.823	1006	1.4
HACCEPT	0.010	0.003	901	871	0.003	0.101	0.952	-0.011	0.312	0.004	0.017	901	9.4
HHEARD	0.896	0.010	1006	973	0.010	0.305	1.086	0.019	0.012	0.875	0.917	1006	10.5
HCONDOM	0.625	0.016	1006	973	0.015	0.484	1.077	0.017	0.026	0.593	0.658	1006	10.5
HLIMIT	0.799	0.013	1006	973	0.013	0.401	1.059	0.013	0.017	0.772	0.826	1006	10.5
HCOMP	0.021	0.005	1006	973	0.005	0.144	1.108	0.024	0.237	0.011	0.031	1006	10.5
HCOMPY	0.011	0.006	374	361	0.005	0.103	1.209	0.159	0.603	0.000	0.024	374	3.9
HINyec	0.081	0.009	1006	973	0.009	0.274	1.071	0.016	0.113	0.063	0.100	1006	10.5
HTEST	0.007	0.003	1006	973	0.003	0.083	0.967	-0.007	0.365	0.002	0.012	1006	10.5

MEN													
Code	R	SE	N-UNWE	N-WEIG	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	SAMP_BASE	B
URBAN	0.000	0.000	358	338	0.000	0.000	-NaN	-0.351	-NaN	0.000	0.000	358	3.8
NOEDUC	0.089	0.017	358	338	0.015	0.285	1.136	0.102	0.192	0.055	0.123	358	3.8
EDUC	0.911	0.017	358	338	0.015	0.285	1.136	0.102	0.019	0.877	0.945	358	3.8
NEVMAR	0.502	0.026	358	338	0.026	0.501	0.968	-0.022	0.051	0.451	0.554	358	3.8
CURMAR	0.481	0.026	358	338	0.026	0.500	0.979	-0.014	0.054	0.429	0.533	358	3.8
KMETHO	0.907	0.020	172	162	0.022	0.291	0.902	-0.219	0.022	0.867	0.947	172	1.8
EVUSE	0.465	0.039	172	162	0.038	0.500	1.027	0.065	0.084	0.387	0.544	172	1.8
NOMORE	0.243	0.034	172	162	0.033	0.430	1.043	0.103	0.141	0.175	0.312	172	1.8
DELAY	0.228	0.032	172	162	0.032	0.420	1.003	0.007	0.141	0.163	0.292	172	1.8
IDEAL	3.840	0.165	314	296	0.171	3.022	0.965	-0.029	0.043	3.511	4.169	314	3.4
HACCEPT	0.068	0.016	267	252	0.015	0.252	1.013	0.014	0.230	0.037	0.099	267	2.9
HCONDOM	0.515	0.023	358	338	0.026	0.500	0.856	-0.094	0.044	0.470	0.560	358	3.8
HLIMIT	0.693	0.025	358	338	0.024	0.462	1.004	0.003	0.035	0.644	0.742	358	3.8
HCOMP	0.008	0.005	358	338	0.005	0.091	0.989	-0.008	0.570	0.000	0.018	358	3.8
HCOMPY	0.007	0.007	137	129	0.007	0.085	0.978	-0.090	0.978	0.000	0.022	137	1.5
HINyec	0.111	0.020	358	338	0.017	0.315	1.173	0.132	0.175	0.072	0.151	358	3.8
HTEST	0.000	0.000	358	338	0.000	0.000	-NaN	-0.351	-NaN	0.000	0.000	358	3.8

na = Not applicable

Samoa	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-4 years)	7.087	1.481	0.209	4.124	10.049
2. Post-neonatal mortality (last 0-4 years)	7.039	1.478	0.210	4.085	9.995
3. Infant mortality (last 0-4 years)	14.122	2.142	0.152	9.837	18.406
4. Child mortality (last 0-4 years)	4.342	1.291	0.297	1.761	6.924
5. Under 5 mortality (last 0-4 years)	18.439	2.669	0.145	13.102	23.776

Place of residence	R	SE	SE/R	R-2SE	R+2SE
Urban	4.426	0.213	0.048	4.000	4.851
Rural	5.215	0.121	0.023	4.972	5.458
Region	R	SE	SE/R	R-2SE	R+2SE
Apia Urban Area	4.426	0.213	0.048	4.000	4.851
North West Upolu	4.861	0.184	0.038	4.493	5.229
Rest of Upolu	5.512	0.204	0.037	5.105	5.920
Savaii	5.424	0.227	0.042	4.970	5.879

Samoa	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	7.171	1.093	0.152	4.986	9.356
2. Post-neonatal mortality (last 0-9 years)	7.310	1.070	0.146	5.170	9.449
3. Infant mortality (last 0-9 years)	14.481	1.497	0.103	11.487	17.475
4. Child mortality (last 0-9 years)	5.481	1.122	0.205	3.236	7.725
5. Under 5 mortality (last 0-9 years)	19.882	1.998	0.101	15.886	23.879
Urban	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	3.861	1.895	0.491	0.072	7.650
2. Post-neonatal mortality (last 0-9 years)	2.943	1.668	0.567	-0.394	6.279
3. Infant mortality (last 0-9 years)	6.804	2.441	0.359	1.922	11.685
4. Child mortality (last 0-9 years)	6.136	2.457	0.400	1.221	11.050
5. Under 5 mortality (last 0-9 years)	12.897	3.577	0.277	5.744	20.051
Rural	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	7.955	1.273	0.160	5.410	10.501
2. Post-neonatal mortality (last 0-9 years)	8.339	1.258	0.151	5.822	10.856
3. Infant mortality (last 0-9 years)	16.294	1.749	0.107	12.796	19.791
4. Child mortality (last 0-9 years)	5.304	1.262	0.238	2.781	7.827
5. Under 5 mortality (last 0-9 years)	21.511	2.319	0.108	16.874	26.149
Apia Urban Area	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	3.861	1.895	0.491	0.072	7.650
2. Post-neonatal mortality (last 0-9 years)	2.943	1.668	0.567	-0.394	6.279
3. Infant mortality (last 0-9 years)	6.804	2.441	0.359	1.922	11.685
4. Child mortality (last 0-9 years)	6.136	2.457	0.400	1.221	11.050
5. Under 5 mortality (last 0-9 years)	12.897	3.577	0.277	5.744	20.051
North West Upolu	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	3.477	1.278	0.368	0.921	6.033
2. Post-neonatal mortality (last 0-9 years)	5.032	1.526	0.303	1.980	8.084
3. Infant mortality (last 0-9 years)	8.509	2.038	0.240	4.432	12.586
4. Child mortality (last 0-9 years)	6.555	2.004	0.306	2.547	10.563
5. Under 5 mortality (last 0-9 years)	15.008	3.161	0.211	8.686	21.331
Rest of Upolu	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	13.763	2.825	0.205	8.114	19.412
2. Post-neonatal mortality (last 0-9 years)	11.284	2.496	0.221	6.292	16.276
3. Infant mortality (last 0-9 years)	25.047	3.422	0.137	18.203	31.891
4. Child mortality (last 0-9 years)	5.909	2.704	0.458	0.502	11.317
5. Under 5 mortality (last 0-9 years)	30.808	4.535	0.147	21.738	39.879
Savaii	R	SE	SE/R	R-2SE	R+2SE
1. Neonatal mortality (last 0-9 years)	7.894	2.566	0.325	2.762	13.026
2. Post-neonatal mortality (last 0-9 years)	9.902	2.718	0.274	4.466	15.337
3. Infant mortality (last 0-9 years)	17.796	3.712	0.209	10.372	25.220
4. Child mortality (last 0-9 years)	2.605	1.474	0.566	-0.343	5.553
5. Under 5 mortality (last 0-9 years)	20.355	4.439	0.218	11.477	29.232

**Table C.1 Household age distribution**

Single-year age distribution of the de facto household population by sex (weighted), Samoa 2014

Age	Women		Men	
	Number	Percent	Number	Percent
0	356	3.0	346	2.7
1	356	3.0	384	3.0
2	375	3.1	419	3.2
3	288	2.4	402	3.1
4	315	2.6	340	2.6
5	304	2.5	333	2.6
6	304	2.5	361	2.8
7	287	2.4	305	2.4
8	317	2.6	338	2.6
9	266	2.2	274	2.1
10	286	2.4	330	2.6
11	245	2.0	270	2.1
12	268	2.2	265	2.0
13	245	2.0	279	2.2
14	310	2.6	344	2.7
15	233	1.9	258	2.0
16	223	1.9	250	1.9
17	257	2.1	265	2.1
18	241	2.0	292	2.3
19	222	1.8	245	1.9
20	200	1.7	229	1.8
21	165	1.4	219	1.7
22	196	1.6	234	1.8
23	158	1.3	179	1.4
24	203	1.7	207	1.6
25	179	1.5	192	1.5
26	176	1.5	181	1.4
27	153	1.3	161	1.2
28	152	1.3	154	1.2
29	164	1.4	166	1.3
30	133	1.1	173	1.3
31	119	1.0	142	1.1
32	144	1.2	152	1.2
33	125	1.0	122	0.9
34	141	1.2	160	1.2
35	133	1.1	113	0.9
36	115	1.0	126	1.0
37	110	0.9	134	1.0
38	120	1.0	116	0.9
39	122	1.0	130	1.0
40	128	1.1	173	1.3
41	125	1.0	117	0.9
42	140	1.2	129	1.0
43	114	0.9	138	1.1
44	119	1.0	126	1.0
45	101	0.8	125	1.0
46	114	0.9	115	0.9
47	93	0.8	151	1.2
48	113	0.9	124	1.0
49	87	0.7	109	0.8
50	185	1.5	118	0.9
51	112	0.9	93	0.7
52	138	1.1	112	0.9
53	111	0.9	88	0.7
54	111	0.9	97	0.7
55	102	0.8	143	1.1
56	80	0.7	106	0.8
57	79	0.7	96	0.7
58	93	0.8	96	0.7
59	86	0.7	91	0.7
60	74	0.6	96	0.7
61	54	0.4	64	0.5
62	77	0.6	73	0.6
63	46	0.4	59	0.5

64	70	0.6	70	0.5
65	59	0.5	42	0.3
66	52	0.4	50	0.4
67	47	0.4	45	0.4
68	49	0.4	44	0.3
69	52	0.4	50	0.4
70+	510	4.2	393	3.0
Don't know/missing	11	0.1	14	0.1
Total	12,036	100.0	12,939	100.0

<u>Table C.2.1 Age distribution of eligible and interviewed women</u>				
De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Samoa 2014				
Age group	Household population of women age 10-54	Interviewed women age 15-49		Percent of women
		Number	Percent	
10-14	1,354	na	na	na
15-19	1,176	1,061	22.1	90.2
20-24	922	834	17.4	90.5
25-29	824	730	15.2	88.6
30-34	662	593	12.3	89.6
25-39	600	547	11.4	91.2
40-44	626	576	12.0	92.0
45-49	507	463	9.6	91.4
50-54	657	na	na	na
15-49	5,317	4,806	100.0	90.4

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 schedule.  
na = Not applicable

<u>Table C.2.2 Age distribution of eligible and interviewed men</u>				
De facto household population of men aged 10-64, interviewed men aged 15-54 and percent of eligible men who were interviewed (weighted), Samoa 2014				
Age group	Household population of men age 10-64	Interviewed men age 15-54		Percentage of eligible men interviewed
		Number	Percent	
10-14	489	na	na	na
15-19	422	350	20.8	82.9
20-24	357	303	18.0	84.8
25-29	267	227	13.5	85.1
30-34	258	213	12.7	82.6
35-39	179	145	8.6	81.1
40-44	215	183	10.9	84.9
45-49	204	168	10.0	82.2
50-54	133	91	5.4	68.8
55-59	222	na	na	na
60-64	119	na	na	na
15-54	2,035	1,679	100.0	82.5

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



Subject	Percentage with missing information	
	Percentage with missing information	Number of cases
Month Only (births in last 15 years)	0.55	7,903
Month and Year (births in last 15 years)	0.03	7,903
Age at Death (deceased children born in the last 15 years)	1.51	137
Age/date at first union (ever married women) <sup>1</sup>	1.25	3,090
Age/date at first union (ever married men) <sup>1</sup>	2.84	844
Respondent's education (all women)	0.06	4,805
Respondent's education (all men)	0.06	1,669
Diarrhea in last 2 weeks (living children 0-59)	3.66	3,140
Height (living children 0-59 from Household Questionnaire)	13.56	3,563
Weight (living children 0-59 from Household Questionnaire)	13.42	3,563
Height or weight (living children 0-59 from Household Questionnaire)	13.62	3,563
Anemia (living children 6-59 months from Household Questionnaire)	13.90	3,212
Anemia (all women from the Household Questionnaire)	27.20	5,317

<sup>1</sup> Both year and age missing

Calendar year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar year ratio <sup>3</sup>		
	L	D	T	L	D	T	L	D	T	L	D	T
0	403	5	408	99.8	100.0	99.8	100.3	151.6	100.8	-	-	-
1	652	5	657	100.0	100.0	100.0	110.7	24.2	109.6	-	-	-
2	681	18	699	100.0	100.0	100.0	102.2	156.1	103.3	105.6	303.5	107.4
3	637	7	644	100.0	100.0	100.0	123.4	135.9	123.6	100.9	42.1	99.4
4	583	15	598	100.0	100.0	100.0	111.9	114.9	112.0	98.7	186.0	99.9
5	543	9	552	99.8	88.1	99.6	106.1	78.9	105.6	92.1	67.8	91.6
6	597	12	609	99.3	100.0	99.3	110.0	140.3	110.5	114.6	117.4	114.6
7	499	11	510	99.6	100.0	99.6	112.3	268.0	114.3	87.9	97.4	88.1
8	537	11	548	99.4	100.0	99.4	102.5	56.3	101.3	113.8	109.2	113.7
9	445	9	454	99.3	100.0	99.3	121.1	50.6	119.1	88.7	72.0	88.3
0-4	2,956	50	3,006	100.0	100.0	100.0	110.0	117.6	110.1	-	-	-
5-9	2,621	52	2,673	99.5	97.9	99.5	109.8	99.9	109.6	-	-	-
10-14	2,056	34	2,090	98.7	91.5	98.6	110.6	111.5	110.7	-	-	-
15-19	1,629	43	1,673	98.7	97.7	98.6	102.4	138.1	103.2	-	-	-
20+	1,382	44	1,426	99.6	100.0	99.6	110.5	145.9	111.5	-	-	-
All	10,645	223	10,867	99.4	97.8	99.3	108.9	120.8	109.2	-	-	-

NA = Not applicable  
<sup>1</sup> Both year and month of birth given  
<sup>2</sup> (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively  
<sup>3</sup> [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

<u>Table C.5 Reporting of age at death in days</u>					
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), Samoa 2014					
Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	7	4	1	2	14
1	4	5	2	1	12
2	1	1	0	0	2
3	3	1	0	1	5
6	1	2	0	0	3
7	2	2	1	0	5
9	0	1	0	0	1
11	0	1	0	0	1
14	1	0	0	3	4
16	0	0	0	1	1
21	0	1	0	0	1
23	2	0	0	0	2
Missing	1	0	0	0	1
Total 0-30	21	18	4	8	50
Percent early neonatal <sup>1</sup>	75.6	71.9	74.8	49.6	70.2
<sup>1</sup> 0-6 days / 0-30 days					

<u>Table C.6 Reporting of age at death in months</u>					
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, Samoa 2014					
Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 <sup>1</sup>	22	18	4	8	51
1	4	2	1	3	10
2	2	1	2	1	6
3	1	2	1	3	7
4	4	2	0	1	7
5	2	3	2	1	8
6	1	0	3	0	4
7	2	1	0	4	7
8	1	0	3	0	4
9	2	2	0	0	4
10	1	0	1	0	2
11	1	1	2	0	4
12	0	0	2	0	2
19	0	2	0	0	2
1 Year	5	4	0	5	14
Total 0-11	42	32	19	21	114
Percent neonatal <sup>2</sup>	51.3	56.5	20.5	36.9	44.9
<sup>1</sup> Includes deaths under one month reported in days					
<sup>2</sup> Under one month / under one year					

Table C.7. 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 (based on the NCHS/CDC/WHO International Reference Population) by background characteristics, Samoa 2014

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	
<b>Age in months</b>												
<6	0.4	1.1	1.3	0.0	2.2	5.1	0.1	0.4	0.7	29.8	1.3	275
6-8	0.0	0.7	1.1	1.4	5.6	3.6	(0.2)	0.0	2.8	15.5	0.6	144
9-11	2.1	4.8	0.6	0.7	4.1	3.4	(0.1)	2.1	5.5	10.3	0.2	146
12-17	1.8	5.4	(0.1)	0.6	6.7	3.0	(0.3)	2.1	7.6	4.6	(0.3)	330
18-23	2.2	3.7	0.1	0.0	5.7	7.1	0.1	0.0	4.9	7.9	0.1	265
24-35	1.1	3.0	0.3	0.3	2.7	2.0	(0.1)	0.6	3.3	4.3	(0.0)	632
36-47	2.4	5.3	0.1	0.2	1.9	3.0	0.2	0.9	3.8	3.7	0.1	574
48-59	0.4	2.7	0.1	0.4	1.4	4.5	0.3	0.2	1.6	5.3	0.2	507
<b>Sex</b>												
Male	1.6	4.2	0.3	0.3	2.7	3.7	0.1	0.7	3.6	8.6	0.2	1,510
Female	1.1	2.9	0.3	0.4	3.7	3.7	(0.0)	0.7	3.6	7.4	0.2	1,362
<b>Birth interval in months<sup>2</sup></b>												
First birth <sup>3</sup>	1.0	3.7	0.4	0.3	3.7	4.1	(0.0)	0.5	3.4	6.3	0.2	594
<24	1.7	3.8	0.1	0.3	3.3	2.8	(0.0)	0.8	4.3	6.6	0.1	754
24-47	1.2	2.9	0.3	0.3	3.9	3.0	(0.0)	0.9	2.9	7.6	0.1	766
48+	1.4	2.3	0.5	0.5	2.3	4.8	0.1	0.7	3.2	9.8	0.4	438
<b>Size at birth<sup>2</sup></b>												
Very small	8.2	16.4	(0.5)	0.0	4.1	0.0	(0.2)	4.1	8.2	4.1	(0.5)	24
Small	1.9	5.7	(0.1)	0.4	7.6	2.3	(0.4)	1.5	6.8	2.3	(0.4)	265
Average or larger	1.2	2.8	0.3	0.3	2.9	3.7	0.1	0.6	3.0	8.0	0.2	2,215
Missing	2.1	2.1	0.1	0.0	2.1	2.1	(0.2)	2.1	4.3	6.3	(0.2)	47
<b>Mother's interview status</b>												
Interviewed	1.3	3.3	0.3	0.3	3.4	3.5	0.0	0.7	3.5	7.4	0.2	2,552
Not interviewed but in household	2.7	6.4	0.4	0.9	0.9	6.4	0.3	0.9	7.3	11.8	0.4	110
Not interviewed, and not in the household <sup>4</sup>	0.9	5.7	0.4	0.5	1.9	4.8	0.2	0.5	3.3	13.7	0.4	211
<b>Mother's nutritional status<sup>5</sup></b>												
Thin (BMI < 18.5)	16.5	16.5	(0.9)	0.0	16.9	0.0	(0.9)	16.5	50.3	0.0	(1.4)	6
Normal (BMI 18.5-24.9)	0.7	3.9	0.1	0.7	3.6	1.1	(0.3)	1.1	3.6	3.6	(0.2)	278
Overweight/obese (BMI ≥ 25)	1.4	3.3	0.3	0.3	3.3	3.6	0.1	0.6	3.5	7.5	0.2	1,880
Missing	1.2	3.1	0.4	0.0	3.1	5.2	0.1	0.8	3.1	9.6	0.2	482
<b>Residence</b>												
Urban	1.3	3.3	0.6	0.0	1.5	5.5	0.3	0.4	1.1	13.2	0.6	450
Rural	1.4	3.6	0.2	0.4	3.5	3.4	(0.0)	0.8	4.1	7.0	0.1	2,423
<b>Region</b>												
Apia urban area	1.3	3.3	0.6	0.0	1.5	5.5	0.3	0.4	1.1	13.2	0.6	450
North west upolu	1.4	3.1	0.2	0.5	4.3	3.7	(0.1)	0.8	5.1	7.0	0.0	1,010

Rest of upolu	1.9	4.3	0.2	0.3	4.7	2.1	(0.2)	0.9	4.4	4.1	(0.0)	695
Savaii	0.8	3.6	0.3	0.4	1.2	4.0	0.2	0.7	2.2	9.9	0.3	718
<b>Mother's education</b>												
No education	10.0	20.2	(0.0)	0.0	0.0	10.0	0.4	10.0	20.2	20.0	0.3	10
Primary	2.5	6.2	(0.2)	1.2	5.0	1.3	(0.3)	1.2	8.8	2.5	(0.5)	80
Secondary	1.4	3.5	0.2	0.3	3.5	2.9	(0.0)	0.8	4.0	6.3	0.1	2,066
More than secondary	1.0	2.2	0.7	0.2	2.4	6.8	0.3	0.2	1.0	12.9	0.6	501
Missing	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.8	4
<b>Wealth quintile</b>												
Lowest	1.2	4.6	0.1	0.3	2.6	3.1	(0.1)	0.6	3.8	5.7	(0.0)	683
Second	0.8	2.4	0.2	0.8	5.1	1.8	(0.1)	1.5	3.6	4.2	(0.0)	614
Middle	2.4	4.5	0.2	0.3	3.6	2.7	(0.0)	0.9	5.8	7.1	0.0	637
Fourth	1.3	3.1	0.5	0.0	2.5	4.2	0.2	0.2	1.9	9.7	0.4	521
Highest	0.9	2.6	0.8	0.2	1.7	8.4	0.4	0.2	1.9	16.6	0.8	417
Total	1.4	3.5	0.3	0.3	3.2	3.7	0.0	0.7	3.6	8.0	0.2	2,872

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 Child Growth Standards.

Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

<sup>1</sup> Includes children who are below -3 standard deviations (SD) from the International Reference Population median

<sup>2</sup> Excludes children whose mothers were not interviewed

<sup>3</sup> First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

<sup>4</sup> Includes children whose mothers are deceased

<sup>5</sup> 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

<sup>6</sup> 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 2014 SAMOA

## DEMOGRAPHIC AND HEALTH SURVEY

## Appendix D

---

Ms Malaefono Taua Taaloga- Samoa Bureau of Statistics (SBS) Project Coordinator & Focal Point

### Fieldwork/Regional Supervisors

Iosefa Lualua	SBS
Kaisarina Moananu	SBS
Taiaopo Faumuina	SBS
Poinsettia Epati	SBS
Alefa Lefo	SBS
Talaimalo Simanu	SBS
Folavale Sooamalii	SBS
Lewis Sinclair	SBS
Laveaina Loia	SBS
Patricia Timua	Ministry of Women Community and Social Development (MWCSD)

### Administrative Support Staff

Sofia Silipa  
Nerisa Leilua  
Victoria Tuivaiti  
Talai Iosefo  
Semo Fepuleai  
Junior Ah Yen

### Data Collections Teams

#### Team 1

Shirley Fetu  
Asalemo Tuliatu  
Fiapule Ulale  
Litia Mah-Kwan  
Malua Epati  
Orita Pagaialii  
Paepaelei Aniseko  
Puøamu Tamara Faleone  
Ramota Pagamalie  
Ropati Tauiliili

#### Team 2

Lealofisa Aloema Epati  
Logonaitaga Taito  
Makerita Faalili  
Melania Selu  
Metala Mara Matafeo  
Opetaia Pasia  
Palepoi Tofilau  
Peter Tusao Togafau  
Poutoa Malo  
Salafai Tiaseuga  
Saulo Saulo  
Faafofola Unasa

**Team 3**

Atulia Lavea  
Elisapeta M Graig  
Faapea Tutaia  
Lua Sakaio Tuafale  
Miriamama Faren  
Murray Maselusi  
Ropati Siaki  
Tepora Aofia  
Uputaua Tupua

**Team 4**

Dora Neru  
Funafuti Inu  
Masaga Sofeni  
Matau Milosia Tuialii  
Palepa Lafaialii  
Sootaga Misa  
Tetapauline Faautu  
Muavae Faletoi  
Faatali Simanu

**Drivers**

Andrew Sofa  
Faaifo Ropeti  
Jay Tuivaiti  
Tiitii  
Tuaolo  
Junior Ah Yen

**Nutrition Teams - National Health Services (NHS)****Team 1**

Peseta Saeu Tualima  
Isabelle Tagiilima  
Saivaega Naumati  
Sofia Lolesio  
Valisi F Rikim  
Saleima Williams

**Team 2**

Tapai Taupau Tanielu  
Emele Filisi  
Siniua Toluono  
Tekave R Viliamu  
Julia Manuleleua  
Tuiuli Tagaloa

**Team 3**

Tofaga A Fiu  
Junior Aperaamo  
Frances Penaia  
Faailoga P Asora  
Simalua Kelehoma  
Perese Upulasi

**Team 4**

Malae Faamatala  
Susana Nimarota  
Ann Mauili  
Aleluia Tupai  
Fuatino Piula  
Maria Sanele  
Analosa Manuele

### **Data Processing Staff**

Leilua Taulealo-Manager  
Shammah Luteru-Supervisor  
Ruben Hume óData Processing Consultant Software Development manager

### **Data Editors**

Hetoa Ioane  
Rudolf Toleafoa  
Saunoa Poai  
Vincent Brebner

### **Data Entry Operators**

Lola Alofaifo  
Baby Tavita Pao  
Feagai Sa  
Taeu Ieremia  
James Silipa  
Sua Ah Sam  
Bethany Taulealo  
Miriama Oge  
Tualagi Tafesilafai  
Shammah Luteru

### **Contributors to the Final Report**

#### **Samoa Bureau of Statistics**

Malaefono Faafeu Taaloga  
Taiaopo Faumuina  
Junior Ah Yen  
Lewis Sinclair  
Kaisarina Moananu  
Talaimalo Simanu  
Poinsettia Epati

#### **Ministry of Health**

Dr Saine Vaai  
Rumanusina Maua  
Keneti Vaigafa  
Aaone Tanumafili  
Perive Lelevaga  
Gail Cummins  
Kay Paterika

#### **Samoa Family Health Association (SFHA)**

Momotu Ulisese Siaosi

#### **Ministry of Women Community and Social Development (MWCSO)**



Veei Enosa  
Patricia Timua

#### **UNFPA**

Luisa Engracia ó Technical Advisor-Report Writing

#### **UNICEF**

Seini Kurusiga  
Mitchell Loeb

	<p><b>DHS - DISABILITY SURVEY 2014</b> <b><u>HOUSEHOLD'S QUESTIONNAIRE</u></b></p>	<p>JULY 2014</p> 											
<p><i>Samoa Bureau of Statistics (SBS) working in partnership with Ministry of Health (MOH) and MWCSD</i></p>													
<b>IDENTIFICATION</b>													
<p>NAME OF REGION _____</p> <p>NAME OF DISTRICT _____</p> <p>NAME OF VILLAGE _____</p> <p>ENUMERATION AREA .....</p> <p>HOUSEHOLD NUMBER .....</p> <p>NAME OF HOUSEHOLD HEAD _____</p> <p>HOUSEHOLD SUB-SELECTED FOR MALE SURVEY?    1 YES    2 NO</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td></tr> </table>												
<b>INTERVIEWER VISITS</b>													
	1	2	3	FINAL VISIT									
DATE	_____	_____	_____	DAY									
INTERVIEWER'S NAME	_____	_____	_____	MONTH									
RESULT*	_____	_____	_____	YEAR									
NEXT VISIT: DATE	_____	_____		INT. NUMBER									
TIME	_____	_____		RESULT									
<p>*RESULT CODES:</p> <p>1 COMPLETED</p> <p>2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT</p> <p>3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME</p> <p>4 POSTPONED</p> <p>5 REFUSED</p> <p>6 DWELLING VACANT OR ADDRESS NOT A DWELLING</p> <p>7 DWELLING DESTROYED</p> <p>8 DWELLING NOT FOUND</p> <p>9 OTHER _____</p> <p style="text-align: center;">(SPECIFY)</p>				<p>TOTAL NUMBER OF VISITS</p> <p style="text-align: center;">□ □</p>									
<p>LANGUAGE OF INTERVIEW:    1 ENGLISH    2 SAMOAN    3 BOTH    4 OTHER _____</p> <p>LANGUAGE OF RESPONDENT:    1 ENGLISH    2 SAMOAN    3 BOTH    4 OTHER _____</p> <p>TRANSLATOR USED?    1 YES    2 NO</p>				<p>TOTAL PERSONS IN HOUSEHOLD</p> <p style="text-align: center;">□ □</p> <p>TOTAL ELIGIBLE WOMEN 15-49</p> <p style="text-align: center;">□ □</p> <p>TOTAL ELIGIBLE MEN 15-54</p> <p style="text-align: center;">□ □</p> <p>LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE</p> <p style="text-align: center;">□ □</p>									
SUPERVISOR	FIELD EDITOR		OFFICE EDITOR	KEYED BY									
NAME _____	NAME _____		NAME _____	NAME _____									
DATE _____ □ □	DATE _____ □ □		DATE _____ □ □	DATE _____ □ □									



**Introduction and Consent (Faamatalaga ma le Sainia o le Maliega)**

Hello. My name is \_\_\_\_\_ and I am working with the Samoa Bureau of Statistics. We are conducting a national survey about various health issues. We would very much appreciate your participation in this survey. The survey usually takes about 30 minutes to complete.

