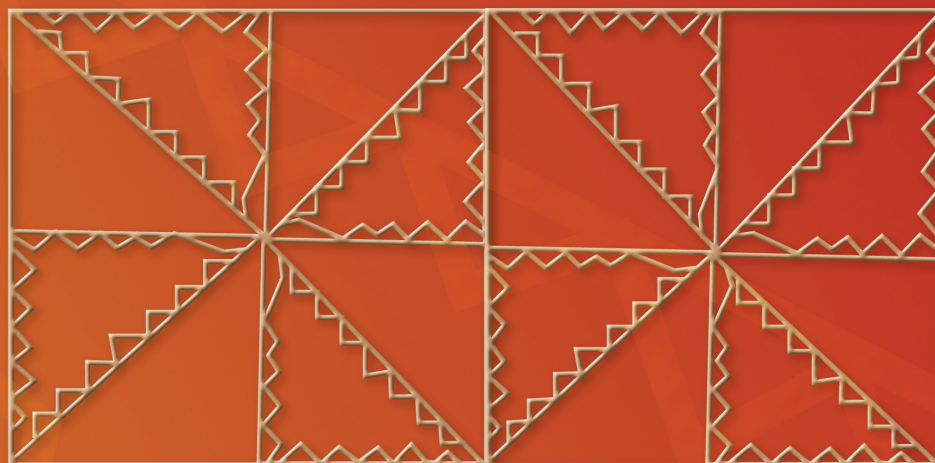


KINGDOM OF TONGA



DEMOGRAPHIC AND  
HEALTH SURVEY  
2012

FINAL REPORT





SPC  
Secretariat  
of the Pacific  
Community



# Tonga

## Demographic and Health Survey

### 2012

by

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Tonga Department of Statistics,  
the Secretariat of the Pacific Community,  
and United Nations Population Fund.

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<http://www.unfpa.org>

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January 2014

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Original text: English

Secretariat of the Pacific Community Cataloguing-in-publication data

Tonga Demographic and Health Survey 2012 / by Tonga Ministry of Health, Tonga Department of Statistics, the Secretariat of the Pacific Community, and United Nations Population Fund.

1. Tonga — Population — Statistics.
2. Demographic surveys — Tonga.
3. Health surveys — Tonga.

I. Title II. Tonga. Ministry of Health III. Tonga. Statistics Department  
IV. Secretariat of the Pacific Community V. United Nations Population Fund

304.6099612

AACR2

ISBN: 978-982-00-0661

This report summarises the findings of the 2012 Tonga Demographic and Health Survey (TDHS) implemented by The Tonga Department of Statistics (TDS) and the Tonga Ministry of Health (TMOH). The Secretariat of the Pacific Community (SPC) was the executing agency for the project. The Government of Tonga provided financial assistance in terms of in-kind contribution of government staff time, office space, and logistical support. The project was funded by the Asian Development Bank, the United Nations Population Fund and the Government of Australia. The Secretariat of the Pacific Community was responsible for the overall coordination of the DHS operations, as well as the sample design, survey planning and budgeting, providing data processing support to the implementing agency, and compiling and coordinating the DHS report. As in previous surveys, a CSPro data processing specialist/programmer with Macro International Inc. DHS experience worked with SPC data processing specialists across the full spectrum of data processing operations, including setting up data entry stems, and training local staff in its use, data editing and production of tables. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the donor organisations.

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Recommended citation:

Tonga Department of Statistics and Tonga Ministry of Health, SPC and UNFPA. 2013. *Tonga Demographic and Health Survey, 2012*.

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## **PREFACE**

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The 2012 Tonga Demographic and Health Survey was part of phase two of Pacific DHS Project with funding support from ADB. The primary objective of this survey 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 programmes within the country. The survey was intended to provide key estimates of Tonga's demographic and health situation.

The findings of the 2012 Tonga Demographic and Health Survey are very important in measuring the achievements of family planning and other health programmes. To ensure better understanding and use of these data, the results of this survey should be widely disseminated at different planning levels. Different dissemination techniques will be used to reach different segments of society.

The Tonga Department of Statistics and Tonga Ministry of Health would like to acknowledge the efforts of a number of organisations and individuals who contributed immensely to the success of the survey. The Steering Committee offered guidance on the implementation of the survey: Mr 'Ata 'Ata Finau, Department of Statistics and Dr Siale Akau'ola, Ministry of Health (joint chair), Ms Sala Paasi, Ministry of Health, Mr Sione Hufanga, Ministry of Health and Mr Sione Lolohea, Department of Statistics.

Financial assistance was provided by the Asian Development Bank, United Nations Population Fund and the Government of Australia. SPC are greatly appreciated for having offered important critical technical support.

We are grateful for the efforts of officials at international and local government levels who supported the survey and note the valuable input of all participants at the workshop held by Tonga Ministry of Health in October 2013 to discuss the results and their policy implications. And finally, we are highly appreciative of all the field staff for their outstanding contributions reflected herein and, equally so, the respondents whose participation play a crucial role to the overall successful completion of this survey.

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## **ACKNOWLEDGEMENTS**

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The 2012 Tonga Demographic and Health Survey is the result of earnest effort put forth by different individuals and organisations. The survey was conducted under phase two of the Asian Development Bank/ Secretariat of the Pacific Community Regional Demographic and Health Survey Project where technical assistance was provided by SPC. The survey was implemented by the Tonga Department of Statistics and Tonga Ministry of Health.

We express our deep appreciation to the technical experts in the different fields of population and health for their valuable input in the various phases of the survey, including finalising the questionnaires, training field staff, reviewing the draft tables and providing valuable input towards finalising the report and discussing policy implications at a workshop held by Tonga Ministry of Health in October 2013. We extend our deepest appreciation to the survey enumerators and the respondents, who were critical to the successful completion of the survey.

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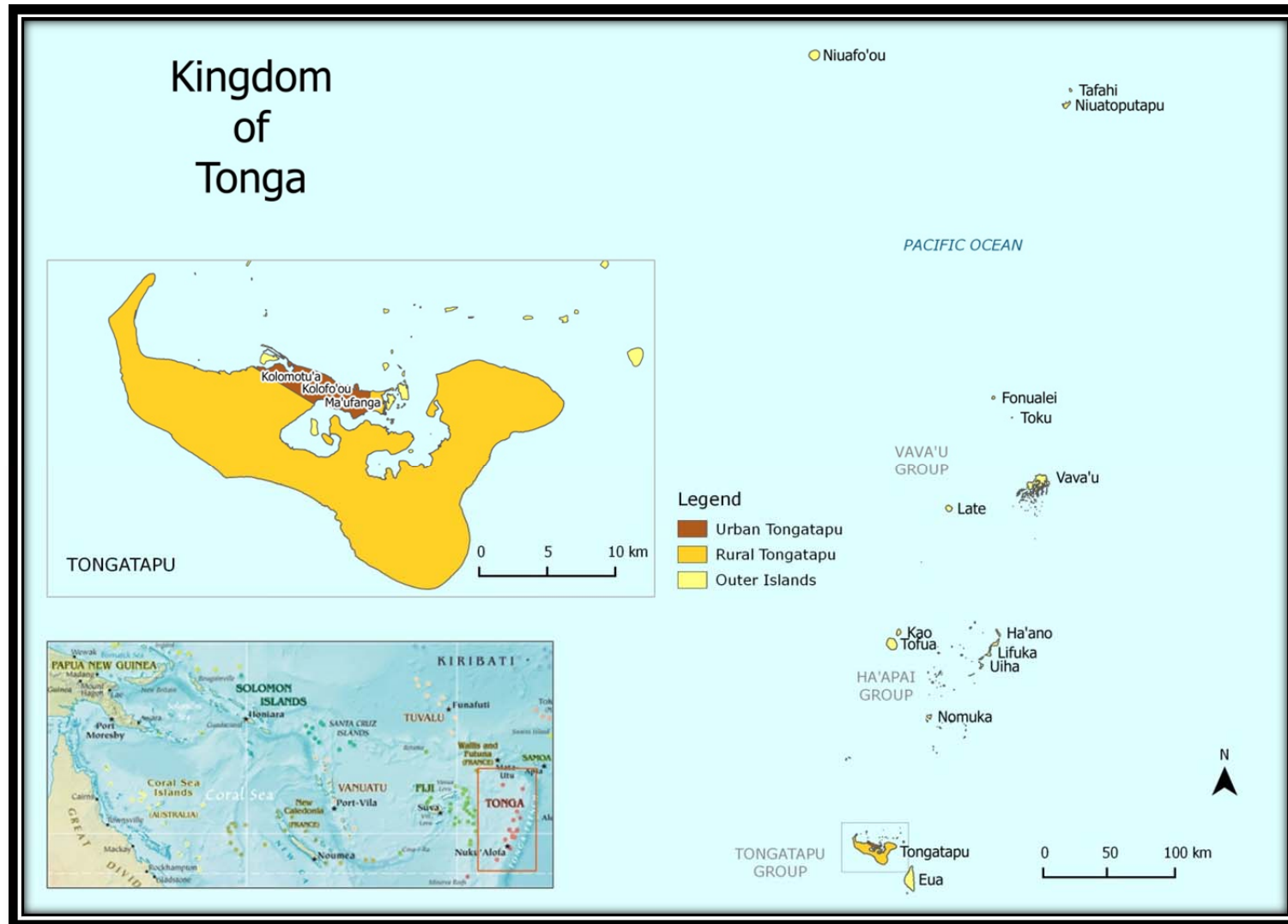
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# MAP OF THE KINGDOM OF TONGA



# CHAPTER 1 INTRODUCTION

## 1.1 GEOGRAPHY, HISTORY AND ECONOMY

The nation of Tonga consists of 171 islands with a total land area of 749 km<sup>2</sup>, spread over 360,000 km<sup>2</sup> of the South Pacific Ocean. Forty of Tonga's islands are permanently inhabited. The islands, which extend 800 kilometres along a roughly north-south line, are composed of a combination of uplifted coral formations and limestone overlaying a volcanic base. Tonga is divided into five administrative divisions: Tongatapu, Vava'u, Ha'apai, 'Eua and Ongo Niua. The capital, Nuku'alofa is located on the Island of Tongatapu.

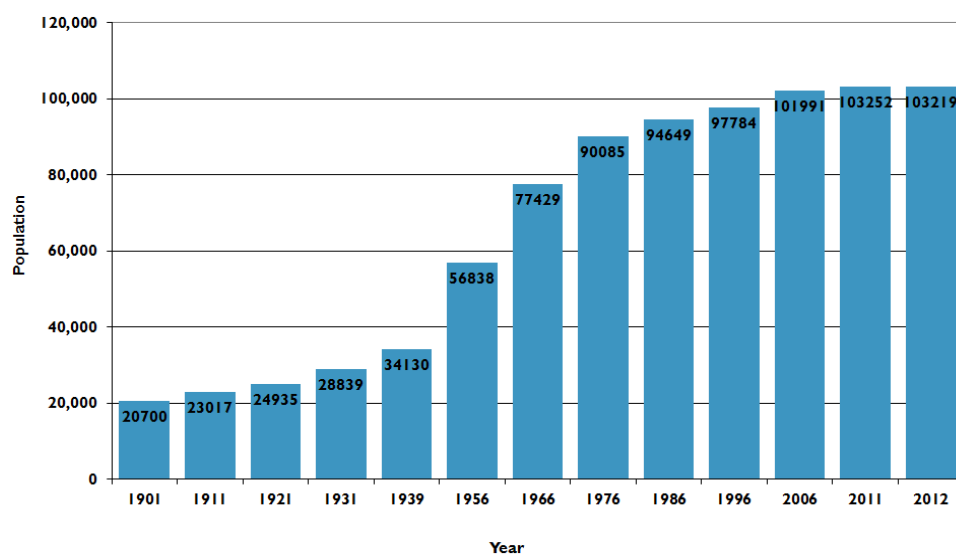
Tonga was first populated over 3,000 years ago through settlement by the Lapita people from the mainland and islands of Southeast Asia. European explorers arrived in the 17th century, and introduced Christianity. The islands were united as the Kingdom of Tonga in 1845 and officially became a constitutional monarchy in 1875; the islands became a British protectorate in 1900. Tonga is the only Pacific Island nation that was never colonized, and has always been governed by the indigenous inhabitants. In 1970 Tonga joined the Commonwealth of Nations. The past head of state, King George Tupou V, introduced changes to address demands that Tonga become more democratic (Secretariat of the Pacific Community, 2013; Tonga Ministry of Tourism, 2011); the current monarch (King Tupou VI), took the throne in 2012 following his brother's death.

The nominal gross domestic product (GDP) of Tonga was TOP 781.5 million in FY2012, 18.3% of which was domestic revenue and 22.2% project aid funding (5% cash, 17% in kind). The rate of growth was close to 5% per annum in FY2012, having recovered from negative growth in FY2007. Economic growth is focused on Nuku'alofa, with remote parts of Tonga experiencing economic decline. Economic growth has been boosted by exports (sandalwood, agricultural produce, tuna and sea cucumber), tourism, and local service economy manufacturing (water and food processing industries). It is anticipated that further growth in tourism and sustainable agricultural and fisheries exports will maintain economic growth (Tonga Ministry of Finance and National Planning, 2012).

## 1.2 POPULATION DEVELOPMENT ISSUES

Twelve population censuses have been carried out in Tonga between 1901 and 2011. From 1901 the population steadily increased, with accelerated growth between 1939 and 1976; at times the population increased by over 2,000 people per year (Fig. 1.1). From 1976 to 2011, the population increased very slowly, with an annual growth rate of less than 0.4% (about 375 people per year). The reduced growth reflects slightly declining fertility rates and increasing rates of emigration from Tonga. The population on 30 June 2012 was estimated at 103,219 (Tonga Statistics Department, 2014).

Figure 1.1: Population of Tonga, 1901–2011



Note: Data for the years 1901–2011 are population census counts, while data for 2012 are a mid-year population projection.  
Source: (Tonga Statistics Department, 2013 DRAFT)

### **1.2.1 Fertility**

Data from the 2011 Census of Population and Housing suggests that Tonga's annual population growth of 0.2% results from a relatively high natural growth rate counterbalanced by a high emigration rate. The high natural growth rate is the result the high fertility (birth) rate. The average number of children per woman dropped marginally — from 4.3 to 4.2 — from 1996 to 2006, and decreased more rapidly to 3.9 children per woman by 2011 (Tonga Statistics Department, 2013 DRAFT).

### **1.2.2 Mortality**

Estimates on the level of mortality based on Ministry of Health (MOH) data, and data from the 2011 Census of Population and Housing, suggest that infant mortality rates declined by 2 deaths per 1,000 births, and life expectancy at birth improved by 1.3 years for males and 0.3 years for females during 2006–2011. The advantage in life expectancy of females over males declined by 1.6 years during 2006–2011 (Tonga Statistics Department, 2013 DRAFT).

### **1.2.3 Migration**

Data from the 1996, 2006 and 2011 censuses suggest that rates of population decline in the outer islands were higher in the 2006–2011 intercensal period than were experienced during the 1996–2006 intercensal period. Almost every district in the divisions of 'Eua, Vava'u, Ha'apai, and Ongo Niuva have shown a negative population growth rate (i.e. a population decline) during the intercensal period. Tonga's 2006–2011 intercensal estimates of international net migration is estimated at –20/1000 population. This translates into a net loss of 2,000 people annually. The high rates of (negative) migration largely offset Tonga's otherwise high natural growth rate (Tonga Statistics Department, 2013 DRAFT).

### **1.2.4 Gender and Development**

During 2012, the Tonga Ministry of Internal Affairs launched the Draft Revised National Policy on Gender and Development, 2012. The data outlined in the TDHS 2012 is of relevance to key Gender and Development policy areas outlined in the draft report. Critical advances made through the TDHS 2012 include analysis of participation of women in decision making processes and production of data disaggregated by sex to facilitate gender analysis and development of gender-based government policies and programmes.

## **1.3 HEALTH POLICY**

MOH is responsible for the delivery of preventative and curative health services in the country. MOH's mission is to support and improve the health of the nation by providing quality, effective and sustainable health services, and being accountable for health outcomes. Its vision is to be the healthiest nation by 2020 compared with Pacific neighbours, as judged by international determinants (Tonga Ministry of Health, 2011).

Historically, Tonga's population has had a relatively high standard of health. Tonga has made good progress towards achieving the health-related Millennium Development Goal indicators for maternal and child mortality. This reflects Tonga's effective primary healthcare delivery, public health infrastructure and the comprehensive antenatal and postnatal care, immunisation, water and sanitation and waste disposal programmes (Tonga Ministry of Finance and National Planning, 2011).

MOH focuses on maintaining and improving the delivery of health services through the national referral hospital at Vaiola, supported by a network of regional hospitals and community clinics, to deliver effective curative and preventative health care, guided by the principles of health systems strengthening based on primary healthcare values (Tonga Ministry of Finance and National Planning, 2011).

There are inequities in the standard of service delivery between urban and rural and/or outer island parts of Tonga that still need to be addressed. Infectious and most communicable diseases are under control, but the increased prevalence of noncommunicable diseases (NCDs) such as diabetes, hypertension and obesity has become a major problem. Nutrition-related illnesses in children are also becoming a greater concern (Tonga Ministry of Finance and National Planning, 2011).

Healthcare services are decentralised in accordance with the long-standing government commitment to primary healthcare provision. The government will improve the provision of health services across Tonga, with continued emphasis on preventative health care that focuses on NCDs, rather than on curative medicine alone. The efficiency and effectiveness of MOH's preventative healthcare programmes will be improved to encourage healthy life styles, with greater emphasis on reducing the main NCD risk factors such as tobacco smoking, alcohol abuse, physical inactivity and unhealthy eating, in order to reduce the incidence of NCDs (Tonga Ministry of Finance and National Planning, 2011).

#### **1.4 SURVEY OBJECTIVES**

The main objective of the 2012 Tonga Demographic and Health Survey (TDHS) is to provide current and reliable data on fertility and family planning behaviour, child mortality, adult and maternal mortality, children's nutritional status, the use of maternal and child healthcare services, and knowledge of HIV and AIDS. Specific objectives are to:

- collect data (at the national level) that will allow the calculation of key demographic rates;
- analyse the direct and indirect factors that determine the fertility level and trends;
- measure the level of contraceptive knowledge and practice among women and men by method, urban–rural residence and region;
- collect high-quality data on family health, including immunisation coverage among children, prevalence and treatment of diarrhoea and other diseases among children under 5 years of age, and maternity care indicators (including antenatal visits, assistance at delivery, and postnatal care);
- collect data on infant and child mortality;
- obtain data on child feeding practices, including breastfeeding, and collect 'observation' information to use in assessing the nutritional status of women and children;
- collect data on knowledge and attitudes of women and men about sexually transmitted infections (STIs), HIV and AIDS, and evaluate patterns of recent behaviour regarding condom use;
- collect data on knowledge and attitudes of women and men about tuberculosis; and
- collect poverty information to determine levels of hardship among children and adults.

This information is essential for making informed policy decisions and planning, monitoring, and evaluating programmes on health — both with respect to general health, and reproductive health in particular — at the national level, and in urban and rural areas. A long-term objective of the survey is to strengthen the technical capacity of government organisations to plan, conduct, process and analyse data from complex national population and health surveys. Moreover, the 2012 TDHS provides national, rural and urban estimates regarding population and health that are comparable with data collected in similar surveys in other Pacific DHS pilot countries and other developing countries.

#### **1.5 SURVEY ORGANISATION**

The 2012 TDHS was carried out with funding support from the Asian Development Bank (ADB) through the Secretariat of the Pacific Community (SPC) and the United Nations Population Fund, with technical assistance from SPC. The survey was carried out by the Tonga Statistics Department (TSD) in collaboration with MOH. A steering committee was formed to coordinate, oversee, advise, and make decisions on all major aspects of the survey. TSD collaborated with MOH to conduct training (pre-test and main training), field enumeration and data processing.

#### **1.6 SAMPLE DESIGN**

The primary focus of the 2012 TDHS was to provide estimates of key population and health indicators, including fertility and mortality rates, both for the country as a whole, and separately for urban and rural areas (this is standard practice for a DHS). The survey used the sampling frame based on census enumeration areas, with population and household information from the 2011 Tonga Census of Population and Housing. It was not considered viable to generate results at an island division level for Tonga due to the expected small sample sizes at these fine geographical levels. However, it was considered worthwhile to split the rural population into two separate domains — one covering rural Tongatapu, and the other the

remaining island divisions — because access to various health facilities in rural Tongatapu is quite different from the access in the other island divisions.

The survey was designed to obtain completed interviews of 3,174 women aged 15–49. In addition, males aged 15 and over in every second household surveyed were interviewed. To take non-responses into account, 2,543 households countrywide were selected: 768 in the urban area and 1,775 in rural areas.

## **1.7 QUESTIONNAIRES**

Three questionnaires were administered during the 2012 TDHS: a household questionnaire, a women’s questionnaire, and a men’s questionnaire. These were adapted to reflect population and health issues relevant to Tonga, and were presented at a series of meetings with various stakeholders, including government ministries and agencies, nongovernmental organisations (NGOs) and international donors. The final draft of each questionnaire was discussed at a workshop organised by MOH. Survey questionnaires were then translated into Tongan by MOH staff and applied in training and field work.

The household questionnaire was used to list all of the usual members and visitors in selected households, and to identify women and men who were eligible for the individual interview. Some basic information was collected on the characteristics of each person listed, including age, sex, education and relationship to the head of the household. For children aged less than 18 years, the survival status of their parents was ascertained. The household questionnaire also collected information on the characteristics of each household’s dwelling unit, such as source of drinking water, type of toilet facility, material used for the floor, and ownership of various durable goods.

The women’s questionnaire collected information from all women aged 15–49 about:

- education, residential history and media exposure;
- pregnancy history and childhood mortality;
- knowledge and use of family planning methods;
- fertility preferences;
- antenatal, delivery and postnatal care;
- breastfeeding and infant feeding practices;
- immunisation and childhood illnesses;
- marriage and sexual activity;
- their own work and their husband’s background characteristics; and
- awareness and behaviour regarding HIV and other STIs.

The men’s questionnaire was administered to all men aged 15 and over living in every second household. It collected much of the same information as the women’s questionnaire, but was shorter because it did not contain questions about reproductive history, maternal and child health, or nutrition.

A high proportion of the questions asked of respondents’ rely on their power of recall and this may affect the quality of information provided. For example, when there is no vaccination card for a child, or if a vaccine had not been recorded on the card as being given, the respondent was asked to recall the vaccines that had been given to her child. Other questions rely on opinion. For example respondents were asked whether their child had fever during the last two weeks – based on each respondent’s definition of what ‘fever’ constitutes. Such methodological issues should be noted when interpreting the results of this DHS report.

## **1.8 LISTING, PRETESTING, TRAINING AND FIELDWORK**

### **1.8.1 Listing**

Household listing was implemented by survey teams two days prior to data collection. All private households within the selected village or enumeration area were listed and recorded along with the head of the household and total number of household members. From the total updated household list, 24 households were randomly selected to be interviewed. Supervisors and field editors assisted their teams



with updating the listing of households on the forms and maps. The maps and list of households used in the 2012 TDHS were prepared by TSD from the 2011 Census of Population and Housing.

All women aged 15–49 who slept in the sample household on the night prior to the interview were eligible to be interviewed using the women’s questionnaire. Every second household was sub-selected for the men’s survey. All men aged 15 or over in sub-selected households were eligible to be interviewed.

### **1.8.2 Pretesting**

Pretest training was conducted from 20 August 2012. The objective was to test the suitability of aspects of the questionnaires such as the translation, skip procedures and filtering instructions. A skip procedure is implemented by an interviewer if a particular question or set of related questions are not applicable to the respondent — these questions are then ‘skipped’. The training of future supervisors was also conducted at this time.

In total, 54 field workers (42 women, 12 men) were trained as supervisors and interviewers. Pretest training consisted of classroom lectures, PowerPoint presentations, demonstration interviews, front-of-class interviews, mock interviews, quizzes and tests, and some field practice that consisted of interviewing selected sample households. The interview team spent less than one week interviewing 20 households. After pretesting, the 2012 TDHS team reviewed and discussed the results. Pretesting proved to be a valuable exercise because it revealed that the translation of some questions and skip procedures required revision.

### **1.8.3 Training**

The main training of 2012 TDHS field workers was conducted during 10–21 September 2012. Interviewers were recruited two weeks prior to the training. Recruitment of fieldworkers involved interviewing and testing for selection. In total, 104 fieldworkers were trained, 90 of whom were selected to be supervisors, field editors and interviewers. The remaining 14 staff were assigned as data editors and data entry operators.

This training was held in Moulton Hall at the Free Wesleyan Church, and was conducted in both English and Tongan. Fieldworkers were instructed regarding the importance of the overall survey and given an explanation of each question within the survey, as well as how to ask each question. Training included instructions on how to follow skip and filtering procedures within the questionnaire. Fieldworkers were tested on their ability to understand the questionnaire and their performance in conducting an interview. Quiz and test results were used for selecting the best supervisors and field editors. In addition to classroom training, fieldworkers underwent several days of field practice to gain more experience in conducting interviews and handling fieldwork logistics.

During fieldwork practice, ten teams were formed, consisting of one supervisor, one field editor, four female interviewers and two male interviewers and one nurse for measurement. Three days were assigned for fieldwork practice, with each team covering 24 households. During fieldwork practice, some issues were identified (e.g. some questionnaires were printed incorrectly, transport was insufficient). These were dealt with before the actual survey was conducted.

### **1.8.4 Fieldwork**

Fieldwork was conducted from 24 September to 16 November, and fieldworkers were sent to their respective field sites the week following training.

Four teams carried out interviews in the outer islands while six teams carried out interviews on Tongatapu. The supervisor’s role was to ensure that all questionnaires were completed and forwarded to TSD for a control check and data processing. Similarly, it was the supervisor and field editor’s responsibility to communicate with the 2012 TDHS Field Operational Manager about any issue the teams encountered in the field.

## **1.9 DATA PROCESSING**

Processing the 2012 TDHS results began one week after the start of fieldwork. Completed questionnaires were periodically forwarded from the field to the TSD data processing center in Nuku’alofa, where the data were entered and edited by seven data processing personnel especially trained for this task and

supervised by TSD data processing personnel. Data entry and editing of questionnaires was completed by 15 March 2013. CSPro version 4.1 was used for data processing.

## 1.10 RESPONSE RATES

Table 1.1 shows household and individual response rates for the 2012 TDHS. In total, 2,543 households were selected for the sample, with 2,526 households found to be occupied during data collection. Of these existing households, 2,500 were successfully interviewed, giving a household response rate of 99%.

In occupied households 3,174 women were identified as being eligible for individual interviews. Interviews were completed with 3,068 women, yielding a response rate of 97%. Of the 1,855 eligible men identified in the selected sub-sample of households, 94% were successfully interviewed. Response rates were higher in rural areas than in the urban area, with the rural–urban difference in response rates being the greatest among eligible men.

**Table 1.1: Results of household and individual interviews**

*Number of households, number of interviews, and response rates, according to residence (unweighted), Tonga 2012*

Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	768	1,775	2,543
Households occupied	763	1,763	2,526
Households interviewed	746	1,754	2,500
Household response rate <sup>1</sup>	97.8	99.5	99.0
<b>Interviews with women aged 15–49</b>			
Number of eligible women	1,009	2,165	3,174
Number of eligible women interviewed	951	2,117	3,068
Eligible women response rate <sup>2</sup>	94.3	97.8	96.7
<b>Interviews with men aged 15+</b>			
Number of eligible men	620	1,235	1,855
Number of eligible men interviewed	559	1,183	1,742
Eligible men response rate	90.2	95.8	93.9

<sup>1</sup> Households interviewed and/or households occupied.

<sup>2</sup> Respondents interviewed and/or eligible respondents

## 1.11 DATA DISSAGREGATION

Data are disaggregated into three important geographical divisions: i) urban Tongatapu (Kolofo’ou, Kolomotu’a and Ma’ufanga, which incorporate the capital Nuku’alofa); ii) rural Tongatapu (peri-urban areas from which the urban area can be easily accessed); and iii) other rural areas (the divisions of Vava’u, Ha’apai, ‘Eua and Ongo Niua, which together constitute Tonga’s ‘outer islands’).

Because of the way the sample was designed, the number of cases may in some cases appear small because 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 25–49 unweighted cases are shown within parentheses, and percentages based on fewer than 25 unweighted cases are suppressed.

In the tables in this report, the category ‘married’ includes both those women or men who are in a formal or official marriage and those who are living together. The exception to this rule is in tables where ‘married’ and ‘living together’ are disaggregated as separate categories, in which case, the category ‘married’ refers only to those women or men who are in a formal or official marriage.

## CHAPTER 2 HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

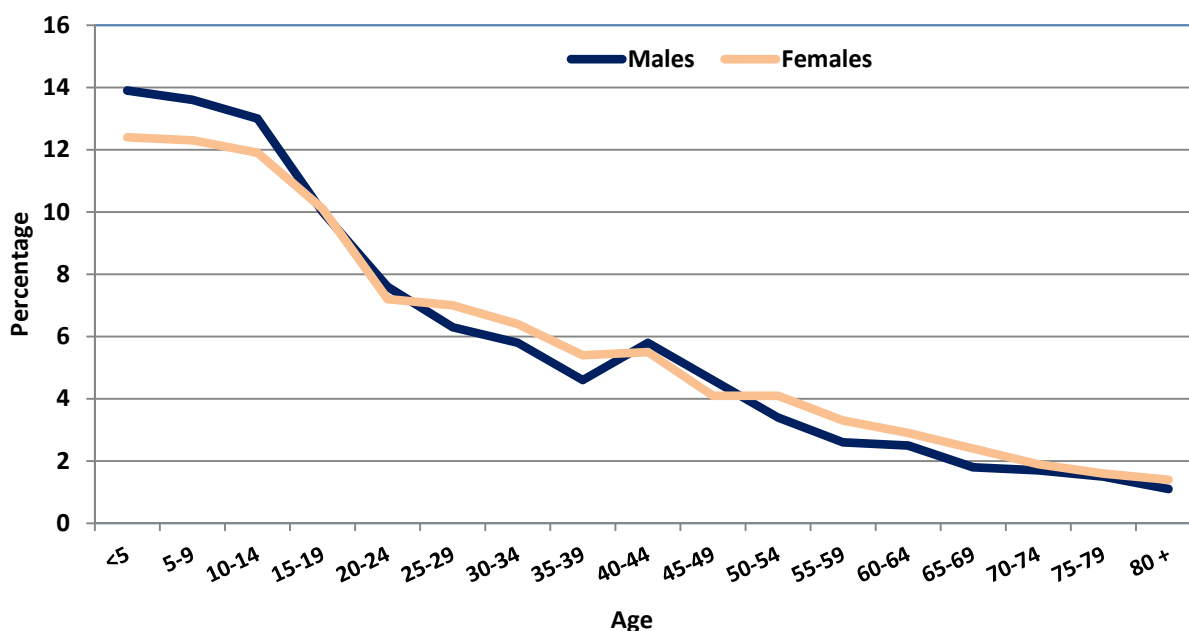
This chapter provides a descriptive summary of some demographic and socioeconomic characteristics of Tonga's population in 2012. For the purposes of the 2012 TDHS, a household was defined as a person or a group of people, related or unrelated, who live together and share a common source of food. Information on basic demographic and socioeconomic characteristics for all usual residents and visitors (e.g. age, sex, educational attainment and current school attendance) was collected using a household questionnaire. This data collection method allows for the analysis of results for either the *de jure* (usual residents) or *de facto* (those who were there at the time of the survey) populations. The household questionnaire also obtained information on housing facilities (e.g. sources of water, sanitation facilities) and household possessions. Information collected from the household questionnaire provides a snapshot picture of household characteristics in Tonga.

### 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are key demographic variables and are the primary basis of demographic classification. They are also important in determining fertility and mortality levels.

An examination of the 2012 TDHS data (Figure 2.1) reveals a decline in population size after age group 10–14 for females and males. The decline in population size dissipates at age group 25–29 for females and remains steady thereafter. For males in particular, there is a trough at ages 35–39 and a peak at ages 40–44. The pattern can be explained by outmigration of young adults (especially males) from Tonga.

**Figure 2.1: Distribution of the *de facto* household population by sex and five-year age groups, Tonga 2012**



The 2012 TDHS interviewed 13,574 people (Table 2.1). Overall, there are slightly more females than males in Tonga, resulting in a 2012 THDS sex ratio of 93 males per 100 females. The sex ratio is lower in the urban area (92 males per 100 females) than in rural areas (94 males per 100 females). Tonga's population is characterised by a youthful age structure (Figure 2.2). About 39% of the population is aged less than 15, while 45% is aged 15–49, and 16% is 50 and older. Five percent of the population are aged 70 years and older.

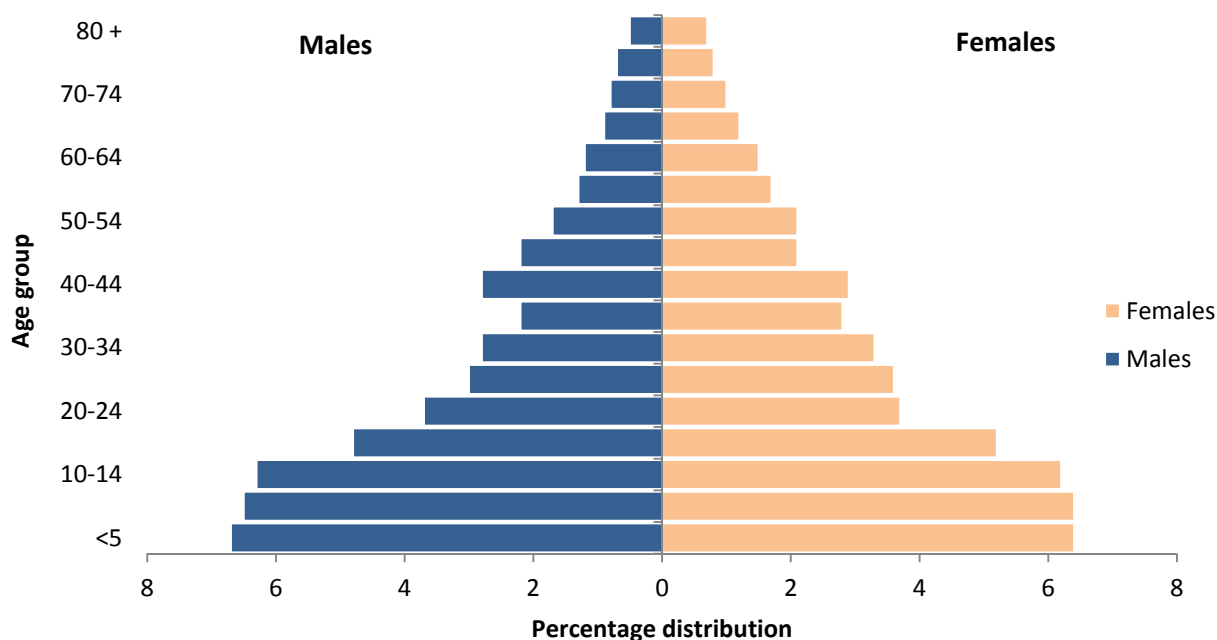
**Table 2.1: Household population by age, sex and residence**

*Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Tonga 2012*

Age	Urban			Rural			Total		Total
	Males	Females	Total	Males	Females	Total	Males	Females	
<5	12.9	11.8	12.4	14.3	12.6	13.4	13.9	12.4	13.2
5-9	13.1	10.9	11.9	13.7	12.8	13.2	13.6	12.3	12.9
10-14	10.9	11.4	11.1	13.7	12.1	12.9	13.0	11.9	12.5
15-19	9.7	10.1	9.9	10.1	10.1	10.1	10.0	10.1	10.1
20-24	10.2	7.8	9.0	6.8	7.0	6.9	7.6	7.2	7.4
25-29	7.8	7.4	7.6	5.8	6.9	6.3	6.3	7.0	6.6
30-34	6.4	6.8	6.6	5.6	6.3	5.9	5.8	6.4	6.1
35-39	4.4	5.6	5.0	4.7	5.4	5.0	4.6	5.4	5.0
40-44	5.1	5.0	5.1	6.0	5.7	5.9	5.8	5.5	5.7
45-49	4.3	4.2	4.3	4.7	4.1	4.4	4.6	4.1	4.3
50-54	3.5	4.8	4.1	3.4	3.9	3.7	3.4	4.1	3.8
55-59	3.2	4.0	3.6	2.4	3.0	2.7	2.6	3.3	2.9
60-64	2.4	2.8	2.6	2.5	2.9	2.7	2.5	2.9	2.7
65-69	2.5	2.4	2.4	1.7	2.4	2.0	1.8	2.4	2.1
70-74	1.5	1.9	1.7	1.8	1.9	1.8	1.7	1.9	1.8
75-79	1.3	1.8	1.6	1.6	1.5	1.6	1.5	1.6	1.6
80 +	0.7	1.3	1.0	1.2	1.4	1.3	1.1	1.4	1.3
Do not know/missing	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,554	1,683	3,237	4,997	5,340	10,336	6,550	7,023	13,574

Note: Total includes people whose sex was not stated.