*Talofa. Malo le soifua laulelei. O lo'u igoa o \_\_\_\_\_. Ou te faigaluega i le Ofisa o Fuainumera Faamauiina. O le taimi nei o loo matou galulue faatasi ma le Matagaluega o le Soifua Maloloina e aoina faamatalaga e faatatau i le soifua maloloina o tagata Samoa i totonu o nuu ma alalafaga. O lenei galuega pe tusa ma se afa itula e faatino ai.*

As part of the survey we would first like to ask some questions about your household. All of the answers you give will be confidential. Participation in the survey is completely voluntary. If we should come to 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. However, we hope you will participate in the survey since your views are important.

*O le vaega muamua o le matou galuega e fia faamauiina ai faamatalaga o tagata o loo outou nonofo faatasi atoa ma auaunaga (pei o le suavai, eletise poo fesootaiga) o loo mauaina e le tou aiga. O faamatalaga uma o le a tuuina mai o le a malu puipuia i lalo o le Tulafono o Fuainumera Faamauiina 1971, o loo faalilolilo ai faamatalaga mo nao le afaigaluega latou te faaogaina. E i ai foi le saolotoga i le aiga e faatino ai lenei suesuega i se taimi talafeagai pe leai foi. Ae talosagaina le auai o lou auaiga ina ia faaleleia atili le auaunaga faa-soifua maloloina i le tatou atunuu e auala atu i faamatalaga tusitusia ma le aloaia.*

At this time, do you want to ask me anything about the survey?  
May I begin the interview now?

Ae tuu atu le avanoa mo se faafesili.  
Pe ete malie e amata lenei faatalanoaga?

Signature of interviewer (Saini le maliega): \_\_\_\_\_ Date (Aso): \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED ... 1      RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ... 2      END

HOUSEHOLD SCHEDULE											
LINE NO.	ALL HOUSEHOLD MEMBERS				AGE 15 YRS OR OLDER	ELIGIBILITY					
	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MARITAL STATUS	DISABILITY			INDIVIDUALS / NUTRITION for WOMEN		NUTRITION
	<p>Please give me the names of the persons who usually live in your household and starting with the head of the household.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A AND 2B TO BE SURE THAT THE LISTING IS COMPLETE.</p> <p>THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-23 FOR EACH PERSON.</p>	<p>What is the relationship of (NAME) to the head of the household?</p> <p>SEE CODES BELOW.</p> <p>INSERT CODE IN THE BOX.</p>	<p>Is (NAME) male or female?</p> <p>CIRCLE CORRECT SEX FOR EACH PERSON.</p>	<p>How old is (NAME) on his/her last birthday?</p> <p>WRITE THE AGE IN THE BOX.</p>	<p>What is (NAME'S) current marital status?</p> <p>WRITE THE CODE FOR THE CURRENT MARITAL STATUS IN THE BOX</p>	<p>CIRCLE LINE NUMBER OF ALL CHILDREN AGE 2-4 YRS</p>	<p>CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-17 YRS</p>	<p>CIRCLE LINE NUMBER OF ALL ADULT AGE 18 YRS AND OVER</p>	<p>CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49 YRS</p>	<p>CIRCLE LINE NUMBER OF ALL MEN AGE 15-54 YRS</p>	<p>CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5 YRS</p>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
01		<input type="text"/>	M F 1 2	<input type="text"/>	<input type="text"/>	01	01	01	01	01	01
02		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	02	02	02	02	02	02
03		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	03	03	03	03	03	03
04		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	04	04	04	04	04	04
05		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	05	05	05	05	05	05
06		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	06	06	06	06	06	06
07		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	07	07	07	07	07	07
08		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	08	08	08	08	08	08
09		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	09	09	09	09	09	09
10		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	10	10	10	10	10	10

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- 01 = HEAD
- 02 = WIFE/ HUSBAND/SPOUSE/PARTNER
- 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 = NIECE/NEPHEW BY BLOOD
- 10 = NIECE/NEPHEW BY MARRIAGE
- 11 = OTHER RELATIVE
- 12 = ADOPTED/FOSTER/STEPCHILD
- 13 = GRANDPARENT
- 14 = NOT RELATED
- 98 = DON'T KNOW

**CODES FOR Q 6: MARITAL STATUS**

- 1 = MARRIED OR LIVING TOGETHER
- 2 = DIVORCED/ SEPARATED
- 3 = WIDOWED
- 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER

HOUSEHOLD SCHEDULE										
AGE 0-10 YEARS	AGE 0-17 YEARS ONLY				AGE 3 YEARS OR OLDER	AGE 3-24 YEARS				
BIRTH REGISTRATION	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL	CURRENT/RECENT SCHOOL ATTENDANCE				
Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the Registration Office?  1 = YES, SEEN 2 = YES, NOT SEEN 3 = REGISTERED 4 = NEITHER 1-3 OR NEVER 8 = DON'T KNOW	Is (NAME)'s biological mother alive?  IF YES: What is her name?  RECORD MOTHER'S LINE NO.  IF NO, RECORD '00'.	Does (NAME)'s biological mother usually live in this household?  IF YES: What is his name?  RECORD FATHER'S LINE NO.  IF NO, RECORD '00'.	Is (NAME)'s biological father alive?  IF YES: What is his name?  RECORD FATHER'S LINE NO.  IF NO, RECORD '00'.	Does (NAME)'s biological father usually live in this household?  IF YES: What is his name?  RECORD FATHER'S LINE NO.  IF NO, RECORD '00'.	Has (NAME) ever attended school?  IF 'NO' GO TO NEXT PERSON AND IF LAST MEMBER SKIP TO Q.24	What is the highest level of school (NAME) has attended?  What is the highest year (NAME) completed at that level?  SEE CODES BELOW.  IF TERTIARY (UNIVERSITY) LEVEL, RECORD TOTAL NUMBER OF YEARS.	Did (NAME) attend school at any time during the 2014 school year?	During this school year, what level and year is (NAME) attending?	Did (NAME) attend school at any time during the previous school year, that is, 2013?  IF 'NO' GO TO NEXT PERSON AND IF LAST MEMBER SKIP TO Q.24	During that school year, what level and year did (NAME) attend?  SEE CODES BELOW.
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
<input type="checkbox"/>	Y N DK 1 2 8 ↓ GO TO 16	<input type="checkbox"/>	Y N DK 1 2 8 ↓ GO TO 18	<input type="checkbox"/>	Y N 1 2 ↓ GO TO 24	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>	Y N 1 2 ↓ GO TO 22	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>	Y N 1 2 ↓ GO TO 24	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>

**CODES FOR QS. 19, 21 & 23: EDUCATION**

**\* LEVEL 3 (TVET) AND 4 (TERTIARY/UNIVERSITY)**

CERTIFICATE	1
DIPLOMA	2
DEGREE	3
POST-GRAD	1
MASTER'S DEGREE	2
PHD	4

**TOTAL YEARS 13**

**(FAAOPOPO (ADD) LE AOFAIGA O TAUSAGA MO LEVELS TA'ITASI UA AUSIA)**

**LEVEL**

0 = PRE-SCHOOL (ECE)
1 = PRIMARY (YRS 1- 8)/ PRIMER 1-3/ STD 1-4/ FORMS 1-2
2 = SECONDARY (YRS 9-13)/ FORMS 3-6
* 3 = TVET (VOCATIONAL SCHOOL)
* 4 = TERTIARY (UNIVERSITY)
5 = SPECIAL NEEDS EDUCATION
8 - DON'T KNOW

**YEAR**

00 = LESS THAN 1 YEAR COMPLETED AT THAT LEVEL	
01 = YEAR 1/ PRIMER 1	01 = YEAR 9/ FORM 3
02 = YEAR 2 /PRIMER 2	02 = YEAR 10/ FORM 4
03 = YEAR 3/ PRIMER 3	03 = YEAR 11/ FORM 5
04 = YEAR 4/ STD 1-2	04 = YEAR 12/ UPPER 5
05 = YEAR 5/ STD 3	05 = YEAR 13/ FORM 6
06 = YEAR 6/ STD 4	06 = YEAR14/FORM 7
07 = YEAR 7/ FORM 1	98 = DON'T KNOW
08 = YEAR 8/ FORM 2	

HOUSEHOLD SCHEDULE											
LINE NO.	ALL HOUSEHOLD MEMBERS				AGE 15 YRS OR OLDER	ELIGIBILITY					
	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MARITAL STATUS	DISABILITY			INDIVIDUALS / NUTRITION for WOMEN		NUTRITION
	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 AND 2B TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-23 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.  INSERT CODE IN THE BOX.	Is (NAME) male or female?  CIRCLE CORRECT SEX FOR EACH PERSON.	How old is (NAME) on his/her last birthday?  WRITE THE AGE IN THE BOX.	What is (NAME'S) current marital status?  WRITE THE CODE FOR THE CURRENT MARITAL STATUS IN THE BOX.	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 2-4 YRS	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 5-17 YRS	CIRCLE LINE NUMBER OF ALL ADULT AGE 18 YRS AND OVER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49 YRS	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54 YRS	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5 YRS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
11		<input type="text"/>	M F 1 2	IN YEARS <input type="text"/>	<input type="text"/>	11	11	11	11	11	11
12		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	12	12	12	12	12	12
13		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	13	13	13	13	13	13
14		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	14	14	14	14	14	14
15		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	15	15	15	15	15	15
16		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	16	16	16	16	16	16
17		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	17	17	17	17	17	17
18		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	18	18	18	18	18	18
19		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	19	19	19	19	19	19
20		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	20	20	20	20	20	20

TICK HERE IF CONTINUATION SHEET IS 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

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- 01 = HEAD
- 02 = WIFE/ HUSBAND SPOUSE/PARTNER
- 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 = NIECE/NEPHEW BY BLOOD
- 10 = NIECE/NEPHEW BY MARRIAGE
- 11 = OTHER RELATIVE
- 12 = ADOPTED/FOSTER/STEPCHILD
- 13 = GRANDPARENT
- 14 = NOT RELATED
- 98 = DON'T KNOW

HOUSEHOLD SCHEDULE										
AGE 0-10 YEARS	AGE 0-17 YEARS ONLY				AGE 3 YEARS OR OLDER	AGE 3-24 YEARS				
BIRTH REGISTRATION	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL	CURRENT/RECENT SCHOOL ATTENDANCE				
Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the Registration Office?  1 = YES, SEEN 2 = YES, NOT SEEN 3 = REGISTERED 4 = NEITHER 1-3 OR NEVER 8 = DON'T KNOW	Is (NAME)'s biological mother alive?	Does (NAME)'s biological mother usually live in this household?	Is (NAME)'s biological father alive?	Does (NAME)'s biological father usually live in this household?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?  What is the highest year (NAME) completed at that level?  SEE CODES BELOW.  IF TERTIARY (UNIVERSITY) LEVEL, RECORD TOTAL NUMBER OF YEARS.	Did (NAME) attend school at any time during the 2014 school year?	During this school year, what level and year is (NAME) attending?	Did (NAME) attend school at any time during the previous school year, that is, 2013?	During that school year, what level and year did (NAME) attend?
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
<input type="checkbox"/>	Y N DK 1 2 8 ↓ GO TO 16	<input type="checkbox"/>	Y N DK 1 2 8 ↓ GO TO 18	<input type="checkbox"/>	Y N 1 2 ↓ GO TO 24	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>	Y N 1 2 ↓ GO TO 22	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>	Y N 1 2 ↓ GO TO 24	LEVEL YEAR <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	1 2 8 ↓ GO TO 16	<input type="checkbox"/>	1 2 8 ↓ GO TO 18	<input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 22	<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓ GO TO 24	<input type="checkbox"/> <input type="checkbox"/>

**CODES FOR Qs. 19, 21 & 23: EDUCATION**

**\* LEVEL 3 (TVET) AND 4 (TERTIARY/UNIVERSITY)**

CERTIFICATE	1
DIPLOMA	2
DEGREE	3
POST-GRAD	1
MASTER'S DEGREE	2
PHD	4

**TOTAL YEARS 13**

**(FAAOPOPO (ADD) LE AOAIFA O TAUSAGA  
MO LEVELS TA'ITASI UA AUSIA)**

**LEVEL**

0 = PRE-SCHOOL (ECE)
1 = PRIMARY (YRS 1- 8)/ PRIMER 1-3/ STD 1-4/ FORMS 1-2
2 = SECONDARY (YRS 9-13)/ FORMS 3-6
* 3 = TVET (VOCATIONAL SCHOOL)
* 4 = TERTIARY (UNIVERSITY)
5 = SPECIAL NEEDS EDUCATION
8 - DON'T KNOW

**YEAR**

00 = LESS THAN 1 YEAR COMPLETED AT THAT LEVEL	
01 = YEAR 1/ PRIMER 1	01 = YEAR 9/ FORM 3
02 = YEAR 2/ PRIMER 2	02 = YEAR 10/ FORM 4
03 = YEAR 3/ PRIMER 3	03 = YEAR 11/ FORM 5
04 = YEAR 4/ STD 1-2	04 = YEAR 12/ UPPER 5
05 = YEAR 5/ STD 3	05 = YEAR 13/ FORM 6
06 = YEAR 6/ STD 4	
07 = YEAR 7/ FORM 1	98 = DON'T KNOW
08 = YEAR 8/ FORM 2	

MODULE ON CHILD FUNCTIONING AND DISABILITY (2-4 YEARS)

CHECK COLUMN 7 IN THE HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 2-4 YEARS IN QUESTION 24. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).				
	QUESTIONS AND CHECKS	CHILD 1	CHILD 2	CHILD 3
24	LINE NUMBER FROM COLUMN 7 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER ○ ○ ... <input type="text"/> NAME _____ AGE ) ○ ○ ○ ..... <input type="text"/>	LINE NUMBER ○ ○ ... <input type="text"/> NAME _____ AGE ) ○ ○ ○ ..... <input type="text"/>	LINE NUMBER ○ ○ ... <input type="text"/> NAME _____ AGE ) ○ ○ ○ ..... <input type="text"/>
25	I would like to ask you some questions about difficulties your child may have in doing certain activities. Does (NAME) wear glasses or contact lenses?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 27) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 27) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 27) ←
26	When wearing his/her glasses, does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 28) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 28) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 28) ←
27	Does (NAME) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4
28	Does (NAME) use a hearing aid?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 30) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 30) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 30) ←
29	When using his/her hearing aid(s), does (name) have difficulty hearing noises like peoples' voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 31) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 31) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 31) ←
30	Does (NAME) have difficulty hearing noises like peoples' voice or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4
31	Does (name) use any equipment or receive assistance for walking?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 34) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 34) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 34) ←
32	When using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←
33	Without using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: some difficulty, a lot of difficulty or cannot do at all?	Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 (SKIP TO 35) ← Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←	Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 (SKIP TO 35) ← Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←	Some difficulty ○ ○ ○ .. 2 A lot of difficulty ○ ○ ○ . 3 (SKIP TO 35) ← Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 36) ←

34	Compared with children of the same age, does (NAME) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←
35	How much concern do you have about this difficulty?	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4
36	Does (name) have difficulty understanding you? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
37	Do you have difficulty understanding (name)? Would you say you have: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
38	Compared with children of the same age, does (name) have difficulty learning things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
39	Compared with children of the same age, does (name) have difficulty learning the names of common objects? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
40	Compared with children of the same age, does (name) have difficulty playing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
41	Compared with children of the same age, how much does (name) kick, bite or hit other children or adults? Would you say (name) kicks, bites or hits other children or adults: not at all, the same or less, more or a lot more?	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 4	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 4	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 4

42	GO BACK TO 24 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 43			
	QUESTIONS AND CHECKS	CHILD 4	CHILD 5	CHILD 6
24	LINE NUMBER FROM COLUMN 7 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER <input type="text"/> <input type="text"/> ... NAME _____ AGE <input type="text"/> <input type="text"/> <input type="text"/> .....	LINE NUMBER <input type="text"/> <input type="text"/> ... NAME _____ AGE <input type="text"/> <input type="text"/> <input type="text"/> .....	LINE NUMBER <input type="text"/> <input type="text"/> ... NAME _____ AGE <input type="text"/> <input type="text"/> <input type="text"/> .....
25	I would like to ask you some questions about difficulties your child may have in doing certain activities. Does (NAME) wear glasses or contact lenses?	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 27) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 27) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 27) ←
26	When wearing his/her glasses, does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 28) ←	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 28) ←	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 28) ←
27	Does (NAME) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4
28	Does (NAME) use a hearing aid?	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 30) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 30) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 30) ←
29	When using his/her hearing aid(s), does (name) have difficulty hearing noises like peoples voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 31) ←	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 31) ←	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 31) ←
30	Does (NAME) have difficulty hearing noises like peoples' voice or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4
31	Does (name) use any equipment or receive assistance for walking?	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 34) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 34) ←	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. 2 (SKIP TO 34) ←
32	When using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4	No difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4
33	Without using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: some difficulty, a lot of difficulty or cannot do at all?	Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 (SKIP TO 35) ← Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 36) ←	Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 (SKIP TO 35) ← Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 36) ←	Some difficulty <input type="checkbox"/> <input type="checkbox"/> .. <input type="checkbox"/> . 2 A lot of difficulty <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> . 3 (SKIP TO 35) ← Cannot do at all <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 4 (SKIP TO 36) ←



34	Compared with children of the same age, does (NAME) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←	No difficulty 0 0 0 0 1 (SKIP TO 36) ← Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 36) ←
35	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 i 4
36	Does (name) have difficulty understanding you? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
37	Do you have difficulty understanding (name)? Would you say you have: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
38	Compared with children of the same age, does (name) have difficulty learning things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
39	Compared with children of the same age, does (name) have difficulty learning the names of common objects? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
40	Compared with children of the same age, does (name) have difficulty playing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
41	Compared with children of the same age, how much does (name) kick, bite or hit other children or adults? Would you say (name) kicks, bites or hits other children or adults: not at all, the same or less, more or a lot more?	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 0 4	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 0 4	Not at all 0 0 0 0 0 0 . 1 The Same or less 0 0 0 i 2 More 0 0 0 0 0 0 0 0 3 A lot more 0 0 0 0 0 0 0 4
42	GO BACK TO 24 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 43			

**CHECK COLUMN 8 IN THE HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 5-17 YEARS IN QUESTION 43. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).**

	QUESTIONS AND CHECKS	CHILD 1	CHILD 2	CHILD 3
43	LINE NUMBER FROM COLUMN 8 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER ○ ○ ... <input type="text"/> <input type="text"/> NAME _____ AGE ○ ○ ○ ○ ..... <input type="text"/> <input type="text"/>	LINE NUMBER ○ ○ ... <input type="text"/> <input type="text"/> NAME _____ AGE ○ ○ ○ ○ ..... <input type="text"/> <input type="text"/>	LINE NUMBER ○ ○ ... <input type="text"/> <input type="text"/> NAME _____ AGE ○ ○ ○ ○ ..... <input type="text"/> <input type="text"/>
44	I would like to ask you some questions about difficulties your child may have in doing certain activities. Does (name) wear glasses or contact lenses?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 46) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 46) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 46) ←
45	When wearing his/her glasses, does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 47) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 47) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 47) ←
46	Does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4
47	Does (NAME) use a hearing aid?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 49) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 49) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 49) ←
48	When using his/her hearing aid(s), does (name) have difficulty hearing noises like peoplesvoices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 50) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 50) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 50) ←
49	Does (name) have difficulty hearing noises like peoplesq voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4
50	Does (name) use any equipment or receive assistance for walking?	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 53) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 53) ←	YES ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ 1 NO ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ .. 2 (SKIP TO 53) ←
51	When using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←	No difficulty ○ ○ ○ ○ ○ ○ 1 Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←
52	Without using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: some difficulty, a lot of difficulty or cannot do at all?	Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←	Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←	Some difficulty ○ ○ ○ ..○ . 2 A lot of difficulty ○ ○ ○ ○ . 3 Cannot do at all ○ ○ ○ ○ 4 (SKIP TO 54) ←

53	Compared with children of the same age, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
54	Does (name) have difficulty with self-care such as feeding or dressing him/herself? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←
55	What type of difficulty does (NAME) have with self-care?  (Choose all that apply)	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X
56	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4
57	When (name) speaks, does he/she have difficulty being understood by people inside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
58	When (name) speaks, does he/she have difficulty being understood by people outside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
59	Compared with children of the same age, does (name) have difficulty learning things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all??	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
60	Compared with children of the same age, does (name) have difficulty remembering things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←
61	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4

62	How often does (name) seem anxious, nervous or worried? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																				
63	How often does (name) seem sad or depressed? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																				
64	Compared with children of the same age, how much difficulty does (name) have controlling his/her behaviour? Would you say: none, the same or less, more or a lot more?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←																																				
65	Do you think that: ➡ His/her difficulty controlling his/her behaviour is NORMAL for children of the same age ➡ He/she needs help to overcome this difficulty? ➡ If not addressed, this difficulty will cause problems in the long term?	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in .....	1	2																																						
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in .....	1	2																																						
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in .....	1	2																																						
66	Does (name) have difficulty focusing on an activity that he/she enjoys doing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																				
67	Does (name) have difficulty accepting changes in his/her routine? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←																																				
68	How much concern do you have about this difficulty?	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ı 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ı 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ı 4																																				
69	Does (name) have difficulty making friends? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																				
70	GO BACK TO 43 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 71																																							

	QUESTIONS AND CHECKS	CHILD 4	CHILD 5	CHILD 6
43	LINE NUMBER FROM COLUMN 8 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>
44	I would like to ask you some questions about difficulties your child may have in doing certain activities. Does (name) wear glasses or contact lenses?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←
45	When wearing his/her glasses, does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←
46	Does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
47	Does (NAME) use a hearing aid?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←
48	When using his/her hearing aid(s), does (name) have difficulty hearing noises like peoples voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←
49	Does (name) have difficulty hearing noises like peoples voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
50	Does (name) use any equipment or receive assistance for walking?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←
51	When using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←
52	Without using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: some difficulty, a lot of difficulty or cannot do at all?	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←

53	Compared with children of the same age, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
54	Does (name) have difficulty with self-care such as feeding or dressing him/herself? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←
55	What type of difficulty does (NAME) have with self-care?  (Choose all that apply)	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X
56	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4
57	When (name) speaks, does he/she have difficulty being understood by people inside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
58	When (name) speaks, does he/she have difficulty being understood by people outside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
59	Compared with children of the same age, does (name) have difficulty learning things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all??	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
60	Compared with children of the same age, does (name) have difficulty remembering things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←
61	How much concern do you have about this difficulty?	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4

62	How often does (name) seem anxious, nervous or worried? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																				
63	How often does (name) seem sad or depressed? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																				
64	Compared with children of the same age, how much difficulty does (name) have controlling his/her behaviour? Would you say: none, the same or less, more or a lot more?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←																																				
65	Do you think that: ➡ His/her difficulty controlling his/her behaviour is NORMAL for children of the same age ➡ He/she needs help to overcome this difficulty? ➡ If not addressed, this difficulty will cause problems in the long term?	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in ..... the long term</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in ..... the long term	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in ..... the long term</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in ..... the long term	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Normal .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Need help .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Problems in ..... the long term</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Normal .....	1	2	Need help .....	1	2	Problems in ..... the long term	1	2
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in ..... the long term	1	2																																						
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in ..... the long term	1	2																																						
	YES	NO																																						
Normal .....	1	2																																						
Need help .....	1	2																																						
Problems in ..... the long term	1	2																																						
66	Does (name) have difficulty focusing on an activity that he/she enjoys doing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																				
67	Does (name) have difficulty accepting changes in his/her routine? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←																																				
68	How much concern do you have about this difficulty?	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4																																				
69	Does (name) have difficulty making friends? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																				
70	GO BACK TO 43 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 71																																							

	QUESTIONS AND CHECKS	CHILD 7	CHILD 8	CHILD 9
43	LINE NUMBER FROM COLUMN 8 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>
44	I would like to ask you some questions about difficulties your child may have in doing certain activities. Does (name) wear glasses or contact lenses?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 46) ←
45	When wearing his/her glasses, does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 47) ←
46	Does (name) have difficulty seeing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
47	Does (NAME) use a hearing aid?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 49) ←
48	When using his/her hearing aid(s), does (name) have difficulty hearing noises like peoplesqvoices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 50) ←
49	Does (name) have difficulty hearing noises like peoplesq voices or music? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
50	Does (name) use any equipment or receive assistance for walking?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 .. 2 (SKIP TO 53) ←
51	When using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←
52	Without using his/her equipment or assistance, does (name) have difficulty walking? Would you say (name) has: some difficulty, a lot of difficulty or cannot do at all?	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←	Some difficulty 0 0 .. 0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 54) ←