**Figure 2.2: Population pyramid, Tonga 2012**



## 2.2 HOUSEHOLD COMPOSITION

Information on other key aspects of household composition (e.g. sex of head of household and household size) is presented in Table 2.2. These characteristics are important because they provide information on the welfare of a household and its members. Economic resources are often more limited in larger households

than in smaller households. Moreover, in large households, crowding can lead to health problems. A household's size and composition influence the allocation of limited resources and affect the living conditions of household members.

Data from the 2012 TDHS indicate that 27% of households are headed by women, with the proportion higher in the urban area (30%) than in rural areas (26%). The mean household size is 5.4 people. In the urban area, the average household size is 5.5 people, whereas in rural areas, the average household size is 5.3 people. The 2011 census reported an average household size of 5.7 people.

**Table 2.2: Household composition**

*Percent distribution of households by sex of head of household and by household size; mean household size; and percentage of households with orphans and foster children under age 18 years, according to residence, Tonga 2012*

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	70.2	73.9	73.0
Female	29.8	26.1	27.0
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
0	0.0	0.3	0.2
1	5.5	6.8	6.5
2	10.6	8.7	9.2
3	11.0	11.2	11.2
4	14.6	14.9	14.8
5	16.6	14.0	14.6
6	10.7	13.7	13.0
7	10.1	10.6	10.5
8	7.2	7.3	7.3
9+	13.7	12.4	12.7
Total	100.0	100.0	100.0
<b>Mean household size</b>	5.5	5.3	5.4
<b>Percentage of households with orphans and foster children under age 18 years</b>			
Foster children <sup>1</sup>	25.9	27.1	26.8
Double orphans	0.4	0.6	0.6
Single orphans	4.2	6.0	5.6
Foster <sup>1</sup> and/or orphan children	27.7	29.9	29.4
<b>Number of households</b>	<b>585</b>	<b>1,915</b>	<b>2,500</b>

<sup>1</sup> Foster children are those under age 18 years living in households with neither their mother nor their father present.  
Note: Table is based on *de jure* household members (i.e. usual residents).

## 2.3 FOSTERHOOD AND ORPHANHOOD

As in most other Pacific Island countries, a child in Tonga is defined as someone who is less than 18 years old. Information on fosterhood and orphanhood by household is presented in Table 2.2. The percentage of households with foster and/or orphan children is higher in rural (30%) areas than in the urban area (28%). The results show that 6% of households include orphans. There are nine times as many households with single<sup>1</sup> orphans than with double orphans.

Table 2.3 shows 1) the percent distribution of *de jure* children less than 18 years old by living arrangements and parental survival status, 2) the percentage of children not living with a biological parent, and 3) the percentage of children with one or both parents dead, according to background characteristics. Overall, 17% of *de jure* children aged less than 18 do not live with a biological parent. The proportion of children aged less than 18 who do not live with a biological parent is highest (20%) in the outer islands (other rural); in Tongatapu it is higher (17%) in the urban area (urban Tongatapu) than in rural areas (15% in rural Tongatapu).

<sup>1</sup> A single orphan is a child who only has one parent, which could be either a mother or a father.

**Table 2.3: Children's living arrangements and orphanhood**

*Percent distribution of de jure children under age 18 years by living arrangements and parental survival status, 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, Tonga 2012*

Background characteristic	% living with both parents	% living with mother but not with father		% living with father but not with mother		% not living with either parent					Total	% not living with a biological parent	% with one or both parents dead	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/mother				
<b>Age</b>														
0-4	69.3	13.5	2.3	1.1	0.1	11.6	0.1	0.7	0.6	0.6	100	13.1	3.9	1,143
..<2	71.7	16.1	2.9	0.4	0.0	6.8	0.0	1.1	0.4	0.6	100	8.3	4.5	486
..2-4	67.6	11.5	1.8	1.6	0.2	15.1	0.2	0.5	0.8	0.6	100	16.6	3.5	657
5-9	61.4	11.3	2.7	1.8	0.7	17.8	1.2	1.2	1.2	0.6	100	21.4	7.0	989
10-14	55.9	6.0	4.5	2.3	1.7	21.8	1.4	2.6	1.6	2.2	100	27.4	12.0	1,131
15-17	42.5	7.3	3.5	2.1	1.5	29.1	1.3	3.4	2.0	7.2	100	35.8	12.2	436
<b>Sex</b>														
Male	60.8	16	2.3	2.8	0.6	15.3	0.5	0.5	0.2	1	100	16.6	4.1	3,031
Female	59.6	15.5	2.8	3.3	0.5	15.7	0.5	0.6	0.4	1.1	100	17.1	4.8	2,985
<b>Residence</b>														
Urban	56.5	18.3	2.4	3.6	0.6	16	0.3	0.4	0.2	1.8	100	16.9	3.9	1,321
Rural	61.3	15.1	2.6	2.9	0.5	15.3	0.6	0.6	0.3	0.8	100	16.8	4.6	4,695
<b>Region</b>														
Urban Tongatapu	56.5	18.3	2.4	3.6	0.6	16	0.3	0.4	0.2	1.8	100	16.9	3.9	1,321
Rural Tongatapu	62.4	15	2.9	3.1	0.6	13.8	0.5	0.5	0.3	0.7	100	15.1	4.9	3,031
Outer islands	59.2	15.1	2	2.6	0.3	18.1	0.6	0.8	0.4	1	100	19.9	4	1,665
<b>Wealth quintile</b>														
Lowest	68.2	13.4	2.8	2.2	0	12.1	0.4	0.5	0.2	0.2	100	13.2	3.8	1,310
Second	58.9	17.8	1.2	2.8	0.5	17	0.5	0.5	0.3	0.5	100	18.3	3	1,289
Middle	58.3	15.5	3.9	2.8	0.9	15.3	0.2	1.3	0.3	1.6	100	17.1	6.6	1,179
Fourth	54.6	18.4	3	3.3	0.7	17.5	0.7	0.5	0.1	1.3	100	18.8	5	1,127
Highest	60	14	2	4.5	0.7	15.8	0.7	0.1	0.5	1.6	100	17.1	4.1	1,111
<b>Total &lt;15</b>	<b>61.7</b>	<b>16.4</b>	<b>2</b>	<b>3</b>	<b>0.4</b>	<b>14.5</b>	<b>0.4</b>	<b>0.5</b>	<b>0.3</b>	<b>0.8</b>	<b>100</b>	<b>15.7</b>	<b>3.6</b>	<b>5,167</b>
<b>Total &lt;18</b>	<b>60.2</b>	<b>15.8</b>	<b>2.6</b>	<b>3.1</b>	<b>0.5</b>	<b>15.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.3</b>	<b>1</b>	<b>100</b>	<b>16.8</b>	<b>4.5</b>	<b>6,016</b>

Note: Table is based on *de jure* members (i.e. usual residents).

## 2.4 EDUCATION OF HOUSEHOLD POPULATION

Most studies show that education is one of the major socioeconomic factors that influence a person's behaviour, attitudes and lifestyle. In general, better educated women are more knowledgeable and responsible about the use of health facilities, family planning methods, and the health of their children.

For the purposes of this analysis, the official age for entry into primary school is 6, but some schools allow children aged 5 to enrol. Education in Tonga is provided free and is compulsory for ages 6–14.

Table 2.4 presents the percentage of *de jure* children aged 10–14 who attend school by parental survival status, according to their background characteristics. The total number of children whose parents are both dead (8) is very small. To assure statistical reliability, school attendance rates for children aged 10–14 whose parents are both dead are not presented. However, 99% of children whose parents are both alive attend school.

**Table 2.4: School attendance by parental survival status**

*The percentage of de jure children aged 10–14 years who attend school by parental survival, according to background characteristics, Kiribati 2009*

Background characteristic	Percentage attending school by survivorship of parents				
	Both parents dead %	Number	Both parents alive and living with at least one parent %	Number	Ratio <sup>1</sup>
<b>Sex</b>					
Male	NP	4	98.6	633	1.01
Female	NP	4	98.5	611	1.02
<b>Residence</b>					
Urban	NA	0	98.2	265	NA
Rural	NP	8	98.6	979	1.01
<b>Region</b>					
Urban Tongatapu	NA	0	98.2	265	NA
Rural Tongatapu	NP	4	98.8	613	1.01
Outer islands	NP	4	98.3	366	1.02
<b>Wealth quintile</b>					
Lowest	NP	1	97.7	297	1.02
Second	NP	2	98.0	264	1.02
Middle	NP	1	99.3	212	1.01
Fourth	NA	0	99.6	222	NA
Highest	NP	4	98.5	249	1.02
<b>Total</b>	<b>NP</b>	<b>8</b>	<b>98.5</b>	<b>1,244</b>	<b>1.01</b>

NA = not applicable, NP = not published

<sup>1</sup> Ratio of the percentage with both parents deceased to the percentage with both parents alive and living with a parent

Note: Table is based only on children who usually live in the household.

The 2012 TDHS also collected information on individual school attainment. Tables 2.5 and 2.6 show the percentage distribution of the *de facto* male and female household population aged 6 and over by highest level of educational attainment. The median years of school completed are also included.

In general, there is very little difference in educational achievement between males and females: a majority of males (58%) and females (59%) completed some secondary school; for 2% of both males and females the highest level of school completed was secondary; and 14% of females and 13% of males completed more than secondary (i.e. tertiary or vocational) education.

In the urban area, higher percentages of both females (20%) and males (19%) are educated to more than a secondary level than in rural areas (females 12%, males 10%). Residents of households in the highest wealth quintiles are more educated

**Table 2.5: Educational attainment of the female household population**

*Percent distribution of the de facto female household populations aged 6 and over by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Tonga 2012*

Background characteristic	No education (%)	Some primary (%)	Completed primary <sup>1</sup> (%)	Some secondary (%)	Completed secondary <sup>2</sup> (%)	More than secondary (tertiary or vocational) (%)	Do not know/missing (%)	Total (%)	No.	Median years completed
<b>Age</b>										
6–9	12.3	86.3	0	1.3	0	0	0.1	100	704	1.4
10–14	0.5	34.5	18.6	46.3	0	0	0.2	100	838	5.8
15–19	0.2	0.5	0.3	89.6	5.8	3.5	0	100	711	9.9
20–24	0.5	0.8	0.3	53.4	9.7	35.2	0.2	100	507	11.8
25–29	0.3	0	0.3	59.3	4	35.7	0.3	100	491	11.4
30–34	0.9	0.5	0.7	69.2	1.8	26.8	0.2	100	450	10.9
35–39	0.6	1.4	0.6	72.4	0.4	24.4	0.2	100	381	10.8
40–44	0.8	0.4	2.5	77.1	0.6	18.6	0	100	390	10.5
45–49	1.1	1.3	1.6	77.7	1.1	16.8	0.5	100	287	10.5
50–54	1.6	1.3	6.5	70.8	0.8	18	1	100	290	10.2
55–59	1.4	2	3.4	75.2	1	14.7	2.3	100	229	9.9
60–64	1.8	3	17.3	64.4	0	12.8	0.7	100	203	9.2
65+	1.2	6.8	18.8	61.6	0.2	6	5.3	100	508	8.9
<b>Residence</b>										
Urban	2.2	14.5	3.8	55.9	2.8	20.3	0.5	100	1,446	10.3
Rural	2.1	16.7	6.2	59.9	2	12.4	0.8	100	4,542	9.6
<b>Region</b>										
Urban Tongatapu	2.2	14.5	3.8	55.9	2.8	20.3	0.5	100	1,446	10.3
Rural Tongatapu	1.9	17.6	5.3	57.5	2.4	14.4	1	100	2,937	9.8
Outer islands	2.3	14.9	8	64.1	1.3	8.7	0.6	100	1,605	9.4
<b>Wealth quintile</b>										
Lowest	1.9	20.5	8.7	62.4	0.7	5	0.7	100	1,135	8.9
Second	2.4	16.8	6.6	63.7	2.3	7.9	0.5	100	1,160	9.4
Middle	2.4	16.3	4.6	61.9	1.8	11.7	1.3	100	1,243	9.9
Fourth	1.6	13.4	5.3	55.2	2.7	21.5	0.4	100	1,218	10.2
Highest	2.2	14	3.4	51.8	3.3	24.4	0.9	100	1,233	10.6
<b>Total</b>	<b>2.1</b>	<b>16.1</b>	<b>5.7</b>	<b>58.9</b>	<b>2.2</b>	<b>14.3</b>	<b>0.7</b>	<b>100</b>	<b>5,989</b>	<b>9.8</b>

<sup>1</sup> Completed class 6 at the primary level.

<sup>2</sup> Completed form 7 at the secondary level.



**Table 2.6: Educational attainment of the male household population**

*Percent distribution of the de facto male household populations aged 6 and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Tonga 2012.*

Background characteristic	No education (%)	Some primary (%)	Completed primary <sup>1</sup> (%)	Some secondary (%)	Completed secondary <sup>2</sup> (%)	More than secondary (tertiary or vocational) (%)	Do not know/missing (%)	Total (%)	No.	Median years completed
<b>Age</b>										
5-9	14.2	84.3	0.3	0.6	0	0.1	0.4	100	727	1.3
10-14	0.1	41.1	19.6	39.1	0	0	0.2	100	852	5.4
15-19	0.8	0.1	1.5	92.1	2	3.5	0.1	100	655	9.5
20-24	0.3	0.1	1.7	65.5	6.5	25.3	0.6	100	500	11.1
25-29	1.1	0.2	0.9	65.5	5.6	26.7	0	100	410	10.8
30-34	1	0	0.4	72.1	2.4	23	1.2	100	377	10.8
35-39	1	0.3	0.8	73.7	1.5	22.1	0.7	100	303	10.8
40-44	1.2	0.6	2.5	74.3	0.6	20	0.8	100	382	10.6
45-49	1.2	1.7	1.8	74.4	1.5	17.1	2.2	100	302	10.5
50-54	1.4	1	8.8	66.2	1.7	21	0	100	224	10.3
55-59	0.5	0.5	4.5	72.1	0.5	19	3	100	172	10.2
60-64	1.9	3.7	11	66.8	0.5	15.6	0.5	100	163	9.4
65+	1.1	10.1	19.7	57.8	0.8	8.6	1.9	100	406	8.8
Do not know/missing	NP	NP	NP	NP	NP	NP	NP	NP	4	NP
<b>Residence</b>										
Urban	2.9	16.2	4.2	54.3	2.6	19.1	0.8	100	1,316	10.1
Rural	2.5	19.5	6.7	58.7	1.5	10.4	0.7	100	4,160	9.1
<b>Region</b>										
Urban Tongatapu	2.9	16.2	4.2	54.3	2.6	19.1	0.8	100	1,316	10.1
Rural Tongatapu	2.7	19	6.2	57.4	1.7	12.1	0.9	100	2,669	9.2
Outer islands	2.1	20.3	7.8	61	1.1	7.3	0.4	100	1,491	8.8
<b>Wealth quintile</b>										
Lowest	3.1	20.2	7.3	62.7	0.8	5.3	0.6	100	1,092	8.4
Second	2.3	22.3	8	57.6	1.2	7.7	0.8	100	1,097	8.6
Middle	2.2	19.1	5.9	59.9	1.7	10.8	0.4	100	1,065	9.3
Fourth	2.4	16.8	4.7	57.6	2.6	15.1	0.8	100	1,111	9.9
Highest	2.9	15.1	4.8	50.5	2.4	23.2	1	100	1,110	10.2
<b>Total</b>	<b>2.6</b>	<b>18.7</b>	<b>6.1</b>	<b>57.6</b>	<b>1.8</b>	<b>12.5</b>	<b>0.7</b>	<b>100</b>	<b>5,476</b>	<b>9.3</b>

NP = not published

<sup>1</sup> Completed class 6 at the primary level.

<sup>2</sup> Completed form 7 at the secondary level.

## 2.5 SCHOOL ATTENDANCE RATIO

Tonga uses a 6–7–3 formal education system, involving six years of primary school (class 1–6), seven years of secondary school (Form 1–7), and a maximum of three to four years of post-secondary, Technical Vocational Education and Training, university, or tertiary education. The official age ranges for these levels are 6–11 for primary school, 12–18 for secondary school, and 19–21 for post-secondary, Technical Vocational Education and Training, university and tertiary education.

The net attendance ratio (NAR) for the primary level is the percentage of children of primary school age (6–11) who attend primary school. The primary school NAR is 93% for males and 92% for females (Table 2.7). Primary school NARs are slightly higher for rural females than urban females. Differences are even smaller for urban and rural males. There are no large differences in primary school NARs by wealth quintile.

Compared with the primary level NAR, the secondary-level NAR is lower, with 83% of children aged 12–18 attending secondary school. The secondary NAR is higher for female children than for male children. Secondary school NARs are highest for females in the outer islands (86%) and lowest for females in urban Tongatapu (80%). Male NARs show less regional difference than female NARs, and are lower in rural Tongatapu than in urban Tongatapu. For both males and females, NAR increases with the wealth status of the household.

The gross attendance ratio (GAR) measures attendance irrespective of the official age at each level. The GAR for primary school is the total number of children attending primary school expressed as a percentage of the official primary school-age population (ages 6–11). A major contributing factor to high GAR is children starting primary school earlier or later than the recommended age of 6 years. The overall primary-school GAR is 97%. There are no major differences in the primary school GAR by sex, region or wealth quintile.

The secondary school GAR (93%) is lower than the primary school GAR (97%). In the urban area, there are differences in the secondary level GAR by gender (96% for males as compared to 89% for females). The GAR increases with the wealth status of the household, especially for males.

The gender parity index (GPI) is a measure of the ratio of females to males attending school. A value of 1.0 indicates that school attendance has gender parity, with equal rates of attendance for males and females. A value greater than 1.0 indicates that female rates of attendance are higher, while a value of less than 1.0 indicates that male rates of attendance are higher. GPIs are close to parity at the primary level for Tonga, and when broken down by region. At the secondary level, GPI shows lower attendance for females than for males in urban Tongatapu, and higher attendance for females than for males in rural Tongatapu. The GPI in primary (and especially secondary education) shifts in favour of males as the wealth quintile of the household increases.

**Table 2.7: School attendance ratios**

*Net attendance ratios (NAR)<sup>1</sup> and gross attendance ratios (GAR)<sup>2</sup> for the de facto household population by sex and level of schooling; and the gender parity index (GPI)<sup>3</sup>, according to background characteristics, Tonga 2012*

Background characteristic	Net attendance ratio				Gross attendance ratio			
	Males	Females	Total	Gender Parity Index	Males	Females	Total	Gender Parity Index
<b>PRIMARY SCHOOL</b>								
<b>Residence</b>								
Urban	92.9	90.6	91.8	0.97	98.3	96.4	97.4	0.98
Rural	92.9	93.0	93.0	1.00	97.0	96.0	96.5	0.99
<b>Region</b>								
Urban Tongatapu	92.9	90.6	91.8	0.97	98.3	96.4	97.4	0.98
Rural Tongatapu	93.9	93.5	93.7	1.00	97.6	96.7	97.2	0.99
Outer islands	91.2	92.1	91.6	1.01	95.9	94.5	95.3	0.99
<b>Wealth quintile</b>								
Lowest	95.1	93.3	94.2	0.98	98.4	99.0	98.7	1.01
Second	91.4	90.4	91.0	0.99	96.6	95.1	95.9	0.98
Middle	92.8	93.6	93.2	1.01	97.9	96.5	97.2	0.99
Fourth	91.5	91.7	91.6	1.00	96.0	94.0	95.1	0.98
Highest	93.8	93.4	93.6	1.00	97.6	95.1	96.3	0.97
<b>Total</b>	<b>92.9</b>	<b>92.5</b>	<b>92.7</b>	<b>1.00</b>	<b>97.3</b>	<b>96.1</b>	<b>96.7</b>	<b>0.99</b>
<b>SECONDARY SCHOOL</b>								
<b>Residence</b>								
Urban	82.5	80.4	81.3	0.97	95.8	88.7	92.0	0.93
Rural	81.8	85.5	83.7	1.05	93.0	94.6	93.8	1.02
<b>Region</b>								
Urban Tongatapu	82.5	80.4	81.3	0.97	95.8	88.7	92.0	0.93
Rural Tongatapu	81.1	85.2	83.2	1.05	90.9	94.1	92.5	1.04
Outer islands	83.0	86.1	84.6	1.04	96.7	95.3	96.0	0.98
<b>Wealth quintile</b>								
Lowest	74.9	77.8	76.4	1.04	83.9	87.8	85.9	1.05
Second	76.0	80.3	78.2	1.06	88.3	89.4	88.9	1.01
Middle	80.6	88.2	84.6	1.09	93.4	96.7	95.1	1.04
Fourth	88.7	89.3	89.0	1.01	101.2	99.5	100.3	0.98
Highest	89.4	85.7	87.4	0.96	101.2	92.5	96.6	0.91
<b>Total</b>	<b>82.0</b>	<b>84.3</b>	<b>83.2</b>	<b>1.03</b>	<b>93.6</b>	<b>93.2</b>	<b>93.4</b>	<b>1.00</b>

<sup>1</sup> NAR for primary school is the percentage of the primary school-age (6–11 years) population attending primary school. NAR for secondary school is the percentage of the secondary school-age (12–18 years) population attending secondary school. By definition, NAR cannot exceed 100%.

<sup>2</sup> GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. 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, GAR can exceed 100%.

<sup>3</sup> The gender parity index (GPI) for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. GPI for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

## 2.6 GRADE REPETITION AND DROPOUT RATES

Repetition and dropout rates presented in Table 2.8 describe the flow of pupils through Tonga's educational system at the primary level. Repetition rates indicate the percentage of pupils who attended a particular grade during the school year that started in 2011, and who again attended that same class during the following school year. Dropout rates show the percentage of pupils in a grade that started in 2011 but no longer attended school the following school year.

**Table 2.8: Grade repetition and dropout rates**

*Repetition and dropout rates for the de facto household population aged 5–24 who attended primary school in the previous school year by school grade, according to background characteristics, Tonga 2012*

Background characteristic	School grade					
	1	2	3	4	5	6
<b>REPETITION RATE<sup>1</sup></b>						
<b>Sex</b>						
Male	9.7	0.9	0.0	0.4	1.0	8.9
Female	4.1	0.9	0.9	2.0	0.7	8.1
<b>Residence</b>						
Urban	12.0	1.0	0.0	1.2	1.6	5.3
Rural	5.7	0.9	0.5	1.1	0.7	9.3
<b>Region</b>						
Urban Tongatapu	12.0	1.0	0.0	1.2	1.6	5.3
Rural Tongatapu	6.1	1.0	0.8	0.8	0.6	8.7
Outer islands	5.0	0.7	0.0	1.8	0.8	10.0
<b>Wealth quintile</b>						
Lowest	6.5	0.0	0.0	1.2	0.0	11.0
Second	4.8	0.0	2.0	0.0	0.0	7.9
Middle	5.4	1.9	0.0	2.1	2.6	10.6
Fourth	11.7	2.4	0.0	2.2	1.1	8.7
Highest	8.2	0.0	0.0	0.0	0.9	4.8
<b>Total</b>	<b>7.0</b>	<b>0.9</b>	<b>0.4</b>	<b>1.2</b>	<b>0.9</b>	<b>8.5</b>
<b>DROPOUT RATE<sup>2</sup></b>						
<b>Sex</b>						
Male	0.4	0.0	0.0	0.0	0.0	1.3
Female	0.0	0.0	0.0	0.0	0.0	0.0
<b>Residence</b>						
Urban	0.0	0.0	0.0	0.0	0.0	1.3
Rural	0.3	0.0	0.0	0.0	0.0	0.6
<b>Region</b>						
Urban Tongatapu	0.0	0.0	0.0	0.0	0.0	1.3
Rural Tongatapu	0.0	0.0	0.0	0.0	0.0	1.0
Outer islands	0.8	0.0	0.0	0.0	0.0	0.0
<b>Wealth quintile</b>						
Lowest	1.0	0.0	0.0	0.0	0.0	1.1
Second	0.0	0.0	0.0	0.0	0.0	1.9
Middle	0.0	0.0	0.0	0.0	0.0	0.0
Fourth	0.0	0.0	0.0	0.0	0.0	0.0
Highest	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>

<sup>1</sup> The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year.

<sup>2</sup> The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school.

Table 2.8 presents the repetition and dropout rates for the *de facto* household population aged 5–24 who attended primary school in 2011 by school grade, according to background characteristics. Overall, the most common grades for repetition are grade 6 (8%) and grade 1 (7%) at the primary school level. Male and female students are equally likely to repeat grade 6, but male students are twice as likely to repeat grade 1. Children living in urban Tongatapu are most likely to repeat grade 1 and children living in the outer islands are more likely to repeat grade 6.

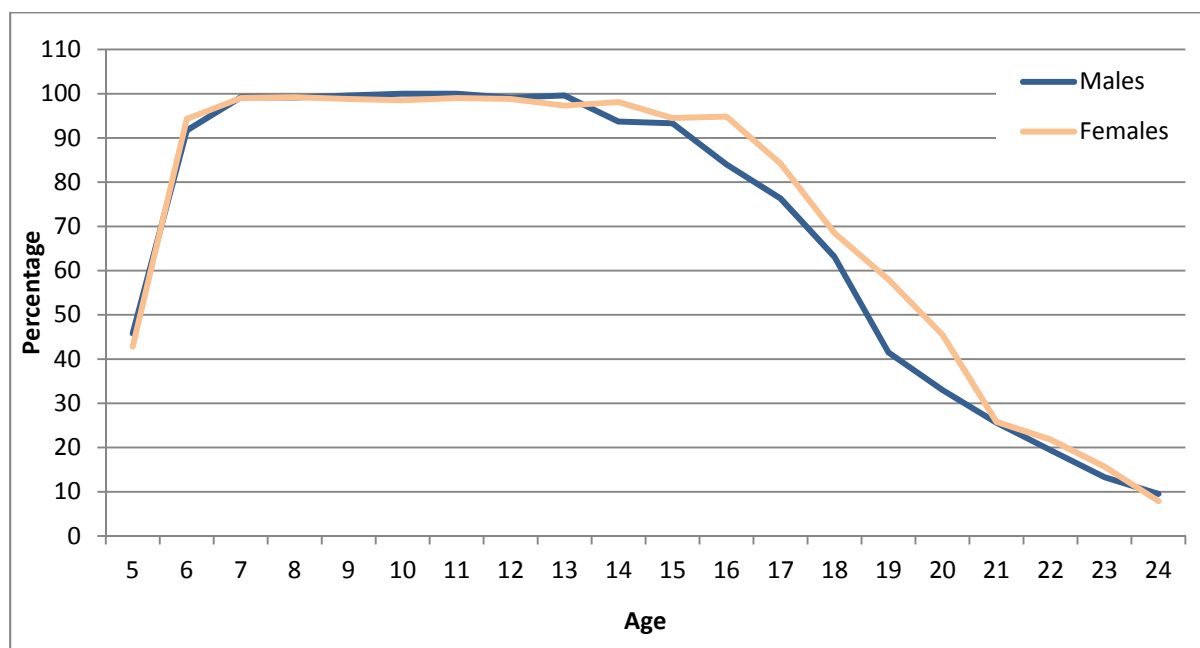
Overall, primary school dropout rates are very low. However, males were more likely than females to drop out (predominately in grade 6). Outer island children from the lowest wealth quintile households are most likely to drop out of grade 1 and Tongatapu children from the lowest and second lowest wealth quintiles are most likely to drop out of grade 6.

## 2.7 AGE-SPECIFIC ATTENDANCE RATE

Figure 2.3 presents information on school attendance for those aged 5–24. The figure includes students who attended primary school, secondary school, or higher education during the 2012 school year.

Attendance rates are less than 50% for five-year olds and over 90% for six-year olds, because entry into primary school is allowed for five-year old children in Tonga, but is obligatory for six-year old children. Some children who were age 6 at the time of the 2012 TDHS may have been age 5 at the beginning of the school year, and thus were still in preschool. On average, 99% of children aged 7–13 attend school. Attendance rates decline noticeably for all children after age 15 for boys and 17 for girls. Because a higher percentage of girls stay longer in secondary school, a higher percentage of girls go on to have more than secondary level education. For example, the attendance rate for males aged 18 is 63% and for females 69%. By age 21, the attendance rate is 26% for both males and females.

**Figure 2.3: Age-specific attendance rates of the *de facto* population aged 5–24, Tonga 2012**



## 2.8 HOUSEHOLD ENVIRONMENT

The physical characteristics of the household dwelling are important determinants of the health status of household members, especially children, and also serve as indicators of the socioeconomic status of a household. The 2012 TDHS contained a set of questions that asked respondents and the head of the household about their household environment, such as source of drinking water; type of sanitation facility; type of flooring, walls and roof; and number of rooms in the dwelling. The results are presented both in terms of households and of the *de jure* population.

### 2.8.1 Drinking water

The source of drinking water is an indication of whether it is safe to drink. Increased access to safe drinking water results in improved health outcomes in the form of reduced cases of water-borne diseases such as dysentery and cholera. A piped source into the dwelling or yard is considered to provide suitable drinking water and is identified as an improved source in Table 2.9 (WHO/UNICEF, 2004, 2005).

Because household sizes vary very little by place of residence, there are no significant differences in the results when aggregated by population as compared with the results when aggregated at the household level. Overall, 78% of all households in Tonga have an improved source of drinking water from a piped source. Another 6% rely on bottled drinking water — this group constitutes 14% of urban households. Rural households have greater access (79%) to piped water sources than urban households (73%). About 16% of all households use a non-improved drinking water source, which is also more common among rural households. Tonga Ministry of Health report far higher rates of access to safe drinking water (Appendix E).

The majority of households (98%) have water on the premises, which reduces the time spent fetching water. The remaining 2% of households spend, on average, less than 30 minutes fetching water and the

person who usually has the burden of collecting water for their household's water consumption is most commonly adult males aged 15 and over.

Water from an improved source can be contaminated at collection, during transportation or fetching, and/or during storage. Information was collected on whether or not water was treated prior to drinking. Only about 43% of households use an appropriate treatment method. The most commonly reported treatment method is boiling (41%). A higher proportion of households in urban Tongatapu (55%) use an appropriate water treatment method than in rural areas (40%).

**Table 2.9: Household drinking water**

*Percent distribution of households and the de jure population by source, time to collect, and people who usually collect drinking water; and percentage of households and the de jure population by treatment of drinking water, according to residence Tonga 2012*

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Source of drinking water</b>						
Improved source	73.3	79.3	77.9	73.2	79.8	78.2
Piped water into dwelling/yard/plot	73.3	79.3	77.9	73.2	79.8	78.2
Non-improved source	11.9	16.7	15.6	13.6	16.3	15.6
Cistern/Tank owned by community	1.7	2.6	2.4	1.8	2.5	2.3
Cistern/Tank owned by neighbours	10.2	14.1	13.2	11.8	13.8	13.3
Bottled water, improved source for cooking/washing <sup>1</sup>	14.1	3.3	5.8	12.6	3.4	5.6
Bottled water, non-improved source for cooking/washing	0.1	0.4	0.3	0.1	0.4	0.3
Other	0.5	0.3	0.4	0.5	0.2	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Percentage using any improved source of drinking water	87.4	82.6	83.7	85.8	83.2	83.8
<b>Time to obtain drinking water (round trip)</b>						
Water on premises	98.4	97.6	97.7	98.6	98.0	98.2
Less than 30 minutes	1.2	1.8	1.6	1.1	1.4	1.3
30 minutes or longer	0.1	0.2	0.2	0.1	0.2	0.1
Do not know/missing	0.3	0.5	0.4	0.2	0.4	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Person who usually collects drinking water</b>						
Adult female aged 15+	0.3	0.6	0.5	0.1	0.4	0.3
Adult male aged 15+	0.5	1.3	1.1	0.3	0.9	0.8
Female child under age 15	0.0	0.4	0.3	0.0	0.4	0.3
Male child under age 15	0.7	0.1	0.2	0.8	0.1	0.3
Other	0.1	0.1	0.1	0.1	0.1	0.1
Water on premises	98.4	97.6	97.7	98.6	98.0	98.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Water treatment prior to drinking<sup>2</sup></b>						
Boiled	53.5	36.9	40.8	53.7	38.5	42.2
Bleach/chlorine	1.1	0.9	0.9	1.0	1.0	1.0
Strained through cloth	0.7	2.6	2.1	0.6	2.5	2.1
Ceramic, sand or other filter	1.7	0.9	1.1	2.4	0.7	1.1
Solar disinfection	0.3	0.0	0.1	0.3	0.0	0.1
Other	0.4	1.0	0.9	0.4	0.9	0.8
No treatment	44.0	59.9	56.1	43.3	58.3	54.7
Percentage using an appropriate treatment method <sup>3</sup>	55.4	39.8	43.4	56.1	41.4	44.9
<b>Number</b>	<b>585</b>	<b>1,915</b>	<b>2,500</b>	<b>3,190</b>	<b>10,189</b>	<b>13,379</b>

<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, therefore, the sum of treatment may exceed 100%.

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

## 2.8.2 Household sanitation facilities

Table 2.10 shows the percent distribution of households and population by type of toilet facility. Eight in ten households have improved toilet or latrine facilities. Poor sanitation, coupled with unsafe water sources, increases the risk of water-borne diseases and illnesses due to poor hygiene. Households without proper toilet facilities are more exposed to the risk of diseases such as dysentery, diarrhoea and typhoid fever than those with improved sanitation facilities. Non-improved facilities are more common in rural areas where almost 6% of households use a pit latrine without slab. Use of a bucket was more common in the urban area (almost 2% of households). In contrast with these data, Tonga Ministry of health report almost universal access to sanitary toilet facilities (Appendix E).

**Table 2.10: Household sanitation facilities**

*Percent distribution of households and the de jure population by type of toilet or latrine facilities, according to residence, Tonga 2012*

Type of toilet or latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Improved, not shared facility</b>						
Flush/pour (flush to septic tank)	90.8	76.7	80.0	90.8	77.6	80.7
Flush/pour (flush to pit latrine)	3.9	7.6	6.8	4.0	7.9	7.0
Ventilated improved pit latrine	0.3	4.9	3.8	0.4	4.8	3.7
Pit latrine (with slab)	0.8	1.0	0.9	0.9	1.0	0.9
Composting toilet	0.1	0.4	0.4	0.1	0.3	0.3
<b>Non-improved facility</b>						
Any facility shared with other households	2.1	2.3	2.3	1.7	2.1	2.0
Flush/pour (flush not to sewer/septic tank/pit latrine)	0.1	0.2	0.2	0.0	0.2	0.2
Pit latrine (without slab/open pit)	0.1	5.5	4.3	0.1	4.9	3.8
Bucket	1.6	1.1	1.2	1.7	1.1	1.3
Other	0.0	0.0	0.0	0.0	0.0	0.0
Missing	0.1	0.2	0.2	0.2	0.1	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>585</b>	<b>1,915</b>	<b>2,500</b>	<b>3,190</b>	<b>10,189</b>	<b>13,379</b>

## 2.8.3 Housing characteristics

Table 2.11 presents information on a number of dwelling characteristics that reflect the socioeconomic status of households. They also may influence environmental conditions. For example, in the case of biomass fuel use, exposure to indoor pollution has a direct bearing on the health and welfare of household members.

Overall, 93% of all households have access to electricity as a source of energy; about 9% of rural households and 2% of urban households have no access to electricity.

Almost half of all households (49%) have cement with carpet flooring, which is slightly more common among rural households (50%) than urban households (46%). Urban households are more likely to have cement with ceramic flooring (22%) than rural households (10%). Cement floors are more commonly used as flooring materials in rural households (21%) than in urban households (15%).

Around one in ten households uses one room for sleeping (12%). About 65% of households use three or more rooms for sleeping, and this is the most common dwelling arrangement, especially for urban households (75%).

More than half of households cook in the house. Cooking in the house is more common among urban households (75%) than rural households (44%). Cooking in a separate building is more common in rural households (31%) than urban households (14%). About 21% of all households cook outdoors: including 24% of rural households and 10% of urban households.

**Table 2.11: Household characteristics**

*Percent distribution of households and the de jure population by housing characteristics and percentage using solid fuel for cooking; among those using solid fuels, percent distribution by type of fire/stove, according to residence, Tonga 2012*

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Electricity</b>						
Yes	97.7	91.3	92.8	98.5	92.8	94.1
No	2.1	8.5	7.0	1.3	6.8	5.5
Missing	0.1	0.3	0.2	0.2	0.4	0.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Flooring material</b>						
Gravel/Sand	0.5	1.0	0.9	0.5	0.9	0.8
Wood planks	5.6	5.6	5.6	5.4	5.7	5.6
Coconut midribs	0.3	0.5	0.5	0.3	0.6	0.5
Parquet or polished wood	10.3	11.8	11.5	9.5	10.9	10.6
Cement	14.6	21.3	19.7	13.7	21.5	19.6
Cement with ceramic	22.0	10.0	12.8	20.4	10.2	12.7
Cement with carpet	46.5	49.7	49.0	50.1	50.2	50.2
Other	0.0	0.0	0.0	0.0	0.0	0.0
Missing	0.1	0.0	0.0	0.1	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Rooms used for sleeping</b>						
One	7.4	13.1	11.7	6.0	11.1	9.9
Two	17.8	24.0	22.5	15.5	22.3	20.7
Three or more	74.7	61.7	64.8	78.4	65.9	68.9
Missing	0.1	1.2	1.0	0.1	0.7	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Place for cooking</b>						
In the house	75.3	44.4	51.6	72.7	42.5	49.7
In a separate building	14.2	30.7	26.8	15.5	33.0	28.8
Outdoors	10.1	24.1	20.8	11.5	24.0	21.0
Other	0.3	0.0	0.1	0.3	0.0	0.1
Missing	0.1	0.8	0.7	0.0	0.5	0.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Cooking fuel</b>						
Electricity	3.5	2.7	2.9	3.2	2.2	2.4
Gas/natural gas/biogas	79.6	45.6	53.6	77.6	44.1	52.1
Kerosene	0.4	0.4	0.4	0.1	0.4	0.3
Wood	14.5	42.9	36.2	17.3	44.2	37.8
Coconut parts	1.9	7.1	5.9	1.8	8.3	6.7
No food cooked in household	0.1	0.5	0.4	0.0	0.1	0.1
Other	0.0	0.7	0.5	0.0	0.7	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Percentage using solid fuel for cooking <sup>1</sup>	16.4	50.0	42.2	19.1	52.5	44.5
Number of households	585	1,915	2,500	3,190	10,189	13,379
Type of fire/stove among households using solid fuel						
Closed stove with chimney	0.0	4.6	4.2	0.0	5.1	4.6
Open fire/stove with chimney	0.8	2.7	2.5	0.5	2.5	2.3
Open fire/stove with hood	14.8	11.2	11.5	14.9	11.3	11.7
Open fire/stove without chimney or hood	83.6	80.5	80.8	83.7	80.1	80.5
Missing	0.8	1.0	1.0	0.9	0.9	0.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of households/population using solid fuel	96	958	1,054	609	5,347	5,957

<sup>1</sup> Includes coal/lignite, charcoal, wood/straw/shrubs/grass, agricultural crops, and animal dung (categories included in the country questionnaire).



## 2.9 HOUSEHOLD POSSESSIONS

The availability of durable consumer goods is an indicator of a household's socioeconomic status. Moreover, particular goods have specific benefits. For instance, 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 services away from the local area.

During the 2012 TDHS, information on the possession of selected durable consumer goods was collected at the household level. The percentages of households possessing various durable consumer goods are shown in Table 2.12. There are often large differences between urban and rural households with regard to access to durable goods — higher percentages of urban households have access to all items requiring electrical power, cars and trucks, motorcycles and scooters, and gas stoves. The largest differences are for refrigerators (24%). However, a few items are more commonly owned by rural households (boats, fishing gear, and both ownership of land for agriculture and farm animals).

**Table 2.12: Household durable goods**

*Percentage of households and the de jure population possessing various household effects, means of transportation, agricultural land and livestock and farm animals by residence, Tonga 2012*

Possession	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Radio	89.5	83.4	84.9	90.4	84.2	85.7
Television	92.0	77.5	80.9	93.8	80.7	83.8
Mobile telephone	96.5	94.6	95.1	97.8	96.8	97.1
Non-mobile telephone	67.0	50.0	53.9	67.5	52.9	56.4
Refrigerator	75.9	52.4	57.9	76.8	54.0	59.4
Bicycle	39.9	38.5	38.8	42.4	41.5	41.8
Animal drawn cart	5.9	5.8	5.8	5.7	6.3	6.2
Motorcycle/scooter	9.1	6.0	6.8	10.0	7.0	7.7
Car/truck	65.7	55.7	58.0	67.8	59.5	61.5
Boat with a motor	2.4	3.4	3.2	2.4	3.6	3.3
Deep freezer	67.4	44.9	50.1	69.1	47.5	52.7
Gas stove	93.2	83.0	85.4	94.4	84.9	87.2
Kerosene stove	4.6	4.1	4.2	4.6	4.1	4.2
Microwave oven	48.5	26.5	31.6	47.0	27.1	31.8
Electric jug or kettle	75.3	69.0	70.5	76.2	70.8	72.1
Rice cooker	40.8	23.0	27.1	39.9	24.1	27.8
Blender	47.9	25.3	30.5	46.0	26.7	31.3
Sewing machine	36.7	32.6	33.6	36.7	35.5	35.8
CD/cassette player	74.0	56.4	60.5	76.4	59.1	63.2
Video or DVD player	82.6	68.2	71.6	84.3	71.4	74.5
Electric water pump	14.5	6.1	8.0	13.0	6.3	7.9
Washing machine	81.5	70.6	73.1	84.8	75.2	77.5
Computer	56.4	32.9	38.4	58.9	36.6	41.9
Electric fan	51.3	35.6	39.3	49.6	37.4	40.3
Air conditioner	5.2	1.8	2.6	5.3	1.8	2.6
Bed	98.7	98.0	98.2	98.8	98.0	98.2
Table	98.0	95.4	96.0	98.3	96.2	96.7
Chair	97.5	93.1	94.1	97.6	93.8	94.7
Sofa	88.3	72.1	75.9	88.4	74.2	77.6
Food safe	86.1	70.3	74.0	85.9	71.2	74.7
Cupboard	78.7	61.3	65.4	78.0	61.4	65.3
Clock	69.8	53.3	57.2	70.0	55.0	58.6
Generator	7.4	6.2	6.5	6.7	6.4	6.4
Solar power	5.5	2.5	3.2	4.9	2.2	2.8
Boat	3.5	5.3	4.9	4.1	5.6	5.2
Canoe	0.7	0.8	0.7	0.5	0.8	0.8
Fishing gear	9.2	16.8	15.1	10.7	17.6	15.9
Residential land	70.5	67.7	68.4	73.2	68.3	69.5
Commercial land	9.7	6.9	7.5	8.8	7.2	7.6
Ownership of agricultural land	43.2	57.2	53.9	45.0	58.1	54.9
Ownership of farm animals	58.2	76.5	72.2	63.4	80.1	76.1
<b>Number</b>	<b>585</b>	<b>1,915</b>	<b>2,500</b>	<b>3,190</b>	<b>10,189</b>	<b>13,379</b>

## 2.10 WEALTH INDEX

The wealth index is a background characteristic that is used as a proxy for the long-term standard of living of the household. It is based on a household's ownership of consumer goods, dwelling characteristics, source of drinking water, toilet facilities, and other characteristics related to a household's socioeconomic status. To construct the index, each of these assets was assigned a weight (factor score) generated through principal component analysis. The resulting asset scores were standardised in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest). A single asset index was developed on the basis of data from the entire country sample and this index was used in all the tabulations presented.

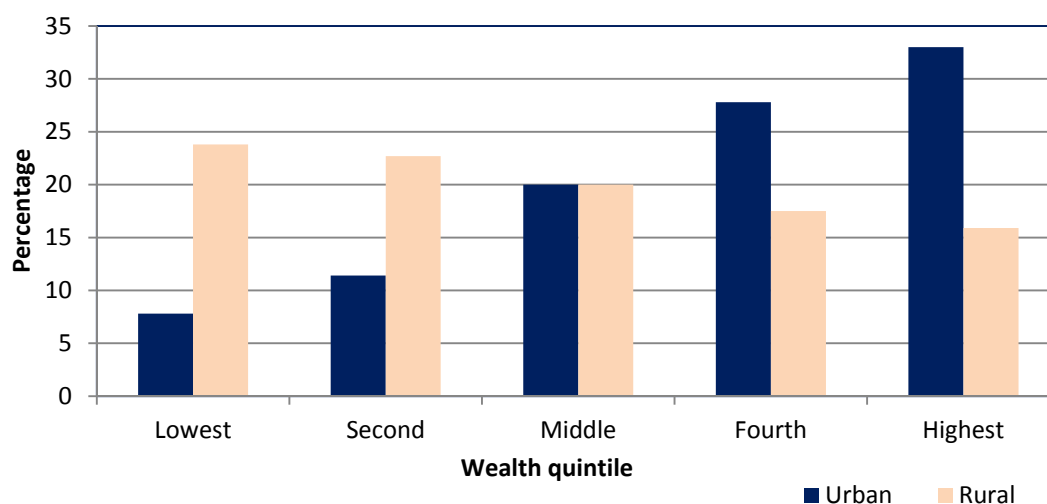
Table 2.13 and Figure 2.4 show the distribution of the *de jure* household population in five wealth levels (quintiles) based on the wealth index by residence. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic area. The 2012 TDHS findings indicate that the wealth status of the population is clearly differentiated geographically, between urban and rural Tongatapu and the outer islands. About 33% of the urban population is in the highest wealth quintile, compared with 16% of the rural population. Furthermore, 19% of the population of rural Tongatapu is in the highest wealth quintile, but only 10% of the outer island population in the highest quintile. On the other hand, about 24% of the rural population is in the lowest wealth quintile, compared with only 8% of the urban population; 33% of people living in the outer islands are in the lowest wealth quintile.

**Table 2.13: Wealth quintiles**

*Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient according to residence and region, Tonga 2012*

Residence/region	Wealth quintile					Total	Population
	Lowest	Second	Middle	Fourth	Highest		
<b>Residence</b>							
Urban	7.8	11.4	20.0	27.8	33.0	100.0	3,190
Rural	23.8	22.7	20.0	17.5	15.9	100.0	10,189
<b>Region</b>							
Urban Tongatapu	7.8	11.4	20.0	27.8	33.0	100.0	3,190
Rural Tongatapu	18.5	21.3	22.0	19.0	19.2	100.0	6,591
Outer islands	33.4	25.4	16.5	14.8	9.9	100.0	3,597
<b>Total</b>	<b>20.0</b>	<b>20.0</b>	<b>20.0</b>	<b>20.0</b>	<b>20.0</b>	<b>100.0</b>	<b>13,379</b>

**Figure 2.4: Percent distribution of the *de jure* population by wealth quintiles, Tonga 2011**



## 2.11 BIRTH REGISTRATION

Birth registration is the inscription of facts about a birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration, or later as proof of birth registration. Birth registration is fundamental to ensuring a child's legal status and, thus, basic rights and services (UNICEF 2006; UNGA 2002). The birth registration system in Tonga needs to be improved, in terms of quality control and coverage. Birth registration is being undertaken on all islands of Tonga.

In addition to being the first legal acknowledgment of a child's existence, birth registration is fundamental to the realisation of a number of rights and practical needs, including access to health care and immunisation. Birth registration in a well-established and functioning system ensures that the country has an up-to-date and reliable database for planning. This is useful for national-level planning, as well as for use by local government agencies responsible for maintaining education, health and other social services for the community.

Table 2.14 presents the percentage of children aged less than 5 whose births are officially registered, and the percentage who had a birth certificate at the time of the survey. Not all children who are registered have a birth certificate because some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

The majority of children (93%) in the 2012 TDHS aged less than 5 years are registered and only 3% lack a birth certificate. There is little variation by background for those children whose births have been registered. However, registration rates are highest (95%) in the outer islands (other rural) and lowest in urban Tongatapu (92%). Rates of registration are highest in the highest wealth quintile (96%) and lowest in the lowest wealth quintile (92%). The percentage of children aged less than 2 years without a birth certificate is 5%, compared with less than 2% for children aged 2–4 years. Children in urban Tongatapu are most likely (4%) to lack a birth certificate, and those in the outer islands (other rural areas) are the least likely (2%).

**Table 2.14: Birth registration of children under age 5**

*Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Tonga 2012*

Background characteristic	Had a birth certificate (%)	Did not have a birth certificate (%)	Total registered (%)	Number of children
<b>Age</b>				
<2	88.3	4.9	93.3	660
2–4	91.9	1.6	93.5	1,089
<b>Sex</b>				
Male	90.2	3.4	93.6	888
Female	90.9	2.3	93.1	861
<b>Residence</b>				
Urban	88.0	4.0	92.0	391
Rural	91.3	2.5	93.8	1,357
<b>Region</b>				
Urban Tongatapu	88.0	4.0	92.0	391
Rural Tongatapu	90.7	2.6	93.3	903
Outer islands	92.5	2.2	94.8	454
<b>Wealth quintile</b>				
Lowest	89.2	2.6	91.8	413
Second	88.8	4.6	93.4	382
Middle	91.1	1.5	92.6	349
Fourth	90.5	3.0	93.4	305
Highest	94.1	2.3	96.4	300
<b>Total</b>	<b>90.5</b>	<b>2.8</b>	<b>93.4</b>	<b>1,749</b>

## CHAPTER 3 CHARACTERISTICS OF RESPONDENTS

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This chapter describes the reproductive status of men and women in Tonga, and presents information on their age at the time of the survey, marital status, residence, education, literacy and media access. In addition, the chapter explores factors that can enhance women's empowerment, including employment, occupation, earnings, and continuity of employment. An analysis of these variables provides the socioeconomic context in which demographic and reproductive health issues are examined in subsequent chapters.

### 3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 presents background characteristics of 3,068 women aged and 1,336 men aged 15–49 who were interviewed during the 2012 TDHS. The age distribution of respondents is similar for men and women. As expected (given Tonga's youthful age structure), the proportion of male and female respondents in each age group declines with increasing age. A majority of both men and women aged 15–49 are below the age of 34: 38% of women and 40% of men are aged 15–24, and 30% of women and 27% of men are aged 25–34. Thirty-three percent of male respondents and 32% of female respondents aged 15–49 are aged between 35–49.

In Table 3.1, the term "married" refers to those in a formal or official marriage, while "living together" refers to those in informal or consensual unions. Data in Table 3.1 show that about half of women (53%) and men (50%) are formally married.<sup>2</sup> Men are more likely (42%) than women (37%) to have never married. Less than 4% of men and women declare themselves to be living in a consensual union. Women are more likely than men to be divorced, separated or widowed.

The distribution of the sample by residence reflects the fact that a larger proportion of Tonga's population resides in rural areas: about 75% of men and women live in rural areas while only 25% live in urban areas. There is some gender disparity in educational attainment: 76% of women and 80% of men aged 15–49 have attended some or completed secondary school, while 23% of women and just 18% of men have either completed or attained more than a secondary education.

The breakdown by wealth quintiles indicates a fairly even distribution of household wealth by gender across the households sampled.

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<sup>2</sup> In the tables in this report, the category 'married' includes both those women or men who are in a formal or official marriage and those who are living together. The exception to this rule is in tables where 'married' and 'living together' are disaggregated as separate categories, in which case, the category 'married' refers only to those women or men who are in a formal or official marriage.

**Table 3.1: Background characteristics of respondents***Percent distribution of women and men aged 15–49 by selected background characteristics, Tonga 2012*

Background characteristic	Women			Men		
	Weighted percent	Weighted	Unweighted	Weighted percent	Weighted	Unweighted
<b>Age</b>						
15–19	21.5	658	696	23.3	311	266
20–24	16.1	493	473	16.5	221	223
25–29	16.4	503	463	14.4	193	164
30–34	13.4	410	430	12.7	170	179
35–39	11.9	364	350	11.2	150	137
40–44	11.8	362	375	11.9	159	186
45–49	9.0	277	281	9.9	132	143
<b>Marital status</b>						
Never married	37.2	1,140	1,166	42.5	567	515
Married	53.4	1,640	1,617	50.1	670	683
Living together	3.5	107	105	3.5	46	47
Divorced/separated	4.8	147	147	3.5	47	48
Widowed	(1.1)	34	33	NP	5	5
<b>Residence</b>						
Urban	24.6	754	951	25.3	338	423
Rural	75.4	2,314	2,117	74.7	998	875
<b>Region</b>						
Urban Tongatapu	24.6	754	951	25.3	338	423
Rural Tongatapu	50.7	1,554	1,046	49.8	666	441
Outer islands	24.8	760	1,071	24.8	332	434
<b>Education</b>						
Primary or less	(1.2)	37	42	(2.8)	24	25
Secondary	76.1	2,334	2,348	79.7	1,066	1,027
More than secondary	22.7	697	678	18.4	246	246
<b>Wealth quintile</b>						
Lowest	18.2	557	587	20.5	275	286
Second	19.5	597	599	18.7	250	237
Middle	20.6	631	602	22.0	294	268
Fourth	21.2	650	655	20.4	272	270
Highest	20.6	632	625	18.4	245	237
<b>Religion</b>						
None	NP	8	8	NP	4	4
Free Wesleyan Church	35.1	1,076	1,104	35.6	476	470
Roman Catholic	14.7	451	454	17.3	232	224
Latter Day Saints	17.9	550	503	19.4	259	229
Free Church of Tonga	11.9	366	376	10.5	141	148
Church of Tonga	6.3	193	210	6.0	80	80
Tokaikolo Chris	2.3	70	62	(2.5)	33	29
Anglican/Church of England	(0.9)	27	32	NP	12	15
Seventh Day Adventist	3.1	95	84	(2.4)	32	30
Assemblies of God	3.3	101	106	(2.8)	37	36
Constitutional Church of Tonga	(1.1)	34	39	NP	4	5
Other religion	3.1	94	86	(1.4)	25	26
Refused to answer	NP	1	1	NP	0	0
Do not know	NP	3	2	NP	0	0
Missing	NP	1	1	NP	3	2
<b>Ethnicity</b>						
Tongan	98.2	3,012	3,008	98.4	1,314	1,273
Part-Tongan	NP	20	21	NP	4	5
Other	(1.2)	36	39	NP	17	18
Missing	NP	0	0	NP	2	2
<b>Total women or men aged 15–49</b>	<b>100.0</b>	<b>3,068</b>	<b>3,068</b>	<b>100.0</b>	<b>1,336</b>	<b>1,298</b>
Total men aged 50+	-	-	-	-	406	444
Total men aged 15+	-	-	-	-	1,742	1,742

- = not applicable; NP = not published

Notes:

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

2. To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### 3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Tables 3.2 and 3.3 show the distribution of women and men according to their highest level of education attained. As mentioned before, the data show little variation between women and men in terms of educational attainment. Generally, younger adults are better educated and reach higher education levels than older people who are more likely to have attained some secondary level education only. Almost all women (99%) completed primary school. Among men aged 15–49, 2% had a primary school education or less, which is only slightly higher than the figure for women (1.2%). Most pupils did not complete their secondary education, unless they were pursuing further studies: 72% of women and 77% of men aged 15–49 had some secondary education, while only 4% of women and 3% of men aged 15–49 completed a secondary education (thus have a secondary education but did not pursue further education). A higher percentage of women (23%) than men (18%) aged 15–49 achieved more than a secondary level of education.

In rural areas, and particularly in the outer islands, the percentage of women and men who completed secondary education or higher is less than in urban Tongatapu, and this is reflected in the difference in the median number of years at school completed, which is slightly higher in the urban area than in rural areas for both women and men.

Tables 3.2 and 3.3 show that younger, more affluent men and women (those in their 20s, those living in the urban area, and those in the two higher wealth quintile households) have had slightly more years of schooling on average than others in Tonga.

**Table 3.2: 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, Tonga 2012*

Background characteristic	Primary or less <sup>1</sup> (%)	Some secondary (%)	Completed secondary <sup>2</sup> (%)	More than secondary (%)	Total (%)	Median years completed	Number of women
<b>Age</b>							
15–24	0.7	73.6	8.1	17.6	100.0	10.7	1,151
15–19	0.7	88.9	6.6	3.8	100.0	10.0	658
20–24	0.7	53.1	10.2	36.1	100.0	11.8	493
25–29	0.5	59.8	4.0	35.7	100.0	11.4	503
30–34	0.9	69.9	1.9	27.3	100.0	10.9	410
35–39	1.0	74.1	0.4	24.4	100.0	10.8	364
40–44	3.2	78.0	0.4	18.4	100.0	10.5	362
45–49	2.8	79.3	0.8	17.0	100.0	10.5	277
<b>Residence</b>							
Urban	1.4	62.8	4.8	30.9	100.0	11.3	754
Rural	1.2	74.9	3.9	20.0	100.0	10.7	2,314
<b>Region</b>							
Urban Tongatapu	1.4	62.8	4.8	30.9	100.0	11.3	754
Rural Tongatapu	0.9	72.3	4.4	22.4	100.0	10.8	1,554
Outer islands	1.8	80.2	3.0	15.1	100.0	10.5	760
<b>Wealth quintile</b>							
Lowest	3.5	85.3	1.6	9.6	100.0	10.2	557
Second	1.0	81.9	4.1	12.8	100.0	10.5	597
Middle	0.5	76.4	3.4	19.6	100.0	10.9	631
Fourth	0.9	59.4	4.9	34.7	100.0	11.4	650
Highest	0.2	59.0	6.3	34.4	100.0	11.6	632
<b>Total</b>	<b>1.2</b>	<b>71.9</b>	<b>4.1</b>	<b>22.7</b>	<b>100.0</b>	<b>10.8</b>	<b>3,068</b>

<sup>1</sup> Completed class 6 at the primary level.

<sup>2</sup> Completed form 7 at the secondary level.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 3.3: Educational attainment — Men**

Percent distribution of men aged 15–49 by highest level of schooling attended or completed and median grade completed, according to background characteristics, Tonga 2012

Background characteristic	Primary or less <sup>1</sup> (%)	Some secondary (%)	Completed secondary <sup>2</sup> (%)	More than secondary (%)	Total (%)	Median years completed	Number of men
<b>Age</b>							
15–24	0.6	84.2	3.9	11.4	100.0	10.2	532
15–19	0.0	94.4	2.4	3.3	100.0	9.7	311
20–24	1.4	69.8	6.0	22.7	100.0	11.0	221
25–29	2.9	65.5	4.8	26.8	100.0	10.9	193
30–34	1.0	69.4	0.4	29.2	100.0	10.9	170
35–39	1.7	77.5	1.6	19.3	100.0	10.7	150
40–44	2.6	76.1	0.7	20.7	100.0	10.5	159
45–49	5.6	73.7	3.3	17.3	100.0	10.5	132
<b>Residence</b>							
Urban	0.9	69.6	3.6	25.9	100.0	10.9	338
Rural	2.2	79.3	2.6	15.9	100.0	10.4	998
<b>Region</b>							
Urban Tongatapu	0.9	69.6	3.6	25.9	100.0	10.9	338
Rural Tongatapu	1.9	76.6	3.2	18.3	100.0	10.5	666
Outer islands	2.5	84.7	1.6	11.2	100.0	10.1	332
<b>Wealth quintile</b>							
Lowest	2.0	84.2	1.7	12.1	100.0	10.0	275
Second	2.8	85.5	3.2	8.5	100.0	10.1	250
Middle	1.2	78.4	2.4	18.0	100.0	10.6	294
Fourth	0.9	71.9	3.9	23.2	100.0	11.0	272
Highest	2.2	63.5	3.4	30.9	100.0	11.2	245
<b>Total men aged 15–49</b>	<b>1.9</b>	<b>76.9</b>	<b>2.9</b>	<b>18.4</b>	<b>100.0</b>	<b>10.5</b>	<b>1,336</b>
Total men aged 50+	20.7	62.8	0.8	15.9	100.0	9.5	406
Total men aged 15+	6.2	73.6	2.4	17.8	100.0	10.3	1,742

<sup>1</sup> Completed class 6 at the primary level.

<sup>2</sup> Completed level 7 at the secondary level.

### 3.3 LITERACY ACHIEVEMENT

During the 2012 TDHS, all respondents who had not attended school or had attended only primary school were asked to read aloud (from a card) a simple sentence written in English and Tongan. The interviewer then recorded whether each respondent could read the entire sentence, only parts of it, or none of it. This method was used to assess literacy on a three point scale, as presented in Tables 3.4 and 3.5.

Data in Tables 3.4 and 3.5 reveal that less than 1% of both men and women cannot read at all. There is little variation among women and men with regard to literacy levels. There is close to 100% literacy in all contexts and for all age groups in the sample population.

**Table 3.4: Literacy — Women***Percent distribution of women aged 15–49 by level of schooling attended level of literacy, and percentage literate, according to background characteristics, Tonga 2012*

Background characteristic	Secondary school or higher	No schooling or primary school					Total	Percentage literate <sup>1</sup>	Number
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/visually impaired	Missing			
<b>Age</b>									
15–19	99.2	0.2	0.1	0.0	0.2	0.2	100.0	99.6	658
20–24	99.4	0.4	0.0	0.0	0.0	0.2	100.0	99.8	493
25–29	99.5	0.3	0.0	0.0	0.0	0.2	100.0	99.8	503
30–34	99.1	0.3	0.3	0.0	0.0	0.2	100.0	99.8	410
35–39	99.0	0.2	0.4	0.4	0.0	0.0	100.0	99.6	364
40–44	96.8	2.4	0.4	0.0	0.0	0.5	100.0	99.5	362
45–49	97.1	1.5	0.5	0.5	0.0	0.3	100.0	99.2	277
<b>Residence</b>									
Urban	98.5	0.7	0.1	0.0	0.0	0.6	100.0	99.4	754
Rural	98.9	0.6	0.2	0.1	0.1	0.1	100.0	99.7	2,314
<b>Region</b>									
Urban Tongatapu	98.5	0.7	0.1	0.0	0.0	0.6	100.0	99.4	754
Rural Tongatapu	99.2	0.3	0.3	0.2	0.1	0.0	100.0	99.7	1,554
Outer islands	98.3	1.4	0.2	0.0	0.0	0.2	100.0	99.8	760
<b>Wealth quintile</b>									
Lowest	96.5	1.8	0.9	0.3	0.3	0.3	100.0	99.2	557
Second	98.9	1.1	0.0	0.0	0.0	0.0	100.0	100.0	597
Middle	99.5	0.2	0.0	0.0	0.0	0.3	100.0	99.7	631
Fourth	99.0	0.3	0.2	0.2	0.0	0.2	100.0	99.5	650
Highest	99.7	0.0	0.0	0.0	0.0	0.3	100.0	99.7	632
<b>Total</b>	<b>98.8</b>	<b>0.7</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>0.2</b>	<b>100.0</b>	<b>99.6</b>	<b>3,068</b>

<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 3.5: Literacy — Men***Percent distribution of men aged 15–49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Tonga 2012*

Background characteristic	Secondary school or higher	No schooling or primary school					Total	Percentage literate <sup>1</sup>	Number
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/visually impaired	Missing			
<b>Age</b>									
15–19	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	311
20–24	98.6	0.7	0.0	0.7	0.0	0.0	100.0	99.3	221
25–29	97.1	1.4	0.0	0.8	0.0	0.8	100.0	98.5	193
30–34	99.0	1.0	0.0	0.0	0.0	0.0	100.0	100.0	170
35–39	98.4	0.6	0.0	0.0	0.0	1.1	100.0	98.9	150
40–44	97.5	0.7	0.4	0.7	0.0	0.7	100.0	98.6	159
45–49	94.3	4.5	0.0	1.1	0.0	0.0	100.0	98.9	132
<b>Residence</b>									
Urban	99.1	0.9	0.0	0.0	0.0	0.0	100.0	100.0	338
Rural	97.9	1.1	0.1	0.6	0.0	0.4	100.0	99.0	998
<b>Region</b>									
Urban Tongatapu	99.1	0.9	0.0	0.0	0.0	0.0	100.0	100.0	338
Rural Tongatapu	98.1	0.6	0.0	0.8	0.0	0.5	100.0	98.7	666
Outer islands	97.5	2.0	0.2	0.0	0.0	0.3	100.0	99.7	332
<b>Wealth quintile</b>									
Lowest	98.0	1.3	0.0	0.6	0.0	0.2	100.0	99.2	275
Second	97.2	2.0	0.2	0.6	0.0	0.0	100.0	99.4	250
Middle	98.8	1.0	0.0	0.0	0.0	0.2	100.0	99.8	294
Fourth	99.0	0.0	0.0	0.4	0.0	0.5	100.0	99.0	272
Highest	97.8	1.0	0.0	0.6	0.0	0.6	100.0	98.7	245
<b>Total men aged 15–49</b>	<b>98.2</b>	<b>1.0</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>	<b>0.3</b>	<b>100.0</b>	<b>99.3</b>	<b>1,336</b>
Total men aged 50+	79.4	13.1	5.2	1.6	0.4	0.4	100.0	97.6	406
Total men aged 15+	93.8	3.8	1.2	0.7	0.1	0.3	100.0	98.9	1,742

<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

Information is essential to increasing people's knowledge and awareness of the world around them, and may eventually affect their perceptions and behaviours. During the 2012 TDHS, exposure to the media was assessed by asking respondents how often they read a newspaper and watched television, or listened to a radio.

Most people are exposed to some form of media. In general, men are more likely than women to have access to all types of mass media. But in the case of the sampled population in the 2012 TDHS, Tables 3.6 and 3.7 show that the percentage of women who have access to all three types of media (radio, newspaper and television) is higher than for men (54% of women and 46% of men). Radio is the most popular medium: 86% of women and 81% of men aged 15–49 listen to a radio broadcast at least once a week. About 68% of women read a newspaper at least once a week, compared with 59% of men aged 15–49.

**Table 3.6: Exposure to mass media — Women**

*Percentage of women aged 15–49 who are exposed to specific media on a weekly basis, by background characteristics, Tonga 2012*

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	66.0	78.6	87.0	53.5	4.9	658
20–24	66.7	78.3	85.9	54.0	5.8	493
25–29	66.2	78.5	86.1	51.7	4.2	503
30–34	69.7	79.4	85.5	55.7	3.4	410
35–39	72.3	73.3	84.6	51.3	3.5	364
40–44	71.4	73.6	84.6	52.6	3.7	362
45–49	69.6	73.5	88.2	56.7	3.7	277
<b>Residence</b>						
Urban	67.8	88.9	85.7	58.7	3.3	754
Rural	68.5	73.1	86.1	51.8	4.6	2,314
<b>Region</b>						
Urban Tongatapu	67.8	88.9	85.7	58.7	3.3	754
Rural Tongatapu	67.8	77.8	87.0	54.3	4.1	1,554
Outer islands	70.0	63.5	84.2	46.7	5.6	760
<b>Education</b>						
Primary or less	(48.7)	(63.9)	(77.2)	(35.5)	(7.4)	37
Secondary	67.5	75.9	86.1	52.1	4.6	2,334
More than secondary	72.3	81.1	86.3	59.2	3.0	697
<b>Wealth quintile</b>						
Lowest	63.1	54.3	76.5	35.3	9.0	557
Second	68.1	74.7	86.1	51.2	4.1	597
Middle	67.6	80.3	88.3	54.5	3.6	631
Fourth	72.4	86.4	88.9	62.0	2.3	650
Highest	69.7	86.2	89.1	62.0	3.1	632
<b>Total</b>	<b>68.3</b>	<b>77.0</b>	<b>86.0</b>	<b>53.5</b>	<b>4.3</b>	<b>3,068</b>

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Television is viewed at least once a week by 77% of women and 72% of men aged 15–49. Only 4% of women and 9% of men aged 15–49 had no exposure to at least one form of mass media at least once per week. This means that most people, and particularly women, have exposure to information through mass media, including information about healthy lifestyles.

Tables 3.6 and 3.7 also show the variation in media exposure by background characteristics of respondents. Generally, the results indicate that the proportion of women who watch television at least once a week decreases with age, whereas, the proportion of women who read a newspaper at least once a week increases with age. However, listening to the radio at least once a week is equally common for

women of all ages. For men, reading a newspaper at least once a week also increases with age, watching television is equally common across all age groups, and listening to the radio declines slightly with age.

Urban women and men are more likely to have access to television than rural women: about 73% of rural women and 67% of rural men watch television at least once a week, compared with 89% of urban women and 86% of urban men. Listening to the radio and reading a newspaper at least once a week is equally common among both urban and rural women. By contrast, for men, reading a newspaper and listening to the radio at least once a week is more common among urban respondents than rural respondents.

The data further reveal that exposure to media is positively associated with educational attainment and that media exposure is limited among respondents in lower wealth quintile households. For instance, only 35% of women and 27% of men from the poorest households are exposed to all three forms of media at least once each week, compared with 62% of women and 64% of men from the wealthiest households.

**Table 3.7: Exposure to mass media — Men**

*Percentage of men aged 15–49 who are exposed to specific media on a weekly basis, by background characteristics, Tonga 2012*

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	59.7	74.4	82.4	47.5	7.8	311
20–24	50.5	77.3	82.1	40.8	8.1	221
25–29	56.5	66.0	80.0	41.9	9.7	193
30–34	56.1	72.0	79.6	42.6	6.7	170
35–39	66.7	70.9	85.1	52.0	6.7	150
40–44	62.8	66.3	76.6	44.7	12.2	159
45–49	69.1	73.4	79.2	53.6	10.5	132
<b>Residence</b>						
Urban	68.6	86.3	84.6	62.0	5.0	338
Rural	56.2	67.0	79.7	40.2	9.9	998
<b>Region</b>						
Urban Tongatapu	68.6	86.3	84.6	62.0	5.0	338
Rural Tongatapu	60.6	77.9	83.2	49.7	7.7	666
Outer islands	47.3	45.2	72.7	21.3	14.2	332
<b>Education</b>						
Primary or Less	NP	NP	NP	NP	NP	24
Secondary	58.5	72.0	81.8	44.9	8.3	1,066
More than secondary	64.8	72.6	78.3	51.3	9.9	246
<b>Wealth quintile</b>						
Lowest	50.5	46.4	73.1	26.9	14.8	275
Second	52.6	66.7	81.1	38.4	10.3	250
Middle	63.6	79.5	84.4	52.9	6.5	294
Fourth	58.5	80.6	81.2	47.4	5.6	272
Highest	72.0	87.1	85.0	63.9	5.9	245
<b>Total men aged 15–49</b>	<b>59.4</b>	<b>71.9</b>	<b>80.9</b>	<b>45.7</b>	<b>8.6</b>	<b>1,336</b>
Total men aged 50+	68.2	65.8	87.5	48.6	4.9	406
Total men aged 15+	61.4	70.5	82.5	46.4	7.8	1,742

NP = not published

### 3.5 EMPLOYMENT STATUS

As with education, employment can be a source of empowerment for women, especially when they attain a decision-making position and control of income. Measuring women's empowerment is a difficult task and is most often under-reported, especially women's work that deals with family or home duties, which is always referred to as 'informal work/home duties'.

To better assess women's empowerment, the 2012 TDHS included questions about women's employment status in both informal and formal sectors. Employed women are classified as currently employed if they worked in the seven days preceding the survey and the 12 months preceding the survey. Additional questions asked about any kind of payment that respondents received in return for services provided.

Tables 3.8 and 3.9 show that 38% of women aged 15–49 and 68% of men aged 15–49 are classified as currently employed. The proportion currently employed increases with age and the number of living children (for both women and men). About 51% of women, who are divorced, separated, or widowed are currently employed, followed by those who are married (44%). Never-married women and men are the least likely to be currently employed (26% of women, 41% of men) – in part because a higher proportion of young people are included in the never married category. Almost nine in ten married men (89%) are currently employed. Women with a secondary education only have the lowest current employment levels (31%). Men with a secondary education have lower current employment levels (64%) than men with more than a secondary education (84%).

The current employment level for women is higher in the urban area (41%) than in rural areas (37%), and in particular, rural Tongatapu (34%). In contrast, the current employment level for men is higher in rural areas (71%) than in the urban area (60%).