53	Compared with children of the same age, does (name) have difficulty walking? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
54	Does (name) have difficulty with self-care such as feeding or dressing him/herself? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 57) ←
55	What type of difficulty does (NAME) have with self-care?  (Choose all that apply)	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X	Willingness to eat ..... A Choice of clothing ..... B Needs repeated reminders..... C Physical ability to eat.... D Physical ability to dress ..... E Other ..... X
56	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4
57	When (name) speaks, does he/she have difficulty being understood by people inside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
58	When (name) speaks, does he/she have difficulty being understood by people outside of this household? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
59	Compared with children of the same age, does (name) have difficulty learning things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all??	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4
60	Compared with children of the same age, does (name) have difficulty remembering things? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←	No difficulty 0 0 0 0 1 Some difficulty 0 0 .5 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 62) ←
61	How much concern do you have about this difficulty?	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4	No concern at all 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 0 4

62	How often does (name) seem anxious, nervous or worried? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																													
63	How often does (name) seem sad or depressed? Would you say: daily, weekly, monthly, a few times a year or never?	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5	Daily ..... 1 Weekly ..... 2 Monthly ..... 3 A few time a year ..... 4 Never ..... 5																																													
64	Compared with children of the same age, how much difficulty does (name) have controlling his/her behaviour? Would you say: none, the same or less, more or a lot more?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 66) ←																																													
65	Do you think that: ➔ His/her difficulty controlling his/her behaviour is NORMAL for children of the same age ➔ He/she needs help to overcome this difficulty? ➔ If not addressed, this difficulty will cause problems in the long term?	<table border="0"> <tr><td></td><td><u>YES</u></td><td><u>NO</u></td></tr> <tr><td>Normal .....</td><td>1</td><td>2</td></tr> <tr><td>Need help .....</td><td>1</td><td>2</td></tr> <tr><td>Problems in .....</td><td>1</td><td>2</td></tr> <tr><td>the long term</td><td></td><td></td></tr> </table>		<u>YES</u>	<u>NO</u>	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2	the long term			<table border="0"> <tr><td></td><td><u>YES</u></td><td><u>NO</u></td></tr> <tr><td>Normal .....</td><td>1</td><td>2</td></tr> <tr><td>Need help .....</td><td>1</td><td>2</td></tr> <tr><td>Problems in .....</td><td>1</td><td>2</td></tr> <tr><td>the long term</td><td></td><td></td></tr> </table>		<u>YES</u>	<u>NO</u>	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2	the long term			<table border="0"> <tr><td></td><td><u>YES</u></td><td><u>NO</u></td></tr> <tr><td>Normal .....</td><td>1</td><td>2</td></tr> <tr><td>Need help .....</td><td>1</td><td>2</td></tr> <tr><td>Problems in .....</td><td>1</td><td>2</td></tr> <tr><td>the long term</td><td></td><td></td></tr> </table>		<u>YES</u>	<u>NO</u>	Normal .....	1	2	Need help .....	1	2	Problems in .....	1	2	the long term		
	<u>YES</u>	<u>NO</u>																																															
Normal .....	1	2																																															
Need help .....	1	2																																															
Problems in .....	1	2																																															
the long term																																																	
	<u>YES</u>	<u>NO</u>																																															
Normal .....	1	2																																															
Need help .....	1	2																																															
Problems in .....	1	2																																															
the long term																																																	
	<u>YES</u>	<u>NO</u>																																															
Normal .....	1	2																																															
Need help .....	1	2																																															
Problems in .....	1	2																																															
the long term																																																	
66	Does (name) have difficulty focusing on an activity that he/she enjoys doing? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																													
67	Does (name) have difficulty accepting changes in his/her routine? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 69) ←																																													
68	How much concern do you have about this difficulty?	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ĩ 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ĩ 4	No concern at all 0 0 0 .. 1 A little concern 0 0 0 .. 2 A lot of concern 0 0 0 . 3 Somewhere between a little and a lot 0 0 0 ĩ 4																																													
69	Does (name) have difficulty making friends? Would you say (name) has: no difficulty, some difficulty, a lot of difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .5 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4																																													
70	GO BACK TO 43 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 71																																																

MODULE ON ADULT FUNCTIONING AND DISABILITY 18 YEARS AND OVER

CHECK COLUMN 9 IN THE HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER, NAME AND AGE FOR ALL ELIGIBLE ADULT 18 YEARS AND OVER IN QUESTION 71. IF MORE THAN SIX ADULT, USE ADDITIONAL QUESTIONNAIRE(S).				
	QUESTIONS	ADULT 1	ADULT 2	ADULT 3
71	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>
72	Do you have difficulty seeing even if using glasses or contact lenses? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←
73	What was the main cause of having sight difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
74	Do you have difficulty hearing peoples voice, even if using a hearing aid? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←
75	What was the main cause of having hearing difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
76	Do you have difficulty walking or climbing steps? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←
77	What was the main cause of having walking difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
78	Do you have difficulty remembering or concentrating? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←
79	What was the main cause of having difficulty remembering things?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
80	Do you have difficulty (with self-care such as) washing all over or dressing? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←

81	What was the main cause of having difficulty dressing up or washing all over?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
82	Using your usual (customary) language, do you have difficulty communicating, for example understanding of being understood? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←
82A	What was the main cause of having difficulty to communicate?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
83	<b>GO BACK TO 71 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE ADULT (18+) GO TO 84</b>			
	QUESTIONS	ADULT 4	ADULT 5	ADULT 6
71	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>
72	Do you have difficulty seeing even if using glasses or contact lenses? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←
73	What was the main cause of having sight difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
74	Do you have difficulty hearing people's voice, even if using a hearing aid? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←
75	What was the main cause of having hearing difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
76	Do you have difficulty walking or climbing steps? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←
77	What was the main cause of having walking difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify

78	Do you have difficulty remembering or concentrating? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←
79	What was the main cause of having difficulty remembering things?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
80	Do you have difficulty (with self-care such as) washing all over or dressing? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←
81	What was the main cause of having difficulty dressing up or washing all over?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
82	Using your usual (customary) language, do you have difficulty communicating, for example understanding of being understood? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←
82A	What was the main cause of having difficulty to communicate?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
83	<b>GO BACK TO 71 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE ADULT (18+) GO TO 84</b>			
	QUESTIONS	ADULT 7	ADULT 8	ADULT 9
71	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2 AGE FROM COLUMN 5	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>	LINE NUMBER 0 0 ... <input type="text"/> NAME _____ AGE 0 0 0 0 ..... <input type="text"/>
72	Do you have difficulty seeing even if using glasses or contact lenses? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 74) ←
73	What was the main cause of having sight difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
74	Do you have difficulty hearing peoples voice, even if using a hearing aid? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 .0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 76) ←

75	What was the main cause of having hearing difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
76	Do you have difficulty walking or climbing steps? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 78) ←
77	What was the main cause of having walking difficulty?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
78	Do you have difficulty remembering or concentrating? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 80) ←
79	What was the main cause of having difficulty remembering things?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
80	Do you have difficulty (with self-care such as) washing all over or dressing? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 82) ←
81	What was the main cause of having difficulty dressing up or washing all over?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
82	Using your usual (customary) language, do you have difficulty communicating, for example understanding of being understood? Would you say, no difficulty, some difficulty, a lot difficulty or cannot do at all?	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←	No difficulty 0 0 0 0 0 1 Some difficulty 0 0 ..0 . 2 A lot of difficulty 0 0 0 . 3 Cannot do at all 0 0 0 0 4 (SKIP TO 83) ←
82A	What was the main cause of having difficulty to communicate?	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify	By birth 0 0 0 0 0 0 0 1 Injury 0 0 0 0 0 0 0 2 Disease 0 0 0 0 0 0 0 . 3 Other _____ 4 specify
83	<b>GO BACK TO 71 IN THE NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE ADULT (18+) GO TO 84</b>			



PERSONS WHO EVER HAVE HAD THE DISEASE				
		PERSON 1	PERSON 2	PERSON 3
88	LINE NUMBER AND NAME FROM COL. (1) AND (2).	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
89	What was/were (NAME)'s illness/illnesses?  What else?	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N
PERSONS WHO EVER HAVE HAD THE DISEASE				
		PERSON 4	PERSON 5	PERSON 6
88	LINE NUMBER AND NAME FROM COL. (1) AND (2).	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
89	What was/were (NAME)'s illness/illnesses?  What else?	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N
PERSONS WHO EVER HAVE HAD THE DISEASE				
		PERSON 7	PERSON 8	PERSON 9
88	LINE NUMBER AND NAME FROM COL. (1) AND (2).	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
89	What was/were (NAME)'s illness/illnesses?  What else?	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... M CANCER ..... N OTHER ..... O	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N



PERSONS WHO EVER HAVE HAD THE DISEASE				
		PERSON 10	PERSON 11	PERSON 12
88	LINE NUMBER AND NAME FROM COL. (1) AND (2).	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
89	What was/were (NAME)'s illness/illnesses?  What else?	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N	DENGUE FEVER ..... A TYPHOID ..... B FILIRIASIS ..... C MEASLES ..... D RUBELLA ..... E LEPROSY ..... F MENINGOCOCCAL ..... G DIABETES ..... H HYPERTENSION ..... I CARDIOVASCULAR ... J RHEUMATIC ..... K CEREBRAL PALSY ..... L CANCER ..... M OTHER ..... N

**HEALTH CARE WASTE**

90	<p>Now I would like to ask you about any medical/surgical treatment that you or any member of your household may have had in the last 3 months.</p> <p>Has any member of your household had any medical/surgical treatment that requires dressing procedures in the last 3 months?</p>	<p>YES 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1                  NO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2</p>	→ 101	
<p>Now please give me the name of all the household members who have had any surgical treatment done in the last 3 months</p> <p>ENTER THE LINE NUMBER AND NAME OF EACH PERSON WHO HAD ANY SURGICAL TREATMENT                  ENTER THE LINE NUMBER IN ASCENDING ORDER.                  (IF THERE ARE MORE THAN 12 PERSONS, USE ADDITIONAL QUESTIONNAIRE).</p>				
	QUESTIONS	PERSON 1	PERSON 2	PERSON 3
91	LINE NUMBER FROM COLUMN 1 NAME FROM COLUMN 2	LINE NUMBER 0 0 ... <input type="text"/> NAME _____	LINE NUMBER 0 0 ... <input type="text"/> NAME _____	LINE NUMBER 0 0 ... <input type="text"/> NAME _____
92	Were there any of these medical treatments done in the last 3 months were done at home?	YES 0 0 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)	YES 0 0 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)	YES 0 0 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)
93	Who was responsible with the treatment procedures?	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4 Other, _____ 6 specify	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4 Other, _____ 6 specify	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4 Other, _____ 6 specify
94	What type of health care waste generated from the treatment done at your home?	Used needles..... A Used syringes..... B Used dressings..... C Pharmaceutical drugs..... D Other _____ X specify	Used needles..... A Used syringes..... B Used dressings..... C Pharmaceutical drugs..... D Other _____ X specify	Used needles..... A Used syringes..... B Used dressings..... C Pharmaceutical drugs..... D Other _____ X specify
95	What type of container used for Health Care Waste Containment?	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D Other, _____ X specify	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D Other, _____ X specify	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D Other, _____ X specify
96	Who was responsible with collection and transportation of Health Care Waste produced at home?	Household Member..... 1 Community Nurse.....0 2 MNRE Waste Collector..... 3 Other, _____ 6 specify (SKIP TO Q98)	Household Member..... 1 Community Nurse.....0 2 MNRE Waste Collector..... 3 Other, _____ 6 specify (SKIP TO Q98)	Household Member..... 1 Community Nurse.....0 2 MNRE Waste Collector..... 3 Other, _____ 6 specify (SKIP TO Q98)
97	How do you dispose these Health Care Waste generated after treatment procedures?	Burn 0 0 0 0 0 0 0 0 0 0 1 Burial..... 2 Other, _____ 6	Burn 0 0 0 0 0 0 0 0 0 0 1 Burial..... 2 Other, _____ 6	Burn 0 0 0 0 0 0 0 0 0 0 1 Burial..... 2 Other, _____ 6
98	How often your community nurse conduct home visit to your family?	Daily 0 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 0 0 3 Other, _____ 6	Daily 0 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 0 0 3 Other, _____ 6	Daily 0 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 0 0 3 Other, _____ 6

	QUESTIONS	PERSON 4	PERSON 5	PERSON 6
91	LINE NUMBER FROM COLUMN 1 NAME FROM COLUMN 2	LINE NUMBER 0 0 ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER 0 0 ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER 0 0 ... <input type="text"/> <input type="text"/> NAME _____
92	Were there any of these medical treatments done in the last 3 months were done at home?	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)	YES 0 0 0 0 0 0 0 0 1 NO 0 0 0 0 0 0 0 0 2 (GO TO 91 IN THE NEXT COLUMN, IF NO MORE MEMBER, THEN SKIP TO Q101)
93	Who was responsible with the treatment procedures?	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4  Other, _____ 6 specify	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4  Other, _____ 6 specify	Doctor 0 0 0 0 0 0 0 0 ... 1 Nurse..0 0 0 0 0 0 0 0 . 2 Mother 0 0 0 0 0 0 0 0 . 3 Other members of the household 0 0 0 0 . 4  Other, _____ 6 specify
94	What type of health care waste generated from the treatment done at your home?	Used needles..... A Used syringes.....B Used dressings.....C Pharmaceutical drugs.....D  Other _____ X specify	Used needles..... A Used syringes.....B Used dressings.....C Pharmaceutical drugs.....D  Other _____ X specify	Used needles..... A Used syringes.....B Used dressings.....C Pharmaceutical drugs.....D  Other _____ X specify
95	What type of container used for Health Care Waste Containment?	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D  Other, _____ X specify	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D  Other, _____ X specify	Sharps container ..0 0 0 0 A Rubbish Bin 0 0 0 0 0 0 0 B Boxes 0 0 0 0 0 0 0 0 . C Bottles 0 0 0 0 0 0 0 0 D  Other, _____ X specify
96	Who was responsible with collection and transportation of Health Care Waste produced at home?	Household Member..... 1 Community Nurse.....0 . 2 MNRE Waste Collector..... 3  Other, _____ 6 specify (SKIP TO Q98)	Household Member..... 1 Community Nurse.....0 . 2 MNRE Waste Collector..... 3  Other, _____ 6 specify (SKIP TO Q98)	Household Member..... 1 Community Nurse.....0 . 2 MNRE Waste Collector..... 3  Other, _____ 6 specify (SKIP TO Q98)
97	How do you dispose these Health Care Waste generated after treatment procedures?	Burn 0 0 0 0 0 0 0 0 0 1 Burial..... 2  Other, _____ 6 specify	Burn 0 0 0 0 0 0 0 0 0 1 Burial..... 2  Other, _____ 6 specify	Burn 0 0 0 0 0 0 0 0 0 1 Burial..... 2  Other, _____ 6 specify
98	How often your community nurse conduct home visit to your family?	Daily 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 3  Other, _____ 6	Daily 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 3  Other, _____ 6	Daily 0 0 0 0 0 0 0 0 0 1 Weekly 0 0 0 0 0 0 0 0 2 Monthly 0 0 0 0 0 0 0 0 3  Other, _____ 6

<b>HOUSEHOLD CHARACTERISTICS</b>			
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the <b>main</b> 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 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) ..... 61 BOTTLED WATER ..... 71 OTHER _____ 96 (SPECIFY)	→ 106 → 103 → 106 → 103 → 103
102	What is the <b>main</b> source of water used by your household for other purposes such as cooking and handwashing?	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 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) ..... 61 BOTTLED WATER ..... 71 OTHER _____ 96 (SPECIFY)	→ 106 → 106
103	Where is that water source located?	IN OWN DWELLING ..... 1 IN OWN YARD/PLOT ..... 2 ELSEWHERE ..... 3	→ 106
104	How long does it take to go there, get water, and come back?	MINUTES ..... <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ..... 998	
105	Who usually goes to this source to fetch the water for your household?	ADULT WOMAN (15+) ..... 1 ADULT MAN (15+) ..... 2 FEMALE CHILD UNDER 15 YEARS OLD ..... 3 MALE CHILD UNDER 15 YEARS OLD ..... 4 OTHER _____ 6 (SPECIFY)	
106	Do you do anything to the water to make it safer to drink?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 108

107	<p>What do you usually do to make the water safer to drink?</p> <p>Anything else?</p> <p>RECORD ALL MENTIONED.</p>	<p>BOIL ..... A</p> <p>ADD BLEACH/CHLORINE ..... B</p> <p>STRAIN THROUGH A CLOTH ..... C</p> <p>USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) ..... D</p> <p>SOLAR DISINFECTION ..... E</p> <p>LET IT STAND AND SETTLE ..... F</p> <p>OTHER _____ X (SPECIFY)</p> <p>DONT KNOW ..... Z</p>	
108	<p>What type of waste water disposal does your household have?</p>	<p>PROTECTED WATER DISPOSAL ... 1</p> <p>UNPROTECTED WATER DISPOSAL ... 2</p> <p>NO WATER DISPOSAL ..... 3</p>	
109	<p>What kind of toilet facility do members of your household usually use?</p>	<p>FLUSH OR POUR FLUSH TOILET</p> <p>FLUSH TO SEPTIC TANK ..... 11</p> <p>FLUSH TO PIT LATRINE ..... 12</p> <p>FLUSH TO SOMEWHERE ELSE ... 13</p> <p>FLUSH, DON'T KNOW WHERE ... 14</p> <p>PIT LATRINE</p> <p>VENTILATED IMPROVED</p> <p>PIT LATRINE ..... 21</p> <p>PIT LATRINE WITH SLAB ..... 22</p> <p>PIT LATRINE WITHOUT SLAB/ OPEN PIT ..... 23</p> <p>NO FACILITY/BUSH/BEACH ..... 31</p> <p>OTHER _____ 96 (SPECIFY)</p>	→ 112
110	<p>Do you share this toilet facility with other households?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 112
111	<p>How many households use this toilet facility?</p>	<p>NO. OF HOUSEHOLDS 0 <input type="text" value="0"/> <input type="text"/></p> <p>IF LESS THAN 10</p> <p>10 OR MORE HOUSEHOLDS ..... 95</p> <p>DONT KNOW ..... 98</p>	

112	<p>Does your household have:</p> <p>Electricity?</p> <p>A radio?</p> <p>A television?</p> <p>A mobile telephone?</p> <p>A landline telephone?</p> <p>A refrigerator?</p> <p>A deep freezer?</p> <p>A gas stove</p> <p>A kerosene stove?</p> <p>A mirowave oven?</p> <p>An electric jug or kettle?</p> <p>A rice cooker?</p> <p>A blender?</p> <p>A sewing machine?</p> <p>A CD/cassette player?</p> <p>A video or DVD player?</p> <p>An electric water pump?</p> <p>A washing machine?</p> <p>A desktop or laptop computer?</p> <p>An electric fan?</p> <p>An air conditioner?</p> <p>A bed?</p> <p>A table?</p> <p>A chair?</p> <p>A sofa?</p> <p>A food safe?</p> <p>A cupboard?</p> <p>A clock or wall clock?</p> <p>A generator?</p> <p>A solar power?</p> <p>An Iron</p> <p>Mosquito net</p>	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a. ELECTRICITY .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>b. RADIO .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>c. TELEVISION .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>d. MOBILE TELEPHONE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>e. LANDLINE TELEPHONE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>f. REFRIGERATOR .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>g. DEEP FREEZER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>h. GAS STOVE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>i. KEROSENE STOVE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>j. MICROWAVE OVEN .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>k. ELECTRIC JUG/KETTLE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>l. RICE COOKER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>m. BLENDER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>n. SEWING MACHINE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>o. CD/CASSETTE PLAYER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>b. VIDEO OR DVD PLAYER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>q. ELECTRIC WATER PUMP .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>r. WASHING MACHINE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>s. DESK/LAP TOP .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>t. ELECTRIC FAN .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>u. AIR CONDITIONER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>v. BED .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>w. TABLE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>x. CHAIR .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>y. SOFA .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>z. FOOD SAFE .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>aa. CUPBOARD .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>bb. CLOCK OR WALL CLOCK .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>cc. GENERATOR .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>dd. SOLAR POWER .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>ee. IRON .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>ff. MOSQUITO NET .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a. ELECTRICITY .....	1	2	b. RADIO .....	1	2	c. TELEVISION .....	1	2	d. MOBILE TELEPHONE .....	1	2	e. LANDLINE TELEPHONE .....	1	2	f. REFRIGERATOR .....	1	2	g. DEEP FREEZER .....	1	2	h. GAS STOVE .....	1	2	i. KEROSENE STOVE .....	1	2	j. MICROWAVE OVEN .....	1	2	k. ELECTRIC JUG/KETTLE .....	1	2	l. RICE COOKER .....	1	2	m. BLENDER .....	1	2	n. SEWING MACHINE .....	1	2	o. CD/CASSETTE PLAYER .....	1	2	b. VIDEO OR DVD PLAYER .....	1	2	q. ELECTRIC WATER PUMP .....	1	2	r. WASHING MACHINE .....	1	2	s. DESK/LAP TOP .....	1	2	t. ELECTRIC FAN .....	1	2	u. AIR CONDITIONER .....	1	2	v. BED .....	1	2	w. TABLE .....	1	2	x. CHAIR .....	1	2	y. SOFA .....	1	2	z. FOOD SAFE .....	1	2	aa. CUPBOARD .....	1	2	bb. CLOCK OR WALL CLOCK .....	1	2	cc. GENERATOR .....	1	2	dd. SOLAR POWER .....	1	2	ee. IRON .....	1	2	ff. MOSQUITO NET .....	1	2	
	YES	NO																																																																																																				
a. ELECTRICITY .....	1	2																																																																																																				
b. RADIO .....	1	2																																																																																																				
c. TELEVISION .....	1	2																																																																																																				
d. MOBILE TELEPHONE .....	1	2																																																																																																				
e. LANDLINE TELEPHONE .....	1	2																																																																																																				
f. REFRIGERATOR .....	1	2																																																																																																				
g. DEEP FREEZER .....	1	2																																																																																																				
h. GAS STOVE .....	1	2																																																																																																				
i. KEROSENE STOVE .....	1	2																																																																																																				
j. MICROWAVE OVEN .....	1	2																																																																																																				
k. ELECTRIC JUG/KETTLE .....	1	2																																																																																																				
l. RICE COOKER .....	1	2																																																																																																				
m. BLENDER .....	1	2																																																																																																				
n. SEWING MACHINE .....	1	2																																																																																																				
o. CD/CASSETTE PLAYER .....	1	2																																																																																																				
b. VIDEO OR DVD PLAYER .....	1	2																																																																																																				
q. ELECTRIC WATER PUMP .....	1	2																																																																																																				
r. WASHING MACHINE .....	1	2																																																																																																				
s. DESK/LAP TOP .....	1	2																																																																																																				
t. ELECTRIC FAN .....	1	2																																																																																																				
u. AIR CONDITIONER .....	1	2																																																																																																				
v. BED .....	1	2																																																																																																				
w. TABLE .....	1	2																																																																																																				
x. CHAIR .....	1	2																																																																																																				
y. SOFA .....	1	2																																																																																																				
z. FOOD SAFE .....	1	2																																																																																																				
aa. CUPBOARD .....	1	2																																																																																																				
bb. CLOCK OR WALL CLOCK .....	1	2																																																																																																				
cc. GENERATOR .....	1	2																																																																																																				
dd. SOLAR POWER .....	1	2																																																																																																				
ee. IRON .....	1	2																																																																																																				
ff. MOSQUITO NET .....	1	2																																																																																																				
113	<p>What type of fuel does your household mainly use for cooking?</p>	<table border="0"> <tbody> <tr> <td>ELECTRICITY .....</td> <td>01</td> <td rowspan="5">} → 116</td> </tr> <tr> <td>LIQUEFIED PETROLEUM GAS .....</td> <td>02</td> </tr> <tr> <td>KEROSENE .....</td> <td>03</td> </tr> <tr> <td>WOOD .....</td> <td>04</td> </tr> <tr> <td>COCONUT PARTS .....</td> <td>05</td> </tr> <tr> <td>NO FOOD COOKED IN HOUSEHOLD .....</td> <td>95</td> <td>→ 119</td> </tr> <tr> <td>OTHER _____</td> <td>96</td> <td></td> </tr> <tr> <td></td> <td>(SPECIFY)</td> <td></td> </tr> </tbody> </table>	ELECTRICITY .....	01	} → 116	LIQUEFIED PETROLEUM GAS .....	02	KEROSENE .....	03	WOOD .....	04	COCONUT PARTS .....	05	NO FOOD COOKED IN HOUSEHOLD .....	95	→ 119	OTHER _____	96			(SPECIFY)																																																																																	
ELECTRICITY .....	01	} → 116																																																																																																				
LIQUEFIED PETROLEUM GAS .....	02																																																																																																					
KEROSENE .....	03																																																																																																					
WOOD .....	04																																																																																																					
COCONUT PARTS .....	05																																																																																																					
NO FOOD COOKED IN HOUSEHOLD .....	95	→ 119																																																																																																				
OTHER _____	96																																																																																																					
	(SPECIFY)																																																																																																					
114	<p>In this household, is food cooked on an open fire, an open stove or a closed stove?</p> <p>PROBE FOR TYPE.</p>	<table border="0"> <tbody> <tr> <td>OPEN FIRE .....</td> <td>1</td> <td rowspan="4">} → 116</td> </tr> <tr> <td>OPEN STOVE .....</td> <td>2</td> </tr> <tr> <td>CLOSED STOVE WITH CHIMNEY .....</td> <td>3</td> </tr> <tr> <td>OTHER _____</td> <td>6</td> </tr> <tr> <td></td> <td>(SPECIFY)</td> <td></td> </tr> </tbody> </table>	OPEN FIRE .....	1	} → 116	OPEN STOVE .....	2	CLOSED STOVE WITH CHIMNEY .....	3	OTHER _____	6		(SPECIFY)																																																																																									
OPEN FIRE .....	1	} → 116																																																																																																				
OPEN STOVE .....	2																																																																																																					
CLOSED STOVE WITH CHIMNEY .....	3																																																																																																					
OTHER _____	6																																																																																																					
	(SPECIFY)																																																																																																					
115	<p>Does this (fire/stove) have a chimney, a hood, or neither of these?</p>	<table border="0"> <tbody> <tr> <td>CHIMNEY .....</td> <td>1</td> </tr> <tr> <td>HOOD .....</td> <td>2</td> </tr> <tr> <td>NEITHER .....</td> <td>3</td> </tr> </tbody> </table>	CHIMNEY .....	1	HOOD .....	2	NEITHER .....	3																																																																																														
CHIMNEY .....	1																																																																																																					
HOOD .....	2																																																																																																					
NEITHER .....	3																																																																																																					