**Table 3.8: Employment status — Women**

*Percent distribution of women aged 15–49 by employment status, according to background characteristics, Tonga 2012*

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			
<b>Age</b>					
15–19	9.0	0.9	90.1	100.0	658
20–24	32.7	4.4	62.9	100.0	493
25–29	41.0	3.9	55.1	100.0	503
30–34	46.8	2.4	50.8	100.0	410
35–39	50.1	1.9	48.0	100.0	364
40–44	53.4	2.0	44.6	100.0	362
45–49	58.3	0.8	40.9	100.0	277
<b>Marital status</b>					
Never married	26.3	1.8	71.8	100.0	1,140
Married or living together	43.7	2.7	53.6	100.0	1,747
Divorced, separated or widowed	51.0	2.9	46.1	100.0	181
<b>Number of living children</b>					
0	29.6	2.3	68.2	100.0	1,366
1–2	42.0	2.7	55.3	100.0	650
3–4	44.5	2.6	52.9	100.0	541
5+	46.6	2.1	51.3	100.0	511
<b>Residence</b>					
Urban	40.8	3.1	56.1	100.0	754
Rural	36.7	2.2	61.2	100.0	2,314
<b>Region</b>					
Urban Tongatapu	40.8	3.1	56.1	100.0	754
Rural Tongatapu	34.3	2.5	63.2	100.0	1,554
Outer islands	41.6	1.5	56.9	100.0	760
<b>Education</b>					
Primary or less	(36.0)	(4.0)	(60.0)	(100.0)	37
Secondary	31.1	2.4	66.4	100.0	2,334
More than secondary	59.8	2.1	38.1	100.0	697
<b>Wealth quintile</b>					
Lowest	35.5	3.4	61.0	100.0	557
Second	33.0	2.4	64.6	100.0	597
Middle	34.2	2.8	63.0	100.0	631
Fourth	42.0	1.2	56.8	100.0	650
Highest	43.1	2.3	54.6	100.0	632
<b>Total</b>	<b>37.7</b>	<b>2.4</b>	<b>59.9</b>	<b>100.0</b>	<b>3,068</b>

<sup>1</sup> 'Currently employed' is defined as having done work in the past seven days. Includes people 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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 3.9: Employment status — Men***Percent distribution of men aged 15–49 by employment status, according to background characteristics, Tonga 2012*

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed <sup>1</sup>	Not currently employed			
<b>Age</b>					
15–19	21.8	1.1	77.1	100.0	311
20–24	58.2	2.7	39.1	100.0	221
25–29	82.0	4.1	13.9	100.0	193
30–34	86.4	6.3	7.3	100.0	170
35–39	91.5	1.6	6.8	100.0	150
40–44	97.1	2.0	0.9	100.0	159
45–49	91.0	1.7	7.3	100.0	132
<b>Marital status</b>					
Never married	40.7	3.1	56.2	100.0	567
Married or living together	89.3	2.4	8.3	100.0	716
Divorced, separated, or widowed	81.7	3.0	15.2	100.0	53
<b>Number of living children</b>					
0	47.8	3.3	48.9	100.0	706
1–2	86.9	1.7	11.4	100.0	245
3–4	93.1	2.3	4.7	100.0	208
5+	95.7	2.2	2.1	100.0	177
<b>Residence</b>					
Urban	59.5	4.0	36.5	100.0	338
Rural	71.4	2.2	26.4	100.0	998
<b>Region</b>					
Urban Tongatapu	59.5	4.0	36.5	100.0	338
Rural Tongatapu	68.6	2.8	28.6	100.0	666
Outer islands	77.1	1.1	21.8	100.0	332
<b>Education</b>					
Primary or less	NP	NP	NP	NP	24
Secondary	64.3	2.8	32.9	100.0	1,066
More than secondary	83.7	2.5	13.7	100.0	246
<b>Wealth quintile</b>					
Lowest	78.0	2.2	19.8	100.0	275
Second	67.9	4.4	27.7	100.0	250
Middle	67.9	2.6	29.5	100.0	294
Fourth	58.5	2.8	38.7	100.0	272
Highest	69.7	1.4	29.0	100.0	245
<b>Total men aged 15–49</b>					
Total men aged 15–49	68.4	2.7	28.9	100.0	1,336
Total men aged 50+	69.9	2.8	27.3	100.0	406
Total men aged 15+	68.7	2.7	28.5	100.0	1,742

NP = not published

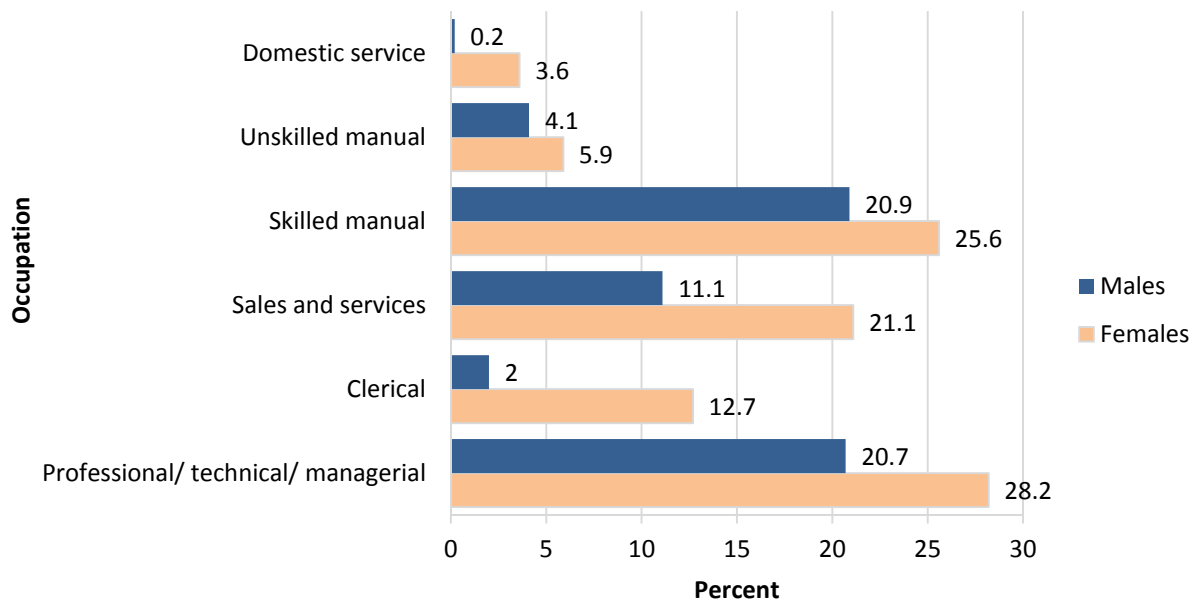
<sup>1</sup> 'Currently employed' is defined as having done work in the past seven days. Includes people who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

### 3.6 OCCUPATION

Respondents who were currently employed were asked to state their occupation; the results are presented in Figure 3.1, and Tables 3.10 and 3.11. Professional, technical and managerial occupations are held by 28% of women and 21% of men; 'skilled manual' occupations are held by 26% of women and 21% of men. These are the two largest employment categories for both women and men.

Women who work in skilled manual jobs are more likely to be rural residents, and in particular, outer island residents, have lower levels of education, have more children and reside in less wealthy households. By contrast, women in professional, technical or managerial occupations are more likely to be urban residents, have fewer children, higher levels of education and come from the wealthiest households.

**Figure 3.1: Occupation by sex, Tonga 2012**



**Table 3.10: Occupation — Women***Percent distribution of women aged 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tonga 2012*

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	9	6.7	31.6	12.7	30.9	3.3	2.3	3.4	100	65
20–24	27.6	16.8	29.4	14.9	6.4	3.2	0.8	0.9	100	183
25–29	38	15.9	21	18.6	3.3	2.5	0.7	0	100	226
30–34	32.9	14.6	17.8	23.6	3.9	5.7	1.5	0	100	202
35–39	28.6	8.4	17.5	34.8	3.6	2	4.4	0.8	100	190
40–44	20.6	8.8	19.9	36	5.7	5.5	2.8	0.7	100	201
45–49	26.2	13.6	17.7	31.1	4.6	2.8	1.8	2.3	100	164
<b>Marital status</b>										
Never married	32.6	16.6	25	10.3	9.9	3.8	0.9	0.9	100	321
Married or living together	27.7	11.8	18.2	30.8	4.2	3.8	2.5	0.9	100	810
Divorced, separated or widowed	17.9	7.3	32.7	32.1	7.6	1.6	0.8	0	100	98
<b>Number of living children</b>										
0	32.7	16	26.6	11.4	7.7	3.8	1.1	0.7	100	435
1–2	32.4	16	18.7	22.7	4.9	2.9	1.3	1	100	291
3–4	29	7.1	17.5	32.4	4.9	5.2	2	1.8	100	255
5+	14.6	8.9	18	46.6	5	2.6	4.4	0	100	249
<b>Residence</b>										
Urban	34.7	17.1	21.3	10.6	8.1	5.7	1.2	1.2	100	331
Rural	25.8	11.1	21	31.1	5.1	2.9	2.3	0.7	100	899
<b>Region</b>										
Urban Tongatapu	34.7	17.1	21.3	10.6	8.1	5.7	1.2	1.2	100	331
Rural Tongatapu	26.4	12.5	25.2	22.8	5.4	3.6	3.1	1	100	571
Outer islands	24.7	8.6	13.8	45.5	4.6	1.6	0.9	0.2	100	327
<b>Education</b>										
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	15
Secondary	11	7.9	26.7	36.6	8.2	5.4	2.7	1.3	100	783
More than secondary	59.9	21.7	10.9	4.7	1.9	0.5	0.4	0	100	431
<b>Wealth quintile</b>										
Lowest	9.3	4.8	17.8	54	6.3	2.7	4.1	1	100	217
Second	18.9	8	21.1	38.4	7	4.6	1.4	0.7	100	211
Middle	24.4	12.2	28.1	19.3	8.4	5.1	1.6	1	100	233
Fourth	37.9	16.7	18.6	18.5	4	1.9	1.9	0.6	100	281
Highest	43	18.7	20.4	6.6	4.8	4.2	1.3	1	100	287
<b>Total</b>	<b>28.2</b>	<b>12.7</b>	<b>21.1</b>	<b>25.6</b>	<b>5.9</b>	<b>3.6</b>	<b>2</b>	<b>0.9</b>	<b>100</b>	<b>1,229</b>

NP = not published

**Table 3.11: Occupation — Men***Percent distribution of men aged 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tonga 2012*

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	4.8	1.2	12.3	9.3	10.3	2.3	58.6	1.1	100	71
20–24	17	2.3	13	20.8	5.4	0	41.6	0	100	134
25–29	17.4	2.5	18.9	22.3	6.3	0	32.6	0	100	166
30–34	24.8	1.8	9.4	18.3	3.3	0	42.3	0	100	157
35–39	22.8	0	12.1	26.3	2.4	0	35.2	1.1	100	140
40–44	24.7	2	5.7	21.9	2	0	43.8	0	100	158
45–49	25.3	4.1	6	22.1	1.8	0	40.1	0.7	100	122
<b>Marital status</b>										
Never married	17.6	1.9	12.8	17.7	6.8	0.7	42.3	0.3	100	248
Married or living together	22	1.9	10.6	21.8	3.4	0	40	0.4	100	657
Divorced, separated or widowed	(18.3)	(3.3)	(10.1)	(26.6)	(0)	(0)	(41.7)	(0)	(100)	45
<b>Number of living children</b>										
0	18.9	2.5	11.7	19.7	6.2	0.4	40.2	0.2	100	361
1–2	21.6	1.9	12.5	24.2	3.5	0	36.3	0	100	217
3–4	23.7	1.1	11.1	21.8	2.7	0	38.4	1.2	100	198
5+	19.7	2	8.3	18.5	2	0	49.5	0	100	173
<b>Residence</b>										
Urban	35	1.5	18.5	26.7	4.8	0	13.1	0.4	100	215
Rural	16.5	2.1	9	19.3	3.9	0.2	48.7	0.3	100	735
<b>Region</b>										
Urban Tongatapu	35	1.5	18.5	26.7	4.8	0	13.1	0.4	100	215
Rural Tongatapu	17.9	2.1	10.1	21.3	3.5	0	44.7	0.3	100	475
Outer islands	14	2.2	6.8	15.5	4.7	0.6	55.9	0.3	100	260
<b>Education</b>										
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	22
Secondary	11.6	1.8	13.2	22.5	4.3	0.2	46.3	0.2	100	715
More than secondary	51.7	2	5.3	15.9	4	0	20.3	0.7	100	213
<b>Wealth quintile</b>										
Lowest	8.1	0.3	9.1	18.5	5.2	0.7	57.7	0.4	100	220
Second	12.4	1.3	8.4	25.4	2.4	0	49.7	0.4	100	181
Middle	17.3	1.7	16.1	22.9	3.2	0	38.1	0.8	100	208
Fourth	34.8	4.4	9.6	20.2	3.7	0	27.3	0	100	167
Highest	35.6	2.9	12.1	17.9	6	0	25.6	0	100	174
<b>Total men aged 15–49</b>										
	<b>20.7</b>	<b>2</b>	<b>11.1</b>	<b>20.9</b>	<b>4.1</b>	<b>0.2</b>	<b>40.6</b>	<b>0.3</b>	<b>100</b>	<b>950</b>
Total men aged 50+	19.6	2.8	7.3	9.4	3.4	0.2	57.4	0	100	295
Total men aged 15+	20.4	2.2	10.2	18.2	3.9	0.2	44.6	0.3	100	1,245

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.



### 3.7 EARNINGS, TYPE OF EMPLOYER, AND CONTINUITY OF WOMEN'S EMPLOYMENT

Table 3.12 shows the distribution of women by employment status. The data indicate that 75% of employed women receive payment in cash only, 8% are paid both in cash and in kind, and 2% receive only in-kind payment. Meanwhile, 14% of women receive no payment for their work.

The data on type of employer indicate that, while 31% of women are employed by a non-family member, 24% are self-employed, and 45% are employed by a family member.

Table 3.12 also shows the distribution of women by continuity of employment. Three-fourths of employed women (74%) year round, 16% work seasonally, and 8% work occasionally.

**Table 3.12: Type of employment — Women**

*Percent distribution of women aged 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 non-agricultural), Tonga 2012*

Employment characteristics	Agricultural work	Non-agricultural work	Missing	Total
<b>Type of earnings</b>				
Cash only	NP	76.1	NP	75.4
Cash and in-kind	NP	8.2	NP	8.3
In-kind only	NP	1.7	NP	1.8
Not paid	NP	13.9	NP	14.4
Missing	NP	0.1	NP	0.1
Total	NP	100.0	NP	100.0
<b>Type of employer</b>				
Employed by family member	NP	44.0	NP	44.6
Employed by nonfamily member	NP	31.4	NP	30.9
Self-employed	NP	24.5	NP	24.5
Missing	NP	0.1	NP	0.1
Total	NP	100.0	NP	100.0
<b>Continuity of employment</b>				
All year	NP	75.4	NP	74.4
Seasonal	NP	16.0	NP	16.5
Occasional	NP	8.0	NP	8.5
Missing	NP	0.7	NP	0.6
Total	NP	100.0	NP	100.0
<b>Number of women employed during the 12 months preceding the survey</b>	<b>24</b>	<b>1,195</b>	<b>10</b>	<b>1,229</b>

NP = not published

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

### 3.8 HEALTH INSURANCE COVERAGE

The 2012 TDHS asked respondents if they were covered by specific types of health insurance. The insurance schemes were categorised as: 1) government-run schemes, such as social security; 2) other employer-based schemes; 3) privately purchased commercial insurance; and 4) other insurance arrangements. The distribution of respondents by type of insurance coverage according to the respondent's background characteristics is presented in Table 3.13 for women aged 15–49, and in Table 3.14 for men aged 15 and over.

Overall, 88% of women and 90% of men aged 15–49 are not covered by any health plan or insurance scheme; thus in Tonga less than one in ten respondents are covered by a health plan or insurance scheme. Other employer-based insurance schemes are most common, covering 5% of women and 8% of men aged 15–49. Social security is least common, covering less than 1% of women or men aged 15–49. Privately purchased commercial insurance covers 5% of women and only 2% of men aged 15–49.

Insurance coverage increases with education and wealth among both men and women. Among women, coverage is obtained through both 'other employer-based' and privately purchased insurance schemes,

while insurance rates among highly educated men and those in wealthier households are higher only for “other employer-based” insurance schemes. The 2012 TDHS data clearly highlight the low level of health insurance coverage in Tonga, which is typical for many Pacific Island countries. This situation urgently needs to be addressed.

**Table 3.13: Health insurance coverage — Women**

*Percentage of women aged 15–49 with specific types of health insurance coverage, according to background characteristics, Tonga 2012*

Background characteristic	Social security	Other employer based insurance	Privately purchased commercial insurance	Other	None	Number
<b>Age</b>						
15–19	0.0	0.8	0.5	0.0	98.7	658
20–24	0.3	2.7	3.1	0.0	93.9	493
25–29	0.3	4.7	4.9	1.7	89.2	503
30–34	1.0	6.6	5.8	1.7	84.9	410
35–39	1.8	9.2	7.3	3.2	78.9	364
40–44	0.0	6.2	7.3	5.2	81.9	362
45–49	2.1	10.1	10.2	3.7	75.9	277
<b>Residence</b>						
Urban	0.2	6.5	4.4	0.6	88.5	754
Rural	0.8	4.5	5.0	2.2	88.0	2,314
<b>Region</b>						
Urban Tongatapu	0.2	6.5	4.4	0.6	88.5	754
Rural Tongatapu	1.0	4.0	6.6	3.1	85.9	1,554
Outer islands	0.3	5.6	1.5	0.5	92.3	760
<b>Education</b>						
Primary or less	(0.0)	(0.0)	(3.8)	(3.8)	(92.4)	37
Secondary	0.6	2.5	3.7	1.9	91.5	2,334
More than secondary	0.9	13.5	8.7	1.6	76.8	697
<b>Wealth quintile</b>						
Lowest	0.0	2.3	2.9	2.9	91.9	557
Second	1.6	2.7	3.3	1.5	91.1	597
Middle	0.8	5.4	3.3	1.9	88.6	631
Fourth	0.3	5.8	5.9	1.5	87.3	650
Highest	0.5	8.2	8.5	1.5	82.4	632
<b>Total</b>	<b>0.6</b>	<b>5.0</b>	<b>4.8</b>	<b>1.8</b>	<b>88.1</b>	<b>3,068</b>

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 3.14: Health insurance coverage — Men**

Percentage of men aged 15–49 with specific types of health insurance coverage, according to background characteristics, Tonga 2012

Background characteristic	Social security	Other employer based insurance	Privately purchased commercial insurance	Other	None	Number
<b>Age</b>						
15–19	0.0	0.3	0.0	0.3	99.5	311
20–24	0.0	2.7	0.0	0.0	97.3	221
25–29	0.0	8.9	2.4	0.5	88.1	193
30–34	0.3	13.7	2.6	0.0	83.3	170
35–39	1.1	9.6	3.6	1.1	84.7	150
40–44	0.4	15.1	1.0	1.2	82.8	159
45–49	0.6	11.4	3.1	1.1	84.4	132
<b>Residence</b>						
Urban	0.2	10.9	1.7	0.8	86.9	338
Rural	0.3	6.4	1.5	0.4	91.4	998
<b>Region</b>						
Urban Tongatapu	0.2	10.9	1.7	0.8	86.9	338
Rural Tongatapu	0.2	6.1	1.4	0.6	91.6	666
Outer islands	0.3	6.9	1.7	0.0	91.1	332
<b>Education</b>						
Primary or less	NP	NP	NP	NP	NP	24
Secondary	0.3	4.4	1.5	0.3	93.6	1,066
More than secondary	0.3	21.7	1.6	1.4	75.3	246
<b>Wealth quintile</b>						
Lowest	0.0	4.2	1.4	0.3	94.1	275
Second	0.2	2.8	0.9	0.0	96.0	250
Middle	0.0	5.9	1.9	1.0	91.1	294
Fourth	0.0	9.2	1.5	0.4	88.9	272
Highest	1.2	16.1	1.9	0.8	80.6	245
<b>Total men aged 15–49</b>	<b>0.3</b>	<b>7.6</b>	<b>1.5</b>	<b>0.5</b>	<b>90.3</b>	<b>1,336</b>
Total men aged 50+	0.3	6.8	2.4	2.2	88.3	406
Total men aged 15+	0.3	7.4	1.7	0.9	89.8	1,742

NP = not published

### 3.9 KNOWLEDGE AND ATTITUDES CONCERNING TUBERCULOSIS

Tuberculosis (TB) is one of the oldest human diseases, and continues to be a leading cause of death from an infectious disease in many countries. The 2012 TDHS asked questions about knowledge of and attitudes toward TB in order to learn how people deal with the disease. Tables 3.15 and 3.16 show several indicators relating to respondents' knowledge and attitudes concerning TB, including the percentage of people who 1) have heard of the disease, 2) know that TB is spread through the air by coughing, 3) believe that TB can be cured, and 4) would want to keep it a secret that a family member had TB.

Women and men display almost the same level of awareness of TB: 90% of women and 87% of men aged 15–49 have heard of TB. However, there are large gender disparities in knowledge about transmission of TB: about 59% of women and 41% of men aged 15–49 who have heard about TB say that it is spread through the air by coughing. Among female respondents, there is a difference in the level of knowledge of how TB is spread by residence and other background characteristics. For example, 65% of urban women report that TB is spread through the air by coughing, compared with 57% of rural women. By contrast, only 41% of both urban and rural men report that TB is spread through the air by coughing.

About 79% of women and 80% of men aged 15–49 who have heard of TB believe it can be cured. The proportion of women and men who believe that TB can be cured increases with age.

**Table 3.15: Knowledge and attitudes concerning tuberculosis — Women**

Percentage of women aged 15–49 who 1) have heard of TB, and among women who have heard of TB, who 2) know that TB is spread through the air by coughing, 3) believe that TB can be cured, and 4) would not want to disclose that a family member has TB, by background characteristics, Tonga 2012

Background characteristic	Among all respondents		Among respondents who have heard of TB			
	Have heard of TB (%)	Number	Report that TB is spread through the air by coughing (%)	Believe that TB can be cured (%)	Would want a family member's TB kept secret (%)	Number
<b>Age</b>						
15–19	75.7	658	48.4	63.1	50.1	498
20–24	87.0	493	54.7	71.6	45.5	429
25–29	93.5	503	60.2	81.0	40.9	470
30–34	93.9	410	57.3	82.0	42.0	385
35–39	94.3	364	66.7	86.4	42.7	344
40–44	95.6	362	68.9	88.7	42.3	347
45–49	98.1	277	65.2	91.1	46.4	272
<b>Residence</b>						
Urban	90.5	754	64.7	77.8	34.8	683
Rural	89.1	2,314	57.4	79.5	47.6	2,062
<b>Region</b>						
Urban Tongatapu	90.5	754	64.7	77.8	34.8	683
Rural Tongatapu	89.4	1,554	53.0	78.9	50.0	1,389
Outer islands	88.6	760	66.6	80.8	42.5	673
<b>Education</b>						
Primary or less	(74.2)	37	(46.9)	(65.9)	(40.0)	28
Secondary	88.1	2,334	58.2	78.3	45.5	2,056
More than secondary	94.8	697	63.1	82.1	41.1	661
<b>Wealth quintile</b>						
Lowest	88.8	557	54.5	79.6	42.5	495
Second	88.3	597	59.4	78.5	48.4	527
Middle	88.0	631	59.7	76.9	43.9	556
Fourth	91.4	650	57.3	79.8	43.0	594
Highest	90.6	632	64.6	80.6	44.2	573
<b>Total</b>	<b>89.5</b>	<b>3,068</b>	<b>59.2</b>	<b>79.1</b>	<b>44.4</b>	<b>2,745</b>

TB = tuberculosis

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 3.16: Knowledge and attitudes concerning tuberculosis — Men**

Percentage of men aged 15–49 who 1) have heard of TB, and among men who have heard of TB, who 2) know that TB is spread through the air by coughing, 3) believe that TB can be cured, and 4) would not want to disclose that a family member has TB, by background characteristics, Tonga 2012

Background characteristic	Among all respondents		Among respondents who have heard of TB			
	Have heard of TB (%)	Number	Report that TB is spread through the air by coughing (%)	Believe that TB can be cured (%)	Would want a family member's TB kept secret (%)	Number
<b>Age</b>						
15–19	69.9	311	40.0	64.0	16.6	217
20–24	78.4	221	38.6	72.4	10.3	173
25–29	92.8	193	36.8	79.1	5.7	179
30–34	96.3	170	44.9	86.4	5.4	163
35–39	96.2	150	35.9	80.0	2.6	145
40–44	98.8	159	46.1	88.1	4.4	158
45–49	98.9	132	45.7	96.3	5.0	131
<b>Residence</b>						
Urban	89.8	338	40.7	70.5	5.3	304
Rural	86.4	998	41.0	82.7	8.6	862
<b>Region</b>						
Urban Tongatapu	89.8	338	40.7	70.5	5.3	304
Rural Tongatapu	87.7	666	41.9	83.3	9.6	584
Outer islands	83.7	332	39.1	81.5	6.5	278
<b>Education</b>						
Primary or less	NP	24	NP	NP	NP	23
Secondary	85.5	1,066	38.9	79.2	8.7	911
More than secondary	94.1	246	48.9	81.7	4.1	232
<b>Wealth quintile</b>						
Lowest	85.2	275	38.0	83.7	6.7	234
Second	87.0	250	38.7	77.3	11.0	217
Middle	85.4	294	38.5	81.6	7.6	251
Fourth	88.0	272	43.4	77.7	6.0	240
Highest	91.0	245	46.3	77.0	7.7	223
<b>Total men aged 15–49</b>	<b>87.2</b>	<b>1,336</b>	<b>40.9</b>	<b>79.5</b>	<b>7.7</b>	<b>1,166</b>
Total men aged 50+	97.8	406	49.9	94.9	3.5	397
Total men aged 15+	89.7	1,742	43.2	83.4	6.6	1,562

NP = not published

About 44% of women and only 8% of men aged 15–49 who have heard about TB would want a family member's TB status kept a secret. Women residing in the urban area are less likely to want to not reveal that a family member has TB (35%), compared with women residing in rural areas (48%), and particularly women in rural Tongatapu (50%). Urban men are less likely (5%) than rural men (9%) to keep the fact that a family member has TB a secret.

Overall, Tongan men and women have a clear understanding about TB, its cause, and the extent to which it can be cured. However, sizable proportions of women, particularly in rural areas, believe that they should not disclose the fact that a family member has TB.

### **3.10 TOBACCO USE**

Smoking and other uses of tobacco affect adult health, and may adversely affect children's health, especially in terms of vulnerability to respiratory illnesses. In addition, tobacco use during pregnancy increases the risk of having a small or low birth-weight baby. Women and men interviewed during the 2012 TDHS were asked about their smoking habits. Tables 3.17 and 3.18 show the percentage of women and men who use various types of tobacco and whether they smoked cigarettes in the 24 hours preceding the survey, according to background characteristics.

The data show that 14% of women and 48% of men aged 15–49 are active tobacco users, and that women and men are more likely to use cigarettes than other forms of tobacco: about 14% of women and 46% of men aged 15–49 smoke cigarettes.

Tobacco use varies greatly by background characteristics. Among women use peaks in the 25–34 age group (which are the peak child-bearing years). Tobacco use is more common among women residing in the urban area: about 12% of women in rural areas use tobacco compared with 17% in urban areas. By contrast, about 48% of men in both rural and urban areas use tobacco. Surprisingly, tobacco use increases slightly as educational attainment increases, but declines slightly as household wealth level increases. It is worth noting that 24% of males aged 15–19 use some form of tobacco as compared with 6% of women in this age group.

**Table 3.17: Use of tobacco — Women**

Percentage of women aged 15–49 who smoke cigarettes or a pipe or use other tobacco products and the distribution of cigarette smokers by number of cigarettes smoked in the 24 hours preceding the survey, according to background characteristics and maternity status, Tonga 2012.

Background characteristic	Cigarettes (%)	Pipe (%)	Other tobacco (%)	Do not use tobacco (%)	No. of women	Number of cigarettes in the last 24 hours					Total	No. of cigarette smokers
						1–2 (%)	3–5 (%)	6–9 (%)	10+ (%)	Don't know/missing (%)		
<b>Age</b>												
15–19	5.5	0	0.2	94.5	658	(44.7)	(26.7)	(8.2)	(16.5)	(4)	(100)	36
20–24	13.4	0.3	2.2	86.6	493	12.2	44.1	16	25.7	2	100	66
25–29	20.2	0.2	2.3	79.7	503	5.5	28.4	16	47.7	2.4	100	101
30–34	21.3	0.4	2.3	78.7	410	16.7	27.6	17.2	35.3	3.2	100	87
35–39	14.7	0.4	2.5	85.3	364	4.3	21.6	30.4	42.2	1.5	100	53
40–44	13.7	0.2	1.1	86.3	362	17	29.5	5.7	46.1	1.6	100	50
45–49	6.9	0.8	1.2	93.1	277	NP	NP	NP	NP	NP	NP	19
<b>Residence</b>												
Urban	16.8	0.7	1	83.2	754	14.6	30.4	15.5	36.8	2.6	100	127
Rural	12.4	0.1	1.8	87.6	2,314	13.5	29	15.9	38.8	2.8	100	286
<b>Region</b>												
Urban Tongatapu	16.8	0.7	1	83.2	754	14.6	30.4	15.5	36.8	2.6	100	127
Rural Tongatapu	13.3	0.1	1.2	86.7	1,554	15.1	26.8	15.7	40.4	2.2	100	206
Outer islands	10.6	0.2	3.2	89.3	760	9.6	34.6	16.6	34.8	4.3	100	80
<b>Education</b>												
Primary or less	(8.4)	(0)	(0)	(91.6)	37	NP	NP	NP	NP	NP	NP	3
Secondary	13.3	0.3	1.8	86.6	2,334	13.2	30.6	16.5	36.1	3.6	100	311
More than secondary	14.2	0.3	1.1	85.8	697	15.7	25	14.1	45.1	0	100	99
<b>Maternity status</b>												
Pregnant	(5.1)	(0)	(1.5)	(94.9)	186	NP	NP	NP	NP	NP	NP	10
Breastfeeding (not pregnant)	15.4	0	2.2	84.6	392	4.5	41	28.5	25.1	1	100	60
Neither	13.8	0.3	1.5	86.2	2,490	15.7	27.1	13.9	40.4	2.9	100	343
<b>Wealth quintile</b>												
Lowest	18.5	0.1	3.3	81.4	557	7	29.7	17.6	40.6	5.1	100	103
Second	14.1	0.5	1.4	85.9	597	12.8	31.2	13.2	39.2	3.5	100	84
Middle	11.9	0.3	1.6	88.1	631	19.7	31.8	14.3	31.4	2.8	100	75
Fourth	10.5	0.1	0.7	89.5	650	16.6	24.9	15.4	43.1	0	100	68
Highest	12.9	0.4	1.2	87.1	632	15.9	28.9	17.9	36.3	1	100	82
<b>Total</b>	<b>13.5</b>	<b>0.3</b>	<b>1.6</b>	<b>86.5</b>	<b>3,068</b>	<b>13.9</b>	<b>29.4</b>	<b>15.8</b>	<b>38.2</b>	<b>2.7</b>	<b>100</b>	<b>413</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 3.18: Use of tobacco — Men**

Percentage of men aged 15–49 who smoke cigarettes or a pipe or use other tobacco products and the distribution of cigarette smokers by number of cigarettes smoked in the 24 hours preceding the survey, according to background characteristics, Tonga 2012

Background characteristic	Cigarettes (%)	Pipe (%)	Other tobacco (%)	Do not use tobacco (%)	No. of women	Number of cigarettes in the last 24 hours						No. of cigarette smokers	
						0 (%)	1–2 (%)	3–5 (%)	6–9 (%)	10+ (%)	Don't know/missing (%)		Total
<b>Age</b>													
15–19	22.7	0.3	16.1	76.1	311	0	21.3	28.2	21.6	28.9	0	100	71
20–24	50.6	0	39.5	48.2	221	0	5.9	15	16	63.1	0	100	112
25–29	52.8	0	33.3	45	193	0	6.7	17.2	12.5	62.2	1.5	100	102
30–34	60.5	0	43.4	38	170	0	3.7	14	15.2	65	2.1	100	103
35–39	55.6	0	38.9	41.8	150	0	2.1	9.9	14.5	70.6	2.9	100	83
40–44	47.7	0	35	50	159	3.1	0	9.4	7.2	80.3	0	100	76
45–49	51.4	0	40.4	43.4	132	0.8	3.1	21.1	9.8	65.3	0	100	68
<b>Residence</b>													
Urban	47.4	0.3	28.1	51.9	338	0	8.6	19	16.4	55.5	0.5	100	160
Rural	45.5	0	34.8	52	998	0.6	4.9	15	13.1	65.3	1.1	100	454
<b>Region</b>													
Urban Tongatapu	47.4	0.3	28.1	51.9	338	0	8.6	19	16.4	55.5	0.5	100	160
Rural Tongatapu	46.2	0	31.5	52.4	666	0.8	4.2	12.8	12.8	68	1.5	100	308
Outer islands	44	0	41.5	51.1	332	0.4	6.4	19.6	13.7	59.6	0.4	100	146
<b>Education</b>													
Primary or less	NP	NP	NP	NP	24	NP	NP	NP	NP	NP	NP	NP	11
Secondary	45.1	0	33.9	52.7	1,066	0.3	5.1	17.6	12.7	63	1.3	100	480
More than secondary	49.9	0.4	29.3	49.1	246	0.9	9.3	11.2	19.5	58.9	0	100	123
<b>Wealth quintile</b>													
Lowest	56.6	0	46.3	41.3	275	1.1	3.6	17.3	12.4	65.6	0	100	155
Second	48.5	0	36.9	49.4	250	0	4.9	18.9	13	62.8	0.5	100	121
Middle	43.8	0.3	30.2	55	294	0	6.2	18.2	11.9	60.1	3.6	100	129
Fourth	40.2	0	26.6	57.3	272	0	9	13.2	18.2	59.7	0	100	110
Highest	40.5	0	25.4	56.8	245	1.2	6.7	10.7	15.5	64.9	0.9	100	99
<b>Total men aged 15–49</b>	<b>46</b>	<b>0.1</b>	<b>33.1</b>	<b>52</b>	<b>1,336</b>	<b>0.5</b>	<b>5.9</b>	<b>16</b>	<b>14</b>	<b>62.7</b>	<b>1</b>	<b>100</b>	<b>614</b>
Total men aged 50+	37.9	0.2	30.5	59.5	406	0	5.4	14.8	16.9	62.9	0	100	154
Total men aged 15+	44.1	0.1	32.5	53.7	1,742	0.4	5.8	15.8	14.6	62.8	0.8	100	768

NP = not published



## CHAPTER 4 FERTILITY

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A major objective of the 2012 TDHS was to examine fertility levels, trends, and differentials in Tonga. Fertility is one of the three principal demographic components of population change, the others being mortality and migration. Tonga's population, (103,252 at the 2011 Census) is growing at an annual rate of about 0.2%. The fertility of Tonga's population is relatively high, and would result in a growth rate of about 2.0% per year, were it not for the country's negative migration rate of approximately 2.0% per year (Tonga Statistics Department, 2013 DRAFT).

Available data suggest that Tonga's fertility level has dropped from around 6.5 children per woman in the 1950s to around 4.2 by the mid-1990s. It has subsequently remained fairly constant, at about 4.0 children per woman, suggesting that Tonga's population is experiencing a protracted demographic transition, with significantly reduced mortality rates but a stagnating decline in fertility.

This chapter analyses the fertility data collected by the 2012 TDHS. The analysis examines levels, trends and differentials in fertility by selected background characteristics. The fertility data include information on lifetime fertility (children ever born alive); data on recent fertility (births during the three years preceding the survey); age at first birth; and intervals between subsequent births. Special attention is accorded to teenage fertility, as one of the core Millennium Development Goal (MDG) indicators for MDG goal 5: 'Improve maternal health'.

Fertility data were collected by asking women of reproductive age (i.e. 15–49) to provide complete birth histories that include all of their live births. For each reported live birth, respondents were asked to explicitly mention if the child was still living in the household, living elsewhere, or if it had died. In addition, the following information was recorded for each live birth: name, sex, date of birth, survival status, current age of the child (if still alive), and age at death (if the child had died). The birth histories constitute the core of any DHS and great care has been taken to ensure the information they contain is complete and accurate. Nevertheless, there are certain cultural practices that are known to affect the quality of the data obtained. Omission of live births that died shortly after delivery is one such practice, and reporting adopted children as one's own is also not uncommon. While the DHS birth histories typically represent the best quality demographic data available for fertility and mortality estimation, their validity may be affected to some degree by certain cultural factors.

### 4.1 FERTILITY LEVELS AND TRENDS

#### 4.1.1 Fertility levels

Table 4.1 presents a number of selected measures of current fertility. These measures are calculated for the three-year period preceding the survey, which roughly corresponds to the calendar period 2010–2012, as the TDHS field work was carried out over a period of three months towards the end of 2012. Cumulation of fertility data over a three-year period is done to ensure a sufficient number of cases, thereby enhancing the statistical validity of the results. The selected measures of current fertility include the following.

- 1) The age-specific fertility rate (ASFR) is expressed as the number of births per 1,000 women in a specified age group, and represents a valuable measure for assessing the current age pattern of childbearing. ASFR is 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.
- 2) The 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 ASFR. TFR is obtained by summing the ASFR and multiplying by 5.
- 3) The general fertility rate (GFR) is the number of live births occurring during a specified period per 1,000 women.
- 4) The crude birth rate (CBR) is the number of births per 1,000 population during a specified period. It is estimated in conjunction with the population data obtained from the household schedule.

**Table 4.1: Current fertility**

*Age-specific fertility rate, total fertility rate, general fertility rate, and crude birth rate for the three years preceding the survey, by residence, Tonga 2012*

Age group	Residence		Total
	Urban	Rural	
15–19	32	26	27
20–24	133	181	169
25–29	213	245	237
30–34	205	211	209
35–39	96	132	123
40–44	37	48	46
45–49	5	2	3
TFR	3.6	4.2	4.1
GFR	119	136	132
CBR	26.5	28.5	28.1

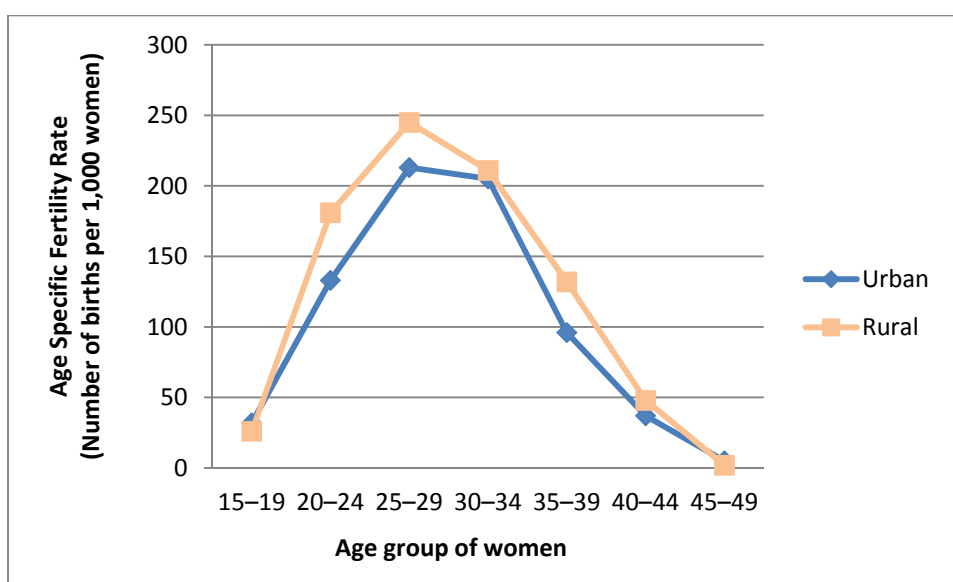
CBR: crude birth rate, expressed per 1,000 population; GFR = general fertility rate expressed per 1,000 women; TFR = total fertility rate expressed per woman.

Notes:

- 1) Age-specific fertility rates are per 1,000 women.
- 2) Rates for the 45–49 age group may be slightly biased due to truncation.
- 3) Rates are for the period 1–36 months prior to interview.

The overall TFR for Tongan women over the three years preceding the survey is 4.1 children per woman (Table 4.1); the TFR is marginally higher for rural women (4.2), and somewhat lower for urban women (3.6). The marginal difference between the total and rural values reflects the fact that most of Tonga’s population lives in rural areas (the proportion living in the urban area is 23%, according to the 2011 population census). The difference in the fertility level between urban and rural women is relatively small, and suggests somewhat better access to reproductive health services for women in the urban area. The GFR and CBR values obtained through the 2012 TDHS show similar differences between urban and rural women.

**Figure 4.1: Age-specific fertility rates by place of residence**



ASFRs (Figure 4.1) reveal that in Tonga urban women tend to concentrate their childbearing from age 25 through 34, after which their fertility drops sharply. This age pattern is indicative of delayed childbearing among many of these women, which could be a consequence of delayed marriage in favour of work or pursuit of higher education. The age pattern of childbearing among women in Tonga’s rural areas tends to be more widely spread over ages 20–34, with a peak in the 25–29 age group. ASFRs are relatively low for the youngest (15–19) and oldest (45–49) age groups. It is unusual that the values for rural women in these age groups are lower than those for urban women.

Differentials in fertility levels by urban–rural residence, region, educational attainment, and wealth quintile are shown in Table 4.2. This table also presents the percentage of women aged 15–49 that are currently pregnant (which is a crude indicator of current fertility), and the mean number of children ever born to women aged 40–49 (which is a measure of completed fertility). The latter measure is indicative of the fertility of women who are, on average, 44.5 years of age. As shown by the ASFRs, a very small number of births occur among Tongan women aged 45–49. Therefore, the implied completed fertility rate based on women aged 40–49 will be approximately the same as the average parity of women aged 45–49.

**Table 4.2: Fertility by background characteristics**

*Total fertility rate for the three years preceding the survey, percentage of women aged 15–49 currently pregnant, and mean number of children ever born to women aged 40–49, by background characteristics, Tonga 2012*

Background characteristic	Total fertility rate	Percentage women aged 15–49 currently pregnant	Mean number of children ever born to women aged 40–49
<b>Residence</b>			
Urban	3.6	5.4	3.8
Rural	4.2	6.3	4.3
<b>Region</b>			
Urban Tongatapu	3.6	5.4	3.8
Rural Tongatapu	4.4	6.0	4.2
Outer islands	3.8	7.0	4.5
<b>Education</b>			
Primary or less	2.8	4.1	3.8
Secondary	4.4	5.7	4.4
More than secondary	3.3	7.5	3.4
<b>Wealth quintile</b>			
Lowest	5.6	9.7	4.8
Second	4.1	4.8	4.7
Middle	4.0	6.0	4.2
Fourth	3.4	5.8	4.0
Highest	3.4	4.4	3.4
<b>Total</b>	<b>4.1</b>	<b>6.1</b>	<b>4.2</b>

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

The regional differentials shown in Table 4.2 reveal differentials that support the observation that rural Tongatapu may be considered peri-urban, and distinct from the other (outer islands) rural areas. The relatively high proportion of currently pregnant women in the outer islands and the above-average mean number of children ever born to women aged 40–49 among these women is indicative of higher fertility levels. On the other hand, TFR for the outer islands (3.8 children per woman) is significantly lower than that for rural Tongatapu, where it reaches 4.4 children per woman. Comparing the TFR for the outer islands with the mean number of children ever born to women aged 40–49 from this region indicates that completed fertility is higher than current fertility, which could be the result of a recent decline in fertility.

The fertility differentials according to educational attainment generally confirm that fertility and education tend to be inversely related (i.e. fertility is lower among women with more education). The 2012 TDHS results indicate that TFR for women with the highest educational qualification (secondary or higher) is 3.3 children per woman, which is significantly less than that for women with some secondary education, and those who have completed a secondary education (4.4 children per woman). These results are consistent with those for the average parity of women aged 40–49.

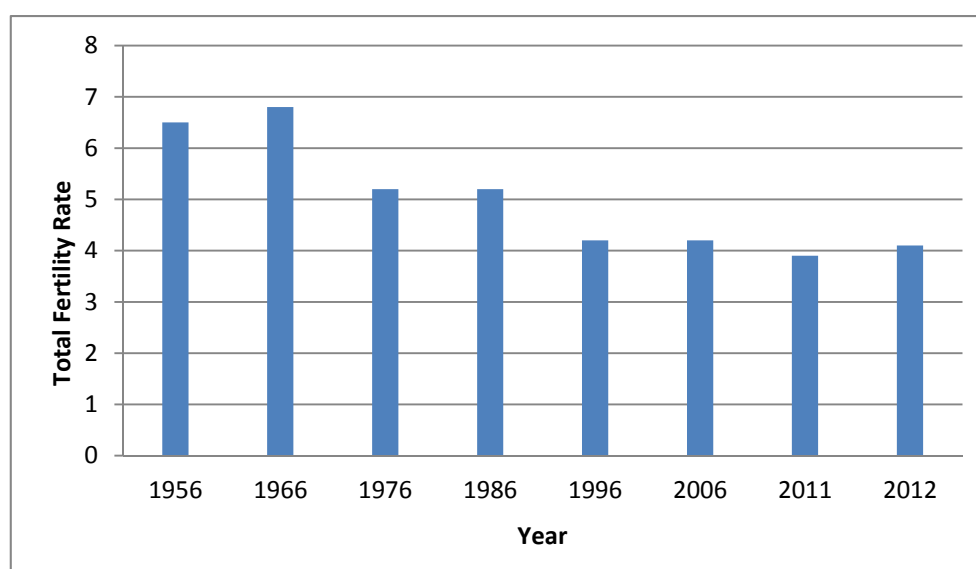
Cross-tabulating fertility indicators by education level reveals a high proportion of currently pregnant women (8%) among women with a post-secondary education, indicating that many Tongan women commence childbearing soon after completing their post-secondary education. This finding is consistent with the observation that age-specific fertility levels are relatively low for women aged 15–19 and reach a high for women aged 25–34.

The results according to wealth quintile are quite consistent. The highest TFRs are found for women in the lowest wealth quintile, while women in the highest wealth quintile are found to have the lowest TFRs. The values range from 3.4 for women in the highest wealth quintile to 5.6 for women in the lowest wealth quintile. Similar results are obtained for the other indicators in Table 4.2 (proportion currently pregnant and mean parity for women aged 40–49). For each of these indicators the values increase as wealth decreases.

### 4.1.2 Trends in fertility

Comparison of current fertility with completed fertility provides a rough indication of trends in fertility levels over the past 20 years (Figure 4.2). Referring to Table 4.2, note that such a comparison does not indicate change in fertility levels, at least not for the survey population as a whole. There are indications of changes in fertility levels for specific population subgroups; most notably women from the outer islands (from a level of 4.5 to 3.8 children per woman).

**Figure 4.2: Trends in total fertility rates**



Sources: Levin and Retherford, 1986 (for 1956 and 1966 data); Levin, 2009 (for 1976 data); Tonga Statistics Department, 1999 (for 1986 and 1996 data); Tonga Statistics Department, 2008 (for 2006 data); Tonga Statistics Department, 2014 (for 2011 data); 2012 TDHS data.

Available data suggest that fertility in Tonga remained high until the 1970s; during the 1960s and 1970s the TFR is estimated to have been 6.0–7.5 (Levin and Retherford, 1986; Levin 2009). The results of the 1986 Census of Population and Housing suggest a TFR of around 5.2. By 1996, TFR had reportedly decreased to 4.2 children per woman (Tonga Statistics Department, 1999). Similar results were obtained through the 2006 Census of Population and Housing, with an estimated TFR of 4.2 children per woman (Tonga Statistics Department, 2008). The 2012 TDHS indicates a TFR of 4.1, suggesting that fertility levels of Tongan women have remained nearly constant over the past 15 years. This indicates stagnation in a fertility decline that may have started some time during the 1970s.

**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, Tonga 2012*

Mother's age at birth	Number of years preceding survey			
	0–4	5–9	10–14	15–19
15–19	24	27	34	32
20–24	168	159	156	177
25–29	230	258	250	245
30–34	210	199	228	[234]
35–39	126	154	[182]	-
40–44	43	[78]	-	-
45–49	[2]	-	-	-

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

'-' = not applicable

Examination of age specific fertility rates obtained through the 2012 TDHS shows some trends that could point to a minor decline in fertility (Table 4.3). The values for the period 0–4 years preceding the survey show some declines from earlier periods, most notably for Tongan women aged 35–44. The data for the youngest age group of women (15–19) also suggest a moderate declining trend. The rate for women aged 20–24 has increased over the last three periods, while for the other age groups, ASFRs fluctuate too much to discern a clear pattern. This generally confirms the earlier observation that fertility levels among Tongan women have remained relatively constant over the past 15 years.

## **4.2 CHILDREN EVER BORN AND LIVING**

Table 4.4 presents the distribution of all women and currently married women by the mean number of children ever born and the mean number of children surviving, according to five-year age groups. Lifetime fertility reflects the accumulation of births over the past 30 years, so its relevance to the current situation is limited. Nevertheless, information on the mean number of children ever born is useful in examining the variation among different age groups.

**Table 4.4: Children ever born and living**

*Percent distribution of the number of children ever born to all women and currently married women, and the mean number of children ever born to and mean number of living children of all women and currently married women, according to age group, Tonga 2012*

	Number of children ever born												Women	Children ever born (mean)	Living children (mean)	
	0	1	2	3	4	5	6	7	8	9	10+	Total				
<b>ALL WOMEN</b>																
Age	%												No.			
15-19	96.1	3.9	0	0	0	0	0	0	0	0	0	0	100	658	0.04	0.04
20-24	70.4	18.2	8	2.9	0.3	0.2	0	0	0	0	0	0	100	493	0.45	0.44
25-29	34.8	19.7	19.6	13.5	8.4	3.2	0.4	0.3	0	0	0	0	100	503	1.54	1.51
30-34	18.3	12.1	17.7	17.2	15.6	8.1	6.6	3	0.9	0.3	0.3	0.3	100	410	2.76	2.72
35-39	16.1	6.4	12.5	12.4	14.1	12.1	14	6.5	3.4	2.3	0.3	0.3	100	364	3.65	3.59
40-44	11.6	7.5	7	10.1	17.4	18.6	9.6	7.1	5.5	3.4	2.3	2.3	100	362	4.2	4.09
45-49	10.9	7.3	9.4	12.9	15.7	15.1	7.8	9.5	4.5	4.9	2.1	2.1	100	277	4.21	4.13
<b>Total</b>	<b>44.3</b>	<b>10.9</b>	<b>10</b>	<b>8.8</b>	<b>8.7</b>	<b>6.6</b>	<b>4.5</b>	<b>2.9</b>	<b>1.6</b>	<b>1.2</b>	<b>0.5</b>	<b>0.5</b>	<b>100</b>	<b>3,068</b>	<b>2.01</b>	<b>1.97</b>
<b>CURRENTLY MARRIED WOMEN</b>																
	%												No.			
15-19	(39.3)	(60.7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	31	(0.61)	(0.61)
20-24	30.6	39.4	21.2	7.4	0.9	0.4	0	0	0	0	0	0	100	181	1.1	1.08
25-29	16.4	22.3	25.8	18.8	11.2	4.5	0.6	0.4	0	0	0	0	100	362	2.04	2.01
30-34	9.4	10.6	17.8	21	19	9.7	7.4	3.2	1.1	0.4	0.4	0.4	100	332	3.18	3.13
35-39	9.1	6.8	12.4	13.7	15.4	13.5	14.6	7.3	4	2.7	0.3	0.3	100	309	4.01	3.94
40-44	5.8	6.3	7.4	10.9	18.1	19	10.8	8.5	6.4	3.9	2.7	2.7	100	302	4.6	4.49
45-49	5.7	6.7	8.4	13.2	18.3	17.5	8.4	9.7	4.7	4.8	2.6	2.6	100	231	4.54	4.47
<b>Total</b>	<b>12.4</b>	<b>15</b>	<b>15.5</b>	<b>14.7</b>	<b>14.3</b>	<b>10.8</b>	<b>7.1</b>	<b>4.8</b>	<b>2.7</b>	<b>1.9</b>	<b>0.9</b>	<b>0.9</b>	<b>100</b>	<b>1,747</b>	<b>3.26</b>	<b>3.19</b>

Note: To ensure statistical reliability, percentages and rates based on 25-49 unweighted cases are shown within parentheses.

The distribution of children ever born by age shows that early childbearing is not common in Tonga; 96% of women aged 15–19 have never given birth. This proportion drops to 35% for women aged 25–29, and to 18% or less among women aged 30 and older. Tongan women attain a parity of 4.2 children by the end of their reproductive period, taken as age group 45–49. This is only marginally higher than the total fertility rate and indicates relatively constant fertility levels, as noted above. Overall, 44% of women aged 15–49 are childless, while less than one percent of women aged 15–49 have 10 or more children.

Of the Tongan women aged 15–19 less than 5% are currently married. Due to the relatively small sample size of the 2012 TDHS, their number is too small for statistical significance. Percentages based on this group therefore appear in parentheses in Table 4.4. The age pattern of childless women who are currently married is similar to that for all women, and suggests that by ages 30–34 more than 90% of currently married women have given birth at least once. Overall, 12% of currently married women aged 15–49 are childless, while less than one percent of currently married women aged 15–49 have 10 or more children. The average parity for currently married women aged 45–49 is 4.0 children per woman. The differences in childbearing between all women and currently married women are relatively small and can be explained by the presence of some unmarried, widowed, divorced, or separated women in the ‘all women’ category. The differences tend to decrease with age, because by age 35 about 85% of Tongan women are currently married.

Voluntary childlessness is uncommon in Tonga, and currently married Tongan women with no live births are likely to be unable to bear children. The level of childlessness among married women at the end of their reproductive lives can be used as an indicator of the level of primary sterility. Based on this premise, primary sterility among older, currently married women in Tonga would be approximately 6%.

The regular progression of average parities by age of woman suggests that the data quality in this regard is good. The slight drop in average parity for currently married women aged 45–49 is explained by the increased proportion of women who are widowed, divorced, or separated among women in this age group, and whose childbearing history is not included in this figure due to their current marital status. The differences between the number of children ever born and the number of children surviving are small, suggesting low infant and childhood mortality rates (see also Chapter 8 — Infant and Child Mortality); this confirms findings from other sources, such as the census data.

### **4.3 BIRTH INTERVALS**

A birth interval is defined as the length of time between two live births. The study of birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals are closely associated with poor health of children, especially during infancy. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Birth intervals are studied using two measures: median birth interval and proportion of non-first births that occur 24 months or more after the previous birth. Table 4.5 presents the distribution of second and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. First births are omitted from the table because there is no prior birth with which to measure an interval. The table also shows the median number of months since the preceding birth.

**Table 4.5: Birth intervals**

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Tonga 2012

Background characteristic	Months since preceding birth						Total	Non-first births	Months since preceding birth (median)
	7-17	18-23	24-35	36-47	48-59	60+			
				%					No.
<b>Age</b>									
20-29	27.7	25.7	31.5	8.5	4.3	2.1	100.0	424	23.2
30-39	16.3	18.5	29.7	12.8	8.8	13.9	100.0	691	28.9
40-49	6.2	10.0	20.4	15.9	8.6	38.8	100.0	158	47.1
<b>Birth order</b>									
2-3	20.9	19.9	31.6	9.9	6.6	11.1	100.0	626	26.2
4-6	18.2	20.0	24.4	13.6	8.2	15.5	100.0	505	29.1
7+	11.8	19.0	35.2	13.5	6.9	13.5	100.0	142	30.3
<b>Sex of preceding birth</b>									
Male	22.2	17.8	27.0	11.8	7.6	13.6	100.0	669	27.1
Female	15.2	22.1	31.6	11.7	6.9	12.5	100.0	604	27.6
<b>Survival of preceding birth</b>									
Living	18.6	19.8	29.3	11.9	7.1	13.3	100.0	1,249	27.4
Dead	NP	NP	NP	NP	NP	NP	NP	24	NP
<b>Residence</b>									
Urban	17.6	15.9	31.0	14.5	8.2	12.9	100.0	274	27.9
Rural	19.2	20.9	28.7	11.1	7.0	13.1	100.0	999	27.1
<b>Region</b>									
Urban Tongatapu	17.6	15.9	31.0	14.5	8.2	12.9	100.0	274	27.9
Rural Tongatapu	19.7	21.1	30.1	10.4	5.8	12.9	100.0	701	26.4
Outer islands	18.0	20.6	25.4	12.7	9.7	13.6	100.0	298	28.7
<b>Education</b>									
Primary or less	NP	NP	NP	NP	NP	NP	NP	9	NP
Secondary	18.7	19.5	28.9	12.1	7.1	13.7	100.0	1,002	27.6
More than secondary	19.6	21.1	30.6	10.6	7.8	10.3	100.0	262	26.7
<b>Wealth quintile</b>									
Lowest	19.4	18.0	29.2	13.9	8.5	10.9	100.0	334	27.5
Second	16.3	22.9	28.5	10.0	6.1	16.2	100.0	260	27.5
Middle	16.6	18.2	33.4	11.0	9.2	11.7	100.0	266	27.4
Fourth	17.7	20.5	26.3	13.7	3.0	18.8	100.0	203	28.5
Highest	25.0	20.5	27.2	9.8	8.4	9.0	100.0	209	24.9
<b>Total</b>	<b>18.8</b>	<b>19.9</b>	<b>29.2</b>	<b>11.8</b>	<b>7.3</b>	<b>13.1</b>	<b>100.0</b>	<b>1,273</b>	<b>27.4</b>

NP = not published

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.



Among Tongan women, 39% of non-first births take place within 24 months of a preceding birth. This proportion is notably higher for women of aged 20–29 (53%), and considerably lower for women aged 40–49 (16%). This is consistent with the pattern of ASFRs. A similar pattern is revealed by the mean birth intervals by average parity, which shows slightly higher proportions of women with a birth interval of less than 24 months for women with two or three previous births (41%), and significantly lower proportions for women who have had seven or more births (31%). The difference in this proportion between women in urban and rural areas is also significant, with values of 34% (urban) and 40% (rural). Interestingly, the differences among wealth quintiles are relatively small. Only the value for women in the highest wealth quintile stands out, with 46% having a birth interval less than 24 months. This is an unexpected finding, which suggests that while the wealthiest women in Tonga may have lower fertility rates, they tend to have their births in rapid succession.

The median birth interval among Tongan women is 27 months. This means that half of non-first births to women in Tonga occur within 27 months of a preceding birth. The data show a steady lengthening of the median duration of birth intervals as the mother's age increases, from 23 months for younger women to 47 months for women in the oldest age group. The longer birth interval among older women may be attributed to multiple factors, such as termination of childbearing after having reached a desired number of children and declining fecundity as women grow older.

The median birth interval for women with low parities is only four months less than that for women with high parity. This suggests that the number of previous births a Tongan woman has had is not a major factor in spacing of births or terminating childbearing altogether.

With regards to the background variable of wealth, the 2012 TDHS data on birth intervals shows little differentiation between the various wealth quintiles, with the exception of the wealthiest group of women. The median birth interval for women in the highest wealth quintile (25 months) is 2.5 months less than that of other women. This finding is directly related to the above observation that a relatively high proportion of births among Tonga's wealthiest women take place at less than the recommended minimum interval of 24 months.

#### 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 mother and child. 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 period, especially when there is little or no contraceptive use. Thus, early childbearing generally leads to a larger family size than later onset of childbearing. A rise in the median age at first birth is typically a sign of a 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 4.6 shows the percentage of women aged 15–49 who gave birth by specific exact ages, the percentage who have never given birth, and the median age at first birth, according to current age.

**Table 4.6: Age at first birth**

*Percentage of women aged 15–49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Tonga 2012*

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			
Age								
15–19	0.0	-	-	-	-	96.1	658	-
20–24	0.0	2.3	10.8	-	-	70.4	493	-
25–29	0.2	3.1	11.7	27.2	52.4	34.8	503	24.7
30–34	0.3	6.2	13.9	26.1	50.4	18.3	410	25.0
35–39	0.4	5.0	11.2	25.1	48.6	16.1	364	25.2
40–44	0.6	2.7	12.4	27.3	54.9	11.6	362	24.5
45–49	0.0	2.6	10.4	22.1	48.7	10.9	277	25.3
20–49	0.2	3.6	11.8	-	-	30.2	2,410	-
25–49	0.3	4.0	12.0	25.9	51.2	19.9	1,917	24.9

- = omitted because less than 50% of the women had a birth before reaching the beginning of the age group

Overall, the median age at first birth for Tongan women is 24.9 years. The median age at first birth for the youngest cohort for whom a median could be calculated (women aged 25–29) is 24.7 years. For the other cohorts, the median ages at first birth are not significantly different from the overall average. The values in Table 4.6 show no evidence of an upward or downward trend. The percentages of first births occurring at specified exact ages also do not indicate a clear trend among Tongan women.

Half of Tongan women delay childbearing until after age 25, as evidenced by the relatively low percentages for first births at younger ages in Table 4.6.

#### 4.5 MEDIAN AGE AT FIRST BIRTH BY BACKGROUND CHARACTERISTICS

Differentials in median age at first birth by socioeconomic and demographic characteristics of Tongan women aged 25–49 are shown in Table 4.7.

**Table 4.7: Median age at first birth**

*Median age at first birth among women aged 25–49, according to background characteristics, Tonga 2012*

Background characteristic	Age					Women Aged 25–49
	25–29	30–34	35–39	40–44	45–49	
<b>Residence</b>						
Urban	24.9	25.7	25.7	24.9	26.9	-
Rural	24.6	24.7	25.0	24.4	25.0	24.7
<b>Region</b>						
Urban Tongatapu	24.9	25.7	25.7	24.9	26.9	-
Rural Tongatapu	24.9	24.1	25.0	24.1	25.0	24.6
Outer islands	24.4	26.4	24.8	24.9	24.8	24.9
<b>Education</b>						
Primary or less	-	20.8	-	23.9	-	-
Secondary	23.7	24.1	23.9	23.9	24.5	24.0
More than secondary	-	27.8	27.6	27.5	27.4	-
<b>Wealth quintile</b>						
Lowest	23.0	23.3	23.8	23.3	26.3	23.4
Second	24.9	23.7	24.0	23.4	23.8	24.0
Middle	-	25.2	25.6	24.6	24.5	-
Fourth	-	27.0	25.9	25.5	25.6	-
Highest	24.9	26.4	26.5	26.1	28.3	-
<b>Total</b>	<b>24.7</b>	<b>25.0</b>	<b>25.2</b>	<b>24.5</b>	<b>25.3</b>	<b>24.9</b>

- = omitted because less than 50% of the women had a birth before reaching the beginning of the age group

The differentials in median age at first birth by residency are fairly small. For older women these tend to increase somewhat, suggesting that the differentiation between urban and rural women in Tonga may be diminishing. Overall, the median age at first birth for urban women is slightly less than a year higher than for rural women.

The differentials by educational attainment are somewhat greater, although many cannot be assessed due to low numbers of cases in specific age groups. Nevertheless, the median age at first birth for women with higher than secondary education appears to be more than three years higher than that for women with lower educational levels.

A similar trend can be observed when analyzing the results by wealth quintile. The median age at first birth for Tongan women in the highest two wealth quintiles is approximately two to three years higher than that for those in the two lowest wealth quintiles.

#### 4.6 TEENAGE FERTILITY

Childbearing by adolescents has potentially negative demographic and social consequences. Children born to very young mothers tend to be predisposed to a higher risk of illness and death. Also, teenage mothers are more likely to experience complications during pregnancy and are less likely to be prepared to deal

with such complications, which often lead to morbidities or even maternal death. From a social perspective it is to be noted that early entry into reproduction denies young women the opportunity to pursue academic or working careers. Consequently, younger mothers tend to have less education and lower earning potential. Finally, the psychological immaturity that characterizes most teenagers is likely to have detrimental effects on the wellbeing of both mother and child.

Table 4.8 displays the percentage of women aged 15–19 who were mothers or were pregnant with their first child at the time of the 2012 TDHS, by selected background characteristics.

**Table 4.8: Teenage pregnancy and motherhood**

*Percentage of women aged 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, Tonga 2012*

Background characteristic	Percentage who:			No. of women
	Have had a live birth	Are pregnant with first child	Have begun childbearing	
<b>Age</b>				
15	0.0	0.5	0.5	127
16	0.0	0.6	0.6	129
17	2.3	0.8	3.1	149
18	6.1	1.9	8.0	145
19	12.5	4.1	16.6	108
<b>Residence</b>				
Urban	5.7	1.9	7.6	152
Rural	3.4	1.3	4.7	506
<b>Region</b>				
Urban Tongatapu	5.7	1.9	7.6	152
Rural Tongatapu	3.5	0.9	4.4	341
Outer islands	3.1	2.3	5.4	165
<b>Education</b>				
Primary or less	NP	NP	NP	5
Secondary	3.5	1.3	4.8	628
More than secondary	(8.7)	(6.0)	(14.7)	25
<b>Wealth quintile</b>				
Lowest	5.0	2.3	7.3	102
Second	5.4	0.4	5.8	133
Middle	2.6	1.1	3.7	132
Fourth	5.5	2.0	7.5	144
Highest	1.5	1.6	3.0	148
<b>Total</b>	<b>3.9</b>	<b>1.5</b>	<b>5.4</b>	<b>658</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

The analysis of age-specific fertility for women aged 15–19 found some evidence for a decline in fertility among women in this age group. The results in Table 4.8 provide additional insight into the fertility of these young women. Overall, nearly 4% of teenage women have had a live birth, while another 2% are pregnant with their first child. The results clearly show that childbearing remains sporadic among Tongan teenagers, at least until the age of 18. After age 18, the proportion of teenagers who have had a live birth increases dramatically. Half of all teenage women who had a live birth are 19 years old.

The differentials in percentages of urban and rural women who have had a live birth reveal an atypical finding, which is that the percentage of teenage women in rural areas who have begun childbearing is lower than that for teenage women in urban Tongatapu. While atypical, it is consistent with the earlier finding that the ASFR for rural Tongan women aged 15–19 is lower than that for their urban counterparts.

The differentials in teenage fertility according to wealth quintile show significant variation, which may be due to the small absolute numbers of women that have begun childbearing. Nevertheless, it may be noted that the values for women in the highest wealth quintile are notably lower than those for other women, while those for women in the lowest quintile are among the highest values.

## CHAPTER 5 FAMILY PLANNING

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This chapter presents the 2012 TDHS findings on contraceptive knowledge, use of and attitudes towards contraception, sources of contraceptives, and exposure to media messages about family planning. The information is particularly useful for policy-makers, programme managers, and researchers in population and family planning, and provides a means of assessing the success of Tonga's 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 realising women's reproductive goals. Comparisons are also made, where feasible, with findings from previous surveys to evaluate trends over the past 20 years in Tonga. Data are also presented on exposure to family planning messages through the media, sources and costs of contraception, contact with family planning providers, and a husbands' knowledge about his wife's use of contraception.

### 5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

A major objective of the 2012 TDHS was to assess the level of knowledge of contraceptive 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 the 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 sterilisation, birth control pills, intrauterine device (IUD), injectable contraceptives, implants, male and female condoms, the lactational amenorrhoea method (LAM), and emergency contraception. Information was also collected on three traditional methods: rhythm, periodic abstinence, and withdrawal. Provision was also made in the questionnaire to record any other methods named spontaneously by respondents, which were coded as 'folk methods.' This report combines both prompted and unprompted knowledge. Thus, knowledge of a family planning method in the 2012 TDHS is defined simply as having heard of a method.

Table 5.1 shows the percentage of all women and men, currently married women and men, and sexually active unmarried women and men (aged 15–49) who have heard of specific contraceptive methods. Most (93% of all women, 97% of all men) know of at least one method of contraception. Modern methods remain more widely known than traditional methods: 93% of all women know of a modern method, compared with 66% who know of a traditional method. Among all women, male condoms are the most commonly known method (86%), followed by injectable contraceptives (82%), birth control pills (80%), and female sterilisation (79%). Emergency contraception, which is the second-least known of the modern methods, is known by only 19% of all women, while only 15% of all women knew about implants. Among the traditional methods, withdrawal is the most commonly known (62%), followed closely by rhythm (53%); a small proportion (1%) mentioned folk methods.

Knowledge of contraceptive methods among currently married women is higher than that among all women, especially the level of knowledge. Among currently married women, 98% know at least one modern method of contraception, and 85% know a traditional method. Among modern methods, the most commonly known method is injectable contraceptives (95%), followed by the male condom (94%), birth control pills (92%) and female sterilisation (91%). Emergency contraception, known by 24% of currently married women, is the second-least known modern method. Only 20% of currently married women knew about implants.

**Table 5.1: Knowledge of contraceptive methods**

Percentage of all respondents, currently married respondents and sexually active unmarried respondents aged 15–49 who know of any contraceptive method, by specific method, Tonga 2012

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried women <sup>1</sup>	All men	Currently married men	Sexually active unmarried men <sup>1</sup>
Any method	92.7	98.4	NP	97.4	99.7	(100.0)
Any modern method	92.7	98.4	NP	96.9	99.7	(100.0)
Female sterilisation	79.4	91.3	NP	65.2	85.2	(60.7)
Male sterilisation	22.8	30.7	NP	14.9	19.7	(15.5)
Pill	80.2	92.3	NP	56.6	78.4	(41.2)
Intrauterine device	68.9	89.7	NP	40.3	61.3	(25.6)
Injectable contraceptives	81.9	94.6	NP	56.5	79.3	(42.9)
Implants	15.4	20.1	NP	9.2	13.0	(9.0)
Male condom	86.2	94.0	NP	95.3	97.6	(100.0)
Female condom	41.1	50.5	NP	22.4	28.3	(35.6)
Lactational amenorrhoea	43.4	60.9	NP	28.6	39.8	(16.3)
Emergency contraception	18.7	24.2	NP	12.7	17.8	(14.3)
Any traditional method	66.1	85.4	NP	69.4	85.8	(59.1)
Rhythm	53.3	73.8	NP	43.4	62.7	(23.8)
Withdrawal	61.7	81.2	NP	65.6	82.1	(59.1)
Folk method	0.8	1.2	NP	1.4	2.1	(4.5)
Mean number of methods known by respondents aged 15–49	6.5	8.0	NP	5.1	6.7	(4.5)
<b>Number of respondents</b>	<b>3,068</b>	<b>1,747</b>	<b>7</b>	<b>1,336</b>	<b>716</b>	<b>35</b>
Mean number of methods known by respondents aged 15+	-	-	-	5.5	6.8	(4.5)
Number of respondents	0	0	0	1,742	1,046	40

NP = not published;

- = not applicable

<sup>1</sup> Had last sexual intercourse within 30 days preceding the survey.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Knowledge of contraception is slightly higher among men than women — 97% of all men know of at least one modern method of contraception (Table 5.1) — while (as with women) a smaller proportion (69%) know a traditional method. As with women, knowledge of most methods is higher among currently married men than unmarried men. The most commonly known modern method is the male condom, reported by 98% of currently married men and 100% of unmarried men. Emergency contraception is known by 13% of all men, and 18% of currently married men. Only 9% of all men knew of implants. The rhythm method is known by 43% of all men and 63% of currently married men. Knowledge all modern methods of contraception, with the exception of male condoms, is lower among men than women. Knowledge of male sterilisation is lower among all men, currently married men and sexually active unmarried men than among women. The majority of Tongan women and men aged 15–49 have heard of at least three contraceptive methods.

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 modern method is high in almost all categories. Nevertheless, it is slightly lower among women aged 20–24 than other age groups. Knowledge of at least one modern method appears to be similar across wealth quintiles, residence and regions. There were no apparent differences among men by background characteristics.

**Table 5.2: Knowledge of contraceptive methods by background characteristics**

*Percentage of currently married women and currently married men aged 15–49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Tonga 2012*

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	(97.9)	(97.9)	31	NP	NP	13
20–24	94.9	94.9	181	100.0	100.0	56
25–29	98.4	98.4	362	100.0	100.0	131
30–34	98.9	98.9	332	100.0	100.0	132
35–39	99.0	99.0	309	100.0	100.0	124
40–44	98.5	98.5	302	99.4	99.4	141
45–49	99.7	99.7	231	98.8	98.8	118
<b>Residence</b>						
Urban	98.2	98.2	411	99.5	99.5	181
Rural	98.5	98.5	1,335	99.7	99.7	535
<b>Region</b>						
Urban Tongatapu	98.2	98.2	411	99.5	99.5	181
Rural Tongatapu	98.0	98.0	890	99.6	99.6	346
Outer islands	99.5	99.5	445	100.0	100.0	189
<b>Education</b>						
Primary or less	NP	NP	19	NP	NP	15
Secondary	98.4	98.4	1,329	100.0	100.0	547
More than secondary	98.6	98.6	399	98.5	98.5	154
<b>Wealth quintile</b>						
Lowest	98.9	98.9	369	100.0	100.0	167
Second	98.5	98.5	357	100.0	100.0	136
Middle	96.8	96.8	352	99.5	99.5	152
Fourth	99.1	99.1	345	100.0	100.0	131
Highest	98.8	98.8	324	98.9	98.9	130
<b>Total aged 15–49</b>	<b>98.4</b>	<b>98.4</b>	<b>1,747</b>	<b>99.7</b>	<b>99.7</b>	<b>716</b>
Total aged 50+	-	-	-	98.4	98.4	330
Total men aged 15+	-	-	-	99.3	99.3	1,046

NP = not published;

- = not applicable

<sup>1</sup>Modern methods: Female sterilisation, male sterilisation, birth control pill, intrauterine device, injectable contraceptives, implants, male condom, female condom lactational amenorrhoea method, and emergency contraception.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

It was not possible to make comparisons with previous surveys because the questions asked were not comparable.