116	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE ..... 1 IN A SEPARATE BUILDING (UMUKUKA) ... 2 OUTDOORS ..... 3 OTHER _____ 6 (SPECIFY)	→ 118 → 119
117	Do you have a separate room which is used as a kitchen?	YES ..... 1 NO ..... 2	→ 119
118	Is your outside kitchen (umukuka) surrounded by a screen wire?	YES ..... 1 NO ..... 2	
119	WHAT TYPE OF HOUSE IS THE <b>MAIN</b> HOUSE	Open Samoan Fale 0 0 0 0 0 0 0 0 0 0 0 1 Open Samoan Fale with Extension 0 0 0 0 0 0 . 2 Closed Samoan Fale 0 0 0 0 0 0 0 0 0 0 0 3 Closed Samoan Fale with Extension 0 0 0 0 0 . 4 Open European House (euro) 0 0 0 0 0 0 0 0 5 Open Euro with Extension 0 0 0 0 0 0 0 0 0 . 6 Closed Euro 0 0 0 0 0 0 0 0 0 0 0 0 7 Closed Euro with Extension 0 0 0 0 0 0 0 0 0 8 2+ storey European House 0 0 0 0 0 0 0 0 0 9 2+ storey Samoan fale 0 0 0 0 0 0 0 0 0 0 10 Faleoo (like beach fale) 0 0 0 0 0 0 0 0 0 0 11 Incomplete small Euro 0 0 0 0 0 0 0 0 0 0 12	
120	Is your MAIN house surrounded by a screen wire?	YES ..... 1 NO ..... 2	
121	<b>MAIN</b> MATERIAL OF THE FLOOR.  RECORD OBSERVATION.	NATURAL FLOOR GRAVEL/SAND ..... 11 RUDIMENTARY FLOOR WOOD PLANKS ..... 21 COCONUT MIDRIBS ..... 22 FINISHED FLOOR PARQUET OR POLISHED WOOD ..... 31 VINYL OR ASPHALT STRIPS ..... 32 CERAMIC TILES ..... 33 CEMENT ..... 34 CARPET ..... 35 OTHER _____ 96 (SPECIFY)	
122	<b>MAIN</b> MATERIAL OF THE ROOF.  RECORD OBSERVATION.	NATURAL ROOFING NO ROOF ..... 11 LOCAL THATCH ..... 12 RUDIMENTARY ROOFING WOOD PLANKS ..... 21 FINISHED ROOFING METAL ..... 31 OTHER _____ 96 (SPECIFY)	
123	<b>MAIN</b> MATERIAL OF THE EXTERIOR WALLS.  RECORD OBSERVATION.	NATURAL WALLS NO WALLS ..... 11 COCONUT MIDRIBS ..... 12 RUDIMENTARY WALLS PLYWOOD ..... 21 CARDBOARD ..... 22 REUSED WOOD ..... 23 FINISHED WALLS CEMENT ..... 31 STONE WITH LIME/CEMENT ..... 32 CEMENT BLOCKS ..... 33 WOOD PLANKS/SHINGLES ..... 34 OTHER _____ 96 (SPECIFY)	

124	How many rooms in this household are used for sleeping?	ROOMS .....	<input type="text"/>	<input type="text"/>	
125	Does any member of this household own this house?	YES .....	1		
		NO .....	2		
126	Does any member of this household own any (other) house?	YES .....	1		
		NO .....	2		
127	Does any member of this household own:		YES	NO	
	A watch?	a. WATCH .....	1	2	
	A bicycle?	b. BICYCLE .....	1	2	
	A motorcycle or motor scooter?	c. MOTORCYCLE/SCOOTER ..	1	2	
	A car or truck?	d. CAR/TRUCK .....	1	2	
	A hand cart?	e. HAND CART .....	1	2	
	A boat?	f. BOAT .....	1	2	
	An Outboard motor?	g. MOTOR .....	1	2	
	A canoe?	h. CANOE .....	1	2	
	A fishing gear?	i. FISHING GEAR .....	1	2	
128	Does any member of this household own any:		YES	NO	
	a: residential land?	RESIDENTIAL LAND .....	1	2	
	b: agricultural land?	AGRICULTURAL LAND .....	1	2	
	c. commercial land?	COMMERCIAL LAND .....	1	2	
129	Does your household own a vegetable Garden? Standard size of a vegetable garden = 7m X 7m	YES .....	1		
		NO .....	2		
130	Does this household own any livestock or poultry or other animals?	YES .....	1		→ 134
		NO .....	2		
131	How many of the following animals does this household currently own?				
	PIGS?	a. PIGS .....	<input type="text"/>	<input type="text"/>	
	DUCKS?	b. DUCKS .....	<input type="text"/>	<input type="text"/>	
	CHICKENS?	c. CHICKENS .....	<input type="text"/>	<input type="text"/>	
	DOGS?	d. DOGS .....	<input type="text"/>	<input type="text"/>	
	CATS?	e. CATS .....	<input type="text"/>	<input type="text"/>	
	SHEEP	f. SHEEP .....	<input type="text"/>	<input type="text"/>	
	COAT	g. COAT .....	<input type="text"/>	<input type="text"/>	
	POVI	h. POVI .....	<input type="text"/>	<input type="text"/>	
	HORSE	i. HORSE .....	<input type="text"/>	<input type="text"/>	
	IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.				
132	Does your family have a pig sty?	YES .....	1		→ 134
		NO .....	2		



133	How far is the pig sty from your place of residence? IF PIG STY IS NOT WITHIN THE RESIDENTIAL AREA OR COMPOUND, CIRCLE '995'. IF ADJACENT TO HOUSE, CIRCLE '000'	NUMBER OF YARDS ..... <input type="text"/> <input type="text"/> <input type="text"/> NOT WITHIN COMPOUND ..... 995 ADJACENT TO HOUSE ..... 000	
134	What is the standard distance of a pig sty from any residential place?	NUMBER OF YARDS ..... <input type="text"/> <input type="text"/> <input type="text"/>	
135	Does any member of this household have a bank account?	YES ..... 1 NO ..... 2	
136	What type of land you're living on?	CUSTOMARY OWNER ..... 1 FREE HOLDER ..... 2 LEASE LAND ..... 3	→ END
137	Does the head of this household own this land?	YES ..... 1 NO ..... 2	





108	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
109	How old were you at your last birthday?  COMPARE AND CORRECT 108 AND/OR 109 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
110	What is your marital status now: are you currently married or living with a man as if married, or are you widowed, divorced, separated or never married and never lived with a man?	CURRENTLY MARRIED ..... 1 CURRENTLY LIVING WITH A MAN ..... 2 WIDOWED ..... 3 DIVORCED ..... 4 SEPARATED ..... 5 NEVER MARRIED/LIVED WITH A MAN 6 6	
111	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 115
112	What is the highest level of school you attended: primary, secondary, higher or what?	PRIMARY OR LOWER ..... 1 SECONDARY ..... 2 *VOCATIONAL (TVET) ..... 3 *TERTIARY/UNIVERSITY ..... 4 SPECIAL NEEDS EDUCATION..... 5	
113	What is the highest year you completed at that level? <b>*LEVEL 3 (TVET) AND 4 (TERTIARY/UNIVERSITY)</b> CERTIFICATE 1 DIPLOMA 2 DEGREE 3 POST-GRAD 1 MASTER'S DEGREE 2 PHD 4 TOTAL YEARS 13 ADD THE NUMBER OF YEARS FOR EACH LEVEL)	LESS THAN ONE YEAR ..... 00 YEAR 1/ PRIMER 1/ YEAR 9 / FORM 3 . 01 YEAR 2/ PRIMER 2/ YEAR 10/ FORM 4 . 02 YEAR 3/ PRIMER 3/ YEAR 11/ FORM 5 . 03 YEAR 4 / STD 1-2/ YEAR 12/ UPPER 5 . 04 YEAR 5/ STD 3/ YEAR 13/ FORM 6 . 05 YEAR 6/ STD 4/YEAR 14/FORM 7 ..... 06 YEAR 7/ FORM 1 ..... 07 YEAR 8/ FORM 2 ..... 08  NUMBER OF YEARS ..... <input type="text"/> <input type="text"/>	
114	<b>CHECK 112:</b>  PRIMARY OR <input type="checkbox"/> LOWER OR <input type="checkbox"/> SPECIAL NEEDS EDUCATION  SECONDARY OR HIGHER <input type="checkbox"/>		→ 119
115	Now I would like you to read this sentence to me.  SHOW CARD IN <b>ENGLISH</b> TO RESPONDENT.  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL IN ENGLISH 1 ABLE TO READ ONLY PARTS OF SENTENCE IN ENGLISH ..... 2 ABLE TO READ WHOLE SENTENCE .. 3  BLIND/VISUALLY IMPAIRED ..... 5	→ 120

116	SHOW CARD IN <b>SAMOAN</b> TO RESPONDENT.  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL IN SAMOAN 1 ABLE TO READ ONLY PARTS OF SENTENCE IN SAMOAN ..... 2 ABLE TO READ WHOLE SENTENCE .. 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE)	
117	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	
118	<b>CHECK 115 and 116:</b>  <b>CODE '2', '3' OR '4' CIRCLED IN 115 OR 116</b> <input type="checkbox"/> <b>CODE '1' CIRCLED IN 115 AND 116</b> <input type="checkbox"/>		120
119	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
120	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
121	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
122	Other than for watching videos, do you use computer almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
123	What is your religion?	EFKS/TAITI ..... 11 METHODIST ..... 12 ROMAN CATHOLIC ..... 13 LDS ..... 14 SDS ..... 15 ASSEMBLY OF GOD ..... 16  OTHER _____ 96 (SPECIFY)  REFUSED TO ANSWER ..... 97 DON'T KNOW ..... 98	
124	Do you consider yourself a Samoan, part-Samoan or what?	SAMOAN ..... 1 PART-SAMOAN ..... 2  OTHER _____ 6 (SPECIFY)  DON'T KNOW ..... 8	

**SECTION 2. REPRODUCTION**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now 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 LIVING WITH HER ... <input type="text"/> <input type="text"/> DAUGHTERS LIVING WITH HER <input type="text"/> <input type="text"/>	
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 ..... <input type="text"/> <input type="text"/> DAUGHTERS ELSEWHERE . <input type="text"/> <input type="text"/>	
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 ..... <input type="text"/> <input type="text"/> GIRLS DEAD ..... <input type="text"/> <input type="text"/>	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL ..... <input type="text"/> <input type="text"/>	
209	<b>CHECK 208:</b> Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct?  YES <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	<b>CHECK 208:</b>  ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/> →		→ 226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.

**RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.**  
**(IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW).**

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	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.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (NEXT BIRTH)	DAYS... 1 MONTHS 2 YEARS... 3	
02	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
03	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
04	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
05	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
06	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	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.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
07	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
08	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
09	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
10	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
11	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH
12	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> YEAR <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD BIRTH NO... 2 NEXT BIRTH



222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.	YES ..... 1 NO ..... 2
223	<p>COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:</p> <p>NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> → (PROBE AND RECONCILE)</p> <p>CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED.</p> <p>FOR EACH BIRTH SINCE JANUARY 2009: MONTH AND YEAR OF BIRTH ARE RECORDED.</p> <p>FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.</p> <p>FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED.</p> <p>FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2009-2014. IF NONE, RECORD '0' AND SKIP TO 226	<input type="checkbox"/>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 2009-2014 ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE RIGHT 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.)		
226	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE ..... 8	<input type="checkbox"/> → 229
227	How many months pregnant are you?  RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/> <input type="text"/>	
228	At the time you became pregnant, did you plan to become pregnant <u>then</u> , did you plan to wait until <u>later</u> , or <u>did you not plan</u> to have any (more) children at all?	THEN ..... 1 LATER ..... 2 NOT AT ALL ..... 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES ..... 1 NO ..... 2	→ 237
230	When did the last such pregnancy end?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
231	<b>CHECK 230:</b>  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>LAST PREGNANCY ENDED IN JANUARY 2009 OR LATER</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>LAST PREGNANCY ENDED BEFORE JANUARY 2009</p> <input type="checkbox"/> </div> </div>		→ 237
232	How many months pregnant were you when the last such pregnancy ended?  RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/> <input type="text"/>	
233	Since January 2009, have you had any other pregnancies that did not result in a live birth?	YES ..... 1 NO ..... 2	→ 235
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2009.  ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
235	Did you have any miscarriages, abortions or stillbirths that ended before 2009?	YES ..... 1 NO ..... 2	→ 237

236	When did the last such pregnancy that terminated before 2009 end?	MONTH ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
237	When did your last menstrual period start?  _____ (DATE, IF GIVEN)	DAYS AGO ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS AGO ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MONTHS AGO ..... 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEARS AGO ..... 4 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> IN MENOPAUSE/ HAS HAD HYSTERECTOMY ... 994  BEFORE PREGNANT WITH LAST BIRTH ..... 995  NEVER MENSTRUATED ..... 996									
238	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table> → 301								
239	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									

**SECTION 3. CONTRACEPTION**

301	<p>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.</p> <p>Which ways or methods have you heard about?</p> <p>FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?</p> <p>CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.</p>		302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES ..... 1 NO ..... 2 ↴ ↓	Have you ever had an operation to avoid having any more children? YES ..... 1 NO ..... 2
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES ..... 1 NO ..... 2 ↴ ↓	Have you ever had a partner who had an operation to avoid having any more children? YES ..... 1 NO ..... 2
03	Oral Contraceptive Pill Women can take a pill every day to avoid becoming pregnant.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
04	IUCD Women can have a loop or coil placed Into uterine cavity by a doctor or a nurse.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
05	INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
06	IMPLANTS Women can have several 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 ↴ ↓	YES ..... 1 NO ..... 2
07	MALE CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
09	LACTATIONAL AMENORRHEA METHOD (LAM)	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
10	RHYTHM METHOD/NATURAL OVULATION 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 ↴ ↓	YES ..... 1 NO ..... 2
11	WITHDRAWAL Men can be careful and pull out before climax.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
12	EMERGENCY CONTRACEPTION As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within five days to prevent pregnancy.	YES ..... 1 NO ..... 2 ↴ ↓	YES ..... 1 NO ..... 2
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES ..... 1 _____ (SPECIFY) _____ (SPECIFY) NO ..... 2	YES ..... 1 NO ..... 2 YES ..... 1 NO ..... 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	<b>CHECK 302:</b> NOT A SINGLE "YES" (NEVER USED) <input type="checkbox"/> AT LEAST ONE "YES" (EVER USED) <input type="checkbox"/>		307
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	306
305	ENTER '0' IN THE CALENDAR IN EACH BLANK MONTH.		335
306	What have you used or done?  CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant.  How many living children did you have at that time, if any?  IF NONE, RECORD '00'.	NUMBER OF CHILDREN ..... <input type="text"/>	
308	<b>CHECK 302 (01):</b> WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/>		311A
309	<b>CHECK 226:</b> NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>		322
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	322
311	Which method are you using?  CIRCLE ALL MENTIONED.  IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.  311A CIRCLE 'A' FOR FEMALE STERILIZATION.	FEMALE STERILIZATION ..... A MALE STERILIZATION ..... B ORAL CONTRACEPTIVE PILL ð ð ð ð C IUCD ..... D INJECTABLES (depo provera) ð ð ð E IMPLANTS ..... F MALE CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD ..... K RHYTHM METHOD/ N.OVULATION . L WITHDRAWAL ..... M  OTHER _____ X (SPECIFY)	316 315 315 319A
312	RECORD IF CODE 'C' FOR PILL IS CIRCLED IN 311.  YES (USING PILL) <input type="checkbox"/> NO (USING CONDOM BUT NOT PILL) <input type="checkbox"/>  May I see the package of pills you are using?                                              May I see the package of condoms you are using?  RECORD NAME OF BRAND IF PACKAGE SEEN.	PACKAGE SEEN ..... 1  BRAND NAME _____ (SPECIFY) <input type="text"/>  PACKAGE NOT SEEN ..... 2	314

313	<p>Do you know the brand name of the (pills/condoms) you are using?</p> <p>RECORD NAME OF BRAND.</p>	<p>BRAND NAME _____ <input type="text"/> <input type="text"/></p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 98</p>	
314	<p>How many (pill cycles/condoms) did you get the last time?</p>	<p>NUMBER OF PILL CYCLES/CONDOMS... <input type="text"/> <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 998</p>	
315	<p>The last time you obtained (HIGHEST METHOD ON LIST IN 311), how much did you pay in total, including the cost of the method and any consultation you may have had?</p>	<p>TALA SENE</p> <p>COST .. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/></p> <p>FREE ..... 9995.95</p> <p>DON'T KNOW ..... 9998.98</p>	<p>} → 319A</p>
316	<p>In what facility did the sterilization take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL ..... 1</p> <p>GOVT. HEALTH CENTRE ..... 2</p> <p>FAMILY PLANNING CLINIC ..... 3</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE MEDICAL CENTRE ... 4</p> <p>SFHA</p> <p>OVERSEAS ..... 5</p> <p>DON'T KNOW ..... 8</p>	
317	<p><b>CHECK 311/311A:</b></p> <p><b>CODE 'A' CIRCLED</b> <input type="checkbox"/></p> <p>Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation?</p> <p><b>CODE 'A' NOT CIRCLED</b> <input type="checkbox"/></p> <p>Before the sterilization operation, was your husband/partner told that he would not be able to have any (more) children because of the operation?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
318	<p>How much did you (your husband/partner) pay in total for the sterilization, including any consultation you (he) may have had?</p>	<p>TALA SENE</p> <p>COST .. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/></p> <p>FREE ..... 9995.95</p> <p>DON'T KNOW ..... 9998.98</p>	
319	<p>In what month and year was the sterilization performed?</p>	<p>MONTH ..... <input type="text"/> <input type="text"/></p> <p>YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
319A	<p>Since what month and year have you been using (CURRENT METHOD) without stopping?</p> <p>PROBE: For how long have you been using (CURRENT METHOD) now without stopping?</p>		
320	<p><b>CHECK 319/319A, 215 AND 230:</b></p> <p><b>ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A.</b> YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p><b>GO BACK TO 319/319A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).</b></p>		

321	<p><b>CHECK 319/319A:</b> YEAR IS 2009-2014</p> <p style="text-align: center;">↓</p> <p><b>ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.</b></p>	<p>YEAR IS 2008 OR EARLIER</p> <p style="text-align: center;">↓</p> <p><b>ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2009</b></p> <p style="text-align: right;"><b>THEN SKIP TO → 333</b></p>																																													
322	<p>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.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2009. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>* When was the last time you used a method? Which method was that?</li> <li>* When did you start using that method? How long after the birth of (NAME)?</li> <li>* How long did you use the method then?</li> </ul>																																														
323	<p><b>CHECK 311/311A:</b></p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<table border="0"> <tr><td>NO CODE CIRCLED .....</td><td>00</td><td>→ 335</td></tr> <tr><td>FEMALE STERILIZATION .....</td><td>01</td><td>→ 326</td></tr> <tr><td>MALE STERILIZATION .....</td><td>02</td><td>→ 337</td></tr> <tr><td>PILL .....</td><td>03</td><td></td></tr> <tr><td>IUD .....</td><td>04</td><td></td></tr> <tr><td>INJECTABLES .....</td><td>05</td><td></td></tr> <tr><td>IMPLANTS .....</td><td>06</td><td></td></tr> <tr><td>CONDOM .....</td><td>07</td><td></td></tr> <tr><td>FEMALE CONDOM .....</td><td>08</td><td></td></tr> <tr><td>DIAPHRAGM .....</td><td>09</td><td></td></tr> <tr><td>FOAM/JELLY .....</td><td>10</td><td></td></tr> <tr><td>LACTATIONAL AMEN. METHOD ...</td><td>11</td><td>→ 324A</td></tr> <tr><td>RHYTHM METHOD/ N.O .....</td><td>12</td><td>→ 324A</td></tr> <tr><td>WITHDRAWAL .....</td><td>13</td><td>→ 337</td></tr> <tr><td>OTHER METHOD .....</td><td>96</td><td>→ 337</td></tr> </table>	NO CODE CIRCLED .....	00	→ 335	FEMALE STERILIZATION .....	01	→ 326	MALE STERILIZATION .....	02	→ 337	PILL .....	03		IUD .....	04		INJECTABLES .....	05		IMPLANTS .....	06		CONDOM .....	07		FEMALE CONDOM .....	08		DIAPHRAGM .....	09		FOAM/JELLY .....	10		LACTATIONAL AMEN. METHOD ...	11	→ 324A	RHYTHM METHOD/ N.O .....	12	→ 324A	WITHDRAWAL .....	13	→ 337	OTHER METHOD .....	96	→ 337
NO CODE CIRCLED .....	00	→ 335																																													
FEMALE STERILIZATION .....	01	→ 326																																													
MALE STERILIZATION .....	02	→ 337																																													
PILL .....	03																																														
IUD .....	04																																														
INJECTABLES .....	05																																														
IMPLANTS .....	06																																														
CONDOM .....	07																																														
FEMALE CONDOM .....	08																																														
DIAPHRAGM .....	09																																														
FOAM/JELLY .....	10																																														
LACTATIONAL AMEN. METHOD ...	11	→ 324A																																													
RHYTHM METHOD/ N.O .....	12	→ 324A																																													
WITHDRAWAL .....	13	→ 337																																													
OTHER METHOD .....	96	→ 337																																													
324	<p>Where did you obtain (CURRENT METHOD) when you started using it?</p>	<table border="0"> <tr><td colspan="2">PUBLIC SECTOR</td></tr> <tr><td>GOVT. HOSPITAL .....</td><td>11</td></tr> <tr><td>GOVT. HEALTH CENTRE .....</td><td>12</td></tr> <tr><td>FAMILY PLANNING CLINIC .....</td><td>13</td></tr> <tr><td colspan="2">PRIVATE MEDICAL SECTOR</td></tr> <tr><td>PRIVATE MEDICAL CENTRE ...</td><td>21</td></tr> <tr><td>PEER TRAINER .....</td><td>22</td></tr> <tr><td colspan="2">OTHER SOURCE</td></tr> <tr><td>HOTEL/NIGHT CLUB .....</td><td>31</td></tr> <tr><td>FRIEND/RELATIVE .....</td><td>32</td></tr> <tr><td>OVERSEAS .....</td><td>41</td></tr> <tr><td>OTHER _____</td><td>96</td></tr> </table> <p style="text-align: center;">(SPECIFY)</p>	PUBLIC SECTOR		GOVT. HOSPITAL .....	11	GOVT. HEALTH CENTRE .....	12	FAMILY PLANNING CLINIC .....	13	PRIVATE MEDICAL SECTOR		PRIVATE MEDICAL CENTRE ...	21	PEER TRAINER .....	22	OTHER SOURCE		HOTEL/NIGHT CLUB .....	31	FRIEND/RELATIVE .....	32	OVERSEAS .....	41	OTHER _____	96																					
PUBLIC SECTOR																																															
GOVT. HOSPITAL .....	11																																														
GOVT. HEALTH CENTRE .....	12																																														
FAMILY PLANNING CLINIC .....	13																																														
PRIVATE MEDICAL SECTOR																																															
PRIVATE MEDICAL CENTRE ...	21																																														
PEER TRAINER .....	22																																														
OTHER SOURCE																																															
HOTEL/NIGHT CLUB .....	31																																														
FRIEND/RELATIVE .....	32																																														
OVERSEAS .....	41																																														
OTHER _____	96																																														
324A	<p>Where did you learn how to use the rhythm/lactational amenorhea method?</p> <p>IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>																																														
325	<p><b>CHECK 311/311A:</b></p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<table border="0"> <tr><td>PILL .....</td><td>03</td><td></td></tr> <tr><td>IUD .....</td><td>04</td><td></td></tr> <tr><td>INJECTABLES .....</td><td>05</td><td></td></tr> <tr><td>IMPLANTS .....</td><td>06</td><td></td></tr> <tr><td>CONDOM .....</td><td>07</td><td>→ 334</td></tr> <tr><td>FEMALE CONDOM .....</td><td>08</td><td>→ 331</td></tr> <tr><td>DIAPHRAGM .....</td><td>09</td><td>→ 331</td></tr> <tr><td>FOAM/JELLY .....</td><td>10</td><td>→ 331</td></tr> <tr><td>LACTATIONAL AMEN. METHOD ...</td><td>11</td><td>→ 337</td></tr> <tr><td>RHYTHM METHOD/ N.O .....</td><td>12</td><td>→ 337</td></tr> </table>	PILL .....	03		IUD .....	04		INJECTABLES .....	05		IMPLANTS .....	06		CONDOM .....	07	→ 334	FEMALE CONDOM .....	08	→ 331	DIAPHRAGM .....	09	→ 331	FOAM/JELLY .....	10	→ 331	LACTATIONAL AMEN. METHOD ...	11	→ 337	RHYTHM METHOD/ N.O .....	12	→ 337															
PILL .....	03																																														
IUD .....	04																																														
INJECTABLES .....	05																																														
IMPLANTS .....	06																																														
CONDOM .....	07	→ 334																																													
FEMALE CONDOM .....	08	→ 331																																													
DIAPHRAGM .....	09	→ 331																																													
FOAM/JELLY .....	10	→ 331																																													
LACTATIONAL AMEN. METHOD ...	11	→ 337																																													
RHYTHM METHOD/ N.O .....	12	→ 337																																													





334	<p>Where did you obtain (CURRENT METHOD) the last time?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTRE ..... 12</p> <p>FAMILY PLANNING CLINIC ..... 13</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE MEDICAL CENTRE ... 21</p> <p>PEER TRAINER ..... 22</p> <p>OTHER SOURCE</p> <p>HOTEL/NIGHT CLUB ..... 31</p> <p>FRIEND/RELATIVE ..... 32</p> <p>OVERSEAS ..... 41</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	<p>→ 337</p>
335	<p>Do you know of a place where you can obtain a method for family planning?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 337</p>
336	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTRE ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE MEDICAL CENTRE ..... D</p> <p>PEER TRAINER ..... E</p> <p>OTHER SOURCE</p> <p>HOTEL/NIGHT CLUB ..... F</p> <p>FRIEND/RELATIVE ..... G</p> <p>OVERSEAS ..... H</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
337	<p>In the last 12 months, were you visited by a peer trainer who talked to you about family planning?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
338	<p>In the last 12 months, have you visited a health facility for care for yourself (or your children)?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 401</p>
339	<p>Did any staff member at the health facility speak to you about family planning methods?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	