## 5.2 EVER USE OF CONTRACEPTION

All women interviewed in the 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, such as male sterilisation, condoms, rhythm and withdrawal. Table 5.3 shows the percentage of all women and currently married women who have ever used specific methods of family planning, by age, and Table 5.4 shows comparable information for men.

Some 37% of all women have used a method of contraception at some time; 32% have used a modern method and 16% a traditional method. Among modern methods, injectable contraceptives are the most commonly used method (17%), followed by female sterilisation (8%) and birth control pills (7%). Male sterilisation, female and male condoms, IUDs and LAM are the least used methods. Among traditional methods, withdrawal (11%) and rhythm (10%) are the most commonly used. Emergency contraception has not been used. The use of any contraceptive method increases with age, peaking among women in their late 30s through 40s, and declining among women aged 45–49.

About 60% of currently married women have used a contraceptive method at some time; 52% have used a modern method and 26% a traditional method. Injectable contraceptives are the most commonly used method among currently married women (28%) followed by female sterilisation (14%) and birth control pills (11%).

Among currently married women, the use of a modern contraceptive method increases with age, peaking among women in their 30s through early 40s, and declining among those aged 45–49.

Table 5.4 shows the percentage of all men and currently married men aged 15–49 who reported having ever used any modern method and one of four male methods of contraception — male sterilisation, male condoms, rhythm, and withdrawal. Ever use of any modern method among all men is lowest among teenagers and highest among older men, especially married men aged 40–44, 63% of whom have used a method. However, ever use of any modern method among currently married men is highest in the younger age group of 20–24 (51%). Almost half of all men aged 15–49 have used a male-oriented method of contraception at some time (43%), while 63% of currently married men reported using a modern method. The most popular male method, the condom, has been used by 20% of all men, 24% of currently married men, and 66% of sexually active unmarried men. Among currently married men, male condoms are less popular than traditional methods. Male sterilisation is practically non-existent in Tonga; less than 1% of men reported ever use of male sterilisation. Withdrawal was reported by 29% of all men.

Ever use of contraception is higher among all men than all women, with considerably higher proportions of men than women reporting having used male condoms and withdrawal. Of the two traditional methods, withdrawal (29%) is reported as being used more often than rhythm (23%) by all men; among currently married men withdrawal has been used by 40%, and rhythm by 36%.

**Table 5.3: Ever use of contraception — Women**

Percentage of all women, currently married women, and sexually active unmarried women aged 15–49 who have ever used any contraceptive method by method, according to age, Tonga 2012

Age	Modern method											Traditional method				Number of women
	Any method	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Any traditional method	Rhythm	Withdrawal	Folk method	
<b>ALL WOMEN</b>																
15–19	2.5	1.6	0	0.1	0.1	0	0.4	0	0.9	0.3	0.2	1.7	0.7	1.7	0	658
20–24	17.6	14	0	0	2.5	1.9	7.7	0	4.1	0.2	2.4	8.8	4.4	6.7	0.3	493
25–29	42.1	36.5	2.4	0	8.1	4.6	20.1	0	8.7	0.7	5.4	17	10.6	11	0.2	503
30–34	55.7	49.1	8.5	0	10	6.5	28.7	0.2	7.9	0.5	8.9	21.1	15	14.1	0	410
35–39	58.6	51.5	19.1	0.2	14	11	26.5	0	8.6	0.4	8.3	23.1	16.2	18.1	0.4	364
40–44	61.5	54.2	22.6	0.2	10	9.5	27	1	6.4	0.4	10	27	18.2	18.3	0.2	362
45–49	57.3	50.4	20.6	0	9.6	10	25.4	0	5.3	1.4	8.8	25.7	16.9	17.9	0	277
<b>Total</b>	<b>37.1</b>	<b>32.2</b>	<b>8.3</b>	<b>0.1</b>	<b>6.8</b>	<b>5.2</b>	<b>17.1</b>	<b>0.1</b>	<b>5.6</b>	<b>0.5</b>	<b>5.5</b>	<b>15.6</b>	<b>10.2</b>	<b>11</b>	<b>0.1</b>	<b>3,068</b>
<b>CURRENTLY MARRIED WOMEN</b>																
15–19	(39.6)	(24.9)	(0)	(0)	(1.9)	(0)	(9.1)	(0)	(11.6)	(7.2)	(4.9)	(26.3)	(14.6)	(26.3)	(0)	31
20–24	40.8	33.2	0	0	5.8	5.3	18.1	0	9.3	0.4	5.3	19.8	10.4	14.3	0.9	181
25–29	56.6	49.3	3.3	0	11	5.5	27.7	0	11.9	0.9	7.5	22.7	14.1	15.1	0.2	362
30–34	64.9	56.7	10.1	0	12	7.6	32.8	0.2	9.1	0.6	11	25.5	18.5	16.8	0	332
35–39	65	56.7	22.2	0.3	14	12	28.8	0	8.8	0.5	9.2	26.5	18.7	20.6	0.5	309
40–44	67.4	59.1	25.4	0.2	11	10	29.6	0.9	7	0.5	12	30.2	20.4	19.7	0.2	302
45–49	62.6	54.6	22.4	0	10	11	27.6	0	6.1	1.6	10	28.3	18	20.8	0	231
<b>Total</b>	<b>60.4</b>	<b>52.3</b>	<b>13.9</b>	<b>0.1</b>	<b>11</b>	<b>8.5</b>	<b>27.9</b>	<b>0.2</b>	<b>8.9</b>	<b>0.9</b>	<b>9.2</b>	<b>25.7</b>	<b>17</b>	<b>18.1</b>	<b>0.3</b>	<b>1,747</b>

IUD = intrauterine device; LAM = lactational amenorrhoea method

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.



**Table 5.4: Ever use of contraception — Men***Percentage of all men, currently married men, and sexually active unmarried men aged 15–49 who have ever used any contraceptive method by method, according to age, Tonga 2012*

Age	Any method	Any modern method	Modern method		Traditional method			Number of men
			Male sterilisation	Male condom	Any traditional method	Rhythm	Withdrawal	
<b>ALL MEN</b>								
15–19	10.3	6.7	0.0	6.7	7.2	0.8	6.9	311
20–24	40.9	28.6	0.7	27.9	25.8	5.2	24.8	221
25–29	46.9	30.6	0.5	30.1	35.0	17.7	28.2	193
30–34	60.2	27.3	1.1	26.9	52.2	34.2	42.7	170
35–39	59.6	30.2	0.0	30.2	54.6	31.9	46.2	150
40–44	60.3	24.5	1.2	23.8	54.6	38.3	43.1	159
45–49	54.1	16.5	0.6	15.9	51.4	39.8	35.9	132
<b>Total men aged 15–49</b>	<b>42.8</b>	<b>22.1</b>	<b>0.5</b>	<b>21.7</b>	<b>35.3</b>	<b>20.0</b>	<b>29.1</b>	<b>1,336</b>
Total men aged 50+	47.4	16.7	1.3	15.4	43.6	34.0	29.7	406
Total men aged 15+	43.9	20.9	0.7	20.3	37.3	23.3	29.2	1,742
<b>CURRENTLY MARRIED MEN</b>								
15–19	NP	NP	NP	NP	NP	NP	NP	13
20–24	72.4	50.8	0.0	50.8	57.7	16.4	56.5	56
25–29	56.5	33.4	0.7	32.6	43.9	22.6	33.9	131
30–34	70.6	29.6	0.9	29.1	62.5	43.4	50.8	132
35–39	61.1	26.8	0.0	26.8	56.9	33.5	46.8	124
40–44	62.5	22.4	1.4	21.6	56.9	41.0	44.4	141
45–49	58.5	16.6	0.7	15.9	56.1	44.4	38.9	118
<b>Total men aged 15–49</b>	<b>62.7</b>	<b>27.9</b>	<b>0.7</b>	<b>27.5</b>	<b>55.4</b>	<b>35.0</b>	<b>44.1</b>	<b>716</b>
Total men aged 50+	50.1	15.3	0.4	14.9	47.6	37.6	31.6	330
Total men aged 15+	58.7	24.0	0.6	23.5	53.0	35.9	40.2	1,046
<b>SEXUALLY ACTIVE UNMARRIED MEN<sup>1</sup></b>								
<b>Total men aged 15–49</b>	<b>(73.7)</b>	<b>(64.3)</b>	<b>(0.0)</b>	<b>(64.3)</b>	<b>(41.8)</b>	<b>(10.0)</b>	<b>(41.8)</b>	<b>35</b>
Total men aged 15+	(73.8)	(65.6)	(0.0)	(65.6)	(41.3)	(13.3)	(41.3)	40

NP = not published

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

### 5.3 CURRENT USE OF CONTRACEPTIVE METHODS

This section presents information on the prevalence of contraceptive use among all women, and currently married women aged 15–49. The level of current use is the most widely used measure of the success of a family planning programme. Furthermore, it has been 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 5.5 shows that 20% of all women are currently using some method of contraception. Modern contraceptive methods account for almost all use, with 17% of married women reporting the use of a modern method compared with 5% using a traditional method. Female sterilisation (14%), injectable contraceptives (4%), and the rhythm method (1.8%) are the most widely used contraceptive methods among married women, followed by withdrawal (2%), birth control pills and IUD (1%), and male condoms (1%).

Among currently married women, 34% reported using any method, and 28% reported using a modern method. The proportion of currently married women that are currently using any modern method of contraception rises with age from 9% of those aged 15–19 to 42% among those aged 35–39, after which it declines. Female sterilisation is mostly used by currently married women in their 40s (25%); among younger women, 3% of women in the 25–29 age group reported female sterilisation. For currently married women aged 25–29, injectable contraceptives, birth control pills and withdrawal are the three most commonly used methods; among currently married women aged 20–24, injectable contraceptives, the IUD and withdrawal are the most common. For married women aged 15–19, injectable contraceptives, rhythm method and male condoms were most common. Injectable contraceptives are the most commonly used method by married women of all ages except those aged 35–39 and in their 40s, for whom female sterilisation is most commonly used. For women aged 35–39 years, the IUD is the second-most commonly reported method and birth control pills the third; for women older than 40, IUD, injectable contraceptives and rhythm method are the second-most commonly reported methods.

Contraceptive use is higher among married women (34%) than among all women (20%) (Table 5.5). Similarly, modern contraceptive use is higher among currently married women (28%) than among all women (17%).

Among all women, female sterilisation is the most commonly used method, followed by injectable contraceptives and the IUD and rhythm method. Similar to married women, modern contraceptive use for all women rises with age, peaks at 31% among women aged 35–39, after which it declines.

**Table 5.5: Current use of contraception by age***Percent distribution of all women, currently married women, and sexually active unmarried women aged 15–49 by contraceptive method currently used, according to age, Tonga 2012*

Age	Modern method										Traditional method					Total	Number of women
	Any method	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	LAM	Any traditional method	Rhythm	Withdrawal	Folk method	Not currently using		
<b>ALL WOMEN</b>																	
15–19	0.7	0.5	0	0	0	0	0.3	0	0.2	0	0.2	0.2	0	0	99.3	100	658
20–24	8.9	6.5	0	0	0.5	1.5	3.7	0	0.8	0	2.4	0.6	1.7	0	91.1	100	493
25–29	20.5	16.7	2.4	0	3.2	2	6.4	0	2.2	0.5	3.8	1.4	2.3	0	79.5	100	503
30–34	29.7	25.7	8.5	0	2.5	3	10.3	0.2	1.1	0.2	4	1.9	2.1	0	70.3	100	410
35–39	35.7	30.5	19.1	0.2	1.8	4.4	3.3	0	1	0.6	5.2	3.1	1.7	0.4	64.3	100	364
40–44	36	30.2	22.6	0	0.4	3.2	2.7	0.2	0.7	0.4	5.8	4.1	1.7	0	64	100	362
45–49	31.6	27	20.6	0	0.3	3.8	1.6	0	0.8	0	4.6	3	1.6	0	68.4	100	277
<b>Total</b>	<b>20.3</b>	<b>17</b>	<b>8.3</b>	<b>0</b>	<b>1.2</b>	<b>2.2</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0.2</b>	<b>3.3</b>	<b>1.8</b>	<b>1.5</b>	<b>0</b>	<b>79.7</b>	<b>100</b>	<b>3,068</b>
<b>CURRENTLY MARRIED WOMEN</b>																	
15–19	(13.5)	(8.6)	(0)	(0)	(0)	(0)	(6.8)	(0)	(1.9)	(0)	(4.9)	(4.9)	(0)	(0)	(86.5)	100	31
20–24	22.7	17.1	0	0	1.3	4	9.6	0	2.2	0	5.6	1.7	3.9	0	77.3	100	181
25–29	27.6	22.4	3.3	0	4.2	2.6	8.7	0	2.9	0.7	5.2	2	3.3	0	72.4	100	362
30–34	35.4	30.4	10.1	0	3.1	3.4	12.1	0.2	1.3	0.2	4.9	2.4	2.6	0	64.6	100	332
35–39	41.4	35.2	22.2	0.3	2.2	5	3.6	0	1.2	0.7	6.1	3.6	2	0.5	58.6	100	309
40–44	41.2	34.2	25.4	0	0.4	3.8	3.3	0	0.9	0.4	7	4.9	2.1	0	58.8	100	302
45–49	34.9	29.4	22.4	0	0.3	3.9	1.9	0	1	0	5.5	3.6	1.9	0	65.1	100	231
<b>Total</b>	<b>34.1</b>	<b>28.4</b>	<b>13.9</b>	<b>0</b>	<b>2.1</b>	<b>3.7</b>	<b>6.7</b>	<b>0</b>	<b>1.6</b>	<b>0.4</b>	<b>5.7</b>	<b>3.1</b>	<b>2.5</b>	<b>0.1</b>	<b>65.9</b>	<b>100</b>	<b>1,747</b>

IUD = intrauterine device; LAM = lactational amenorrhoea method

Notes:

- 1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.
- 2) If more than one method is used, only the most effective method is considered in this tabulation.

**Table 5.6: Current use of contraception by background characteristics***Percent distribution of currently married women aged 15–49 by contraceptive method currently used, according to background characteristics, Tonga 2012*

Background characteristic	Any method	Any modern method	Modern method								Any traditional method	Traditional method			Not currently using	Total	Number of women
			Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	LAM		Rhythm	Withdrawal	Folk method			
<b>Residence</b>																	
Urban	31.9	27	11.2	0.2	2	2.9	7.4	0	2.4	0.4	4.9	3	2	0	68.1	100	411
Rural	34.7	28.8	14.7	0	2	3.9	6.4	0.1	1.4	0.4	5.9	3.1	2.7	0.1	65.3	100	1,335
<b>Region</b>																	
Urban Tongatapu	31.9	27	11.2	0.2	2	2.9	7.4	0	2.4	0.4	4.9	3	2	0	68.1	100	411
Rural Tongatapu	33.3	27.4	15.6	0	2	3	5.2	0	0.9	0.3	5.9	3.3	2.5	0.2	66.7	100	890
Outer islands	37.6	31.6	12.9	0	1	5.7	8.8	0.2	2.4	0.4	5.9	2.8	3.1	0	62.4	100	445
<b>Education</b>																	
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	19
Secondary	35.1	29.9	14.7	0	2	3.7	7.6	0.1	1.3	0.3	5.2	2.8	2.3	0.1	64.9	100	1,329
More than secondary	30.7	23.1	10.6	0.2	2	3.6	3.6	0	2.7	0.6	7.7	4.1	3.6	0	69.3	100	399
<b>No. of living children</b>																	
0	2.1	1.1	0.4	0	0	0	0.4	0	0	0	1	0.3	0.7	0	97.9	100	222
1–2	22.7	17.6	2.7	0	1	3.1	6.8	0	3.1	0.7	5.1	2.4	2.8	0	77.3	100	540
3–4	41.6	34.8	16.4	0.2	4	4.5	7.8	0	1.4	0.1	6.8	3.5	3.3	0	58.4	100	511
5+	53.9	46.5	30.3	0	1	5.1	8.2	0.1	0.9	0.5	7.4	4.8	2.3	0.3	46.1	100	474
<b>Wealth quintile</b>																	
Lowest	41.2	35.6	15.8	0	3	4.9	10.1	0	1.2	0.6	5.7	2.4	2.9	0.4	58.8	100	369
Second	35.1	30.7	15.4	0	1	4.4	7.6	0	1.9	0.2	4.4	1.5	3	0	64.9	100	357
Middle	32.9	24.6	10.8	0	3	2.2	6.7	0	1.8	0.2	8.3	5.1	3.2	0	67.1	100	352
Fourth	28.4	22.8	11.9	0	1	4	3.8	0.2	1.1	0.6	5.6	3.1	2.5	0	71.6	100	345
Highest	32	27.7	15.4	0.3	2	2.7	4.7	0	2.2	0.3	4.4	3.5	0.9	0	68	100	324
<b>Total</b>	<b>34.1</b>	<b>28.4</b>	<b>13.9</b>	<b>0</b>	<b>2</b>	<b>3.7</b>	<b>6.7</b>	<b>0</b>	<b>1.6</b>	<b>0.4</b>	<b>5.7</b>	<b>3.1</b>	<b>2.5</b>	<b>0.1</b>	<b>65.9</b>	<b>100</b>	<b>1,747</b>

IUD = intrauterine device; LAM = lactational amenorrhoea method; NP = not published

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

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

Table 5.6 shows the percent distribution of currently married women by current use of family planning methods, according to background characteristics. Current use of contraception varies with the number of living children, urban–rural residence, region, education, and wealth.

The proportion of women currently using contraception generally increases with an increasing number of children: 2% of women without children currently use a contraceptive method, compared with 54% of women with five or more children. Current use of any modern contraceptive method is highest among women who have more than five children (47%).

Women in urban areas are slightly less likely to use contraceptive methods (32%) than their rural counterparts (35%), and in particular women in the outer islands (38%). Women in rural Tongatapu are most likely to use female sterilisation (16%) than women in urban Tongatapu (11%), whereas women in the outer islands are most likely to use an IUD (6%) and injectable contraceptives (8%).

Use of modern contraception appears to be negatively correlated with wealth status; among currently married women in the lowest wealth quintile, contraceptive use was reported to be 36%, compared with 28% in the highest wealth quintile.

While some patterns appear to emerge, generally the pattern of current use of modern and traditional methods of contraception is similarly low across subgroups. Use of both modern and traditional methods appears to be more common in rural areas than in urban areas. Patterns of significantly increasing use with increasing levels of education and wealth quintile are not evident.

## **5.5 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 differs according to the circumstances of couples and individuals. Couples using family planning to control family size (i.e. to stop having 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.

During the 2012 TDHS, 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. among 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 parity and number of living children at first use of contraception.

Table 5.7 shows the percent distribution of women by the number of living children at the time of first use of contraception, according to current age. Approximately 63% of all women aged 15–49 reported that they have never used a contraceptive method. Eleven percent of all women first used a contraceptive method when they already had four or more children. Approximately 2% first used a contraceptive method at a time when they had no children, and 11% first used contraception after the birth of their first child. The results indicate that overall levels of contraceptive use have varied and the average parity at which Tongan women start using contraception is variable. A pattern of more Tongan women adopting family planning methods at lower parities is not evident. A change in behaviour is evident when comparing women's parity at first use of contraception among younger and older women. The percentage of women who began using contraception after one child varied with age: 9% for women aged 20–24, 17% for women aged 25–29, and more than 15% for women aged 30–39, suggesting a decline in contraceptive use in recent years among younger women. Older women are more likely to have waited until they had children to start using contraception. Among women aged 45–49, 26% started using contraception after having four children. 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. While younger women tend to initiate contraception for spacing births, older women tend to initiate contraceptive use at a later age primarily to limit rather than to space births. It should be noted that a very high proportion of younger women have never used contraception.

**Table 5.7: Number of children at first use of contraception**

Percent distribution of women aged 15–49 by number of living children at the time of first use of contraception, according to current age, Tonga 2012

Current age	Number of living children at time of first use of contraception						Missing	Total	Number of women
	Never used	0	1	2	3	4+			
Age									
15–19	97.5	1.7	0.8	0.0	0.0	0.0	0.0	100.0	658
20–24	82.4	4.1	9.0	3.4	0.8	0.3	0.0	100.0	493
25–29	57.9	2.4	17.2	11.5	7.5	3.5	0.0	100.0	503
30–34	44.3	2.4	16.6	14.5	6.5	15.8	0.0	100.0	410
35–39	41.4	1.0	15.2	10.3	10.7	21.0	0.4	100.0	364
40–44	38.5	2.0	13.8	10.5	6.1	29.0	0.2	100.0	362
45–49	42.7	0.8	13.0	6.5	10.7	26.4	0.0	100.0	277
Total	62.9	2.2	11.3	7.4	5.2	11.0	0.1	100.0	3,068

## 5.6 KNOWLEDGE OF THE FERTILE PERIOD

Table 5.8 shows the proportion of women aged 15–49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method.

Among users of the rhythm method, 40% perceived the fertile period to be halfway between two menstrual periods, compared with 11% of non-users of the rhythm method.

Among users of the rhythm method, 44% perceived the fertile period to be right after the menstrual period has ended, compared with 47% of non-users of the method. Thirty-eight percent of all women did not know any specific time or reported they did not know, with an additional 3% perceiving the fertile period to be just before the menstrual period begins or during the menstrual period.

**Table 5.8: Knowledge of fertile period**

Percent distribution of women aged 15–49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Tonga 2012

Perceived fertile period	Users of rhythm method	Non-users of rhythm method	All women
Just before her menstrual period begins	0.0	1.9	1.9
During her menstrual period	0.0	1.3	1.3
Right after her menstrual period has ended	44.1	46.6	46.6
Halfway between two menstrual periods	37.5	11.0	11.5
Other	0.0	0.0	0.0
No specific time	11.2	15.4	15.3
Don not know	7.1	23.6	23.3
Missing	0.0	0.0	0.0
Total	100.0	100.0	100.0
Number of women	54	3,014	3,068

## 5.7 TIMING OF STERILISATION

The 2013 TDHS collected information on the timing of female sterilisation among those using the method (Table 5.9). The median age at sterilisation is calculated only for women sterilised before they were 40 to avoid problems of censoring. The median age at sterilisation is 34. About 35% of sterilised women underwent the procedure at age 30–34, 36% at age 35–39, 13% at age 40–44, and 13% at age 25–29. The smallest proportion (2%) underwent the procedure before the age of 25.

**Table 5.9: Timing of sterilisation**

Percent distribution of sterilised women aged 15–49 by age at the time of sterilisation and median age at sterilisation, according to the number of years since the operation, Tonga 2012

Years since operation	Age at time of sterilisation						Total	Number of women	Median age <sup>1</sup>
	<25	25–29	30–34	35–39	40–44	45–49			
<2	1.5	13.0	34.5	34.8	14.9	1.3	100.0	59	33.7
2–3	3.2	17.3	35.5	39.6	4.3	0.0	100.0	47	34.4
4–5	0.0	11.7	23.7	35.3	29.3	0.0	100.0	44	35.0
6–7	3.9	3.5	30.0	49.6	12.9	0.0	100.0	40	35.5
8–9	2.4	8.0	44.4	33.3	11.9	0.0	100.0	28	33.7
10+	3.9	26.1	49.6	20.4	0.0	0.0	100.0	37	-
<b>Total</b>	<b>2.4</b>	<b>13.4</b>	<b>35.4</b>	<b>35.8</b>	<b>12.6</b>	<b>0.3</b>	<b>100.0</b>	<b>255</b>	<b>34.1</b>

- = not calculated due to censoring

<sup>1</sup> Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring.

## 5.8 SOURCE OF CONTRACEPTION

Information regarding the sources of modern contraceptive procedures, drugs or devices is important to family planning programme management. In Tonga, the public sector is strategically important in the provision of family planning services. Tonga does not have a vibrant social marketing programme but has a few pharmacies and private clinics. Condoms are distributed in the communities through peer educators. Tonga has a major NGO — the Tonga Family Health Association — which provides both clinical and non-clinical contraceptives. The public sector provides the full range of clinical and non-clinical contraceptives, mainly through health facilities, and also supports major partners.

In the 2012 TDHS, all current users of modern contraceptive methods were asked the most recent source of their contraceptives. 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 5.10 shows that the vast majority of users (92%) obtain their contraceptives from the public sector. Government hospitals are the most common public source (74%), followed by health centres (14%) and family planning clinics (4%).

**Table 5.10: Source of modern contraceptives**

Percent distribution of users of modern contraceptive methods aged 15–49 by most recent source, according to method, Tonga 2012

Source	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	Total <sup>1</sup>
Public sector	95.6	NP	(81.1)	90.3	91.9	NP	(85.2)	91.9
Government hospital	93.7	NP	(41.2)	62.7	57.7	NP	(40.7)	73.8
Government health center	1.9	NP	(29.4)	22.8	28.6	NP	(20.5)	14.1
Family planning clinic	0.0	NP	(10.5)	4.8	5.6	NP	(24.0)	4.1
Private medical sector	0.6	NP	(5.9)	5.4	4.4	NP	(9.6)	3.0
Private hospital/clinic/ Tonga Family Health Association health clinic	0.6	NP	(5.9)	5.4	4.4	NP	(9.6)	3.0
Other source	3.3	NP	(11.0)	2.1	1.8	NP	(5.2)	3.9
Friend/relative	0.0	NP	(0.0)	0.0	0.0	NP	(2.6)	0.1
Overseas	3.3	NP	(11.0)	2.1	1.8	NP	(2.7)	3.7
Other	0.0	NP	(0.0)	0.0	0.6	NP	(0.0)	0.2
Missing	0.6	NP	(2.1)	2.3	1.2	NP	(0.0)	1.0
<b>Total</b>	<b>100.0</b>	<b>NP</b>	<b>(100.0)</b>	<b>100.0</b>	<b>100.0</b>	<b>NP</b>	<b>(100.0)</b>	<b>100.0</b>
<b>Number of women</b>	<b>255</b>	<b>1</b>	<b>37</b>	<b>68</b>	<b>121</b>	<b>2</b>	<b>29</b>	<b>513</b>

IUD = intrauterine device; NP = not published

<sup>1</sup> Total includes other modern methods but excludes lactational amenorrhoea method (LAM).

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Very few women (3%) use the community and private sector to obtain their contraceptive methods; 4% of women who are using a modern method of contraception reporting getting their contraceptives from other sources, mostly from overseas, friends or relatives (4%).

The type of source does differ slightly by method. The majority of women using injectable contraceptives (92%), IUD (90%) and female sterilisation (96%) obtain their drug, device or procedure from a government source. While the majority (94%) of female sterilisation is performed at the government hospital, 41% of users of birth control pills receive them from government hospitals, and 29% from the government health centre. Eleven percent of birth control pill users, 6% of injectable contraceptive users and 5% of IUD users reported receiving their contraceptive from the family planning clinic. IUD users are more likely to obtain them from public hospitals.

## 5.9 COST OF CONTRACEPTION

Although the majority of contraceptives are obtained from the public sector, information on the cost of contraception is useful to family planning programmes. This information provides guidance on price differentials among various contraceptive sources. It also gives an indication of adherence to stipulated prices by the various contraceptive sources. In the 2012 TDHS, women who were using modern methods of contraception were asked how much they paid in total the last time they obtained their contraceptive or procedure, including the cost of the drug, device or procedure, and any consultation they may have had. Table 5.11 shows the percentage of women who obtained contraceptives at no cost, and for those who paid, the median cost, by method and public–private source.

In Tonga, contraceptives are generally provided free of charge or for a nominal fee that covers the cost of the consultation. Commodities are sold at highly subsidised prices and public sector prices are low. Few respondents were able to provide cost information, which may affect the inferences drawn, but the information is useful nevertheless. Most users of contraception reported obtaining it at no cost: 89% of those who had undergone female sterilisation reported the procedure had been done at no cost to them; similarly, 90% of birth control pill users, 97% of IUD users, and 96% of injectable contraceptive users reported their contraceptives were supplied free of charge. Only two implant users reported receiving the implants free of charge, and these were not provided by the public sector. While 88% of those who received male condoms stated they were free, 5% reported not knowing the cost.

**Table 5.11: Cost of modern contraceptive methods**

*Percentage of current users of modern contraception aged 15–49 who did not pay for the method and who do not know the cost of the method and the median cost of the method by current method, according to source of current method, Tonga 2012*

Source of method/cost	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Implants	Male condom	Total
<b>Public sector</b>								
Percentage free	91.3	-	(92.9)	98.5	95.7	-	(97.1)	93.7
Do not know cost	0.0	-	(0.0)	0.0	1.3	-	(2.9)	0.5
Median cost [in TOP] <sup>1</sup>	149.0	-	-	-	9.3	-	-	24.9
<b>Number of women</b>	<b>244</b>	<b>0</b>	<b>30</b>	<b>61</b>	<b>112</b>	<b>0</b>	<b>25</b>	<b>472</b>
<b>Private medical sector/other</b>								
Percentage free	NP	NP	NP	NP	NP	NP	NP	(66.9)
Do not know cost	NP	NP	NP	NP	NP	NP	NP	(12.8)
Median cost [in TOP] <sup>1</sup>	NP	NP	NP	NP	NP	NP	NP	(39.9)
<b>Number of women</b>	<b>11</b>	<b>1</b>	<b>7</b>	<b>7</b>	<b>10</b>	<b>2</b>	<b>4</b>	<b>41</b>
<b>Totals</b>								
Percentage free	89.1	NP	(90.0)	97.4	96.1	NP	(87.5)	91.5
Do not know cost	0.8	NP	(2.1)	1.3	1.2	NP	(5.0)	1.5
Median cost [in TOP] <sup>1</sup>	149.3	NP	(9.7)	-	9.3	NP	(4.8)	29.4
<b>Number of women</b>	<b>255</b>	<b>1</b>	<b>37</b>	<b>68</b>	<b>121</b>	<b>2</b>	<b>29</b>	<b>513</b>

IUD= intrauterine device; NP = not published; TOP = Tongan pa'anga; - = not applicable

<sup>1</sup> Median cost is based only on those women who reported a cost.

Notes:

1) Table excludes lactational amenorrhoea method (LAM). Costs are based on the last time current users obtained method. Costs include consultation costs, if any.

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

3) For sterilisation, data are based on women who received the operation in the five years before the survey.



## 5.10 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 1) the potential side effects of their method, 2) what they should do if they encounter side effects or signs of a problem, and 3) 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. Table 5.12 shows the percentage of current users of modern methods who were either informed about possible side effects or problems with the method used or informed of other methods they could use; these are broken down by method type and source of the method.

About 68% of current users of modern methods received the relevant information needed to make informed choices. Family planning clinics were highly likely to inform users of modern methods about the side effects or problems of methods used (89%) and about other methods that could be used (77%), and about what to do if they experienced side effects (83%). Information varied by type of method, with IUD users receiving the least information about side effects and what to do about them.

Approximately two-thirds of clients accessing public sector services were informed of other methods or side effects, but only 61% of them were informed about what to do if they had side effects. Family planning clinics had a high percentage (89%) of their clients reporting being informed of side effects and problems of other methods compared with clients of the government hospital (68%) or government health clinics (66%). A higher percentage of women accessing private sector services tended to report being informed of side effects and what to do than among women using public sector services, but the proportion was not as high as among family planning clinic users.

**Table 5.12: Informed choice**

Among current users of modern methods aged 15–49 who started the last episode of use within the five years preceding the survey, the percentage who 1) were informed about possible side effects of or problems with that method, 2) were informed about what to do if they experienced side effects, and 3) were informed about other methods that could be used, by method and source; and among sterilised women, the percentage who were informed that the method is permanent, by initial source of method, Tonga 2012

Method/source	Among women who started last episode of modern contraceptive method within the five years preceding the survey:				Among women who were sterilised:	
	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women	Percentage who were informed that sterilisation is permanent <sup>1</sup>	Number of women
<b>Method</b>						
Female sterilisation	72.3	67.6	56.3	120	96.3	120
Birth control pill	(64.7)	(64.1)	(78.1)	33	-	0
intrauterine device	(52.7)	(48.4)	(68.1)	42	-	0
Injectable contraceptives	70.1	58.4	74.4	114	-	0
Implants	NP	NP	NP	2	-	0
Other	-	-	NP	7	-	0
<b>Initial source<sup>2</sup></b>						
Public sector	68.1	61.4	67.0	288	96.0	113
Government hospital	66.4	61.8	63.4	220	96.0	112
Government health center	(69.3)	(53.4)	(79.2)	51	NP	1
Family planning clinic	NP	NP	NP	17	NP	0
Private medical sector	NP	NP	NP	7	NP	1
Private hospital/clinic/ Tonga Family Health Association health clinic	NP	NP	NP	7	NP	1
Other private sector	NP	NP	NP	13	NP	5
Friend or relative	NP	NP	NP	1	-	0
Overseas	NP	NP	NP	12	NP	5
Other	NP	NP	NP	3	-	0
<b>Total</b>	<b>68.1</b>	<b>61.4</b>	<b>65.7</b>	<b>317</b>	<b>96.3</b>	<b>120</b>

NP = not published; - = not applicable

<sup>1</sup> Among women who were sterilised in the five years preceding the survey.

<sup>2</sup> Source at start of current episode of use.

Notes:

1) Note: Table excludes users who obtained their method from friends or relatives.

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 5.11 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 5.13 shows the percent distribution of currently married women who are not using a contraceptive method by intention to use in the future and according to number of living children.

Only 14% of currently married non-users say they intend to use family planning in the future, while 75% do not intend to use, and 10% are unsure. The proportion of those intending to use varies slightly with the number of living children, increasing from 10% for those with no children to a peak of 17% for those with two children and declining to 15% for those with four children. The proportion who do not intend to use contraception in the future is highest among those with no children (80%). Approximately three-quarters of the women with two or three children do not intend to use contraception. These findings indicate there is a need to increase the level of family planning messages and services to target groups, among all women.

**Table 5.13: Future use of contraception**

*Percent distribution of currently married women aged 15–49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Tonga 2012*

Intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	9.5	13.2	17.0	15.5	14.8	14.2
Unsure	10.4	12.3	7.2	7.8	10.1	9.7
Does not intend to use	79.7	73.2	74.8	75.3	73.2	74.8
Missing	0.4	1.3	1.0	1.4	1.9	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	174	218	219	162	378	1,152

<sup>1</sup> Includes current pregnancy.

## 5.12 REASONS FOR NOT INTENDING TO USE CONTRACEPTION

Understanding the reasons why non-users of contraception do not intend to use a contraceptive method in the future, is crucial to identifying strategies to improve the access, acceptability, and quality of care of family planning services. Table 5.14 presents the main reasons why non-users do not intend to use contraception reported by currently married women who are not currently 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 health concerns (22%); other reasons given for not intending to use contraception include fear of side effects (16%), respondent opposed (15%), religious prohibition (11%), want as many children as possible (9%), subfecund or infecund (8%), and infrequent sex or hysterectomy (2%). Only small proportions of women cited a lack of knowledge of methods, lack of access or cost as the main reason they do not intend to use family planning.

**Table 5.14: Reason for not intending to use contraception in the future**

*Percent distribution of currently married women aged 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, Tonga 2012*

Reason	Percent distribution
<b>Fertility-related reasons</b>	
Infrequent sex or no sex	1.6
Menopausal or had a hysterectomy	1.6
Subfecund or infecund	7.7
Wants as many children as possible	8.7
<b>Opposition to use</b>	
Respondent opposed	14.6
Husband or partner opposes	4.1
Others oppose	0.3
Religious prohibition	11.4
<b>Lack of knowledge</b>	
Knows no method	1.4
Knows no source	0.2
<b>Method-related reasons</b>	
Health concerns	22.2
Fear of side effects	16.3
Lack of access or too far	0.2
Cost too much	0.3
Inconvenient to use	0.8
Interfere with body's normal process	5.8
<b>Other/do not know</b>	
Other	0.2
Do not know	2.5
Missing	0.3
Total	100.0
Number of women	861

### 5.13 PREFERRED METHOD OF CONTRACEPTION FOR FUTURE USE

Of particular interest to programme managers are the preferred methods 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 family planning methods. As shown in Table 5.15, among currently married women who are not presently using contraception but intend to do so in the future, 26% expressed a preference for injectable contraceptives (26%), followed by the IUD (15%), pills (13%), female sterilisation (11%), periodic abstinence (10%) and condoms (9%).

**Table 5.15: Preferred method of contraception for future use**

*Percent distribution of currently married women aged 15–49 who are not using a contraceptive method but who intend to use in the future by preferred method, Tonga 2012*

Method	Percent distribution
Female sterilisation	11.2
Male sterilisation	0.9
Birth control pill	12.7
Intrauterine device	15.0
Injectable contraceptives	26.0
Condom	9.1
Female condom	1.1
Lactation amenorrhea	3.8
Periodic abstinence	10.2
Withdrawal	2.4
Other	0.5
Unsure	7.0
Total	100.0
Number of women	164

## **5.14 EXPOSURE TO FAMILY PLANNING MESSAGES**

The media is seen as an effective means to disseminate family planning information. To assess the extent to which various types of media serve as sources of family planning information, 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 among women and men aged 15–49 is shown in Table 5.16.