**SECTION 4. PREGNANCY AND POSTNATAL CARE**

401	<p><b>CHECK 224:</b></p> <p align="center"> <input type="checkbox"/> <b>ONE OR MORE BIRTHS IN 2009 OR LATER</b> </p> <p align="center"> <input type="checkbox"/> <b>NO BIRTHS IN 2009 OR LATER</b> </p>	→ 546		
402	<p><b>CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2009 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).</b></p> <p>Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)</p>			
403	LINE NUMBER FROM 212	LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>	NEXT-TO-LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>	SECOND-FROM-LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>
404	FROM 212 AND 216	NAME(S) _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME(S) _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME(S) _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>
405	At the time you became pregnant with (NAME), did you plan to become pregnant then, did you plan to wait until later, or did you not plan to have any (more) children at all?	THEN ..... 1 (SKIP TO 407) ← <input type="checkbox"/> LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 407) ← <input type="checkbox"/>	THEN ..... 1 (SKIP TO 427) ← <input type="checkbox"/> LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 427) ← <input type="checkbox"/>	THEN ..... 1 (SKIP TO 427) ← <input type="checkbox"/> LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 427) ← <input type="checkbox"/>
406	How much longer would you have liked to wait?	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998
407	Did you see anyone for antenatal care for this pregnancy?  IF YES: Whom did you see?  Anyone else?  PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE .. B ENROLLED NURSE (EN)õ õ C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . D  OTHER _____ X (SPECIFY)  NO ONE ..... Y (SKIP TO 414) ← <input type="checkbox"/>		
408	Where did you receive antenatal care for this pregnancy?  Anywhere else?  PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S).	HOME YOUR HOME ... A OTHER HOME ... B  PUBLIC SECTOR GOVT. HOSPITAL C GOVT. HEALTH CENTRE ..... D  PRIVATE SECTOR MED. CENTRE... E  OVERSEAS ..... F  OTHER _____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____			
409	How many months pregnant were you when you first received antenatal care for this pregnancy?						
410	How many times did you receive antenatal care during this pregnancy?						
411	As part of your antenatal care during this pregnancy, were any of the following done at least once?  Were you weighed?  Was your blood pressure measured?  Did you give a urine sample?  Did you give a blood sample?  <i>Was your height measured?</i>						
412	Were you offered 'ultra-sound at any stage of this pregnancy?  <i>If YES how many weeks gestation?</i>						
413	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications?						
414	Were you told where to go if you had any of these complications?						
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?						
416	During this pregnancy, how many times did you get this tetanus injection?						
417	<b>CHECK 416:</b>						

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
418	At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby?	YES ..... 1 NO ..... 2 (SKIP TO 422) ← DON'T KNOW ..... 8		
419	Before this pregnancy, how many other times did you receive a tetanus injection?  IF 7 OR MORE TIMES, RECORD '7'.	TIMES ..... <input type="text"/> DON'T KNOW .... 8		
420	In what month and year did you receive the last tetanus injection before this pregnancy?	MONTH ... <input type="text"/> <input type="text"/> DK MONTH ..... 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (SKIP TO 422) ← DK YEAR ..... 9998		
421	How many years ago did you receive that tetanus injection?	YEARS AGO ..... <input type="text"/> <input type="text"/>		
422	During this pregnancy, were you given or did you buy any iron tablets?  <b>Tablets : 'Pregamol and Fesolate'</b>	YES ..... 1 NO ..... 2 (SKIP TO 424) ← DON'T KNOW ..... 8		
423	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 . <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ... 998		
424	During this pregnancy, did you take any drug for intestinal worms?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		
425	During this pregnancy, did you have difficulty with your vision during daylight?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
426	During this pregnancy, did you suffer from night blindness?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		
427	When name was born, was he/she very large, larger than average, average, smaller than average, or very small?	LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8
428	Was (NAME) weighed at birth?	YES ..... 1 NO ..... 2 (SKIP TO 430) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 430) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 430) ← DON'T KNOW ..... 8
429	How much did (NAME) weigh?  RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW . 99.98	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW . 99.98	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/>  KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/>  DON'T KNOW . 99.98
430	Who assisted with the delivery of (NAME)?  Anyone else?  PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED.  IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B ENROLLED NURSE (EN)δ . . C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E  OTHER _____ X (SPECIFY) NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B ENROLLED NURSE (EN)δ . . C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E  OTHER _____ X (SPECIFY) NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B ENROLLED NURSE (EN)δ . . C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E  OTHER _____ X (SPECIFY) NO ONE ..... Y
431	Where did you give birth to (NAME)?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	HOME YOUR HOME ... 11 (SKIP TO 438) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTRE ..... 22  PRIVATE SECTOR MED. CENTRE ... 31  OVERSEAS HOME ..... 41 (SKIP TO 438) ← HEALTH FACILITY 42  OTHER _____ 96 (SPECIFY) (SKIP TO 438) ←	HOME YOUR HOME ... 11 (SKIP TO 439) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTRE ..... 22  PRIVATE SECTOR MED. CENTRE ... 31  OVERSEAS HOME ..... 41 (SKIP TO 439) ← HEALTH FACILITY 42  OTHER _____ 96 (SPECIFY) (SKIP TO 439) ←	HOME YOUR HOME ... 11 (SKIP TO 439) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTRE ..... 22  PRIVATE SECTOR MED. CENTRE ... 31  OVERSEAS HOME ..... 41 (SKIP TO 439) ← HEALTH FACILITY 42  OTHER _____ 96 (SPECIFY) (SKIP TO 439) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH																																				
		NAME _____	NAME _____	NAME _____																																				
432	How long after (NAME) was delivered did you stay there?  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW . 998													HOURS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW ... 998													HOURS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW ... 998												
433	What type of delivery method that was used to deliver (NAME)?	LSCS 0 0 0 0 0 0 . 1 VENTHOUSE 0 0 0 2 FORCEP 0 0 0 0 0 . 3 VACCUM 0 0 0 0 0 0 4 NORMAL ..... 5 DON'T KNOW 0 0 ..998	LSCS 0 0 0 0 0 0 . 1 VENTHOUSE 0 0 0 2 FORCEP 0 0 0 0 0 . 3 VACCUM 0 0 0 0 0 0 4 NORMAL ..... 5 DON'T KNOW 0 0 ..998	LSCS 0 0 0 0 0 0 . 1 VENTHOUSE 0 0 0 2 FORCEP 0 0 0 0 0 . 3 VACCUM 0 0 0 0 0 0 4 NORMAL ..... 5 DON'T KNOW 0 0 ..998																																				
434	Before you were discharged after (NAME) was born, did any health care provider check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 437) ←	YES ..... 1 (SKIP TO 449) ← NO ..... 2	YES ..... 1 (SKIP TO 449) ← NO ..... 2																																				
435	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 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW ... 998																																						
436	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 ENROLLED NURSE 3 OTHER PERSON TRADITIONAL BIRTH ATTENDANT ... 4  OTHER _____ 6 (SPECIFY) (SKIP TO 448) ←																																						
437	After you were discharged, did any health care provider or a traditional birth attendant check on your health?	YES ..... 1 (SKIP TO 440) ← NO ..... 2 (SKIP TO 448) ←	YES ..... 1 (SKIP TO 449) ← NO ..... 2	YES ..... 1 (SKIP TO 449) ← NO ..... 2																																				
438	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 TRANSPORTATION ... C DON'T TRUST FACILITY/POOR QUALITY SERVICE D NO FEMALE PROVIDER AT FACILITY .. E HUSBAND/FAMILY DID NOT ALLOW .. F NOT NECESSARY .. G NOT CUSTOMARY .. H OTHER _____ (SPECIFY) X																																						

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____															
439	After (NAME) was born, did any health care provider or a traditional birth attendant check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 444) ←	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2															
440	How long after delivery did the first check take place?  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS. IF MORE THAN 2 MONTHS, PROBE AND CORRECT 438.	HOURS 1 <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> DAYS 2 <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> WEEKS 3 <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> DON'T KNOW ... 998																	
441	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 ENROLLED NURSE 3  OTHER PERSON TRADITIONAL BIRTH ATTENDANT... 4  OTHER _____ 6 (SPECIFY)																	
442	Where did this first check take place?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	HOME YOUR HOME ... 11 OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTRE ..... 22  PRIVATE SECTOR MED. CENTRE... 31  OVERSEAS ..... 41  OTHER _____ 96 (SPECIFY)																	
443	CHECK 437:	YES      NOT ASKED <input type="checkbox"/> <input type="checkbox"/> ↓                    ↓ (SKIP TO 448)																	
444	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES ..... 1 NO ..... 2 (SKIP TO 448) ← DON'T KNOW ..... 8																	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____						
445	<p>How many hours, days or weeks after the birth of (NAME) did the first check take place?</p> <p>IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HRS AFTER BIRTH .. 1 <input type="checkbox"/> <input type="checkbox"/></p> <p>DAYS AFTER BIRTH .. 2 <input type="checkbox"/> <input type="checkbox"/></p> <p>WKS AFTER BIRTH .. 3 <input type="checkbox"/> <input type="checkbox"/></p> <p>DON'T KNOW ... 998</p>								
446	<p>Who checked on (NAME)'s health at that time?</p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p>HEALTH PERSONNEL</p> <p>DOCTOR ..... 1</p> <p>NURSE/MIDWIFE.. 2</p> <p>ENROLLED NURSE 3</p> <p>OTHER PERSON</p> <p>TRADITIONAL BIRTH ATTENDANT... 4</p> <p>OTHER _____ 6 (SPECIFY)</p>								
447	<p>Where did this first check of (NAME) take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p>	<p>HOME</p> <p>YOUR HOME ... 11</p> <p>OTHER HOME ... 12</p> <p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL 21</p> <p>GOVT. HEALTH CENTRE ..... 22</p> <p>PRIVATE SECTOR</p> <p>MED. CENTRE.. 31</p> <p>OVERSEAS ..... 41</p> <p>OTHER _____ 96 (SPECIFY)</p>								
448	<p>Has your menstrual period returned since the birth of (NAME)?</p>	<p>YES ..... 1 (SKIP TO 450) ←</p> <p>NO ..... 2 (SKIP TO 451) ←</p>								
449	<p>Did your period return between the birth of (NAME) and your next pregnancy?</p>									
450	<p>For how many months after the birth of (NAME) did you not have a period?</p>	<p>MONTHS ... <input type="checkbox"/> <input type="checkbox"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="checkbox"/> <input type="checkbox"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="checkbox"/> <input type="checkbox"/></p> <p>DON'T KNOW ..... 98</p>						
451	<p><b>CHECK 226:</b></p> <p><b>IS RESPONDENT PREGNANT?</b></p>	<p>NOT PREG-NANT <input type="checkbox"/></p> <p>PREGNANT OR UNSURE <input type="checkbox"/></p> <p>(SKIP TO 453) ←</p>								
452	<p>Have you begun to have sexual intercourse again since the birth of (NAME)?</p>	<p>YES ..... 1</p> <p>NO ..... 2 (SKIP TO 454) ←</p>								



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
453	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98
454	Did you ever breastfeed (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 462) ←	YES ..... 1 NO ..... 2 (SKIP TO 462) ←	YES ..... 1 NO ..... 2 (SKIP TO 462) ←
455	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 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/>		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES ..... 1 NO ..... 2 (SKIP TO 458) ←		
457	What was (NAME) given to drink?  Anything else?  RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER ... B SUGAR OR GLUCOSE WATER ... C GRUPE WATER ... D SUGAR-SALT-WATER SOLUTION ..... E FRUIT JUICE ..... F INFANT FORMULA . G  OTHER _____ X (SPECIFY)		
458	<b>CHECK 404:</b>  <b>IS CHILD LIVING?</b>	<b>LIVING</b> <input type="checkbox"/> <b>DEAD</b> <input type="checkbox"/> (SKIP TO 460) ←		
459	Are you still breastfeeding (NAME)?	YES ..... 1 (SKIP TO 461) ← NO ..... 2		
460	For how many months did you breastfeed (NAME)?	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ... 98	MONTHS ... <input type="text"/> <input type="text"/> STILL BF ..... 95 DON'T KNOW ... 98	MONTHS ... <input type="text"/> <input type="text"/> STILL BF ..... 95 DON'T KNOW ... 98
461	Did you exclusively breastfeed (NAME) for the first 6 months	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8



**SECTION 5. CHILD IMMUNIZATION AND HEALTH AND CHILD'S AND WOMAN'S NUTRITION**

501 ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2009 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	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER ..... <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>	NEXT-TO-LAST BIRTH LINE NUMBER ..... <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>	SECOND-FROM-LAST BIRTH LINE NUMBER ..... <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>
-----	----------------------	---	---	---

503	FROM 212 AND 216	NAME _____ LIVING <input style="width:20px; height:20px;" type="checkbox"/> DEAD <input style="width:20px; height:20px;" type="checkbox"/> <input style="width:20px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 543)	NAME _____ LIVING <input style="width:20px; height:20px;" type="checkbox"/> DEAD <input style="width:20px; height:20px;" type="checkbox"/> <input style="width:20px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 543)	NAME _____ LIVING <input style="width:20px; height:20px;" type="checkbox"/> DEAD <input style="width:20px; height:20px;" type="checkbox"/> <input style="width:20px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 543)
-----	------------------	--	--	---

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 508) ← NO CARD ..... 3	YES, SEEN ..... 1 (SKIP TO 506) ← YES, NOT SEEN ..... 2 (SKIP TO 508) ← NO CARD ..... 3	YES, SEEN ..... 1 (SKIP TO 506) ← YES, NOT SEEN ..... 2 (SKIP TO 508) ← NO CARD ..... 3
-----	---	---	---	---

505	Did you ever have a vaccination card for (NAME)?	YES ..... 1 (SKIP TO 508) ← NO ..... 2	YES ..... 1 (SKIP TO 508) ← NO ..... 2	YES ..... 1 (SKIP TO 508) ← NO ..... 2
-----	--	--	--	--

506 (1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.  
 (2) WRITE '4' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.

	LAST BIRTH			NEXT-TO-LAST BIRTH			SECOND-FROM-LAST BIRTH				
	DAY	MONTH	YEAR	DAY	MONTH	YEAR	DAY	MONTH	YEAR		
BCG (AT BIRTH)				BCG (AT BIRTH)				BCG (AT BIRTH)			
Hep B (AT BIRTH)				Hep B (AT BIRTH)				Hep B (AT BIRTH)			
DTP-HepB=Hip 1				DTP-HepB=Hip 1				DTP-HepB=Hip 1			
OPV 1				OPV 1				OPV 1			
DTP-HepB=Hip 2				DTP-HepB=Hip 2				DTP-HepB=Hip 2			
OPV 2				OPV 2				OPV 2			
DTP-HepB=Hip 3				DTP-HepB=Hip 3				DTP-HepB=Hip 3			
OPV 3				OPV 3				OPV 3			
MMR 1				MMR 1				MMR 1			
MMR 2				MMR 2				MMR 2			
DTP 4				DTP 4				DTP 4			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
506A	CHECK 506:	BCG TO MMR 2 ALL RECORDED <input type="checkbox"/> (GO TO 510)	OTHER <input type="checkbox"/> (GO TO 510)	BCG TO MMR 2 ALL RECORDED <input type="checkbox"/> (GO TO 510)
		OTHER <input type="checkbox"/> (GO TO 510)		OTHER <input type="checkbox"/> (GO TO 510)
507	Has (NAME) received any vaccinations that are not recorded on this card?  RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, HEP B AT BIRTH, HEP B 1-3, HIB 1-3, DTP 1-3, OPV 1-3, AND MMR VACCINES.	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '6' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '6' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE '6' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8
508	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES ..... 1 NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 510) DON'T KNOW ..... 8
509	Please tell me if (NAME) received any of the following vaccinations:			
509A	A BCG vaccination against tuberculosis, that is, an injection in the 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
509B	Hepatitis B vaccine, that is, an injection given in the thigh or arm, to prevent him/her from getting liver disease?	YES ..... 1 NO ..... 2 (SKIP TO 509E) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509E) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509E) DON'T KNOW ..... 8
509C	Was the first Hepatitis B vaccine received at birth or later?	AT BIRTH ..... 1 LATER ..... 2	AT BIRTH ..... 1 LATER ..... 2	AT BIRTH ..... 1 LATER ..... 2
509D	How many times was a Hepatitis B vaccination received?	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
509E	Polio vaccine, that is, drops in the mouth?	YES ..... 1 NO ..... 2 (SKIP TO 509H) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509H) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509H) DON'T KNOW ..... 8
509F	Was the first polio vaccine received six weeks after birth or later?	6 WEEKS ... 1 LATER ..... 2	6 WEEKS ... 1 LATER ..... 2	6 WEEKS ... 1 LATER ..... 2
509G	How many times was the polio vaccine received?	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
509H	A DTP vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 (SKIP TO 509J) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509J) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509J) DON'T KNOW ..... 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
509I	How many times was a DTP vaccination received?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
509J	A Hib vaccination against flu, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES ..... 1 NO ..... 2 (SKIP TO 509L) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509L) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 509L) ← DON'T KNOW ..... 8
509K	How many times was Hib vaccination received?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
509L	A measles injection or an MMR injection - that is, a shot in the arm at the age of 12 and 15 months - to prevent him/her from getting measles, mumps or rubella?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
509M	How many times was a MMR vaccination received?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
510	In the last seven days, did (NAME) take iron syrup like this?  SHOW SAMPLE OF 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
511	Has (NAME) taken any drug for intestinal worms in the last six months?	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	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
513	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
514	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
515	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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
516	Did you seek advice or treatment for the diarrhea from any source?	YES ..... 1 NO ..... 2 (SKIP TO 521) ←	YES ..... 1 NO ..... 2 (SKIP TO 521) ←	YES ..... 1 NO ..... 2 (SKIP TO 521) ←
517	Where did you seek advice or treatment?  Anywhere else?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)
518	<b>CHECK 517:</b>	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 520) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 520) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 520) ←
519	Where did you first seek advice or treatment?  USE LETTER CODE FROM 517.	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
520	How many days after the diarrhea began did you first seek advice or treatment for (NAME)?  IF THE SAME DAY, RECORD '00'.	DAYS ..... <input type="text"/>	DAYS ..... <input type="text"/>	DAYS ..... <input type="text"/>
521	Does (NAME) still have diarrhea?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
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 ORS or The hospital-recommended: b) homemade salt and sugar solution? c) coconut juice?	YES NO DK FLUID FROM ORS PKT .. 1 2 8  HOMEMADE FLUID ... 1 2 8  COCONUT 1 2 8	YES NO DK FLUID FROM ORS PKT .. 1 2 8  HOMEMADE FLUID ... 1 2 8  COCONUT 1 2 8	YES NO DK FLUID FROM ORS PKT .. 1 2 8  HOMEMADE FLUID ... 1 2 8  COCONUT 1 2 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	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 OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) ... C UNKNOWN PILL OR SYRUP ... D  INJECTION ANTIBIOTIC ..... E NON-ANTIBIOTIC. F UNKNOWN INJECTION ... G  (IV) INTRAVENOUS . H  HOME REMEDY/ HERBAL MEDICINE ..... I  OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC ..... A ANTIMOTILITY ..... B OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) ... C UNKNOWN PILL OR SYRUP ... D  INJECTION ANTIBIOTIC ..... E NON-ANTIBIOTIC. F UNKNOWN INJECTION ... G  (IV) INTRAVENOUS . H  HOME REMEDY/ HERBAL MEDICINE ..... I  OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC ..... A ANTIMOTILITY ..... B OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY) ... C UNKNOWN PILL OR SYRUP ... D  INJECTION ANTIBIOTIC ..... E NON-ANTIBIOTIC. F UNKNOWN INJECTION ... G  (IV) INTRAVENOUS . H  HOME REMEDY/ HERBAL MEDICINE ..... I  OTHER _____ X (SPECIFY)
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) ←
529	<b>CHECK 525:</b>  <b>HAD FEVER?</b>	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> ↓ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, TO 543)

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
530	<p>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?</p> <p>IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?</p>	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	<p>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?</p> <p>IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?</p>	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	<p>Did you seek advice or treatment for the illness from any source?</p>	YES ..... 1 NO ..... 2 (SKIP TO 537) ←	YES ..... 1 NO ..... 2 (SKIP TO 537) ←	YES ..... 1 NO ..... 2 (SKIP TO 537) ←
533	<p>Where did you seek advice or treatment?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p>	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTRE ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTRE ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTRE ..... B  PRIVATE SECTOR MED. CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY)
534	<p><b>CHECK 533:</b></p>	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 536) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 536) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED ↓ (SKIP TO 536) ←
535	<p>Where did you first seek advice or treatment?</p> <p>USE LETTER CODE FROM 533.</p>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
536	<p>How many days after the illness began did you first seek advice or treatment for (NAME)?</p> <p>IF THE SAME DAY, RECORD '00'.</p>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>



NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
537	Is (NAME) still sick with a (fever/cough)?	FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8	FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8	FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8
538	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 543) DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543) 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 543) DON'T KNOW ..... 8
539	What drugs did (NAME) take?  Any other drugs?  RECORD ALL MENTIONED.	ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B  OTHER DRUGS PARACETAMOL/ PANADOL ... C  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B  OTHER DRUGS PARACETAMOL/ PANADOL ... C  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B  OTHER DRUGS PARACETAMOL/ PANADOL ... C  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z
540	<b>CHECK 539: CODE A CIRCLED?</b>	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543)	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543)	YES <input type="checkbox"/> NO <input type="checkbox"/> (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 543)
541	Did you already have the antibiotic pill/syrup at home when the child became ill?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
542		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 543.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 543.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
543	<p><b>CHECK 215 AND 218, ALL ROWS:</b></p> <p><b>NUMBER OF CHILDREN BORN IN 2009 OR LATER LIVING WITH THE RESPONDENT</b></p> <p>ONE OR MORE <input type="checkbox"/> NONE <input type="checkbox"/></p>		546
544	<p>The last time (NAME OF YOUNGEST CHILD) passed stools, what was done to dispose of the stools?</p>	<p>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)</p>	
545	<p><b>CHECK 522(a), ALL COLUMNS:</b></p> <p>NO CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/> ANY CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/></p>		547
546	<p>Have you ever heard of a special product called ORS or vai masima you can get for the treatment of diarrhea?</p>	<p>YES ..... 1  NO ..... 2</p>	
547	<p><b>CHECK 215 AND 218, ALL ROWS:</b></p> <p>HAS AT LEAST ONE CHILD BORN IN 2011 OR LATER AND LIVING WITH HER <input type="checkbox"/> DOES NOT HAVE ANY CHILDREN BORN IN 2011 OR LATER AND LIVING WITH HER <input type="checkbox"/></p> <p>RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 548)</p> <p>_____ (NAME)</p>		601
548	<p>Now I would like to ask you about liquids or foods (NAME FROM 547) had yesterday during the day or at night.</p> <p>Did (NAME FROM 547) (drink/eat):</p> <p>Plain water? Vaiauli</p> <p>Commercially produced infant formula such as SMA, S-26?</p> <p>Any commercially fortified baby food or cereal like Cerelac, Gerber, etc?</p> <p>Any (other) porridge or gruel?</p>	<p>YES NO DK</p> <p>PLAIN WATER..... 1 2 8</p> <p>FORMULA ..... 1 2 8</p> <p>BABY CEREAL ..... 1 2 8</p> <p>OTHER PORRIDGE/GRUEL.. 1 2 8</p>	

549

Now I would like to ask you about (other) liquids or foods that (NAME FROM 547) may have had yesterday during the day or at night. I am interested in whether your child had the item even if it was combined with other foods.

Did (NAME FROM 547)/you drink (eat):

- a) Milk such as tinned, powdered, or fresh animal milk?
- b) Tea or coffee?
- c) Soft drinks?
- d) Any other liquids?
- e) Bread, rice, noodles, or other foods made from grains?
- f) Pumpkin, carrots, squash, or breadfruit that are yellow or orange inside?
- g) Giant taro, taro, yams, or any other foods made from roots?
- h) Cabbages, peles leaves and any other dark green, leafy vegetables?
- i) Paw-paw, mango, orange, ripe breadfruit?
- j) Any other fruits or vegetables such as apple, pear, banana, pineapple, coconut etc?
- k) Liver, kidney, heart or other organ meats?
- l) Any fresh meat, such as beef, pork, lamb, chicken, or duck?
- m) Any canned or frozen meat or poultry?
- n) Eggs?
- o) Fresh, canned, smoked or dried fish or shellfish?
- p) Any foods made from beans, peas, lentils, or nuts?
- q) Cheese, yogurt or other milk products?
- r) Any oil, fats, or butter, or foods made with any of these such as coconut cream?
- s) Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?
- t) Any other solid or semi-solid food?

	CHILD			MOTHER		
	YES	NO	DK	YES	NO	DK
<b>a</b>	1	2	8	1	2	8
<b>b</b>	1	2	8	1	2	8
<b>c</b>	1	2	8	1	2	8
<b>d</b>	1	2	8	1	2	8
<b>e</b>	1	2	8	1	2	8
<b>f</b>	1	2	8	1	2	8
<b>g</b>	1	2	8	1	2	8
<b>h</b>	1	2	8	1	2	8
<b>i</b>	1	2	8	1	2	8
<b>j</b>	1	2	8	1	2	8
<b>k</b>	1	2	8	1	2	8
<b>l</b>	1	2	8	1	2	8
<b>m</b>	1	2	8	1	2	8
<b>n</b>	1	2	8	1	2	8
<b>o</b>	1	2	8	1	2	8
<b>p</b>	1	2	8	1	2	8
<b>q</b>	1	2	8	1	2	8
<b>r</b>	1	2	8	1	2	8
<b>s</b>	1	2	8	1	2	8
<b>t</b>	1	2	8	1	2	8

550	<p><b>CHECK 548 (LAST 2 CATEGORIES: BABY CEREAL OR OTHER PORRIDGE/GRUEL) AND 549 CATEGORIES e THROUGH t FOR CHILD):</b></p> <p>AT LEAST ONE "YES" <input type="checkbox"/></p> <p>NOT A SINGLE "YES" <input type="checkbox"/></p>		601
551	<p>How many times did (NAME FROM 547) eat solid, semisolid, or soft foods yesterday during the day or at night?</p> <p>IF 7 OR MORE TIMES, RECORD 7.</p>	<p>NUMBER OF TIMES ..... <input type="checkbox"/></p> <p>DON'T KNOW ..... 8</p>	

**SECTION 6. FERTILITY PREFERENCES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
601	<p><b>CHECK 311/311A:</b></p> <p><b>NEITHER STERILIZED</b> <input type="checkbox"/></p> <p><b>NOT ASKED</b> <input type="checkbox"/></p> <p><b>HE OR SHE STERILIZED</b> <input type="checkbox"/></p>		613								
602	<p><b>CHECK 226:</b></p> <p><b>NOT PREGNANT OR UNSURE</b> <input type="checkbox"/></p> <p>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?</p> <p><b>PREGNANT</b> <input type="checkbox"/></p> <p>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?</p>	<p>HAVE (A/ANOTHER) CHILD ..... 1</p> <p>NO MORE/NONE ..... 2 → 604</p> <p>SAYS SHE CAN'T GET PREGNANT . 3 → 613</p> <p>UNDECIDED/DON'T KNOW AND PREGNANT ..... 4 → 609</p> <p>UNDECIDED/DON'T KNOW AND NOT PREGNANT OR UNSURE ..... 5 → 608</p>									
603	<p><b>CHECK 226:</b></p> <p><b>NOT PREGNANT OR UNSURE</b> <input type="checkbox"/></p> <p>How long would you like to wait from now before the birth of (a/another) child?</p> <p><b>PREGNANT</b> <input type="checkbox"/></p> <p>After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?</p>	<p>MONTHS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>YEARS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p> <p>SOON/NOW ..... 993 → 608</p> <p>SAYS SHE CAN'T GET PREGNANT 994 → 613</p> <p>AFTER MARRIAGE ..... 995</p> <p>OTHER _____ 996 → 608 (SPECIFY)</p> <p>DON'T KNOW ..... 998</p>									
604	<p><b>CHECK 226:</b></p> <p><b>NOT PREGNANT OR UNSURE</b> <input type="checkbox"/></p> <p><b>PREGNANT</b> <input type="checkbox"/></p>		609								
605	<p><b>CHECK 310: USING A CONTRACEPTIVE METHOD?</b></p> <p><b>NOT ASKED</b> <input type="checkbox"/></p> <p><b>NOT CURRENTLY USING</b> <input type="checkbox"/></p> <p><b>CURRENTLY USING</b> <input type="checkbox"/></p>		613								
606	<p><b>CHECK 603:</b></p> <p><b>NOT ASKED</b> <input type="checkbox"/></p> <p><b>24 OR MORE MONTHS OR 02 OR MORE YEARS</b> <input type="checkbox"/></p> <p><b>00-23 MONTHS OR 00-01 YEAR</b> <input type="checkbox"/></p>		609								

607	<p><b>CHECK 602:</b></p> <p><b>WANTS TO HAVE A/ANOTHER CHILD</b> <input type="checkbox"/></p> <p>You have said that you want (a/another) child soon, but you are not using any method to avoid pregnancy.</p> <p>Can you tell me why you are not using a method?</p> <p>Any other reason?</p> <p><b>WANTS NO MORE/NONE</b> <input type="checkbox"/></p> <p>You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy.</p> <p>Can you tell me why you are not using a method?</p> <p>Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>NOT MARRIED ..... A</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX ..... B</p> <p>INFREQUENT SEX ..... C</p> <p>MENOPAUSAL/HYSTERECTOMY . D</p> <p>SUBFECUND/INFECUND ..... E</p> <p>POSTPARTUM AMENORRHEIC ... F</p> <p>BREASTFEEDING ..... G</p> <p>FATALISTIC ..... H</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED ..... I</p> <p>HUSBAND/PARTNER OPPOSED . J</p> <p>OTHERS OPPOSED ..... K</p> <p>RELIGIOUS PROHIBITION ..... L</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD ..... M</p> <p>KNOWS NO SOURCE ..... N</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNS ..... O</p> <p>FEAR OF SIDE EFFECTS ..... P</p> <p>LACK OF ACCESS/TOO FAR ..... Q</p> <p>COSTS TOO MUCH ..... R</p> <p>INCONVENIENT TO USE ..... S</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES ..... T</p> <p>OTHER _____ X (SPECIFY)</p> <p>DONT KNOW ..... Z</p>	
608	<p><b>CHECK 310: USING A CONTRACEPTIVE METHOD?</b></p> <p><b>NOT ASKED</b> <input type="checkbox"/> <b>NO, NOT CURRENTLY USING</b> <input type="checkbox"/> <b>YES, CURRENTLY USING</b> <input type="checkbox"/></p>		→ 613
609	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DONT KNOW ..... 8</p>	→ 611 → 613
610	Which contraceptive method would you prefer to use?	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>ORAL CONTRACEPTIVE PILL ..... 03</p> <p>IUCD ..... 04</p> <p>INJECTABLES (depo provera) ..... 05</p> <p>IMPLANTS ..... 06</p> <p>MALE CONDOM ..... 07</p> <p>FEMALE CONDOM ..... 08</p> <p>DIAPHRAGM ..... 09</p> <p>FOAM/JELLY ..... 10</p> <p>LACTATIONAL AMEN. METHOD ..... 11</p> <p>RHYTHM METHOD/ N.OVULATION ..... 12</p> <p>WITHDRAWAL ..... 13</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>UNSURE ..... 98</p>	→ 613



616	<b>CHECK 110:</b> <b>CURRENTLY MARRIED</b> <input type="checkbox"/> <b>OR</b> <b>LIVING WITH A MAN</b> <input type="checkbox"/> <b>NEVER MARRIED/ NEVER LIVED WITH MAN</b> <input type="checkbox"/> <b>OR</b> <b>WIDOWED/DIVORCED /SEPARATED</b> <input type="checkbox"/>		→ 622
617	<b>CHECK 311/311A:</b> <b>CODE B, G, OR M CIRCLED</b> <input type="checkbox"/> <b>NO CODE CIRCLED</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		→ 619 → 621
618	Does your husband/partner know that you are using a method of family planning?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8	
619	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) _____	
620	<b>CHECK 311/311A:</b> <b>NEITHER STERILIZED</b> <input type="checkbox"/> <b>HE OR SHE STERILIZED</b> <input type="checkbox"/>		→ 622
621	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 DONT KNOW ..... 8	
622	<b>CHECK 110:</b> <b>CURRENTLY MARRIED OR LIVING WITH A MAN</b> <input type="checkbox"/> <b>WIDOWED OR DIVORCED OR SEPARATED</b> <input type="checkbox"/> <b>NEVER MARRIED/ NEVER LIVED WITH A MAN</b> <input type="checkbox"/>		→ 624
623A	In what <u>month</u> and <u>year</u> did you start living with your (first) husband or partner?	MONTH ..... <input type="text"/> <input type="text"/> DONT KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DONT KNOW YEAR ..... 9998	→ 624
623B	How old were you when you first started living with him or first husband?	AGE ..... <input type="text"/> <input type="text"/>	
624	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
625	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 ..... <input type="text"/> <input type="text"/>	→ 701



626	<p>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.</p>											
627	<p>When was the <u>last</u> time you had sexual intercourse?</p> <p>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.</p>	<p>DAYS AGO ..... 1</p> <p>WEEKS AGO ..... 2</p> <p>MONTHS AGO ..... 3</p> <p>YEARS AGO ..... 4</p>	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									

**SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	<p><b>CHECK 110:</b></p> <p><b>CURRENTLY MARRIED/LIVING WITH A MAN</b> <input type="checkbox"/></p> <p><b>DIVORCED/SEPARATE OR WIDOWED</b> <input type="checkbox"/></p> <p><b>NEVER MARRIED AND NEVER LIVED WITH A MAN</b> <input type="checkbox"/></p>		<p>→ 703</p> <p>→ 707</p>
702	How old was your husband/partner on his last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
703	Did your (former) husband/partner ever attend school?	YES ..... 1 NO ..... 2	→ 706
704	What was the highest level of school he attended: primary, secondary, higher or what?	PRIMARY OR LOWER ..... 1 SECONDARY ..... 2 *VOCATIONAL (TVET) ..... 3 *TERTIARY/UNIVERSITY ..... 4 SPECIAL NEEDS EDUCATI..... 5 DON'T KNOW ..... 8	→ 706
705	What was the highest year he completed at that level? <u><b>*LEVEL 3 (TVET) AND 4 (TERTIARY/UNIVERSITY)</b></u> CERTIFICATE <b>1</b> DIPLOMA <b>2</b> DEGREE <b>3</b> POST-GRAD <b>1</b> MASTER'S DEGREE <b>2</b> PHD <b>4</b> <u><b>TOTAL YEARS        13</b></u> ADD THE NUMBER OF YEARS FOR EACH LEVEL)	LESS THAN ONE YEAR ..... 00 YEAR 1/ PRIMER 1/ YEAR 9 / FORM 3    01 YEAR 2/ PRIMER 2/ YEAR 10/ FORM 4    02 YEAR 3/ PRIMER 3/ YEAR 11/ FORM 5    03 YEAR 4 / STD 1-2/ YEAR 12/ UPPER 5    04 YEAR 5/ STD 3/ YEAR 13/ FORM 6       05 YEAR 6/ STD 4/YEAR 14/FORM 7        06 YEAR 7/ FORM 1 ..... 07 YEAR 8/ FORM 2 ..... 08  NUMBER OF YEARS <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98	
706	<p><b>CHECK 701:</b></p> <p><b>CURRENTLY MARRIED/LIVING WITH A MAN</b> <input type="checkbox"/></p> <p><b>DIVORCED/SEPARATE OR WIDOWED</b> <input type="checkbox"/></p> <p>What is your husband's/partner's occupation? That is, what kind of work does he mainly do?</p> <p>What was your (former) husband's/partner's occupation? That is, what kind of work did he mainly do?</p>	<input type="text"/> <input type="text"/> _____ _____ _____ _____	
707	Aside from your own housework, have you done any other work in the last seven days?	YES ..... 1 NO ..... 2	→ 711
708	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	→ 711
709	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	→ 711

710	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 718
711	What is your occupation, that is, what kind of work do you mainly do?	_____ <input type="checkbox"/> <input type="checkbox"/> _____ _____	
712	<b>CHECK 711:</b> <b>WORKS IN AGRICULTURE</b> <input type="checkbox"/> <b>DOES NOT WORK IN AGRICULTURE</b> <input type="checkbox"/>		→ 714
713	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND ..... 1 FAMILY LAND ..... 2 RENTED LAND ..... 3 SOMEONE ELSE'S LAND ..... 4	
714	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER ..... 1 FOR ORGANIZATION/GOVERNMENT/ PRIVATE EMPLOYER ..... 2 SELF-EMPLOYED ..... 3	
715	Do you usually work at home or away from home?	HOME ..... 1 AWAY ..... 2	
716	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	
717	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	
718	<b>CHECK 701:</b> <b>CURRENTLY MARRIED/LIVING WITH A MAN</b> <input type="checkbox"/> <b>NOT IN UNION</b> <input type="checkbox"/>		→ 727
719	<b>CHECK 717:</b> <b>CODE 1 OR 2 CIRCLED</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		→ 722
720	Who usually decides how the money that 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)	
721	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	→ 723

722	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)	
723	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 & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 OTHER = 6  1      2      3      4      6	
724	Who usually makes decisions about making major household purchases?	1      2      3      4      6	
725	Who usually makes decisions about making purchases for daily household needs?	1      2      3      4      6	
726	Who usually makes decisions about visits to your family or relatives?	1      2      3      4      6	
727	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ PRES./ NOT LISTEN. NOT PRES. LISTEN. CHILDREN < 10 ... 1    2    3 HUSBAND ..... 1    2    3 OTHER MALES ..... 1    2    3 OTHER FEMALES ... 1    2    3	
728	Sometimes a husband is annoyed or angered by things that his wife does. 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  If she comes home late from work or community function?    COMES HOME LATE .. 1    2    8	

**SECTION 8. HIV/AIDS and SEXUALLY TRANSMITTED DISEASES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																		
801	<p>Now I would like to talk about something else.</p> <p>HIV is a virus (infection) that can be passed from person to person. If people catch HIV they can become ill. This illness is called AIDS.</p> <p>Prior to this interview, have you ever heard of HIV or the disease called AIDS?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 852</p>																		
802	<p><b>CHECK Q. 115 and 116:</b></p> <p><b>CODE '2', '3', or '4' CIRCLED IN 115 OR 116 OR NOT ASKED</b> <input type="checkbox"/></p> <p><b>CODE '1' CIRCLED IN 115 &amp; 116 OR CODE '5' CIRCLED IN 115</b> <input type="checkbox"/></p>		<p>→ 804</p>																		
803	<p>The following is a list of sources of information on prevention of getting HIV, the virus that causes AIDS. Have you ever :</p> <p>a. Read messages about HIV or AIDS in newspapers or magazines?</p> <p>b. Seen leaflets, brochures, or booklets on HIV or AIDS?</p> <p>c. Gotten information on HIV or AIDS from the internet?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>INTERNET .....</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	NEWSPAPER/MAGAZINE	1	2	LEAFLETS/BOOKLETS	1	2	INTERNET .....	1	2							
	<u>YES</u>	<u>NO</u>																			
NEWSPAPER/MAGAZINE	1	2																			
LEAFLETS/BOOKLETS	1	2																			
INTERNET .....	1	2																			
804	<p><b>READ INTRODUCTORY STATEMENT ONLY IF Q803 WAS NOT ASKED:</b></p> <p>The following is a list of sources of information on prevention of getting HIV, the virus that causes AIDS.</p> <p>Have you ever</p> <p>a. Seen messages about HIV or AIDS on billboards, signs or posters?</p> <p>b. Seen/heard messages about HIV or AIDS on TV?</p> <p>c. Heard messages about HIV or AIDS on radio?</p> <p>d. Attended a community event about HIV or AIDS?</p> <p>e. Received information about AIDS or HIV, the virus that causes AIDS, from an outreach work, that is someone who came to your community and talked about HIV or AIDS?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TV .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>RADIO .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>COMMUNITY EVENT .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OUTREACH WORKER ...</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	SIGNS/POSTERS .....	1	2	TV .....	1	2	RADIO .....	1	2	COMMUNITY EVENT .....	1	2	OUTREACH WORKER ...	1	2	
	<u>YES</u>	<u>NO</u>																			
SIGNS/POSTERS .....	1	2																			
TV .....	1	2																			
RADIO .....	1	2																			
COMMUNITY EVENT .....	1	2																			
OUTREACH WORKER ...	1	2																			

		YES	NO	
	f. Participated in an HIV or AIDS peer education program?	PEER EDUCATION . . . . .	1	2
	g. Participated in another type of HIV or AIDS education program such as a workshop or school program?	OTHER EDUCATION . . . . .	1	2
	h. Discussed AIDS OR HIV, the virus that causes AIDS, with other persons such as friend, family members, or work colleagues?	FAMILY/FRIENDS . . . . .	1	2
805	Can people reduce their chance of getting HIV, the virus that causes AIDS, by having just one, uninfected, faithful sex partner?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
806	Can people get HIV from mosquito bites?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
807	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . NO . . . . . DON'T KNOW . . . . .	1 2 8	
808	Can people get HIV by sharing food with a person who has HIV or AIDS?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
809	Can people reduce their chance of getting HIV by not having sexual intercourse at all?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
810	Can people get HIV from the saliva of someone who has HIV or AIDS?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
811	Can people get HIV by having injections with a needle or syringe that has already been used by someone else?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
812	Can only gay men and/or faafafines (drag queens) get HIV?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
813	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
814	Is it possible for a healthy-looking person to have HIV?	YES . . . . . NO . . . . . DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW . . . . .	1 2 3 8	
815	Can HIV, the virus that causes AIDS, be transmitted from a mother to her baby:	YES NO DEPEND DK		
	During pregnancy?	DURING PREG. . . . .	1 2 3 8	
	During delivery?	DURING DELIVERY . . . . .	1 2 3 8	
	By breastfeeding?	BREASTFEEDING . . . . .	1 2 3 8	

816	<b>CHECK 815:</b> <b>AT LEAST ONE 'YES'</b> <input type="checkbox"/>		<b>OTHER</b> <input type="checkbox"/> → 818																
817	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
818	Have you heard about special antiretroviral drugs that people infected with HIV can get from a doctor or a nurse to help them live longer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																	
819	<b>CHECK 208 AND 215:</b>		<b>NO BIRTHS</b> <input type="checkbox"/> → 829 <b>LAST BIRTH SINCE JANUARY 2009</b> <input type="checkbox"/> → 829 <b>LAST BIRTH BEFORE JANUARY 2009</b> <input type="checkbox"/> → 829																
820	<b>CHECK 407 FOR LAST BIRTH:</b> <b>HAD ANTENATAL CARE</b> <input type="checkbox"/>		<b>NO ANTENATAL CARE</b> <input type="checkbox"/> → 829																
821	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.																		
822	During any of the antenatal visits for your last birth, did anyone talk to you about:	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Babies getting HIV from their mother?</td> <td>AIDS FROM MOTHER 1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Things that you can do to prevent getting HIV?</td> <td>THINGS TO DO . 1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Getting tested for the HIV?</td> <td>TESTED FOR AIDS . 1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	Babies getting HIV from their mother?	AIDS FROM MOTHER 1	2	8	Things that you can do to prevent getting HIV?	THINGS TO DO . 1	2	8	Getting tested for the HIV?	TESTED FOR AIDS . 1	2	8	
	YES	NO	DK																
Babies getting HIV from their mother?	AIDS FROM MOTHER 1	2	8																
Things that you can do to prevent getting HIV?	THINGS TO DO . 1	2	8																
Getting tested for the HIV?	TESTED FOR AIDS . 1	2	8																
823	Were you offered a test for HIV as part of your antenatal care?	YES ..... 1 NO ..... 2																	
824	I don't want to know the results, but were you tested for the HIV as part of your antenatal care?	YES ..... 1 NO ..... 2	→ 829																
825	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2																	
826	Where was the test done?	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTRE ..... 2  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ..... 3  OVERSEAS ..... 4 OTHER ..... 6 (SPECIFY)																	

827	Have you been tested for HIV since that time you were tested during your pregnancy?	YES ..... 1 NO ..... 2	→ 830
828	When was the last time you were tested for HIV?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	→ 836
829	I don't want to know the results, but have you ever been tested to see if you have HIV?	YES ..... 1 NO ..... 2	→ 834
830	When was the last time you were tested?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	
831	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
832	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	
833	Where was the test done?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTRE ..... 2  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... 3  OVERSEAS ..... 4 OTHER ..... 6 (SPECIFY)	→ 836
834	Do you know of a place where people can go to get tested for HIV?	YES ..... 1 NO ..... 2	→ 836
835	Where is that? Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTRE ..... B  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... C  OVERSEAS ..... D  OTHER ..... X (SPECIFY)	
836	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW ..... 8	
837	Would you share a meal with a person if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW ..... 8	
838	If a member of your family got infected with HIV, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW ..... 8	
839	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 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW ..... 8	
840	In your opinion, if a female teacher has HIV but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED ..... 1 SHOULD NOT BE ALLOWED ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 0 3 DON'T KNOW ..... 8	



841	Should the names of all persons with HIV be displayed in a public place for everyone to see?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 3 DONT KNOW ..... 8	
842	Should all persons with HIV live apart from the general community?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 3 DONT KNOW ..... 8	
843	Should it be a criminal offence to knowingly pass HIV onto someone else?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 3 DONT KNOW ..... 8	
844	Should all newcomers to Samoa be required to take a test for HIV?	YES ..... 1 NO ..... 2 DEPENDS 0 0 0 0 0 0 0 0 0 0 0 3 DONT KNOW ..... 8	
845	Do you personally know someone who has been denied health services in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
846	Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
847	Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
848	<b>CHECK 845, 846, AND 847:</b> <b>NOT A SINGLE</b> <input type="checkbox"/> <b>YES'</b> ↓		<b>AT LEAST</b> <input type="checkbox"/> <b>ONE 'YES'</b> → 850
849	Do you personally know someone who has or is suspected to have HIV or AIDS?	YES ..... 1 NO ..... 2	
850	Do you agree or disagree with the following statement: People with HIV or AIDS should be ashamed of themselves.	AGREE ..... 1 DISAGREE ..... 2 DONT KNOW/NO OPINION ..... 8	
851	Do you agree or disagree with the following statement: People with HIV or AIDS should be blamed for bringing the disease into the community.	AGREE ..... 1 DISAGREE ..... 2 DONT KNOW/NO OPINION ..... 8	
852	<b>CHECK Q. 801.</b> <b>HEARD ABOUT</b> <input type="checkbox"/> <b>HIV OR AIDS</b> ↓ Apart from HIV, have you heard about other infections that can be transmitted through sexual contact?	<b>NOT HEARD</b> <input type="checkbox"/> <b>ABOUT HIV OR AIDS</b> ↓ Have you heard about infections that can be transmitted through sexual contact? YES ..... 1 NO ..... 2	

853	<b>CHECK 852: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?</b> <p style="text-align: center;"> <b>YES</b> <input type="checkbox"/> <span style="margin-left: 150px;"><b>NO</b> <input type="checkbox"/></span> </p>		→ 901																		
854	Have you ever heard about the following STI diseases? a. Gonorrhoea b. Syphilis c. Chlamydia d. Genital warts e. Genital herpes	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>GONORRHEA .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>SYPHILLIS .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>CHLAMYDIA .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GENITAL WARTS .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GENITAL HERPES ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	GONORRHEA .....	1	2	SYPHILLIS .....	1	2	CHLAMYDIA .....	1	2	GENITAL WARTS .....	1	2	GENITAL HERPES ...	1	2	
	YES	NO																			
GONORRHEA .....	1	2																			
SYPHILLIS .....	1	2																			
CHLAMYDIA .....	1	2																			
GENITAL WARTS .....	1	2																			
GENITAL HERPES ...	1	2																			
855	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																			
856	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																			
857	<b>CHECK 855, AND 856:</b> <b>HAS HAD AN INFECTION (ANY 'YES')</b> <input type="checkbox"/> <span style="margin-left: 100px;"><b>HAS NOT HAD AN INFECTION OR DOES NOT KNOW</b></span> <input type="checkbox"/>		→ 860																		
858	The last time you had (PROBLEM FROM 855/856), did you seek any kind of advice or treatment?	YES ..... 1 NO ..... 2	→ 860																		
859	Where did you go?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).  IF UNABLE TO DETERMINE IF HOSPITAL OR CLINIC IS PUBLIC OR PRIVATE MEDICAL FACILITY, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL ..... A GOVT. HEALTH CENTRE ..... B  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D FRIEND/RELATIVE ..... E  OVERSEAS ..... F  OTHER _____ X (SPECIFY)																			
860	Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																			

**SECTION 9. OTHER HEALTH ISSUES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
901	Have you ever heard of an illness called tuberculosis or TB?	YES ..... 1 NO ..... 2	→ 908																											
902	<p><b>CHECK Q. 115 and 116:</b></p> <p><b>CODE '2', '3', OR '4' CIRCLED IN 115 OR 116 OR NOT ASKED</b> <input type="checkbox"/></p> <p><b>CODE '1' CIRCLED IN 115 &amp; 116 OR CODE '5' CIRCLED IN 115</b> <input type="checkbox"/></p>		→ 904																											
903	<p>The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following?</p> <p>a. Read messages about TB in newspapers or magazines?</p> <p>b. Seen leaflets, brochures, or booklets on TB?</p> <p>c. Gotten information on TB from the internet?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>INTERNET . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	NEWSPAPER/MAGAZINE . . .	1	2	LEAFLETS/BOOKLETS . . .	1	2	INTERNET . . . . .	1	2																
	<u>YES</u>	<u>NO</u>																												
NEWSPAPER/MAGAZINE . . .	1	2																												
LEAFLETS/BOOKLETS . . .	1	2																												
INTERNET . . . . .	1	2																												
904	<p><b>READ INTRODUCTORY STATEMENT ONLY IF Q903 WAS NOT ASKED:</b></p> <p>The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following?</p> <p>a. Seen messages about TB on billboards, signs or posters?</p> <p>b. Seen/heard messages about TB on TV?</p> <p>c. Heard messages about TB on the radio?</p> <p>d. Participated in a TB peer education program?</p> <p>e. Participated in another type of TB education program such as a wokshop or school program?</p> <p>f. Attended a community event about TB such as the women community workshop on World TB Day?</p> <p>g. Received information about TB from an outreach work, that is, someone who came to your community and talked about TB?</p> <p>h. Discussed TB with other persons such as friends, family members, or work colleagues?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TV . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>RADIO . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>PEER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OTHER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>COMMUNITY EVENT . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OUTREACH WORKER . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>FAMILY/FRIENDS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	SIGNS/POSTERS . . . . .	1	2	TV . . . . .	1	2	RADIO . . . . .	1	2	PEER EDUCATION . . . . .	1	2	OTHER EDUCATION . . . . .	1	2	COMMUNITY EVENT . . . . .	1	2	OUTREACH WORKER . . . . .	1	2	FAMILY/FRIENDS . . . . .	1	2	
	<u>YES</u>	<u>NO</u>																												
SIGNS/POSTERS . . . . .	1	2																												
TV . . . . .	1	2																												
RADIO . . . . .	1	2																												
PEER EDUCATION . . . . .	1	2																												
OTHER EDUCATION . . . . .	1	2																												
COMMUNITY EVENT . . . . .	1	2																												
OUTREACH WORKER . . . . .	1	2																												
FAMILY/FRIENDS . . . . .	1	2																												
905	<p>How does tuberculosis spread from one person to another?</p> <p>PROBE: Any other ways?</p> <p>RECORD ALL MENTIONED.</p>	<p>THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A</p> <p>THROUGH SHARING UTENSILS . . . . . B</p> <p>THROUGH TOUCHING A PERSON WITH TB . . . . . C</p> <p>THROUGH FOOD . . . . . D</p> <p>THROUGH SEXUAL CONTACT . . . . . E</p> <p>THROUGH MOSQUITO BITES . . . . . F</p> <p>THROUGH SALIVA . . . . . G</p> <p>THROUGH SMOKING . . . . . H</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON' KNOW . . . . . Z</p>																												

906	Can tuberculosis be cured?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
907	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/ DEPENDS ..... 8	
908	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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . <input type="text"/> <input type="text"/>  NONE ..... 00 → 912	
909	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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . <input type="text"/> <input type="text"/>  NONE ..... 00 → 912	
910	The last time you had an injection given to you by a health worker, where did you go to get the injection?	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTRE ..... 2  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... 3  OVERSEAS ..... 4 OTHER _____ 6 (SPECIFY)	
911	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
912	Do you currently smoke cigarettes?	YES ..... 1 NO ..... 2 → 914	
913	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES ..... <input type="text"/> <input type="text"/>	
914	Do you currently smoke or use any other type of tobacco?	YES ..... 1 NO ..... 2 → 916	
915	What (other) type of tobacco do you currently smoke or use?  RECORD ALL MENTIONED.	PIPE ..... A TAPAA SAMOA ..... B  OTHER _____ X (SPECIFY)	