Radio is the most commonly named source of family planning messages for both women (68%) and men (57%); television was named by 58% of women and 44% of men. Newspapers were the least common source of family planning messages for both women (33%) and men (20%), while 25% of women and 38% of men did not see or hear any family planning messages on radio, TV or newspapers in the few months preceding the survey.

Exposure to family planning messages through the radio and television is more common among women than men, especially in urban areas. Exposure to family planning messages is least common in the outer islands for both women and men. As expected, exposure to family planning messages through newspapers was highest among respondents with the highest level of education, and among those in the highest wealth quintile; this was true of both women and men.

Individuals aged 15–19 (of both sexes) report the lowest exposure to family planning messages through the media: 47% of females aged 15–19 reported exposure to no family planning messages through these three media sources, as did 67% of males in this age category. These results indicate a need for programmes that target youth (with family planning messages) in their preferred media channels and information sources.

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

To determine whether non-users of family planning in Tonga 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 (Table 5.17) show that in the 12 months preceding the survey, 11% of non-users reported that they had visited a health facility and discussed family planning, and 11% of women reported that they were visited by a field worker who discussed family planning; 21% of women visited a health facility and did not discuss family planning. The majority of the women (83%) did not discuss family planning with a field worker or staff at a health facility in the prior twelve months, indicating a high percentage of women not accessing family planning messages.

Women aged 30–34 are more likely to have discussed family planning with a service provider than younger women.

Women in rural areas are more likely to have discussed family planning with health professionals than women in urban Tongatapu. Women with no education are least likely to have discussed family planning with a field worker or staff at a health facility than women with higher levels of education.

Women in the fourth highest wealth quintile are more likely to have discussed family planning through a visit by a field worker than women in the low to middle wealth quintiles. There appears to be no pattern related to the percentage of women who visited a health facility in the past 12 months and discussed family planning.

These results may indicate that some groups of women are already using contraceptive methods, or that they already have information about family planning and, therefore, do not feel the need to discuss family planning with providers, or they may be less likely to have visited a facility.

**Table 5.16: Exposure to family planning messages**

*Percentage of women and men aged 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, Tonga 2012*

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	42.8	39	22.6	47	658	27.7	19.9	7.8	67.3	311
20–24	63.1	52.4	29.6	27.8	493	43.3	32.4	12.5	52.4	221
25–29	73.9	67.8	35.1	18.5	503	57.4	46.3	17.1	37.8	193
30–34	79	67.3	39.3	15.5	410	70.6	56.8	28.7	25.6	170
35–39	78.2	64	36.2	17.2	364	62.1	51.9	17.8	34.2	150
40–44	79.5	69	40.9	16.6	362	70.8	55.3	31.3	25.8	159
45–49	76.1	60.9	36.5	19.7	277	72.5	56.1	27	23.7	132
<b>Residence</b>										
Urban	72.4	70.1	41.3	21.5	754	55.2	51	18.3	37.2	338
Rural	65.9	54.2	30.4	26.7	2,314	52.8	38.8	18.4	44	998
<b>Region</b>										
Urban Tongatapu	72.4	70.1	41.3	21.5	754	55.2	51	18.3	37.2	338
Rural Tongatapu	66.5	59.8	31.5	24.2	1,554	56.9	49.2	20	39	666
Outer islands	64.8	42.9	28	32	760	44.6	17.8	15.2	54.1	332
<b>Education</b>										
Primary or less	(51.1)	(48.5)	(27.5)	(40.8)	37	NP	NP	NP	NP	24
Secondary	65.8	55.9	30.2	27.5	2,334	50.8	39.1	15.8	45.1	1,066
More than secondary	74.4	66.2	42.8	17.5	697	64.9	55.4	30.3	30.5	246
<b>Wealth quintile</b>										
Lowest	60.5	44.1	25	32.8	557	55.4	36	18.1	41.9	275
Second	68.2	58.1	31.7	25.2	597	49.4	39.2	15.8	46.4	250
Middle	67.1	56.2	30.3	25.7	631	60.3	44.7	18.3	35.9	294
Fourth	71.4	64.8	36.5	21.7	650	49.8	42.5	16.7	46.5	272
Highest	69.6	65.6	40.8	22.6	632	51.3	47.1	23.4	41.6	245
<b>Total aged 15–49</b>	<b>67.5</b>	<b>58.1</b>	<b>33.1</b>	<b>25.4</b>	<b>3,068</b>	<b>53.4</b>	<b>41.9</b>	<b>18.4</b>	<b>42.3</b>	<b>1,336</b>
Total aged 50+	-	-	-	-	-	69.9	48.8	26.4	25.7	406
Total men aged 15+	-	-	-	-	-	57.3	43.5	20.3	38.4	1,742

NP = not published; - = not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 5.17: Contact of non-users with family planning providers**

*Among women aged 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, Tonga 2012*

Background characteristic	Women who were visited by a fieldworker who discussed family planning (%)	Women who visited a health facility in the past 12 months and:		Women who did not discuss family planning with fieldworker or at a health facility (%)	Number of women
		Discussed family planning (%)	Did not discuss family planning (%)		
<b>Age</b>					
15–19	7.1	3.3	19.3	90.8	653
20–24	12.3	8.4	20.8	83.6	449
25–29	10.9	15.1	22.5	78.6	400
30–34	15.1	19.2	18.9	74.9	288
35–39	12.4	16.3	19.7	77.6	234
40–44	12.3	9.5	26.4	82.2	232
45–49	13.6	12.0	15.9	80.2	190
<b>Residence</b>					
Urban	10.7	10.0	24.1	82.4	614
Rural	11.2	10.7	19.3	82.8	1,833
<b>Region</b>					
Urban Tongatapu	10.7	10.0	24.1	82.4	614
Rural Tongatapu	10.7	10.8	22.2	83.3	1,248
Outer islands	12.3	10.6	13.0	81.6	585
<b>Education</b>					
Primary or less	(2.1)	(10.0)	(24.0)	(87.9)	30
Secondary	11.2	10.4	19.9	82.9	1,848
More than secondary	11.3	11.0	22.1	81.9	569
<b>Wealth quintile</b>					
Lowest	9.0	10.0	18.2	85.2	399
Second	8.2	11.3	20.2	83.4	467
Middle	12.2	12.0	22.9	80.7	511
Fourth	15.2	10.0	21.7	80.0	546
Highest	10.0	9.5	18.9	84.9	523
<b>Total</b>	<b>11.1</b>	<b>10.6</b>	<b>20.5</b>	<b>82.7</b>	<b>2,447</b>

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 5.16 HUSBAND OR PARTNER'S KNOWLEDGE ABOUT A 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 or 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 husband or partner, the 2012 TDHS asked married women whether their husband or partner know they are using a method of family planning.

Table 5.18 shows that the majority of married women (82%) who are using contraception say that their husband or partner knows about their use of family planning; only 5% said that their husband or partner does not know about their use of contraception, while 12% were unsure.

**Table 5.18: Husband or partner's knowledge of a woman's use of contraception**

*Among currently married women aged 15–49 who are using contraception, percent distribution by whether they report that their husbands/partners know about their use, according to background characteristics, Tonga 2012*

Background characteristic	Knows <sup>1</sup> (%)	Does not know (%)	Unsure whether knows/missing (%)	Total (%)	Number of women
<b>Age</b>					
15–19	NP	NP	NP	NP	4
20–24	(75.8)	(15.0)	(9.2)	(100.0)	41
25–29	80.3	3.7	15.9	100.0	100
30–34	81.3	2.4	16.3	100.0	117
35–39	87.5	2.9	9.5	100.0	128
40–44	80.2	8.2	11.6	100.0	124
45–49	83.4	6.3	10.3	100.0	81
<b>Residence</b>					
Urban	77.2	7.4	15.4	100.0	131
Rural	83.7	4.8	11.5	100.0	464
<b>Region</b>					
Urban Tongatapu	77.2	7.4	15.4	100.0	131
Rural Tongatapu	84.8	4.9	10.3	100.0	297
Outer islands	81.8	4.6	13.6	100.0	167
<b>Education</b>					
Primary or less	NP	NP	NP	NP	7
Secondary	82.1	5.5	12.3	100.0	466
More than secondary	82.5	4.4	13.2	100.0	123
<b>Wealth quintile</b>					
Lowest	81.3	3.8	14.9	100.0	152
Second	86.5	5.4	8.1	100.0	125
Middle	82.3	5.6	12.1	100.0	116
Fourth	75.1	9.3	15.6	100.0	98
Highest	85.4	3.5	11.1	100.0	104
<b>Total</b>	<b>82.3</b>	<b>5.3</b>	<b>12.4</b>	<b>100.0</b>	<b>595</b>

NP = not published

<sup>1</sup> Includes women who report use of male sterilisation, male condoms or withdrawal.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

In Tonga, communication between couples about the use of family planning is relatively high for almost all background characteristics and increases with age, peaking among women aged 35–39 (excluding the youngest group, for whom data are not published). A larger proportion (84%) of women in rural Tonga say that their husband or partner are aware of their contraceptive use than in urban Tongatapu (77%).

There was no obvious correlation between increased husband's knowledge of women's use of contraception with education. Women who have completed secondary education were less likely than other education categories to say that their husbands are aware they are using contraception. Similarly, no correlation is evident with wealth quintiles.



## CHAPTER 6 OTHER PROXIMATE DETERMINANTS OF FERTILITY

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This chapter explores the principal factors, other than contraception, that affect a woman's chances of becoming pregnant. These are referred to as other proximate (or direct) determinants of fertility, and include marriage and sexual intercourse, postpartum amenorrhoea, abstinence from sexual relations, and secondary infertility (menopause). These factors interact and influence each other and affect fertility levels and trends.

The 2012 TDHS focuses on nuptiality (the frequency of marriage within a population) because marriage is the leading indicator of women's exposure to the risk of pregnancy, and is important in understanding fertility. 'Marriage' here refers to unions that are recognised by civil and religious laws as well as culturally (by the community). In most societies, marriage sanctions childbearing, and married women are exposed to a greater risk of becoming pregnant than unmarried women. Women that make up a population with a low median age at marriage tend to begin childbearing at a relatively young age, and have a high fertility level. This chapter explores trends in median age at marriage, and includes information on more direct measures of the beginning and the level of exposure to pregnancy — age at first sexual intercourse and frequency of intercourse. Measures of several other proximate determinants of fertility that also influence exposure to the risk of pregnancy — including duration of postpartum amenorrhoea, postpartum abstinence and secondary infertility (also known as menopause) — are also presented.

### 6.1 CURRENT MARITAL STATUS

The marital status of respondents at the time of the survey is presented in Table 6.1 and Figure 6.1. In Table 6.1, the term 'married' includes legal or formal marriage, while 'living together' designates an informal union. However, in some of the tables in this report, these two categories are combined and referred to collectively as 'currently married' or 'currently in union – living together'. Respondents who are widowed, divorced, or not living together (separated), make up the remainder of the 'ever married' or 'ever in union' category.

At the time of the 2012 TDHS, 57% of women were currently in union, including 4% who were living together, and 53% who were married; among men, 54% were currently in union, with 4% living together, and 50% married (Table 6.1). The results generally show that most Tongan women and men opt to get legally married, rather than live together.

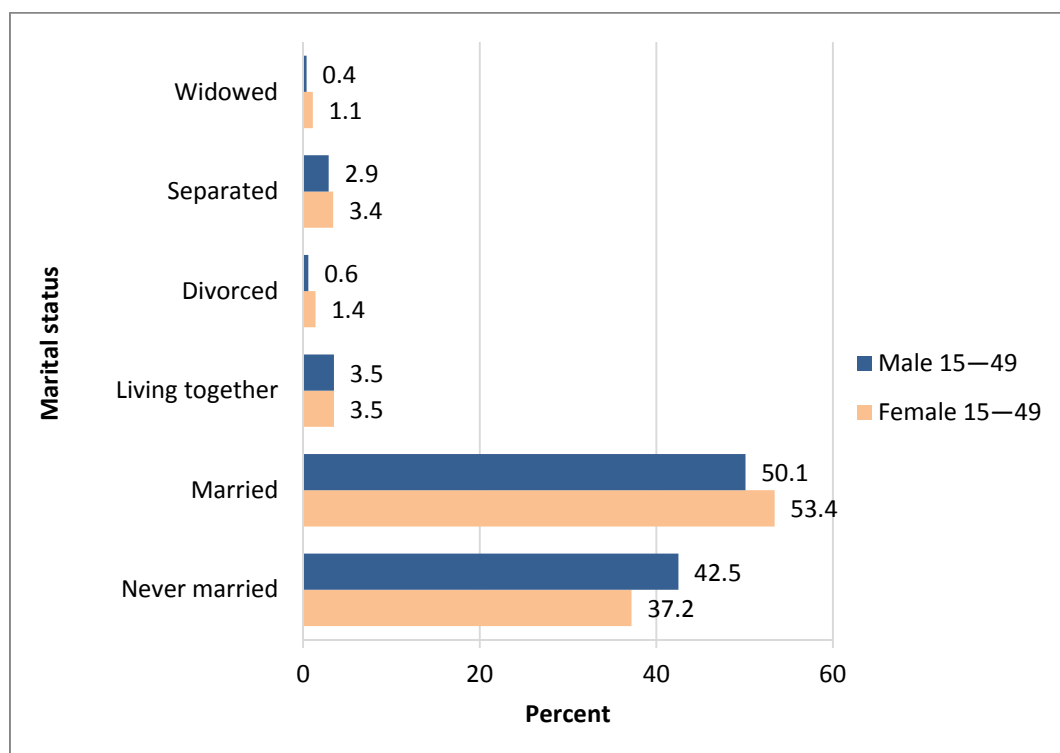
The results from Table 6.1 also show that less than 3% of young women aged 15–19 are married, with 1% living together. In contrast, young Tongan men aged 15–19 are more likely to be living together (3%) than to be married (1%). However, by age 20–24, 20% of men are married, compared with 6% that are living together; among women aged 20–24, 32% are married, and 5% are living together.

Tongan women are more likely to be divorced or separated than men. More women aged 35 and older are likely to be widowed than men in the same age range, because the average life expectancy of men is generally lower than that of women.

**Table 6.1: Current marital status***Percent distribution of women and men aged 15–49 by current marital status, according to age, Tonga 2012*

Age	Marital status						Total (%)	Respondents currently in union (%)	Respondents (number)
	Never married (%)	Married (%)	Living together (%)	Divorced (%)	Separated (%)	Widowed (%)			
<b>WOMEN</b>									
15–19	93.7	3.2	1.4	0.2	1.4	0	100	4.7	658
20–24	58.2	31.7	4.9	0.8	4	0.3	100	36.6	493
25–29	23.3	66.5	5.4	0.9	3.3	0.5	100	71.9	503
30–34	11.7	76.6	4.4	2.4	4.8	0.2	100	80.9	410
35–39	7.5	81.2	3.5	2.3	4	1.5	100	84.7	364
40–44	7.4	80.5	2.9	2.9	4.6	1.8	100	83.4	362
45–49	5.9	81.6	1.8	1.9	2.7	6.1	100	83.4	277
<b>Total women aged 15–49</b>	<b>37.2</b>	<b>53.4</b>	<b>3.5</b>	<b>1.4</b>	<b>3.4</b>	<b>1.1</b>	<b>100</b>	<b>56.9</b>	<b>3,068</b>
<b>MEN</b>									
15–19	94	1.1	3.1	0	1.8	0	100	4.2	311
20–24	69.7	19.6	5.7	0.3	4.7	0	100	25.3	221
25–29	28.4	63.9	4.1	1	2.6	0	100	68	193
30–34	20	72.9	5.1	0.3	1.8	0	100	77.9	170
35–39	10.4	80.6	2.2	2.1	4.7	0	100	82.8	150
40–44	6.7	87	1.5	1.1	1.8	2	100	88.5	159
45–49	4.8	88	1.7	0	3.9	1.6	100	89.7	132
<b>Total men aged 15–49</b>	<b>42.5</b>	<b>50.1</b>	<b>3.5</b>	<b>0.6</b>	<b>2.9</b>	<b>0.4</b>	<b>100</b>	<b>53.6</b>	<b>1,336</b>
Total men aged 50+	3.8	79.1	2.2	2.1	2.1	10.7	100	81.3	406
Total men aged 15+	33.5	56.9	3.2	1	2.7	2.8	100	60.1	1,742

**Figure 6.1: Current marital status of women and men**



## 6.2 AGE AT FIRST MARRIAGE

Although the initiation of sexual intercourse (and thus the beginning of exposure to the risk of pregnancy) may precede the start of marriage, age at first marriage is nevertheless an important social and demographic indicator. In most societies this represents the point in a person’s life when childbearing first becomes welcome. Note that in Table 6.2, ‘married’ includes ‘living together’; in Table 6.2 the age at first marriage is defined as the age at which the respondent began living with her or his first spouse or partner.

Marriage is a leading social and demographic indicator of the exposure of women to the risk of pregnancy, especially where levels of contraceptive use are low, and is therefore important in understanding fertility trends. Populations in which age at first marriage is low tend to have early childbearing and high fertility, and are likely to have a high rate of natural population increase. Early marriages in Tonga, where the use of family planning methods are not widespread, leads to early childbearing and a longer period of exposure of women to reproductive risks, which in turn leads to high cumulative fertility levels. Table 6.2 presents the percentage of women and men who are married (by specific ages), and the median age at first marriage, according to the age of the respondent at the time of the survey.

Trends in age at first marriage for people of different age cohorts are described by comparing the cumulative distribution for successively younger age groups. When drawing conclusions concerning trends, the data for the oldest age cohorts must be interpreted cautiously because respondents may not recall dates or their age at marriage with accuracy; many respondents may not have consulted their marriage certificates at the time of the interview, and so would have guessed at ages or dates.

For each cohort, the accumulated percentages stop at the lower age boundary of the cohort to avoid censoring problems. For example, for the cohort currently aged 20–24, accumulation stops with the percentage married by the exact age of 20. As a measure of central tendency, the median age at first marriage is used. The median is defined as the age by which half of the cohort has married, not the age by which half of those married have started living with their spouse. The median is preferred over the mean as a measure of central tendency because, unlike the mean, it can be estimated for all cohorts where at least half are ever married at the time of survey.

Although women can legally marry in Tonga when they reach age 15, parental consent is required for marriages of both females and males under age 18. Among women aged 20–49, less than 1% were married at age 15, 7% were married by age 18, and 18% by age 20. The median age at first marriage among women aged 25–49 is 24. The trend has remained about the same for women marrying at very young ages, as less than 1% of women aged 15–19 are married at age 15.

Among men aged 20–49, less than 1% were married at age 15, while a little over 6% were married by age 18. By age 20, 15% of men were married, compared with 18% of Tongan women. According to the 2012 TDHS, the median age at first marriage for men aged 25–49 is 25 years (about one year more than the median age at first marriage for women aged 25–49).

**Table 6.2: Age at first marriage**

*Percentage of women and men aged 15–49 who were first married by specific exact ages and median age at first marriage, according to current age, Tonga 2012*

Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
<b>WOMEN</b>								
Age								
15–19	0.2	-	-	-	-	93.7	658	<sup>a</sup>
20–24	0.3	5.6	19.0	-	-	58.2	493	<sup>a</sup>
25–29	0.5	8.5	18.2	38.5	64.3	23.3	503	23.3
30–34	0.4	8.3	19.0	34.3	58.1	11.7	410	23.8
35–39	1.7	8.3	18.0	34.0	58.1	7.5	364	23.6
40–44	0.4	5.3	19.8	36.3	62.8	7.4	362	23.5
45–49	0.3	4.5	14.9	30.4	53.7	5.9	277	24.3
20–49	0.6	6.9	18.3	-	-	21.7	2,410	<sup>a</sup>
25–49	0.6	7.3	18.1	35.2	60.0	12.3	1,917	23.6
<b>MEN</b>								
Age								
15–19	0.3	-	-	-	-	94.0	311	<sup>a</sup>
20–24	1.7	6.0	14.8	-	-	69.7	221	<sup>a</sup>
25–29	0.6	5.9	9.8	21.1	54.5	28.4	193	24.6
30–34	0.0	3.7	12.5	29.0	48.3	20.0	170	25.3
35–39	0.0	10.5	19.5	29.3	51.5	10.4	150	24.7
40–44	0.0	6.0	18.5	29.0	46.9	6.7	159	25.4
45–49	0.0	6.6	17.4	28.2	49.8	4.8	132	25.0
20–49	0.5	6.3	15.1	-	-	26.9	1,025	<sup>a</sup>
25–49	0.1	6.5	15.1	27.0	50.4	15.1	804	25.0
20+	0.5	6.2	14.9	-	-	20.3	1,431	<sup>a</sup>
25+	0.3	6.3	15.0	27.3	49.8	11.3	1,210	<sup>a</sup>

- = not applicable due to censoring

<sup>a</sup> = omitted because less than 50% of the women or men married for the first time before reaching the beginning of the age group

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

### 6.3 MEDIAN AGE AT FIRST MARRIAGE

The median age at first marriage for women by current age and background characteristics is shown in Table 6.3, and for men in Table 6.4. Overall, urban women in Tonga aged 25–49 marry about a year later (age 24) than rural women in the same age group. The pattern of median age at first marriage by wealth index shows that women from the poorest households marry earlier than women from wealthier households, which is not surprising.

**Table 6.3: Median age at first marriage —Women**

Median age at first marriage among women by five-year age groups, for all women aged 25–49, according to background characteristics, Tonga 2012

Background characteristic	Age					All women aged 25–49
	25–29	30–34	35–39	40–44	45–49	
<b>Residence</b>						
Urban	23.9	24.4	25.0	24.2	25.9	24.3
Rural	23.1	23.5	23.4	23.3	24.0	23.4
<b>Region</b>						
Urban Tongatapu	23.9	24.4	25.0	24.2	25.9	24.3
Rural Tongatapu	23.0	22.9	23.3	23.0	23.9	23.1
Outer islands	23.2	25.0	23.7	23.8	24.2	23.8
<b>Education</b>						
Primary or less	22.2	20.7	-	21.9	-	<sup>a</sup>
Secondary	22.3	22.9	22.7	22.9	23.5	22.8
More than secondary	24.6	26.1	26.1	25.7	26.4	<sup>a</sup>
<b>Wealth quintile</b>						
Lowest	21.7	21.9	22.6	21.9	24.9	22.3
Second	23.2	22.5	23.1	22.6	23.1	22.9
Middle	23.9	23.8	24.4	23.0	23.4	23.7
Fourth	24.0	25.9	25.1	24.8	24.4	24.7
Highest	24.0	25.3	25.0	24.6	27.1	25.0
<b>Total</b>	<b>23.3</b>	<b>23.8</b>	<b>23.6</b>	<b>23.5</b>	<b>24.3</b>	<b>23.6</b>

<sup>a</sup> = omitted because less than 50% of the women married for the first time before reaching the beginning of the age group

- = not applicable due to censoring

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

There is less than one year age difference for urban–rural age at first marriage for men aged 50+ (Table 6.4) (26 for urban men, 25 for rural men). The median age at first marriage for men ranges from 25 for men aged 50+ with primary education or less, to 27 for men with more than secondary education. The pattern by wealth quintile shows that men from the poorest households marry later than men from wealthier households, which is the not the same pattern that is seen among Tongan women.

**Table 6.4: Median age at first marriage — Men**

Median age at first marriage among men by five-year age groups, for men aged 25+, according to background characteristics, Tonga 2012

Background characteristic	Age						Men age 25+
	25–29	30–34	35–39	40–44	45–49	50+	
<b>Residence</b>							
Urban	24.1	25.4	29.5	27.5	26.4	25.8	<sup>a</sup>
Rural	24.7	25.3	23.8	25.1	24.7	25.1	24.8
<b>Region</b>							
Urban Tongatapu	24.1	25.4	29.5	27.5	26.4	25.8	<sup>a</sup>
Rural Tongatapu	24.8	25.0	23.4	24.8	23.3	25.5	24.6
Outer islands	24.6	26.4	25.2	25.3	26.2	24.7	<sup>a</sup>
<b>Education</b>							
Primary or less	-	29.2	-	24.7	24.3	24.9	<sup>a</sup>
Secondary	24.8	24.6	24.5	25.1	25.1	24.7	24.8
More than secondary	23.7	27.0	26.0	26.7	25.0	26.5	<sup>a</sup>
<b>Wealth quintile</b>							
Lowest	24.7	24.2	25.0	25.3	23.3	26.4	24.9
Second	24.9	24.1	23.5	25.0	24.5	24.7	24.5
Middle	23.9	26.6	24.5	27.8	26.0	24.6	<sup>a</sup>
Fourth	24.8	24.8	27.6	25.0	26.9	26.2	<sup>a</sup>
Highest	24.7	27.3	24.2	25.1	22.9	25.3	<sup>a</sup>
<b>Total</b>	<b>24.6</b>	<b>25.3</b>	<b>24.7</b>	<b>25.4</b>	<b>25.0</b>	<b>25.3</b>	<b><sup>a</sup></b>

<sup>a</sup> = omitted because less than 50% of the men married for the first time before reaching the beginning of the age group; - = not applicable due to censoring

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

## 6.4 AGE AT FIRST SEXUAL INTERCOURSE

The 2012 TDHS collected data on age at first sexual intercourse. Less than 1% of women aged 25–49 are sexually active by age 15, but 6% are active by age 18 (Table 6.5). The cumulative percentage of sexually active women increases thereafter, reaching 18% by age 20 and 63% by age 25. However, the median age at first sex for women aged 25–49 is 24, a relatively mature age by international standards.

Sexual activity among men also begins late. Less than 1% of men aged 25–49 are sexually active by age 15, but this increases to 25% by age 20 (indicating 7% more men are active by this age than are women). The median age at first sexual intercourse for men aged 25–49 is 24 (the same age as for women).

**Table 6.5: Age at first sexual intercourse**

*Percentage of women and men aged 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, Tonga 2012*

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>								
15–19	0.7	-	-	-	-	92.4	658	<sup>a</sup>
20–24	0.3	5.4	18.3	-	-	56.8	493	<sup>a</sup>
25–29	0.2	6.8	18.8	36.7	63	21.8	503	23.4
30–34	0	7.1	18.5	33.2	54.9	10	410	24.2
35–39	0.8	7.5	17.7	32.7	55.3	6.9	364	23.9
40–44	0.4	4	19.2	34.5	59.9	5.8	362	23.6
45–49	0	7.2	16	31.4	54.2	5.6	277	24.1
20–49	0.3	6.3	18.2	-	-	20.4	2,410	<sup>a</sup>
25–49	0.3	6.5	18.2	34	57.9	11.1	1,917	23.8
15–24	0.5	-	-	-	-	77.2	1,151	<sup>a</sup>
<b>MEN</b>								
15–19	1.4	-	-	-	-	85.5	311	<sup>a</sup>
20–24	0.6	10.6	29.6	-	-	48.7	221	<sup>a</sup>
25–29	1.1	11.1	21.8	33.6	63.4	20.2	193	23.7
30–34	0	13.2	25.5	37.9	58	12.9	170	23.8
35–39	0	12.1	24.7	38.7	57.8	7.1	150	23.7
40–44	0	7.3	26.3	39.2	55.6	4.1	159	24.1
45–49	0	9	26.5	38.5	57.2	3.7	132	23
20–49	0.3	10.6	25.8	-	-	18.6	1,025	-
25–49	0.3	10.6	24.8	37.4	58.7	10.3	804	23.7
15–24	1.1	-	-	-	-	70.2	532	<sup>a</sup>
20+	0.5	10.1	24.3	-	-	14	1,431	<sup>a</sup>
25+	0.5	10	23.4	36.3	58.1	7.7	1,210	23.8

- = not applicable due to censoring;

<sup>a</sup> = omitted because less than 50% of the respondents had intercourse for the first time before reaching the beginning of the age group

## 6.5 MEDIAN AGE AT FIRST SEXUAL INTERCOURSE

The median age at first sexual intercourse by current age and background characteristics is shown in Table 6.6 for women and Table 6.7 for men. Note that the median age in Tables 6.6 and 6.7 is defined as the exact age by which 50% of an age cohort had sexual intercourse for the first time. The tables are used to describe differences in age at first intercourse between Tongan population subgroups, and to examine trends within these subgroups.

For both men and women aged 25–49, the median age at first sexual intercourse in rural areas (24) is just over one year lower than the median age at first sexual intercourse in the urban area (25).

Examination by education levels reveals that women with no education or some primary education engage in sexual relations earlier than women with more than a secondary education. A similar trend is noted for

men in that those with low education levels engage in first sexual intercourse earlier in life compared to those with higher levels of education. The effect of household wealth on the initiation of sexual intercourse is obvious among women: women in the poorest households are more likely to engage in sexual activity at a younger age than women in higher wealth quintile households.

**Table 6.6: Median age at first intercourse — Women**

*Median age at first sexual intercourse among women by five-year age groups, aged 25–49, according to background characteristics, Tonga 2012*

Background characteristic	Age					Women age 25–49
	25–29	30–34	35–39	40–44	45–49	
<b>Residence</b>						
Urban	24.2	25.3	25.3	25.2	25.9	24.9
Rural	23.1	23.9	23.7	23.3	23.8	23.5
<b>Region</b>						
Urban Tongatapu	24.2	25.3	25.3	25.2	25.9	24.9
Rural Tongatapu	23.1	23.4	23.6	23.1	24.0	23.4
Outer islands	23.2	24.5	23.7	23.6	23.7	23.7
<b>Education</b>						
Primary or less	22.2	20.7	-	26.1	-	<sup>a</sup>
Secondary	22.4	23.3	22.9	22.8	23.4	22.9
More than secondary	24.8	26.6	25.8	26.4	28.3	<sup>a</sup>
<b>Wealth quintile</b>						
Lowest	21.7	21.8	22.6	22.0	25.3	22.3
Second	23.2	22.9	23.1	23.0	22.6	23.0
Middle	23.6	24.1	25.3	24.2	23.3	23.9
Fourth	24.2	26.0	25.0	25.3	25.1	24.9
Highest	24.5	26.0	25.1	24.9	26.9	<sup>a</sup>
<b>Total</b>	<b>23.4</b>	<b>24.2</b>	<b>23.9</b>	<b>23.6</b>	<b>24.1</b>	<b>23.8</b>

- = not applicable due to censoring

<sup>a</sup> = omitted because less than 50% of the women had intercourse for the first time before reaching the beginning of the age group

**Table 6.7: Median age at first intercourse — Men**

*Median age at first sexual intercourse among men by five-year age groups, aged 25+, according to background characteristics, Tonga 2012*

Background characteristic	Age						Men aged 25+
	25–29	30–34	35–39	40–44	45–49	50+	
<b>Residence</b>							
Urban	23.7	23.7	28.3	25.3	26.5	24.4	24.6
Rural	23.7	23.8	23.2	22.8	22.6	23.9	23.5
<b>Region</b>							
Urban Tongatapu	23.7	23.7	28.3	25.3	26.5	24.4	24.6
Rural Tongatapu	23.9	23.6	23.1	22.7	22.3	23.7	23.3
Outer islands	22.7	24.6	23.5	23.0	25.3	24.2	24.0
<b>Education</b>							
Primary or less	-	29.2	25.2	24.7	22.3	25.2	<sup>a</sup>
Secondary	23.9	23.4	23.8	24.0	22.8	23.7	23.6
More than secondary	23.0	25.4	23.5	24.1	27.8	25.0	24.3
<b>Wealth quintile</b>							
Lowest	24.2	22.1	23.5	24.2	21.9	25.5	24.1
Second	24.2	22.1	23.3	24.4	24.1	23.6	23.6
Middle	22.8	27.1	23.3	25.8	22.9	24.6	24.1
Fourth	23.6	24.0	25.4	22.2	29.5	22.7	23.8
Highest	23.9	24.4	23.0	24.6	21.8	23.6	23.8
<b>Total</b>	<b>23.7</b>	<b>23.8</b>	<b>23.7</b>	<b>24.1</b>	<b>23.0</b>	<b>24.1</b>	<b>23.8</b>

- = not applicable due to censoring

<sup>a</sup> = omitted because less than 50% of the men had intercourse for the first time before reaching the beginning of the age group

## 6.6 RECENT SEXUAL ACTIVITY

In societies with low contraception use, the probability of a woman becoming pregnant is closely related to her exposure to and frequency of sexual intercourse. Information on recent sexual activity is, therefore, a useful measure of exposure to the risk of pregnancy. The 2012 TDHS asked women and men about the timing of their last sexual intercourse. Tables 6.8 and 6.9 present the percent distribution of women and men (respectively) by the timing of their last sexual intercourse, according to their background characteristics. Respondents are considered to be sexually active if they have had sexual intercourse at least once in the four weeks preceding the survey.

Among women aged 15–49, 43% were sexually active in the four weeks prior to the survey; 13% reported having sex within the past year but not in the four weeks prior to the survey; and about 8% reported having had sex, but were not sexually active in the 12 months preceding the survey. The highest level of recent sexual activity was observed among women aged 35–39. The proportion of married women who were sexually active in the four weeks preceding the survey increases with age, peaking at 66% for women aged 35–39, and declining for older women. Women in rural areas are more likely to have had sex in the four weeks preceding the survey (44%) than urban women (40%). Rates of recent sexual activity are highest in the outer islands (49%). With regard to education, it appears that education is not a determinant of recent sexual experiences; however, a slightly lower proportion of women with lower education levels were sexually active in the four weeks preceding the survey than women with higher levels of education.



**Table 6.8: Recent sexual activity — Women***Percent distribution of women aged 15–49 by timing of last sexual intercourse, according to background characteristics, Tonga 2012*

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	3.2	2.4	1.8	0.1	92.4	100.0	658
20–24	26.3	12.7	3.8	0.4	56.8	100.0	493
25–29	55.9	14.6	7.5	0.2	21.8	100.0	503
30–34	61.6	16.9	10.3	1.2	10.0	100.0	410
35–39	66.4	16.9	8.8	0.9	6.9	100.0	364
40–44	63.7	15.1	14.7	0.7	5.8	100.0	362
45–49	57.6	18.8	17.2	0.8	5.6	100.0	277
<b>Marital status</b>							
Never married	0.1	1.0	2.1	0.2	96.6	100.0	1,140
Married or living together	75.0	19.4	5.1	0.6	0.0	100.0	1,747
Divorced, separated or widowed	3.2	21.6	72.8	2.4	0.0	100.0	181
<b>Marital duration<sup>2</sup></b>							
0–4 years	71.8	24.6	3.0	0.5	0.0	100.0	405
5–9 years	79.3	16.5	4.0	0.3	0.0	100.0	314
10–14 years	80.8	15.4	3.5	0.3	0.0	100.0	257
15–19 years	77.3	17.0	4.2	1.6	0.0	100.0	232
20–24 years	69.1	20.6	9.2	1.1	0.0	100.0	185
25+ years	71.7	21.8	5.7	0.9	0.0	100.0	81
Married more than once	72.1	19.3	8.5	0.0	0.0	100.0	273
<b>Residence</b>							
Urban	40.4	12.0	9.2	1.0	37.4	100.0	754
Rural	43.7	12.9	7.5	0.4	35.4	100.0	2,314
<b>Region</b>							
Urban Tongatapu	40.4	12.0	9.2	1.0	37.4	100.0	754
Rural Tongatapu	41.3	14.5	8.3	0.1	35.9	100.0	1,554
Outer islands	48.8	9.8	6.0	1.1	34.4	100.0	760
<b>Education</b>							
Primary or less	(39.5)	(11.4)	(15.5)	(1.9)	(31.7)	(100.0)	37
Secondary	42.5	13.2	7.9	0.5	35.9	100.0	2,334
More than secondary	44.6	10.9	7.9	0.5	36.0	100.0	697
<b>Wealth quintile</b>							
Lowest	52.1	13.5	8.1	0.2	26.0	100.0	557
Second	45.8	13.5	6.7	0.6	33.4	100.0	597
Middle	39.8	14.5	8.9	0.4	36.4	100.0	631
Fourth	39.0	12.9	8.0	0.5	39.6	100.0	650
Highest	39.3	9.1	8.1	1.0	42.6	100.0	632
<b>Total</b>	<b>42.9</b>	<b>12.7</b>	<b>8.0</b>	<b>0.5</b>	<b>35.9</b>	<b>100.0</b>	<b>3,068</b>

<sup>1</sup> Excludes women who had sexual intercourse within the last four weeks.<sup>2</sup> Excludes women who are not currently married.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Overall, men aged 15–49 are just as likely as women to have had recent sexual intercourse (Table 6.9), and display similar levels according to various background characteristics as do women. About 45% of men aged 15–49 had sexual intercourse in the four weeks preceding the survey, 13% had sexual intercourse in the year preceding the survey but not in the previous four weeks, 7% had sex one or more years before the survey, and 34% had never had sexual intercourse (compared to 36% of women). Men's sexual activity patterns are quite similar to those of women but at slightly higher levels.