916	Do you currently drink alcohol?	YES ..... 1 NO ..... 2	→ 920																											
917	In the last 24 hours, did you intake any drinks containing alcohol?	YES ..... 1 NO ..... 2	→ 920																											
918	Did you have it before, during or after meal?	BEFORE MEAL 0 0 0 0 0 0 0 0 0 1 DURING MEAL 0 0 0 0 0 0 0 0 0 2 AFTER MEAL 0 0 0 0 0 0 0 0 0 3																												
919	How many standard drinks containing alcohol did you have? A standard drink is a can of beer, a glass of wine, a shot of liquor, a glass of cocktail drink, small bottle (beer) etc.?	STANDARD DRINK ..... <input type="text"/> <input type="text"/>	→																											
920	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?	<table border="0"> <thead> <tr> <th></th> <th>BIG PROB- LEM</th> <th>NOT A BIG PROB- LEM</th> </tr> </thead> <tbody> <tr> <td>Getting permission to go?</td> <td>PERMISSION TO GO . 1</td> <td>2</td> </tr> <tr> <td>Getting money needed for treatment?</td> <td>GETTING MONEY ..... 1</td> <td>2</td> </tr> <tr> <td>The distance to the health facility?</td> <td>DISTANCE ..... 1</td> <td>2</td> </tr> <tr> <td>Having to take transport?</td> <td>TAKING TRANSPORT . 1</td> <td>2</td> </tr> <tr> <td>Not wanting to go alone?</td> <td>GO ALONE ..... 1</td> <td>2</td> </tr> <tr> <td>Concern that there may not be a female health provider?</td> <td>NO FEMALE PROVIDER 1</td> <td>2</td> </tr> <tr> <td>Concern that there may not be any health provider?</td> <td>NO PROVIDER ... 1</td> <td>2</td> </tr> <tr> <td>Concern that there may be no drugs available?</td> <td>NO DRUGS ... 1</td> <td>2</td> </tr> </tbody> </table>		BIG PROB- LEM	NOT A BIG PROB- LEM	Getting permission to go?	PERMISSION TO GO . 1	2	Getting money needed for treatment?	GETTING MONEY ..... 1	2	The distance to the health facility?	DISTANCE ..... 1	2	Having to take transport?	TAKING TRANSPORT . 1	2	Not wanting to go alone?	GO ALONE ..... 1	2	Concern that there may not be a female health provider?	NO FEMALE PROVIDER 1	2	Concern that there may not be any health provider?	NO PROVIDER ... 1	2	Concern that there may be no drugs available?	NO DRUGS ... 1	2	
	BIG PROB- LEM	NOT A BIG PROB- LEM																												
Getting permission to go?	PERMISSION TO GO . 1	2																												
Getting money needed for treatment?	GETTING MONEY ..... 1	2																												
The distance to the health facility?	DISTANCE ..... 1	2																												
Having to take transport?	TAKING TRANSPORT . 1	2																												
Not wanting to go alone?	GO ALONE ..... 1	2																												
Concern that there may not be a female health provider?	NO FEMALE PROVIDER 1	2																												
Concern that there may not be any health provider?	NO PROVIDER ... 1	2																												
Concern that there may be no drugs available?	NO DRUGS ... 1	2																												
921	Are you covered by any health insurance?	YES ..... 1 NO ..... 2	→ 923																											
922	What type of health insurance?  RECORD ALL MENTIONED.	HEALTH INSURANCE THROUGH EMPLOYER ..... A SOCIAL SECURITY ..... B OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. C OTHER _____ X (SPECIFY)																												
923	Are you involved in a regular physical activity campaigns?	YES ..... 1 NO ..... 2 NO ANSWER, REFUSED ..... 6	→ 925																											
924	Which type of physical activity you are involved in it?  RECORD ALL MENTIONED.	VILLAGE ..... 1 MOH ..... 2 PRIVATE ..... 3 PERSONAL EXERCISE 0 0 0 0 0 0 0 4 OTHER _____ 5 (SPECIFY)																												

925	<p>How much servings of fruits do you usually have in a week? <i>(1 SERVING IS EQUIVALENT TO THE RESPONDENT'S FIST)</i></p> <p>RECORD '00' IF NO SERVING OF FRUITS IN A WEEK.</p>	<p>NO. OF SERVINGS ..... <input type="text"/> <input type="text"/></p>	
926	<p>How much servings of vegetables do you usually have in a week? <i>(1 SERVING IS EQUIVALENT TO THE RESPONDENT'S FIST)</i></p> <p>RECORD '00' IF NO SERVING OF VEGETABLES IN A WEEK.</p>	<p>NO. OF SERVINGS ..... <input type="text"/> <input type="text"/></p>	
927	<p>How often do you eat the following foods?</p> <p><b>1 Fish/Seafood</b>, <i>crab, octopus, sea cucumber, lobster eel etc,</i></p> <p><b>2 Fried foods/high fat foods</b>, <i>fried chicken/fish,turkey tails,pancakes, cake, doughnuts, mutton, corned beef, coconut cream, etc</i></p> <p><b>3 High sugary foods</b> <i>cakes, lollies, ice cream cookies, coconut jam</i></p> <p><b>4 High Salty foods</b> <i>noodles with seasoning, corned beef, sausages, meat pie, eleni (natural oil), twisties, soy sauce, tomato sauce</i></p> <p><b>5 Cordial/Raro/Softdrinks/Commercial Fruit drinks</b></p> <p><b>6 Starchy foods</b>, <i>taro, breadfruit, potato, giant taro</i></p>	<p><b>0 - NONE</b>  <b>1 - ONCE A WEEK</b>  <b>2 - TWICE A WEEK</b>  <b>3 - THREE OR MORE A WEEK</b></p> <p>1 <i>Fish/Seafood</i>   0 1 2 3</p> <p>2 <i>Fried foods/high fat..... foods</i>   0 1 2 3</p> <p>3 <i>High sugary foods.....</i>   0 1 2 3</p> <p>4 <i>High sugary foods.....</i>   0 1 2 3</p> <p>5 <i>cordial/Raro..... Softdrinks/ Commercial Fruit drinks</i>   0 1 2 3</p> <p>6 <i>Starchy foods</i>   0 1 2 3</p>	
928	<p>RECORD THE TIME.</p>	<p>HOUR ..... <input type="text"/> <input type="text"/></p> <p>MINUTES ..... <input type="text"/> <input type="text"/></p>	

**INSTRUCTIONS:**

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.  
ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS
  
- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 ORAL CONTRACEPTIVE PILL
- 4 IUCD
- 5 INJECTABLES
- 6 IMPLANTS
- 7 MALE CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD/OVULATION METHOD
- M WITHDRAWAL
- X OTHER \_\_\_\_\_  
(SPECIFY)

12	DEC	01		
11	NOV	02		
10	OCT	03		
09	SEP	04		
2	08	AUG	05	2
0	07	JUL	06	0
1	06	JUN	07	1
4	05	MAY	08	4
	04	APR	09	
	03	MAR	10	
	02	FEB	11	
	01	JAN	12	

12	DEC	13		
11	NOV	14		
10	OCT	15		
09	SEP	16		
2	08	AUG	17	2
0	07	JUL	18	0
1	06	JUN	19	1
3	05	MAY	20	3
	04	APR	21	
	03	MAR	22	
	02	FEB	23	
	01	JAN	24	

12	DEC	25		
11	NOV	26		
10	OCT	27		
09	SEP	28		
2	08	AUG	29	2
0	07	JUL	30	0
1	06	JUN	31	1
2	05	MAY	32	2
	04	APR	33	
	03	MAR	34	
	02	FEB	35	
	01	JAN	36	

12	DEC	37		
11	NOV	38		
10	OCT	39		
09	SEP	40		
2	08	AUG	41	2
0	07	JUL	42	0
1	06	JUN	43	1
1	05	MAY	44	1
	04	APR	45	
	03	MAR	46	
	02	FEB	47	
	01	JAN	48	

12	DEC	49		
11	NOV	50		
10	OCT	51		
09	SEP	52		
2	08	AUG	53	2
0	07	JUL	54	0
1	06	JUN	55	1
0	05	MAY	56	0
	04	APR	57	
	03	MAR	58	
	02	FEB	59	
	01	JAN	60	

12	DEC	61		
11	NOV	62		
10	OCT	63		
09	SEP	64		
2	08	AUG	65	2
0	07	JUL	66	0
0	06	JUN	67	0
9	05	MAY	68	9
	04	APR	69	
	03	MAR	70	
	02	FEB	71	
	01	JAN	72	

## **TYPE OF GOVERNMENT HOSPITALS**

### **Government Hospital**

- 1 Tupua Tamasese Meaole II-TTM-II
- 2 Malietoa Tanumafili II
- 3 Poutasi District Hospital
- 4 Leulumoega District Hospital
- 5 Lalomanu District Hospital
- 6 Safotu District Hospital
- 7 Sataua District Hospital
- 8 Foailalo District Hospital

### **Government Health Centre**

- 1 Lufilufi HC
- 2 Faleolo HC
- 3 Saanapu HC
- 4 Fagamalo HC
- 5 Vaipouli HC





**DEMOGRAPHIC HEALTH SURVEY (DHS) 2014  
MEN'S QUESTIONNAIRE (AGE 15-54)**



*Samoa Bureau of Statistics (SBS) working in partnership with Ministry of Health (MOH) and MWCSD*

**MAN'S IDENTIFICATION**

NAME OF REGION _____ NAME OF DISTRICT _____ NAME OF VILLAGE _____ ENUMERATION AREA . . . . . HOUSEHOLD NUMBER . . . . . NAME AND LINE NUMBER OF MAN _____	<table border="1" style="margin: auto;"> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>																					

**INTERVIEWER VISITS**

	1	2	3	FINAL VISIT				
DATE	_____	_____	_____	DAY MONTH YEAR <table border="1" style="display: inline-table; text-align: center;"> <tr><td>2</td><td>0</td><td>1</td><td>4</td></tr> </table>	2	0	1	4
2	0	1	4					
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER <table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>				
RESULT*	_____	_____	_____	RESULT <table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td></tr> </table>				
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td></tr> </table>				
NEXT VISIT: TIME	_____	_____						

\*RESULT CODES:

1 COMPLETED	4 REFUSED	
2 NOT AT HOME	5 PARTLY COMPLETED	7 OTHER _____
3 POSTPONED	6 INCAPACITATED	(SPECIFY)

LANGUAGE OF INTERVIEW	1 ENGLISH	2 SAMOAN	3 BOTH	4 OTHER _____
				(SPECIFY)
LANGUAGE OF RESPONDENT	1 ENGLISH	2 SAMOAN	3 BOTH	4 OTHER _____
				(SPECIFY)
TRANSLATOR USED?	1 YES	2 NO		

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY								
NAME _____	NAME _____										
DATE _____ <table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td></tr> </table>			DATE _____ <table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td></tr> </table>			<table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td></tr> </table>			<table border="1" style="display: inline-table; text-align: center;"> <tr><td> </td><td> </td></tr> </table>		

**SECTION 1. RESPONDENT'S BACKGROUND**

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is \_\_\_\_\_ and I am working with the SBS. We are conducting a national survey that asks women (and men) about various health issues. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes about 15 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary, and if we should come to 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. However, we hope that you will participate in this survey sincere your views important.

At this time, do you want to ask me anything about the survey?  
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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> MINUTES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
102	How long have you been living continuously in (CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> ALWAYS (PLACE OF BIIRTH) ..... 95					→ 108				
103	Just before you moved here, where else did you live?  _____ (WRITE NAME OF THE VILLAGE)	AUA ..... 1 NWU ..... 2 ROU ..... 3 SAVAII ..... 4 OVERSEAS ..... 6 (SPECIFY COUNTRY)									
104	CHECK 102: LESS THAN 1 YEAR <input type="checkbox"/> 1 YEARS OR MORE <input type="checkbox"/>		→ 106								
105	Where were you living 1 year ago?  _____ (WRITE NAME OF THE VILLAGE)	AUA ..... 1 NWU ..... 2 ROU ..... 3 SAVAII ..... 4 OVERSEAS ..... 6 (SPECIFY COUNTRY)									
106	CHECK 102: LESS THAN 5 YEARS <input type="checkbox"/> 5 YEARS OR MORE <input type="checkbox"/>		→ 108								
107	Where were you living 5 years ago?  _____ (WRITE NAME OF THE VILLAGE)	AUA ..... 1 NWU ..... 2 ROU ..... 3 SAVAII ..... 4 OVERSEAS ..... 6 (SPECIFY COUNTRY)									

108	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
109	How old were you at your last birthday?  COMPARE AND CORRECT 108 AND/OR 109 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
110	What is your marital status now: are you currently married or living with a woman as if married, or are you a widower, divorced, separated or never married and never lived with a woman?	CURRENTLY MARRIED ..... 1 CURRENTLY LIVING TOGETHER ..... 2 WIDOWER ..... 3 DIVORCED ..... 4 SEPARATED ..... 5 NEVER MARRIED/LIVED TOGETHER ... 6	
111	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 115
112	What is the highest level of school you attended: primary, secondary, higher or what?	PRIMARY OR LOWER ..... 1 SECONDARY ..... 2 *VOCATIONAL (TVET) ..... 3 *TERTIARY/UNIVERSITY ..... 4 SPECIAL NEEDS EDUCATION ..... 5	
113	What is the highest year you completed at that level? <b>*LEVEL 3 (TVET) AND 4 (TERTIARY/UNIVERSITY)</b> CERTIFICATE            1 DIPLOMA                2 DEGREE                 3 POST-GRAD            1 MASTER'S DEGREE    2 PHD                      4 <u>TOTAL YEARS        13</u> <b>ADD THE NUMBER OF YEARS FOR EACH LEVEL)</b>	LESS THAN ONE YEAR ..... 00 YEAR 1/ PRIMER 1/ YEAR 9 / FORM 3 . 01 YEAR 2/ PRIMER 2/ YEAR 10/ FORM 4 . 02 YEAR 3/ PRIMER 3/ YEAR 11/ FORM 5 . 03 YEAR 4 / STD 1-2/ YEAR 12/ UPPER 5 . 04 YEAR 5/ STD 3/ YEAR 13/ FORM 6 . 05 YEAR 6/ STD 4/YEAR 14/FORM 7 ... 06 YEAR 7/ FORM 1 ..... 07 YEAR 8/ FORM 2 ..... 08  NUMBER OF YEARS ..... <input type="text"/> <input type="text"/>	
114	CHECK 112:  PRIMARY OR <input type="checkbox"/> SECONDARY <input type="checkbox"/> LOWER                      OR HIGHER SPECIAL NEEDS EDUCATION	→ 119	
115	Now I would like you to read this sentence to me.  SHOW CARD IN <b>ENGLISH</b> TO RESPONDENT.  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL IN ENGLISH ... 1 ABLE TO READ ONLY PARTS OF SENTENCE IN ENGLISH ..... 2 ABLE TO READ WHOLE SENTENCE .. 3  BLIND/VISUALLY IMPAIRED ..... 5	→ 120

116	SHOW CARD IN <b>SAMOAN</b> TO RESPONDENT.  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL IN SAMOAN ... 1 ABLE TO READ ONLY PARTS OF SENTENCE IN SAMOAN ..... 2 ABLE TO READ WHOLE SENTENCE .. 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE)	
117	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	
118	CHECK 115 and 116:  CODE '2', '3' OR '4' CIRCLED IN 115 OR 116 <input type="checkbox"/> CODE '1' CIRCLED IN 115 AND 116 OR CODE '5' IN 115 <input type="checkbox"/>		120
119	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
120	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
121	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
122	Other than for watching videos, do you use computer almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
123	What is your religion?	EFKS/TAITI ..... 11 METHODIST ..... 12 ROMAN CATHOLIC ..... 13 LDS ..... 14 SDS ..... 15 ASSEMBLY OF GOD ..... 16  OTHER _____ 96 (SPECIFY)  REFUSED TO ANSWER ..... 97 DON'T KNOW ..... 98	
124	Do you consider yourself a Samoan, part-Samoan or what?	SAMOAN ..... 1 PART-SAMOAN ..... 2  OTHER _____ 6 (SPECIFY)  DON'T KNOW ..... 8	

**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	<input type="checkbox"/> → 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 #0'.	SONS AT HOME ..... <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME ..... <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 #0'.	SONS ELSEWHERE ..... <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE . . . <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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	<input type="checkbox"/> → 208								
207	How many boys have died?  And how many girls have died?  IF NONE, RECORD #0'.	BOYS DEAD ..... <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD ..... <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD #0'.	TOTAL CHILDREN ..... <table border="1"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208:  HAS HAD MORE THAN ONE CHILD <input type="checkbox"/> ↓  HAS HAD ONLY ONE CHILD <input type="checkbox"/> →  HAS NOT HAD ANY CHILDREN <input type="checkbox"/> →		→ 212  → 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 ..... <input type="text"/> <input type="text"/>	
212	How old were you when your (first) child was born?	AGE IN YEARS ..... <input type="text"/> <input type="text"/>	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/>		→ 301
214	How many years old is your (youngest) child?	AGE IN YEARS ..... <input type="text"/> <input type="text"/>	
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-3 YEARS <input type="checkbox"/> OTHER <input type="checkbox"/>		→ 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 ..... 3	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT ..... 1 NOT PRESENT ..... 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY ..... 1 AT HOME ASSISTED BY TBA ..... 2 AT HOME ASSISTED BY RELATIVES ..... 3 OTHER ..... 4	→ 221
220	What was the main reason why (NAME)'s mother did not deliver in a hospital or health facility?	COST TOO MUCH ..... 01 FACILITY CLOSED ..... 02 TOO FAR/NO TRANSPORTATION ..... 03 DON'T TRUST FACILITY/POOR QUALITY SERVICE ..... 04 NO FEMALE PROVIDER ..... 05 NOT THE FIRST CHILD ..... 06 CHILD'S MOTHER DID NOT THINK IT WAS NECESSARY ..... 07 HE DID NOT THINK IT WAS NECESSARY ..... 08 FAMILY DID NOT THINK IT WAS NECESSARY ..... 09 OTHER _____ 96 (SPECIFY) DON'T KNOW ..... 98	
221	When a child has diarrhea, how much should he or she be given to drink: more than usual, the same amount as usual, less than usual, or should he or she not be given anything 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	<p>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.</p> <p>Which ways or methods have you heard about?</p> <p>FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?</p> <p>CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR METHODS 02, 07, 10, AND 11, ASK 302 IF 301 HAS CODE 1 CIRCLED.</p>	302 Have you ever used (METHOD)?	
01	<p><b>FEMALE STERILIZATION</b> Women can have an operation to avoid having any more children.</p>	<p>YES ..... 1 NO ..... 2</p>	
02	<p><b>MALE STERILIZATION</b> Men can have an operation to avoid having any more children.</p>	<p>YES ..... 1 NO ..... 2</p> <p align="right">↓</p>	<p>Have you ever had an operation to avoid having any more children?</p> <p>YES ..... 1 NO ..... 2</p>
03	<p><b>ORAL CONTRACEPTIVE PILL</b> Women can take a pill every day to avoid becoming pregnant.</p>	<p>YES ..... 1 NO ..... 2</p>	
04	<p><b>IUCD</b> Women can have a loop or coil placed into uterine by a doctor or a nurse.</p>	<p>YES ..... 1 NO ..... 2</p>	
05	<p><b>INJECTABLES</b> Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.</p>	<p>YES ..... 1 NO ..... 2</p>	
06	<p><b>IMPLANTS</b> Women can have several small rods placed in arm by a doctor or nurse which can prevent pregnancy for one or more years.</p>	<p>YES ..... 1 NO ..... 2</p>	
07	<p><b>MALE CONDOM</b> Men can put a rubber sheath on their penis before sexual intercourse.</p>	<p>YES ..... 1 NO ..... 2</p> <p align="right">↓</p>	<p>YES ..... 1 NO ..... 2</p>
08	<p><b>FEMALE CONDOM</b> Women can place a sheath in their vagina before sexual intercourse.</p>	<p>YES ..... 1 NO ..... 2</p>	
09	<p><b>LACTATIONAL AMENORRHEA METHOD (LAM)</b></p>	<p>YES ..... 1 NO ..... 2</p>	
10	<p><b>RHYTHM METHOD/NATURAL OVULATION</b> 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.</p>	<p>YES ..... 1 NO ..... 2</p> <p align="right">↓</p>	<p>YES ..... 1 NO ..... 2</p>
11	<p><b>WITHDRAWAL</b> Men can be careful and pull out before climax</p>	<p>YES ..... 1 NO ..... 2</p> <p align="right">↓</p>	<p>YES ..... 1 NO ..... 2</p>
12	<p><b>EMERGENCY CONTRACEPTION</b> As an emergency measure after sexual intercourse, women can take special pills at any time within 5 days to prevent pregnancy.</p>	<p>YES ..... 1 NO ..... 2</p>	
13	<p>Have you heard of any other ways or methods that women or men can use to avoid pregnancy?</p>	<p>YES ..... 1</p> <p align="center">_____ (SPECIFY)</p> <p align="center">_____ (SPECIFY)</p> <p>NO ..... 2</p>	

303	In the last few months have you heard about family planning:  On the radio? On the television? In a newspaper or magazine?	YES NO RADIO ..... 1 2 TELEVISION ..... 1 2 NEWSPAPER OR MAGAZINE 1 2	
304	In the last few months, have you discussed the practice of family planning with a health worker or health professional?	YES ..... 1 NO ..... 2	
305	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 if she has sexual relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 307
306	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	
307	Do you think that a woman who is breastfeeding her baby can become pregnant?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
308	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.  a) Contraception is women's business and a man should not have to worry about it.  b) Women who use contraception may become promiscuous.	DIS- AGREE AGREE DK CONTRACEPTION WOMAN'S BUSINESS . 1 2 8 WOMAN MAY BECOME PROMISCUOUS ... 1 2 8	
309	CHECK 301 (07) KNOWS MALE CONDOM YES <input type="checkbox"/> NO <input type="checkbox"/>		→ 313
310	Do you know of a place where a person can get condoms?	YES ..... 1 NO ..... 2	→ 313
311	Where is that?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL ..... A GOVT. HEALTH CENTRE ..... B FAMILY PLANNING CLINIC ... C  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE . D PEER TRAINER ..... E  OTHER SOURCE HOTEL/NIGHT CLUB ..... F FRIEND/RELATIVE ..... G  OVERSEAS ..... H OTHER _____ X (SPECIFY)	
312	If you wanted to, could you yourself get a condom?	YES ..... 1 NO ..... 2	



313	CHECK 301 (08) KNOWS FEMALE CONDOM YES <input type="checkbox"/> NO <input type="checkbox"/>	→ 401	
314	Do you know of a place where a person can get female condoms?	YES ..... 1 NO ..... 2	→ 401
315	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL ..... A GOVT. HEALTH CENTRE ..... B FAMILY PLANNING CLINIC ... C  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE . D PEER TRAINOR ..... E  OTHER SOURCE HOTEL/NIGHT CLUB ..... F FRIEND/RELATIVE ..... G  OVERSEAS ..... H  OTHER _____ X (SPECIFY)	
316	If you wanted to, could you yourself get a female condom?	YES ..... 1 NO ..... 2	

**SECTION 4. FERTILITY PREFERENCES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	<p>CHECK 110:</p> <p>CURRENTLY MARRIED/ LIVING TOGETHER <input type="checkbox"/></p> <p>DIVORCED/SEPARATED WIDOWER/ NEVER MARRIED <input type="checkbox"/></p>	<p>→ 406</p>	
402	<p>CHECK 302:</p> <p>MAN NOT STERILIZED <input type="checkbox"/></p> <p>MAN STERILIZED <input type="checkbox"/></p>	<p>→ 406</p>	
403	<p>Is your wife (partner) currently pregnant?</p>	<p>YES ..... 1 NO ..... 2 DONT KNOW ..... 8</p>	
404	<p>CHECK 403:</p> <p>WIFE/PARTNER NOT PREGNANT OR DON'T KNOW <input type="checkbox"/></p> <p>WIFE/ PARTNER PREGNANT <input type="checkbox"/></p> <p>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?</p> <p>Now I have some questions about the future. After the child(ren) you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?</p>	<p>HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 COUPLE INFECUND ..... 3 WIFE (WIVES)/PARTNER(S) STERILIZED ..... 4 UNDECIDED/DON'T KNOW ..... 8</p>	<p>→ 406</p>
405	<p>CHECK 403:</p> <p>WIFE/PARTNER NOT PREGNANT OR DON'T KNOW <input type="checkbox"/></p> <p>WIFE/PARTNER PREGNANT <input type="checkbox"/></p> <p>How long would you like to wait from now before the birth of (a/another) child?</p> <p>After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?</p>	<p>MONTHS ..... 1 <input type="text"/><input type="text"/></p> <p>YEARS ..... 2 <input type="text"/><input type="text"/></p> <p>SOON/NOW ..... 993 COUPLE INFECUND ..... 994 OTHER ..... 996 (SPECIFY) DONT KNOW ..... 998</p>	
406	<p>CHECK 208:</p> <p>HAS LIVING CHILDREN <input type="checkbox"/></p> <p>NO LIVING CHILDREN <input type="checkbox"/></p> <p>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?</p> <p>If you could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>PROBE FOR A NUMERIC RESPONSE.</p>	<p>NONE ..... 00</p> <p>NUMBER ..... <input type="text"/><input type="text"/></p> <p>OTHER ..... 96 (SPECIFY)</p>	<p>→ 408</p> <p>→ 408</p>
407	<p>How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?</p>	<p>BOYS    GIRLS    EITHER</p> <p>NUMBER <input type="text"/><input type="text"/> <input type="text"/><input type="text"/> <input type="text"/><input type="text"/></p> <p>OTHER ..... 96 (SPECIFY)</p>	

408	CHECK 110: CURRENTLY MARRIED <input type="checkbox"/> OR LIVING WITH A MAN ↓	WIDOWED OR DIVORCED OR SEPARATED <input type="checkbox"/> ↓	NEVER MARRIED/ NEVER LIVED WITH A MAN <input type="checkbox"/> → 410
409A	In what <u>month</u> and <u>year</u> did you start living with your (first) wife or partner?	MONTH ..... <input type="text"/> <input type="text"/> DONT KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DONT KNOW YEAR ..... 9998	→ 410
409B	How old were you when you first started living with (her/first wife)?	AGE ..... <input type="text"/> <input type="text"/>	
410 CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.			
411	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 ..... <input type="text"/> <input type="text"/>	→ 501
412	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.		
413	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 <input type="text"/> <input type="text"/> WEEKS AGO ..... 2 <input type="text"/> <input type="text"/> MONTHS AGO ..... 3 <input type="text"/> <input type="text"/> YEARS AGO ..... 4 <input type="text"/> <input type="text"/>	

**SECTION 5. EMPLOYMENT AND GENDER ROLES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 504
502	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	→ 504
503	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 513
504	What is your occupation, that is, what kind of work do you mainly do?	<div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	
505	CHECK 504: WORKS IN AGRICULTURE <input type="checkbox"/> DOES NOT WORK IN AGRICULTURE <input type="checkbox"/>		→ 507
506	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND ..... 1 FAMILY LAND ..... 2 RENTED LAND ..... 3 SOMEONE ELSE'S LAND ..... 4	
507	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER ..... 1 FOR ORGANIZATION/GOVERNMENT/ PRIVATE EMPLOYER ..... 2 SELF-EMPLOYED ..... 3	
508	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	
509	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	
510	CHECK 110: CURRENTLY MARRIED/ LIVING TOGETHER <input type="checkbox"/> DIVORCED/SEPARATED WIDOWER/ NEVER MARRIED <input type="checkbox"/>		→ 513
511	CHECK 509: CODE 1 OR 2 CIRCLED <input type="checkbox"/> OTHER <input type="checkbox"/>		→ 513
512	Who decides how the money you earn will be used: mainly you, mainly your (wife /partner), or you and (wife/partner) jointly?	RESPONDENT ..... 1 WIFE/PARTNER ..... 2 RESPONDENT AND WIFE/ PARTNER JOINTLY ..... 3 OTHER _____ 6 SPECIFY	

513	<p>In a couple, who do you think should have the greater say in each of the following decisions: the husband, the wife or both equally:</p> <p>a) making large household purchases?</p> <p>b) making small daily household purchases?</p> <p>c) deciding when to visit the wife's family or relatives?</p> <p>d) deciding what to do with the money she earns for her work?</p> <p>e) deciding how many children to have?</p>	<table border="1"> <thead> <tr> <th></th> <th>HUS-BAND</th> <th>WIFE</th> <th>BOTH EQUALLY</th> <th>DON'T KNOW/DEPENDS</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>b)</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>c)</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>d)</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>e)</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> </tbody> </table>		HUS-BAND	WIFE	BOTH EQUALLY	DON'T KNOW/DEPENDS	a)	1	2	3	8	b)	1	2	3	8	c)	1	2	3	8	d)	1	2	3	8	e)	1	2	3	8	
	HUS-BAND	WIFE	BOTH EQUALLY	DON'T KNOW/DEPENDS																													
a)	1	2	3	8																													
b)	1	2	3	8																													
c)	1	2	3	8																													
d)	1	2	3	8																													
e)	1	2	3	8																													
514	<p>I will now read you some statements about pregnancy. Please tell me if you agree or disagree with them.</p> <p>a) Childbearing is a woman's concern and there is no need for the father to get involved.</p> <p>b) It is crucial for the mother's and child's health that a woman have assistance from a doctor or nurse at delivery.</p>	<table border="1"> <thead> <tr> <th></th> <th>AGREE</th> <th>DIS-AGREE</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>CHILDBEARING WOMAN'S CONCERN..</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>DOCTOR/NURSE'S ASSISTANCE CRUCIAL .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		AGREE	DIS-AGREE	DK	CHILDBEARING WOMAN'S CONCERN..	1	2	8	DOCTOR/NURSE'S ASSISTANCE CRUCIAL .....	1	2	8																			
	AGREE	DIS-AGREE	DK																														
CHILDBEARING WOMAN'S CONCERN..	1	2	8																														
DOCTOR/NURSE'S ASSISTANCE CRUCIAL .....	1	2	8																														
515	<p>Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations:</p> <p>If she goes out without telling him?</p> <p>If she neglects the children?</p> <p>If she argues with him?</p> <p>If she refuses to have sex with him?</p> <p>If she burns the food?</p> <p>If she comes home late from work or community function?</p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>GOES OUT .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NEGL. CHILDREN ...</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>ARGUES .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>REFUSES SEX .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>BURNS FOOD .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>COMES HOME LATE...</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		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	COMES HOME LATE...	1	2	8			
	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																														
COMES HOME LATE...	1	2	8																														
516	<p>Do you think that if a woman refuses to have sex with her husband when he wants her to, he has the right to</p> <p>a) Get angry and reprimand her?</p> <p>b) Refuse to give her money or other means of support?</p> <p>c) Use force and have sex with her even if she doesn't want to?</p> <p>d) Go ahead and have sex with another woman?</p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DON'T KNOW/DEPENDS</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>c)</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>d)</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DON'T KNOW/DEPENDS	a)	1	2	8	b)	1	2	8	c)	1	2	8	d)	1	2	8											
	YES	NO	DON'T KNOW/DEPENDS																														
a)	1	2	8																														
b)	1	2	8																														
c)	1	2	8																														
d)	1	2	8																														

**SECTION 6. HIV/AIDS and SEXUALLY TRANSMITTED DISEASES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
601	<p>Now I would like to talk about something else.</p> <p>HIV is a virus (infection) that can be passed from person to person. If people catch HIV they can become ill. This illness is called AIDS.</p> <p>Prior to this interview, have you ever heard of HIV or the disease called AIDS?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 643																											
602	<p>CHECK Q. 115 and 116:</p> <p>CODE '2', '3', or '4' CIRCLED IN 115 OR 116 OR NOT ASKED</p> <p>CODE '1' CIRCLED IN 115 &amp; 116 OR CODE '5' CIRCLED IN 115</p>		→ 604																											
603	<p>The following is a list of sources of information on prevention of getting HIV, the virus that causes AIDS. Have you ever</p> <p>a. Read messages about HIV or AIDS in newspapers or magazines?</p> <p>b. Seen leaflets, brochures, or booklets on HIV or AIDS?</p> <p>c. Gotten information on HIV or AIDS from the internet?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>INTERNET . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	NEWSPAPER/MAGAZINE . . .	1	2	LEAFLETS/BOOKLETS . . .	1	2	INTERNET . . . . .	1	2																
	<u>YES</u>	<u>NO</u>																												
NEWSPAPER/MAGAZINE . . .	1	2																												
LEAFLETS/BOOKLETS . . .	1	2																												
INTERNET . . . . .	1	2																												
604	<p>READ INTRODUCTORY STATEMENT ONLY IF Q603 WAS NOT ASKED:</p> <p>The following is a list of sources of information on prevention of getting HIV, the virus that causes AIDS.</p> <p>Have you ever</p> <p>a. Seen messages about HIV or AIDS on billboards, signs or posters?</p> <p>b. Seen/heard messages about HIV or AIDS on TV?</p> <p>c. Heard messages about HIV or AIDS on radio?</p> <p>d. Attended a community event about HIV or AIDS?</p> <p>e. Received information about AIDS or HIV, the virus that causes AIDS, from an outreach work, that is someone who came to your community and talked about HIV or AIDS?</p> <p>f. Participated in an HIV or AIDS peer education program?</p> <p>g. Participated in another type of HIV or AIDS education program such as a workshop or school program?</p> <p>h. Discussed AIDS OR HIV, the virus that causes AIDS, with other persons such as friend, family members, or work colleagues?</p>	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TV . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>RADIO . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>COMMUNITY EVENT . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OUTREACH WORKER . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>PEER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OTHER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>FAMILY/FRIENDS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	SIGNS/POSTERS . . . . .	1	2	TV . . . . .	1	2	RADIO . . . . .	1	2	COMMUNITY EVENT . . .	1	2	OUTREACH WORKER . . .	1	2	PEER EDUCATION . . . . .	1	2	OTHER EDUCATION . . . . .	1	2	FAMILY/FRIENDS . . . . .	1	2	
	<u>YES</u>	<u>NO</u>																												
SIGNS/POSTERS . . . . .	1	2																												
TV . . . . .	1	2																												
RADIO . . . . .	1	2																												
COMMUNITY EVENT . . .	1	2																												
OUTREACH WORKER . . .	1	2																												
PEER EDUCATION . . . . .	1	2																												
OTHER EDUCATION . . . . .	1	2																												
FAMILY/FRIENDS . . . . .	1	2																												

605	Can people reduce their chance of getting HIV, the virus that causes AIDS, by having just one, uninfected, faithful sex partner?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
606	Can people get HIV from mosquito bites?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
607	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																					
608	Can people get HIV by sharing food with a person who has HIV or AIDS?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
609	Can people reduce their chance of getting HIV by not having sexual intercourse at all?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
610	Can people get HIV from the saliva of someone who has HIV or AIDS?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
611	Can people get HIV by having injections with a needle or syringe that has already been used by someone else?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
612	Can only gay men and/or faafafines (drag queens) get HIV?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
613	Can people get HIV because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
614	Is it possible for a healthy-looking person to have HIV?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8																					
615	Can HIV, the virus that causes AIDS, be transmitted from a mother to her baby:  During pregnancy? During delivery? By breastfeeding?	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DEP.</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>DURING PREG.</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>DURING DELIVERY</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> <tr> <td>BREASTFEEDING</td> <td>1</td> <td>2</td> <td>3</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DEP.	DK	DURING PREG.	1	2	3	8	DURING DELIVERY	1	2	3	8	BREASTFEEDING	1	2	3	8	
	YES	NO	DEP.	DK																			
DURING PREG.	1	2	3	8																			
DURING DELIVERY	1	2	3	8																			
BREASTFEEDING	1	2	3	8																			
616	CHECK 615: AT LEAST <input type="checkbox"/> ONE 'YES' <input type="checkbox"/>	OTHER <input type="checkbox"/> → 618																					
617	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																					
618	Have you heard about special antiretroviral drugs that people infected with HIV can get from a doctor or a nurse to help them live longer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																					

619	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
620	I don't want to know the results, but have you ever been tested to see if you have HIV?	YES ..... 1 NO ..... 2	→ 625
621	When was the last time you were tested?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	
622	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
623	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	
624	Where was the test done?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTRE ..... 2  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... 3  OVERSEAS ..... 4 OTHER _____ 6 (SPECIFY)	→ 627
625	Do you know of a place where people can go to get tested for HIV?	YES ..... 1 NO ..... 2	→ 627
626	Where is that?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTRE ..... B  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... C  OVERSEAS ..... D  OTHER _____ X (SPECIFY)	
627	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
628	Would you share a meal with a person if you knew that this person had HIV?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
629	If a member of your family got infected with HIV, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
630	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 DEPENDS ..... 3 DON'T KNOW ..... 8	
631	In your opinion, if a female teacher has HIV but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED ..... 1 SHOULD NOT BE ALLOWED ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	



632	Should the names of all persons with HIV be displayed in a public place for everyone to see?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
633	Should all persons with HIV live apart from the general community?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
634	Should it be a criminal offence to knowingly pass HIV onto someone else?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
635	Should all newcomers to Samoa be required to take a test for HIV?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
636	Do you personally know someone who has been denied health services in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
637	Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
638	Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she has or is suspected to have HIV?	YES ..... 1 NO ..... 2	
639	CHECK 636, 637, AND 638: NOT A SINGLE YES' <input type="checkbox"/> AT LEAST ONE 'YES' <input type="checkbox"/> → 641		
640	Do you personally know someone who has or is suspected to have HIV or AIDS?	YES ..... 1 NO ..... 2	
641	Do you agree or disagree with the following statement: People with HIV or AIDS should be ashamed of themselves.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	
642	Do you agree or disagree with the following statement: People with HIV or AIDS should be blamed for bringing the disease into the community.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	
643	CHECK 601. HEARD ABOUT HIV OR AIDS <input type="checkbox"/> NOT HEARD ABOUT HIV OR AIDS <input type="checkbox"/> Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? Have you heard about infections that can be transmitted through sexual contact?	YES ..... 1 NO ..... 2	
644	CHECK 643: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES <input type="checkbox"/> NO <input type="checkbox"/> → 701		

645	Have you ever heard about the following STI diseases? a. Gonorrhoea b. Syphilis c. Calmydia d. Genital warts e. Genital herpes	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>GONORRHEA .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>SYPHILLIS .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>CALMYDIA .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>GENITAL WARTS .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>GENITAL HERPES ...</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	GONORRHEA .....	1	2	SYPHILLIS .....	1	2	CALMYDIA .....	1	2	GENITAL WARTS .....	1	2	GENITAL HERPES ...	1	2	
	YES	NO																			
GONORRHEA .....	1	2																			
SYPHILLIS .....	1	2																			
CALMYDIA .....	1	2																			
GENITAL WARTS .....	1	2																			
GENITAL HERPES ...	1	2																			
646	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																			
647	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																			
648	CHECK 646, AND 647: HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/> HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/>		→ 651																		
649	The last time you had (PROBLEM FROM 646/647), did you seek any kind of advice or treatment?	YES ..... 1 NO ..... 2	→ 651																		
650	Where did you go?  Any other place?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).  IF UNABLE TO DETERMINE IF HOSPITAL OR CLINIC IS PUBLIC OR PRIVATE MEDICAL FACILITY, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL ..... A GOVT. HEALTH CENTER ..... B  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ... C  OTHER SOURCE TRADITIONAL HEALER ..... D FRIEND/RELATIVE ..... E  OVERSEAS ..... F  OTHER _____ X (SPECIFY)																			
651	Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																			

**SECTION 7. OTHER HEALTH ISSUES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
701	Have you ever heard of an illness called tuberculosis or TB?	YES ..... 1 NO ..... 2	→ 708																											
702	CHECK Q. 115 and 116: CODE '2', '3', OR '4' CIRCLED IN <input type="checkbox"/> 115 OR 116 OR NOT ASKED ↓	CODE '1' CIRCLED IN 115 & 116 <input type="checkbox"/> OR CODE '5' CIRCLED IN 115	→ 704																											
703	The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following?  a. Read messages about TB in newspapers or magazines?  b. Seen leaflets, brochures, or booklets on TB?  c. Gotten information on TB from the internet?	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>INTERNET . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	NEWSPAPER/MAGAZINE . . .	1	2	LEAFLETS/BOOKLETS . . .	1	2	INTERNET . . . . .	1	2																
	<u>YES</u>	<u>NO</u>																												
NEWSPAPER/MAGAZINE . . .	1	2																												
LEAFLETS/BOOKLETS . . .	1	2																												
INTERNET . . . . .	1	2																												
704	READ INTRODUCTORY STATEMENT ONLY IF Q703 WAS NOT ASKED:  The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following?  a. Seen messages about TB on billboards, signs or posters?  b. Seen/heard messages about TB on TV?  c. Heard messages about TB on the radio?  d. Participated in an TB peer education program?  e. Participated in another type of TB education program such as a wokshop or school program?  f. Attended a community event about TB such as the women community workshop on World TB Day?  g. Received information about TB from an outreach work, that is, someone who came to your community and talked about TB?  h. Discussed TB with other persons such as friends, family members, or work colleagues?	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TV . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>RADIO . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>PEER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OTHER EDUCATION . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>COMMUNITY EVENT . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>OUTREACH WORKER . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>FAMILY/FRIENDS . . . . .</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	SIGNS/POSTERS . . . . .	1	2	TV . . . . .	1	2	RADIO . . . . .	1	2	PEER EDUCATION . . . . .	1	2	OTHER EDUCATION . . . . .	1	2	COMMUNITY EVENT . . . . .	1	2	OUTREACH WORKER . . . . .	1	2	FAMILY/FRIENDS . . . . .	1	2	
	<u>YES</u>	<u>NO</u>																												
SIGNS/POSTERS . . . . .	1	2																												
TV . . . . .	1	2																												
RADIO . . . . .	1	2																												
PEER EDUCATION . . . . .	1	2																												
OTHER EDUCATION . . . . .	1	2																												
COMMUNITY EVENT . . . . .	1	2																												
OUTREACH WORKER . . . . .	1	2																												
FAMILY/FRIENDS . . . . .	1	2																												

705	How does tuberculosis spread from one person to another?  PROBE: Any other ways?  RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING ..... A THROUGH SHARING UTENSILS ..... B THROUGH TOUCHING A PERSON WITH TB ..... C THROUGH FOOD ..... D THROUGH SEXUAL CONTACT ..... E THROUGH MOSQUITO BITES ..... F THROUGH SALIVA ..... G THROUGH SMOKING ..... H  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
706	Can tuberculosis be cured?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
707	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/ DEPENDS ..... 8	
708	Some men are circumcised. Are you circumcised?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 5	→ 708B
708A	What age did you had your circumcision done?	AGE    0 0 0 0 0 . 0 0 0 0 . <input type="text"/> <input type="text"/>  CAN'T REMEMBER 0 0 0 0 0 0 0 0 95 REFUSED TO ANSWER 0 0 0 0 0 0 . 98	
708B	Do you think men needs to be circumcised?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 8	→ 709
708C	If YES, what reason(s) why you support men to be circumcised?  RECORD ALL MENTIONED.	TRADITION 0 0 0 0 0 0 0 0 0 0 .. A RELIGIOUS BELIEF 0 0 0 0 0 0 0 0 . B HEALTH REASON 0 0 0 0 0 0 0 0 . C  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
709	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 GREATER THAN 90, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS <input type="text"/> <input type="text"/>  NONE ..... 00	→ 713
710	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 GREATER THAN 90, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS <input type="text"/> <input type="text"/>  NONE ..... 00	→ 713

711	The last time you had an injection given to you by a health worker, where did you go to get the injection?	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTER ..... 2  PRIVATE MEDICAL SECTOR PRIVATE MEDICAL CENTRE ..... 3  OVERSEAS ..... 4 OTHER _____ 6 (SPECIFY)	
712	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
713	Do you currently smoke cigarettes?	YES ..... 1 NO ..... 2	→ 715
714	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES ..... <input type="text"/> <input type="text"/>	
715	Do you currently smoke or use any other type of tobacco?	YES ..... 1 NO ..... 2	→ 717
716	What (other) type of tobacco do you currently smoke or use?  RECORD ALL MENTIONED.	PIPE ..... A TAPAA SAMOA ..... B  OTHER _____ X (SPECIFY)	
717	Do you currently drink alcohol?	YES ..... 1 NO ..... 2	→ 721
718	In the last 24 hours, did you intake any drinks containing alcohol?	YES ..... 1 NO ..... 2	→ 721
719	Did you have it before meal, during meal or after meal?	BEFORE MEAL 0 0 0 0 0 0 0 0 0 1 DURING MEAL 0 0 0 0 0 0 0 0 0 2 AFTER MEAL 0 0 0 0 0 0 0 0 0 3	
720	How many standard drinks containing alcohol did you have in the last 24 hours? <i>A standard drink is a can of beer, a glass of wine, a shot of liquor, a glass of cocktail drink, small bottle (beer) etc.?</i>	STANDARD DRINK ..... <input type="text"/> <input type="text"/>	
721	Are you covered by any health insurance?	YES ..... 1 NO ..... 2	→ 723
722	What type of health insurance?  RECORD ALL MENTIONED.	HEALTH INSURANCE THROUGH EMPLOYER ..... A SOCIAL SECURITY ..... B OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. C OTHER _____ X (SPECIFY)	
723	Are you involved in a regular physical activity campaigns?	YES ... . . . . . 1 NO . . . . . 2 NO ANSWER, REFUSED ..... 6	→ 725
724	Which type of physical activity you are involved in it?  RECORD ALL MENTIONED.	VILLAGE . . . . . A MOH . . . . . B PRIVATE . . . . . C PERSONAL EXERCISE 0 0 0 0 0 0 0 D OTHER _____ X (SPECIFY)	

725	How much servings of fruits do you usually have in a week? <i>(1 SERVING IS EQUIVALENT TO THE REPONDENT'S FIST)</i> RECORD '00' IF NO SERVING OF FRUITS IN A WEEK.	NO. OF SERVINGS ..... <input type="text"/> <input type="text"/>	
726	How much servings of vegetables do you usually have in a week? <i>(1 SERVING IS EQUIVALENT TO THE REPONDENT'S FIST)</i> RECORD '00' IF NO SERVING OF VEGETABLES IN A WEEK.	NO. OF SERVINGS ..... <input type="text"/> <input type="text"/>	
727	How often do you eat the following foods?  <b>1 Fish/Seafood</b> , <i>crab, octopus, sea cucumber, lobster eel etc,</i>  <b>2 Fried foods/high fat foods</b> , <i>fried chicken/fish,turkey tailspancakes, cake, doughnuts, mutton, corned beef, coconut cream, etc</i>  <b>3 High sugary foods</b> <i>cakes, lollies, ice cream cookies, coconut jam</i>  <b>4 High Salty foods</b> <i>noodles with seasoning corned beef, sausages, meat pie, eleni (natural oil), twisties, soy sauce, tomato sauce</i>  <b>5 Dordial/Raro/Softdrinks/Commercial Fruit drinks</b>  <b>6 Starchy foods</b> , <i>taro, breadfruit, potato, giant taro</i>	<b>0 - NONE</b> <b>1 - ONCE A WEEK</b> <b>2 - TWICE A WEEK</b> <b>3 - THREE OR MORE A WEEK</b>  1 <i>Fish/Seafood</i> 0   1   2   3 2 <i>Fried foods/high fat..... foods</i> 0   1   2   3 3 <i>High sugary foods.....</i> 0   1   2   3 4 <i>High salty foods.....</i> 0   1   2   3 5 <i>cordial/Raro..... Softdrinks/ Commercial Fruit drinks</i> 0   1   2   3 6 <i>Starchy foods</i> 0   1   2   3	
728	RECORD THE TIME.	HOUR ..... <input type="text"/> <input type="text"/> MINUTES ..... <input type="text"/> <input type="text"/>	

## **TYPE OF GOVERNMENT HOSPITALS**

### **Government Hospital**

- 1 Tupua Tamasese Meaole II-TTM-II
- 2 Malietoa Tanumafili II
- 3 Poutasi District Hospital
- 4 Leulumoega District Hospital
- 5 Lalomanu District Hospital
- 6 Safotu District Hospital
- 7 Sataua District Hospital
- 8 Foailalo District Hospital

### **Government Health Centre**

- 1 Lufilufi HC
- 2 Faleolo HC
- 3 Saanapu HC
- 4 Fagamalo HC
- 5 Vaipouli HC



**DEMOGRAPHIC HEALTH SURVEY (DHS) 2014  
NUTRITION MODULE  
(CHILDREN AGE 0-5 AND WOMEN AGE 15-49)**



*Samoa Bureau of Statistics (SBS) working in partnership with Ministry of Health (MOH) and MWCSD*

**HOUSEHOLD'S IDENTIFICATION**

NAME OF REGION \_\_\_\_\_  
 NAME OF DISTRICT \_\_\_\_\_  
 NAME OF VILLAGE \_\_\_\_\_  
 ENUMERATION AREA . . . . .  
 HOUSEHOLD NUMBER . . . . .  
 NAME OF HOUSEHOLD HEAD \_\_\_\_\_


**INTERVIEWER VISITS**

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY MONTH YEAR INT. NUMBER RESULT
INTERVIEWER'S NAME	_____	_____	_____	2 0 1 4
RESULT*	_____	_____	_____	
NEXT VISIT: DATE TIME	_____	_____	_____	TOTAL NUMBER OF VISITS

\*RESULT CODES:  
 1 COMPLETED      4 REFUSED  
 2 NOT AT HOME      5 PARTLY COMPLETED      7 OTHER \_\_\_\_\_  
 3 POSTPONED      6 INCAPACITATED      (SPECIFY)

LANGUAGE OF INTERVIEW    1 ENGLISH    2 SAMOAN    3 BOTH    4 OTHER \_\_\_\_\_  
 (SPECIFY)  
 LANGUAGE OF RESPONDENT    1 ENGLISH    2 SAMOAN    3 BOTH    4 OTHER \_\_\_\_\_  
 (SPECIFY)  
 TRANSLATOR USED?    1 YES    2 NO

SUPERVISOR	NURSE	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____	_____	_____
DATE _____	DATE _____	_____	_____



**List of Eligible Women (15-49) and Children (0-5)**

ELIGIBLE WOMEN AGE 15-49				
PERSON NUMBER	NAME	AGE	MARITAL STATUS	AGE 15-17 & SINGLE (4)
<i>From column (10) of the hhold</i>	<i>From column (2) of the hhold questionnaire</i>	<i>From column (5) of the hhold questionnaire</i>	<i>From column (6) of the hhold</i>	<i>Line # of Parent/ responsible adult from column (1) of the hhold</i>
(1)	(2)	(3)	(4)	(5)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

ELIGIBLE CHILDREN AGE 0-5			
PERSON NUMBER	NAME	AGE	LINE NUMBER
<i>From column (12) of the hhold</i>	<i>From column (2) of the hhold questionnaire</i>	<i>From column (5) of the hhold questionnaire</i>	<i>Parent/ responsible adult from column (1) of the hhold</i>
(6)	(7)	(8)	(9)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

**(4) MARITAL STATUS OF WOMEN 15-49**

- 1 = MARRIED OR LIVING TOGETHER      3 = WIDOWED  
 2 = DIVORCED/SEPARATED              4 = NEVER-MARRIED AND NEVER LIVED TOGETHER

**WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5**

201	CHECK COLUMN 12 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 12 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
204	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
205	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
206	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
207	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 213) OLDER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 213) OLDER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 213) OLDER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2
208	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>
209*	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	<p>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.</p> <p>We ask that all children born in 2009 or later to 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.</p> <p>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.</p> <p>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) to participate in the anemia test?</p>		
210	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2
211	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET .	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .....994 REFUSED .....995 OTHER .....996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .....994 REFUSED .....995 OTHER .....996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT .....994 REFUSED .....995 OTHER .....996
212	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 213.			

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 12 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
204	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996
205	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
206	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
207	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 213) ← OLDER (6-60 MONTHS).. 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 213) ← OLDER (6-60 MONTHS).. 2	0-5 MONTHS ..... 1 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 213) ← OLDER (6-60 MONTHS).. 2
208	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>
209	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 208 AS RESPONSIBLE FOR CHILD.	<p>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.</p> <p>We ask that all children born in 2009 or later to 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.</p> <p>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.</p> <p>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) to participate in the anemia test?</p>		
210	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2
211	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT..... 994 REFUSED ..... 995 OTHER ..... 996
212	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 213.			

		CHILD 7	CHILD 8	CHILD 9
202	LINE NUMBER FROM COLUMN 12 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> 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 ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
204	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT..... 9994 REFUSED ..... 9995 OTHER ..... 9996
205	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ... 9994 REFUSED ..... 9995 OTHER ..... 9996
206	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
207	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 213) ← OLDER (6-60 MONTHS).. 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 213) ← OLDER (6-60 MONTHS).. 2	0-5 MONTHS ..... 1 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 213) ← OLDER (6-60 MONTHS).. 2
208	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>	LINE NUMBER ..... <input type="text"/> <input type="text"/>
209	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 208 AS RESPONSIBLE FOR CHILD.	<p>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.</p> <p>We ask that all children born in 2009 or later to 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.</p> <p>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.</p> <p>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) to participate in the anemia test?</p>		
210	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2	GRANTED ..... 1 _____ (SIGN) ← REFUSED ..... 2
211	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT.....994 REFUSED ..... 995 OTHER ..... 996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT.....994 REFUSED ..... 995 OTHER ..... 996	G/DL <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT.....994 REFUSED ..... 995 OTHER ..... 996
212	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 213.			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

213	CHECK COLUMN 10 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
214	LINE NUMBER FROM COLUMN 10 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
215	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 99994 REFUSED ..... 99995 OTHER ..... 99996
216	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
217	AGE: CHECK COLUMN 5.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙
218	MARITAL STATUS: CHECK COLUMN 6.	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙
219	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>
220	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 219 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>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.</p> <p>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.</p> <p>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.</p> <p>Do you have any questions?</p> <p>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?</p>		
221	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
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
222	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	<p>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.</p> <p>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.</p> <p>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?</p>		
223	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)
224	PREGNANCY STATUS: CHECK 226 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
225	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996
226	GO BACK TO 213 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 227.			

		WOMAN 4	WOMAN 5	WOMAN 6
214	LINE NUMBER FROM COLUMN 10 NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
215	WEIGHT IN KILOGRAMS	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	KG. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
216	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 REFUSED ..... 9995 OTHER ..... 9996
217	AGE: CHECK COLUMN 5.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 222) ↙
218	MARITAL STATUS: CHECK COLUMN 6.	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙	CODE 4 (NEVER IN UNION)..... 1 OTHER ..... 2 (GO TO 222) ↙
219	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT <input type="text"/> <input type="text"/>
220	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 219 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	<p>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.</p> <p>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.</p> <p>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.</p> <p>Do you have any questions?</p> <p>You can say yes to the test for (NAME OF ADOLESCENT), or you can say no. It is up to you to decide.</p> <p>Will you allow (NAME OF ADOLESCENT) to take the anemia test?</p>		
221	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 4	WOMAN 5	WOMAN 6
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
222	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	<p>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.</p> <p>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.</p> <p>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?</p>		
223	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)
224	PREGNANCY STATUS: CHECK 226 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
225	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 994 REFUSED ..... 995 OTHER ..... 996
226	GO BACK TO 213 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 227.			



**SALT IODIZATION (SI)**

**227**

We would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household?

*Once you have tested the salt, circle number that corresponds to test outcome.*

Not iodized - 0 PPM           1

< 15 PPM            2

> 15 PPM            3

No salt in the house           4

Salt not tested  
(specify reason) \_\_\_\_\_ 5

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



ISBN 978-982-98096-4-3



9 789829 809643