As is the case with women, men who are currently married or living with a woman are most likely to have had recent sexual intercourse: 79% compared with 5% of never married men. Recent sexual activity is higher among men in rural areas (46%) than among men in the urban area (44%) and is highest in the outer islands (52%). The percentage of men with more than secondary level education who have had recent sexual intercourse is higher (54%) than men with only secondary education (43%). Similarly, the percentage of men with only secondary level education who have never had sexual intercourse is higher (37%) than men with secondary or higher levels of education (24%). This pattern is significantly different than for women. There is no distinctive pattern in men's sexual activity by level of household wealth.

**Table 6.9: Recent sexual activity — Men***Percent distribution of men aged 15–49 by timing of last sexual intercourse, according to background characteristics, Tonga 2012*

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the 4 weeks preceding the survey	Within 1 year of the survey <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15–19	4.0	7.7	2.8	0.0	85.5	100.0	311
20–24	24.2	18.3	8.5	0.3	48.7	100.0	221
25–29	61.3	11.3	6.7	0.5	20.2	100.0	193
30–34	68.1	10.6	7.6	0.9	12.9	100.0	170
35–39	66.5	15.6	8.1	2.8	7.1	100.0	150
40–44	74.3	13.4	7.3	0.9	4.1	100.0	159
45–49	64.1	20.0	11.2	1.1	3.7	100.0	132
<b>Marital status</b>							
Never married	4.8	6.5	8.2	0.1	80.4	100.0	567
Married or living together	79.2	16.4	3.1	1.3	0.0	100.0	716
Divorced, separated or widowed	15.5	39.9	44.6	0.0	0.0	100.0	53
<b>Marital duration<sup>2</sup></b>							
0–4 years	74.4	23.0	2.0	0.6	0.0	100.0	146
5–9 years	81.8	14.5	1.9	1.8	0.0	100.0	88
10–14 years	77.6	13.3	4.0	5.1	0.0	100.0	82
15–19 years	73.0	21.3	4.5	1.3	0.0	100.0	63
20–24 years	83.7	9.2	7.1	0.0	0.0	100.0	54
25+ years	68.2	20.5	11.2	0.0	0.0	100.0	27
Married more than once	83.3	14.2	1.7	0.8	0.0	100.0	256
<b>Residence</b>							
Urban	43.7	14.4	8.6	0.7	32.6	100.0	338
Rural	45.6	12.7	6.3	0.8	34.7	100.0	998
<b>Region</b>							
Urban Tongatapu	43.7	14.4	8.6	0.7	32.6	100.0	338
Rural Tongatapu	42.3	13.8	6.7	0.7	36.6	100.0	666
Outer islands	52.2	10.4	5.5	1.0	30.9	100.0	332
<b>Education</b>							
Primary or less	NP	NP	NP	NP	NP	NP	24
Secondary	43.1	13.5	5.9	0.7	36.8	100.0	1,066
More than secondary	53.5	10.9	10.9	1.0	23.7	100.0	246
<b>Wealth quintile</b>							
Lowest	51.5	14.5	5.7	0.4	27.8	100.0	275
Second	47.4	12.4	5.3	0.0	34.8	100.0	250
Middle	42.2	12.6	6.7	1.7	36.9	100.0	294
Fourth	38.6	14.5	9.6	1.5	35.7	100.0	272
Highest	46.2	11.3	6.9	0.0	35.6	100.0	245
<b>Total men aged 15–49</b>	<b>45.1</b>	<b>13.1</b>	<b>6.9</b>	<b>0.8</b>	<b>34.2</b>	<b>100.0</b>	<b>1,336</b>
Total men aged 50+	34.5	18.4	39.1	5.5	2.4	100.0	406
Total men aged 15+	42.6	14.3	14.4	1.9	26.8	100.0	1,742

NP = not published

<sup>1</sup> Excludes men who had sexual intercourse within the last four weeks.<sup>2</sup> Excludes men who are not currently married.

## 6.7 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. Among women who do not using contraception, exposure to the risk of pregnancy in the period following birth is determined by two major factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding, which can lengthen the duration of amenorrhoea, or by delayed resumption of sexual activity (postpartum abstinence). In Table 6.10, the percentage of births for which mothers are postpartum amenorrhoeic and abstaining is presented, along with the percentage of births for which mothers are defined as still

postpartum insusceptible (i.e. either amenorrhoeic or abstaining or both). These women are classified as not exposed (i.e. insusceptible) to the risk of pregnancy.

At the time of the survey, 24% of women who had given birth during the three years preceding the survey were insusceptible because they were still amenorrhoeic (14%) or still abstaining (17%) or both.

**Table 6.10: 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, Tonga 2012*

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible <sup>1</sup>	
< 2	(80.7)	(94.2)	(96.1)	40
2–3	33.6	45.8	59.5	54
4–5	31.1	35.0	53.9	70
6–7	19.7	29.2	41.3	79
8–9	24.1	15.1	34.3	47
10–11	19.2	25.6	38.7	51
12–13	(16.4)	(11.5)	(24.6)	45
14–15	6.9	13.4	20.3	57
16–17	9.1	10.6	19.7	71
18–19	(5.2)	(1.6)	(6.8)	46
20–21	(6.3)	(9.2)	(15.5)	49
22–23	(0.0)	(1.9)	(1.9)	41
24–25	5.7	4.5	10.2	56
26–27	5.2	5.0	9.2	71
28–29	3.2	5.1	8.2	71
30–31	0.0	7.1	7.1	62
32–33	0.0	5.5	5.5	82
34–35	(0.0)	(3.0)	(3.0)	46
<b>Total</b>	<b>13.6</b>	<b>17.0</b>	<b>24.4</b>	<b>1,040</b>
<b>Median</b>	<b>2.2</b>	<b>2.8</b>	<b>4.6</b>	<b>-</b>
<b>Mean</b>	<b>5.7</b>	<b>6.7</b>	<b>9.4</b>	<b>-</b>

- = not applicable

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

Notes: 1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

2) Estimates are based on status at the time of the survey.

The proportion of women remaining amenorrhoeic, abstaining or insusceptible declines as duration since birth increases. Within the first two to three months after birth, 60% of women in Tonga are insusceptible to pregnancy, 34% are amenorrhoeic, and 46% are abstaining from sex. After six months (the recommended duration of exclusive breastfeeding), 41% of mothers are still insusceptible to the risk of pregnancy. After 24 months, 10% of mothers are still insusceptible (6% amenorrhoeic, 4% abstaining). By 34–35 months after birth, 3% of mothers are insusceptible (3% abstaining).

The median duration of postpartum insusceptibility is 4.6 months; the median duration for postpartum amenorrhoea is 2.2 months, and for postpartum sexual abstinence 2.2 months.

## 6.8 MEDIAN DURATION OF POSTPARTUM INSUSCEPTIBILITY BY BACKGROUND CHARACTERISTICS

The median duration of postpartum amenorrhoea, abstinence and insusceptibility by various background characteristics is presented in Table 6.11. The median duration of postpartum amenorrhoea and postpartum abstinence is longer for women less than 30 years of age than for women aged over 30, which causes a disparity in postpartum insusceptibility of almost one month between women under 30, and those over 30. The median duration of postpartum amenorrhoea and postpartum abstinence is higher in rural Tongatapu than elsewhere; accordingly, postpartum abstinence varies by place of residence (almost seven months in rural Tongatapu, four months in the outer islands, and less than four months in urban Tongatapu). Although there is no clear pattern across wealth quintiles, postpartum insusceptibility is six months in lowest wealth quintile households as compared to four months in the highest wealth quintile households.

**Table 6.11: 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, Tonga 2012*

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility <sup>1</sup>
<b>Mother's age</b>			
15–29	2.4	3.4	5.1
30–49	1.9	2.2	4.2
<b>Residence</b>			
Urban	1.6	2.3	3.5
Rural	2.4	3.1	5.9
<b>Region</b>			
Urban Tongatapu	1.6	2.3	3.5
Rural Tongatapu	3.0	3.4	6.9
Outer islands	1.5	2.3	4.0
<b>Education</b>			
Primary or less	1.6	1.6	1.6
Secondary	2.2	3.3	5.2
More than secondary	2.4	2.1	3.8
<b>Wealth quintile</b>			
Lowest	2.3	3.3	6.3
Second	2.1	2.4	3.8
Middle	2.9	3.4	4.3
Fourth	1.1	2.3	5.7
Highest	1.8	2.5	4.0
<b>Total</b>	<b>2.2</b>	<b>2.8</b>	<b>4.6</b>

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

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

## 6.9 MENOPAUSE

Another factor that influences the risk of pregnancy among women older than 30 years of age is menopause. Table 6.12 presents an important indicator concerning fecundity as measured by evidence of menopause. The lack of a menstrual period in the six months preceding the survey among women who are neither pregnant nor postpartum amenorrhoeic is taken as evidence of menopause and, therefore, infecundity. Although the onset of menopause is difficult to determine for an individual woman, methods are available for estimating the proportion of women who are menopausal for the population as a whole. For this analysis, a woman is considered menopausal if she is neither pregnant nor postpartum amenorrhoeic but did not have a menstrual period in the six months preceding the survey.

Table 6.12 summarises the percentage of women aged 30–49 who are menopausal. According to the 2012 TDHS, 6% of women aged 30–49 are menopausal. The proportion of women who are menopausal rises with age from about 2% for the 30–34 age group, to 28% for the 48–49 age group. It is clear that the onset of infertility with increasing age reduces the proportion of women who are exposed to the risk of pregnancy.

**Table 6.12: Menopause**

*Percentage of women aged 30–49 who are menopausal, by age, Tonga 2012*

Age	Percentage menopausal <sup>1</sup>	Number of women
30–34	2.1	410
35–39	2.9	364
40–41	7.8	146
42–43	2.9	143
44–45	7.2	147
46–47	12.8	105
48–49	28.1	98
<b>Total</b>	<b>6.1</b>	<b>1,414</b>

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

## **CHAPTER 7      FERTILITY PREFERENCES**

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Future reproductive preferences are of fundamental importance for population policy and family planning programmes. In Tonga attempts to institute a population policy have had limited success, and the use of family planning by couples remains relatively limited, making it crucial to gain insights into the fertility preferences of the population, and to assess the potential demand for family planning. In the 2012 TDHS, 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 the desire of Tongan couples to cease childbearing or delay their next pregnancy, and explores the extent to which contraceptive behaviour diverges from expressed fertility desires.

A woman's fertility preferences are subjective and do not necessarily predict her reproductive behaviour, because a woman's childbearing decisions are frequently influenced 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, TDHS 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 sterilised 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, sterilised 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: Fertility preferences by number of living children**

Percent distribution of currently married women and currently married men aged 15–49 by desire for children, according to number of living children, Tonga 2012

Desire for children	Number of living children							Total aged 15–49	Aged 50+	Total men aged 15+
	0	1	2	3	4	5	6+			
WOMEN <sup>1</sup>										
Have another soon <sup>2</sup>	64.4	37.7	27.6	17.6	10.0	10.5	3.4	22.8	-	-
Have another later <sup>3</sup>	2.3	30.8	28.4	25.0	12.0	8.3	2.6	16.5	-	-
Have another, undecided when	7.1	7.8	4.0	3.1	1.9	0.8	0.5	3.5	-	-
Undecided	7.7	7.7	8.7	10.6	8.0	8.2	7.0	8.3	-	-
Want no more	6.4	11.1	25.0	28.6	42.8	46.4	49.2	30.7	-	-
Sterilised <sup>4</sup>	0.5	1.2	3.8	10.9	21.7	23.3	33.0	13.9	-	-
Declared infecund	10.8	3.2	2.2	3.7	3.2	2.2	3.8	3.9	-	-
Missing	0.8	0.5	0.2	0.6	0.3	0.3	0.4	0.4	-	-
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	-	-
<b>Number</b>	<b>179</b>	<b>264</b>	<b>297</b>	<b>254</b>	<b>263</b>	<b>193</b>	<b>298</b>	<b>1,747</b>	-	-
MEN <sup>5</sup>										
Have another soon	40.8	40.6	29.4	19.9	19.1	7.5	7.3	24.3	4.2	17.9
Have another later	12.1	28.6	29.9	17.8	16.9	7.1	7.7	18.1	1.1	12.7
Have another, undecided when	9.2	3.0	5.8	8.0	8.0	11.3	2.1	6.4	0.0	4.4
Undecided	16.9	4.4	4.0	6.7	5.2	5.5	5.5	6.7	2.4	5.3
Want no more	12.7	18.8	28.9	43.4	45.2	56.1	66.0	38.1	84.8	52.8
Sterilised	1.7	1.5	0.0	1.9	4.2	8.8	7.2	3.4	4.2	3.6
Declared infecund	3.7	0.4	0.0	0.0	0.7	0.0	0.0	0.6	1.9	1.0
Missing	2.8	2.5	2.0	2.2	0.6	3.8	4.2	2.6	1.4	2.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>89</b>	<b>127</b>	<b>110</b>	<b>108</b>	<b>96</b>	<b>74</b>	<b>112</b>	<b>716</b>	<b>330</b>	<b>1,046</b>

- = not applicable

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

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

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

<sup>4</sup> Includes both female and male sterilisation.

<sup>5</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

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. There is considerable desire among married Tongan women and men to control the timing and especially the number of births: 17% of currently married women and 18% of currently married men would like to wait for two or more years for the next birth, while 31% of women and 38% of men do not want to have another child. Taking into account the 14% of currently married women and 3% of currently married men who are sterilised, about 61% of currently married Tongan women and 59% of men want to delay or limit childbearing. This greatly exceeds the approximately 23% of women and 24% of men (aged 15–49) who would like to have another child within the next two years. The remaining women and men are undecided about their fertility desires or say they are unable to get pregnant (infecund).

The results show that Tongan men and women hold similar views regarding postponement of childbearing. Overall, the preference of Tongan men and women is for termination of childbearing, although the relatively high proportions who say they want another child within the next two years are worth noting.

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 very high for those who do not yet have any children, and tapers off with increasing numbers of living children. The TDHS results show a high proportion (64%) of childless currently married women want their first birth soon; among men, the figure is 41%. After having one child the desire to have another child within two years remains high for both Tongan men (41%) and women (38%). After having two children, most Tongan men and women express a desire to delay future births more than two years, or to not have additional children. The

percentage of Tongan women who want no more children rises steeply after they have had four births (43%). For Tongan men a similar pattern is observed, but earlier: after having three children, 43% do not want more.

**Table 7.2: Desire to limit childbearing — Women**

*Percentage of currently married women aged 15–49 who want no more children, by number of living children, according to background characteristics, Tonga 2012*

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Age</b>								
15-19	0.0	20.4	-	-	-	-	-	16.6
20-24	3.9	7.6	29.6	11.4	16.6	47.0	-	13.4
25-29	0.0	7.1	12.7	23.4	47.2	49.4	80.9	18.8
30-34	0.0	6.4	32.4	37.8	64.2	51.2	71.2	41.7
35-39	5.6	16.9	32.4	49.6	61.7	74.7	77.9	54.9
40-44	30.5	32.1	47.0	63.5	68.7	84.5	84.6	69.6
45-49	28.9	24.6	63.2	52.9	85.4	71.3	90.8	71.1
<b>Residence</b>								
Urban	16.9	30.0	37.7	49.6	70.3	70.4	88.4	49.6
Rural	3.2	5.7	25.5	36.0	63.0	69.5	81.0	43.1
<b>Region</b>								
Urban Tongatapu	16.9	30.0	37.7	49.6	70.3	70.4	88.4	49.6
Rural Tongatapu	3.4	7.3	30.4	38.8	68.7	72.4	83.5	46.7
Outer islands	2.7	2.8	15.1	30.3	48.9	64.3	76.0	35.8
<b>Education</b>								
Primary or less	0.0	28.2	0.0	52.1	79.6	52.1	82.9	54.3
Secondary	4.0	12.5	29.5	39.4	62.6	70.3	81.6	46.5
More than secondary	12.8	11.4	27.7	39.4	69.7	67.4	86.7	38.0
<b>Wealth quintile</b>								
Lowest	0.0	1.4	22.9	39.9	52.4	76.1	75.1	44.4
Second	1.9	12.0	24.5	37.8	69.1	65.6	86.7	46.8
Middle	2.2	14.0	24.6	42.5	70.8	66.2	79.4	43.1
Fourth	7.1	14.6	28.1	47.9	70.7	70.7	90.9	44.6
Highest	18.3	17.9	45.1	30.0	57.0	67.3	81.5	44.1
<b>Total</b>	<b>6.8</b>	<b>12.3</b>	<b>28.8</b>	<b>39.4</b>	<b>64.5</b>	<b>69.7</b>	<b>82.2</b>	<b>44.6</b>

- = not applicable

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

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

Table 7.2 shows the percentage of currently married women who do not want more children (or have been sterilised) by the number of living children and background characteristics. A total of 45% of Tongan women say they do not want more children. The percentage who do not want more children is 17% for age 15–19 and thereafter, from a low of 13% for age 20–24 the percentage linearly increases to reach 71% of 45–49 year olds. The percentages of women who are aged less than 40 years and who do not want to have any children are extremely low. Women in the urban area are more likely than women in rural areas to not want more children, irrespective of the number of children a woman has. This difference is particularly profound at parities zero and one. This suggests that women in rural Tonga want at least two children. Overall, 50% of women in the urban area do not want more children, as compared with 43% of women in rural areas.

There are notable differences between the desire of women to limit childbearing across Tonga's three main regions: 30% of women in urban Tongatapu say they want no more children after their first birth, in rural Tongatapu 30% do not want more children after having two children, while in the outer islands, 30% do not want more children only after they have had three births. Overall, the percentages of women who say they do not want more children is fairly similar among women in urban Tongatapu (50%) and rural Tongatapu (47%), but much lower (36%) in the outer islands.

The differentials by educational background in Table 7.2 show a similar pattern to that observed earlier: Tongan women with higher than secondary education appear to be less inclined to limit their childbearing than women with less education. Just 38% of women with the highest educational qualifications say they do not want more children, as compared with 47% of women with secondary education and 54% of women with primary or lower education.

The findings regarding the desire of women to cease childbearing by wealth quintile show some irregularities, which could be due to low numbers. Overall, the differences across the wealth quintiles are marginal, with most values hovering around 44%. When reviewing the results by parity, it is noted that at low parities (from zero to two) the proportion of women wanting no more children is highest among women in the highest wealth quintile. Surprisingly, this pattern then reverses for higher parities. This finding partially confirms the observation in the previous section where it was noted that the higher educated Tongan women seem less inclined to limit childbearing. It is possible that highly educated, wealthy Tongan women include two subgroups, one that prefers large numbers of children, and one that prefers to keep their childbearing limited.

**Table 7.3: Desire to limit childbearing — Men**

*Percentage of currently married men aged 15–49 and 15+ who want no more children, by number of living children, according to background characteristics, Tonga 2012*

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Age</b>								
15-19	20.1	20.1	-	-	-	-	-	20.1
20-24	3.9	5.5	21.6	0.0	-	-	-	7.7
25-29	12.1	9.5	16.5	19.5	0.0	62.2	-	13.8
30-34	16.0	22.6	25.6	37.7	32.0	57.0	42.3	31.3
35-39	13.9	28.3	38.6	38.6	44.3	45.4	48.9	38.4
40-44	26.0	40.0	31.1	58.3	73.3	80.7	87.8	67.7
45-49	37.8	89.7	60.2	84.6	78.1	54.7	78.7	73.6
<b>Residence</b>								
Urban	21.5	26.2	33.4	52.7	66.0	83.2	71.5	46.5
Rural	10.5	18.7	27.2	42.5	44.2	58.8	73.5	39.7
<b>Region</b>								
Urban Tongatapu	21.5	26.2	33.4	52.7	66.0	83.2	71.5	46.5
Rural Tongatapu	11.7	18.7	28.2	47.8	47.5	58.2	73.7	41.6
Outer islands	8.4	18.7	25.1	30.7	39.3	59.9	73.2	36.4
<b>Education</b>								
Primary or less	28.5	-	48.0	100.0	75.3	100.0	62.4	65.7
Secondary	12.4	19.5	29.5	41.1	45.6	60.3	73.8	40.3
More than secondary	19.6	24.2	25.6	52.1	57.2	80.3	71.4	43.3
<b>Wealth quintile</b>								
Lowest	16.4	12.8	47.4	47.7	46.4	68.4	72.5	47.3
Second	9.4	18.6	9.8	43.5	55.2	34.9	75.3	34.7
Middle	7.1	15.3	31.3	37.4	52.6	65.8	76.8	41.5
Fourth	17.7	36.8	31.5	62.2	25.1	78.3	82.3	44.2
Highest	17.6	19.5	25.2	38.7	58.5	65.5	64.5	38.4
<b>Total men aged 15–49</b>								
Total men aged 15–49	14.4	20.4	28.9	45.3	49.4	64.8	73.2	41.4
<b>Total men aged 50+</b>								
Total men aged 50+	80.8	60.4	82.5	80.6	95.4	86.4	93.6	89.0
<b>Total men aged 15+</b>								
Total men aged 15+	22.5	23.7	36.1	53.7	63.8	74.5	84.9	56.4

- = not applicable

<sup>1</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children.



The proportion of Tongan men aged 15–49 who do not want more children (41%, Table 7.3) is slightly lower than the percentage of Tongan women (45%). Similar to the findings for Tongan women, the percentage of men who do not want more children increases with age (from age 20). At parities of zero, values for men are considerably higher than those for women in almost all age groups.

The percentage of men who want no more children is greater among those in the primary or less education category (66%), followed by the highest education category (43%) and lowest in the secondary educated category (40%). This is indicative of a pattern that is opposite to that for women, but is more in line with results for most other countries.

The differentials among men according to wealth remain inconclusive, and suggest the presence of two separate patterns, somewhat similar to what was noted for Tongan women. The percentage of men who want no more children increases steadily — from 35–44% — across wealth quintiles two, three and four, which is expected. But the percentage of men who want no more children is higher than average for those in the lowest wealth quintile (47%) and lower than average for men in the highest wealth quintile (38%). The sample size of men is significantly smaller than that of women, and stochastic variation due to low absolute numbers may account for some of these unexpected findings.

## **7.2 NEED AND DEMAND FOR FAMILY PLANNING**

This section discusses the extent of the need for family planning in Tonga 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 and met needs for family planning. The unmet need for family planning is a core indicator for the International Conference on Population and Development Programme of Action and a Millennium Development Goal target under Goal 5.

Table 7.4 shows the need for family planning among currently married women by background characteristics. Overall, 25% of currently married Tongan women have an unmet need for family planning. The unmet need for spacing childbearing (13%) is marginally greater than the unmet need for limiting childbearing (12%). With regard to the met need for family planning, the results show that 10% of currently married Tongan women have a met need for spacing, while 24% have a met need for limiting; thus 34% of currently married women in Tonga are using family planning. The total demand for family planning among Tongan women amounts to 59% (23% for spacing and 36%); 58% of the total demand for family planning is currently being met.

The demand for family planning among Tongan women is considerable, even at a young age. Total demand is approximately 54% for women aged 15–29, primarily for spacing (around 40%). After age 35 the demand for family planning shifts markedly towards a need for limiting. The total demand for family planning reaches a maximum of around 65% for women aged 30–39. The percentage of the total demand that is satisfied increases steadily with age, from 24% for women aged 15–19 to 66% for women aged 40–49. The unmet need for family planning among currently married Tongan women generally decreases as age increases, dropping from 28% for women aged 20–24 to 18% for women aged 45–49.

The total demand for family planning is almost equal among women from urban and rural Tongatapu and the outer islands. The unmet need for family planning, however, is higher among urban women (29%) as compared with rural women (25%); interestingly, it is lowest among women in the outer islands (23%). This is also reflected in the findings for percentage of demand that is satisfied (53% for women in urban Tongatapu, 57% in rural Tongatapu, and 63% in the outer islands). It may be noted in this regard that women in the outer islands have much higher demand for spacing than women elsewhere in Tonga, and that a higher proportion of that demand is satisfied. Similarly, while their demand for limiting is below average, a high proportion of that demand is satisfied (their unmet need for limiting is just 7%).

**Table 7.4: Need and demand for family planning among currently married women**

Percentage of currently married women aged 15–49 with unmet need for family planning, 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, Tonga 2012

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 <sup>1</sup>			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	(27.3)	(16.8)	(44)	(13.5)	(0)	(13.5)	(40.8)	(16.8)	(57.6)	(23.5)	31
20–24	23.1	5.2	28.3	18.4	4.3	22.7	41.5	9.5	51	44.5	181
25–29	20.1	6	26	17.7	9.9	27.6	37.8	15.9	53.7	51.5	362
30–34	17.9	12.2	30.1	12.2	23.2	35.4	30.1	35.3	65.4	54	332
35–39	8.8	15.5	24.3	6.1	35.2	41.4	14.9	50.7	65.6	63	309
40–44	4.9	16.2	21.2	2.6	38.6	41.2	7.5	54.8	62.4	66	302
45–49	2.8	15.4	18.2	1.5	33.5	34.9	4.3	48.8	53.1	65.8	231
<b>Residence</b>											
Urban	14	14.9	28.9	9.9	22	31.9	23.9	36.9	60.8	52.5	411
Rural	12.9	11.1	24	9.8	24.9	34.7	22.8	36	58.8	59.1	1,335
<b>Region</b>											
Urban Tongatapu	14	14.9	28.9	9.9	22	31.9	23.9	36.9	60.8	52.5	411
Rural Tongatapu	11.6	13.1	24.7	7.6	25.8	33.3	19.2	38.9	58.1	57.4	890
Outer islands	15.5	7	22.6	14.4	23.2	37.6	29.9	30.2	60.1	62.5	445
<b>Education</b>											
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	19
Secondary	12.8	12.3	25.1	9.5	25.6	35.1	22.2	37.9	60.2	58.3	1,329
More than secondary	14.7	10.6	25.3	11.4	19.3	30.7	26.2	29.9	56	54.9	399
<b>Wealth quintile</b>											
Lowest	12.4	11.7	24.1	12.6	28.7	41.2	24.9	40.4	65.4	63.1	369
Second	11.7	12.8	24.5	7.5	27.7	35.1	19.1	40.5	59.6	58.9	357
Middle	14.9	9.3	24.1	10.5	22.4	32.9	25.3	31.7	57	57.7	352
Fourth	15.2	14.9	30	8.8	19.6	28.4	23.9	34.5	58.4	48.6	345
Highest	11.9	11.1	23	9.8	22.2	32	21.8	33.3	55.1	58.2	324
<b>Total</b>	<b>13.2</b>	<b>12</b>	<b>25.2</b>	<b>9.8</b>	<b>24.2</b>	<b>34.1</b>	<b>23</b>	<b>36.2</b>	<b>59.2</b>	<b>57.5</b>	<b>1,747</b>

NP = not published

<sup>1</sup> Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrhoeic 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 amenorrhoeic, who are not using any method of family planning, and say they want to wait two 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; amenorrhoeic 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 amenorrhoeic, who are not using any method of family planning, and who want no more children.

<sup>2</sup> Using family planning 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 family planning 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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

The total demand for family planning amongst women with secondary education is somewhat greater (60%) than that for women with post-secondary education (56%), and the percentages of met demand is higher for women with secondary education (35%) than for women with more than secondary (31%), meaning women with secondary and post-secondary education have essentially identical unmet need. A significant difference between these two groups of women is that those with secondary education have much greater demand for limiting: 38% compared with 30% for women with post-secondary education.

The total demand for family planning generally decreases with increasing wealth, decreasing from 65% for women in the lowest wealth quintile to 55% for the wealthiest group of women. Satisfied demand shows a roughly similar pattern, decreasing from 41% for women in the lowest wealth quintile to 32% for women in the highest. Unmet need vary little across wealth quintiles (close to 24% for most). The main driver of these patterns appears to be the demand for limiting births. The figures for this parameter generally decrease as wealth increases, from 40% for the poorest women to 33% for the wealthiest.

### **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. This occurs for two reasons. 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; 94% of women and 91% of men gave a numerical answer. Non-numerical answers — usually similar to 'it's up to God's will' — are not included in the calculation of means in Tables 7.5 and 7.6.

The mean ideal number of children for all women aged 15–49 is 3.3, while for men aged 15–49 it is 3.6. While the value for men is higher than that for women, it is important to note that both values are significantly lower than the observed TFR for Tongan women, which is 4.1 children per woman.

**Table 7.5: Ideal number of children**

*Percent distribution of women and men aged 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, Tonga 2012*

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
<b>WOMEN<sup>1</sup></b>								
0	26.7	13.3	10.6	11.2	12.9	14.0	19.6	19.2
1	3.9	8.7	2.5	1.0	0.6	0.8	0.9	3.2
2	19.2	18.8	18.4	7.7	5.8	6.5	4.5	14.5
3	15.9	18.9	12.5	13.7	5.7	9.5	5.7	13.3
4	14.2	19.7	27.6	19.2	35.6	16.4	10.1	18.4
5	9.7	10.8	13.5	28.0	10.7	20.3	10.0	12.6
6+	5.4	6.7	9.0	16.7	20.7	27.3	39.4	13.4
Non-numeric responses	5.0	3.1	6.0	2.7	8.3	5.1	9.8	5.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>1,314</b>	<b>342</b>	<b>337</b>	<b>268</b>	<b>279</b>	<b>207</b>	<b>321</b>	<b>3,068</b>
<b>Mean ideal number of children for women aged 15–49<sup>2</sup></b>								
All	2.5	3.0	3.4	4.0	4.1	4.3	4.7	3.3
Number	1,249	331	317	261	256	196	289	2,900
Currently married	3.3	3.2	3.5	4.1	4.1	4.3	4.8	3.9
<b>Number</b>	<b>176</b>	<b>257</b>	<b>281</b>	<b>247</b>	<b>242</b>	<b>183</b>	<b>270</b>	<b>1,654</b>
<b>MEN<sup>3</sup></b>								
0	24.5	12.2	14.7	22.6	17.8	22.0	17.6	21.0
1	3.1	6.4	0.0	0.0	0.9	0.0	0.0	2.3
2	12.1	15.1	7.9	1.4	4.5	0.9	0.6	9.0
3	14.7	15.2	13.2	13.1	4.2	1.6	3.5	12.0
4	13.7	17.7	23.9	16.8	17.1	8.9	5.8	14.6
5	12.3	16.4	15.7	20.3	12.8	13.5	6.5	13.3
6+	9.9	11.7	20.0	17.7	34.5	42.2	55.0	19.1
Non-numeric responses	9.7	5.2	4.5	8.0	8.1	11.0	11.0	8.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>681</b>	<b>141</b>	<b>116</b>	<b>109</b>	<b>99</b>	<b>74</b>	<b>116</b>	<b>1,336</b>
<b>Mean ideal number children for men aged 15–49<sup>2</sup></b>								
All	2.9	3.3	4.1	4.3	4.2	4.7	5.7	3.6
Number	615	133	110	101	91	66	103	1,220
Currently married	3.0	3.5	3.9	4.4	4.3	4.7	5.7	4.2
<b>Number</b>	<b>82</b>	<b>122</b>	<b>106</b>	<b>99</b>	<b>88</b>	<b>66</b>	<b>99</b>	<b>663</b>
<b>Mean ideal number children for men aged 15+</b>								
All	2.8	3.2	3.8	4.3	3.9	4.2	5.2	3.6
Number	627.8	143.5	126.2	129.5	132.0	119.7	222.3	1,570.6
Currently married	2.8	3.4	3.7	4.3	4.0	4.2	5.2	4.1
<b>Number</b>	<b>94.2</b>	<b>132.4</b>	<b>122.4</b>	<b>127.5</b>	<b>129.2</b>	<b>119.7</b>	<b>218.3</b>	<b>943.8</b>

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

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

<sup>3</sup> The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Tongan men tend to prefer a larger family size than Tongan women, irrespective of the number of living children. As is often observed in answers to this type of question, the stated ideal number of children increases with the number of living children. Among all women, the ideal number of children ranges from 2.5 for those with no children to 4.7 for those with six or more children. As with women, the mean ideal number of children among all men increases with the number of children and ranges from 2.9 for those with no children to 5.7 for those with six or more children.

Despite their desire for slightly larger family size, the proportion of Tongan men who say they want no children at all is remarkably high (21%); while slightly lower, the value for Tongan women (19%) is quite high as well, especially considering their actual reproductive behaviour.

As expected, the proportion of women and men whose ideal number of children matches their current parity increases with higher parities: 39% of women and 55% of men with six or more children indicate that their ideal family size is the same as its current size. For women and men with lower parities, the ideal number of children tends to be higher than the number of children they currently have. The exception to this pattern is for women and men who have no living children: 27% of these women and 24% of these men indicate that their ideal number of children is zero. This finding may partly be due to the inclusion of never married women and men in the main part of the tabulation.

The differences in the mean ideal numbers of children for all women and currently married women in Table 7.5 vary little, except for women with zero parity. Currently married women with no previous births desire 3.3 children, compared with 2.5 for all women. For men there is no significant difference between those who are currently married and those who are not.

**Table 7.6: Mean ideal number of children**

*Mean ideal number of children for all women aged 15–49 by background characteristics, Tonga 2012*

Background characteristic	Mean	Number of women <sup>1</sup>
<b>Age</b>		
15–19	2.3	618
20–24	2.9	473
25–29	3.6	475
30–34	3.4	394
35–39	3.7	344
40–44	3.8	340
45–49	4.0	255
<b>Residence</b>		
Urban	2.9	700
Rural	3.4	2,200
<b>Region</b>		
Urban Tongatapu	2.9	700
Rural Tongatapu	3.5	1,469
Outer island	3.0	731
<b>Education</b>		
Primary or less	(3.2)	36
Secondary	3.3	2,200
More than secondary	3.2	664
<b>Wealth quintile</b>		
Lowest	3.6	515
Second	3.3	571
Middle	3.3	603
Fourth	3.1	608
Highest	3.1	603
<b>Total</b>	<b>3.3</b>	<b>2,900</b>

<sup>1</sup> The number of women who gave a numeric response.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Table 7.6 shows the mean ideal number of children for all women by background characteristics. Ideal family size increases with age, from 2.3 children among women aged 15–19 to 4.0 children among women aged 45–49. While this pattern might suggest a trend towards smaller family size, it probably also reflects to some extent complacency with achieved parities. The ideal number of children for women in urban Tongatapu is 2.9 children, which is lower than that for women in rural areas, who report a mean value of 3.4; women in the outer islands have an ideal of 3.0 children. While the similar figures for urban Tongatapu and the outer islands are unexpected, they are consistent with some of the observations on fertility preferences.

The reported ideal numbers of children according to educational attainment do not show significant differentials, and remain close to the overall mean. Tabulation of ideal number of children against the background variable of wealth reveals that the highest value of 3.6 is observed for women in the lowest wealth quintile and the lowest value of 3.1 is found for women in the highest two wealth quintiles. While such a pattern is fairly typical across many countries, the current findings are not consistent with the results

obtained regarding demand for family planning among wealthy Tongan women. This reflects a discrepancy between reported ideals and actual behaviour.

## 7.4 FERTILITY PLANNING

Women were asked a series of questions about all of 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 rationalise mistimed or unwanted pregnancies, declaring them as wanted after the children are born.

Table 7.7 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 79% of births in the five years preceding the survey were planned ('wanted then') while 21% were unplanned — 12% were mistimed ('wanted later') and 8% were not wanted ('wanted no more').

The proportion of births that are reported as wanted at the time decreases with increasing birth order: 85% of first births are reported as wanted at the time, dropping to 80% for second-order births, 76% for third-order births, and 75% for fourth-order births. This pattern corresponds closely with the proportions of births that are not wanted, which increases from 7% (first-order births) to 12% (fourth-order births).

The proportion of unplanned births is highest for women aged 15–19, among whom 37% of births were either mistimed (18%) or unwanted altogether (20%). The proportion of unplanned births is also high (32%) among women aged 40–44, which is also of concern. Among these women, the proportion of unwanted births (25%) is much higher than that of mistimed births (8%), indicating their desire to terminate childbearing.

Table 7.8 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 numerical 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 can reveal the potential demographic impact of eliminating unwanted births.

**Table 7.7: Fertility planning status**

*Percent distribution of births to women aged 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, Tonga 2012*

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	85.4	7.5	7.1	0.0	100.0	474
2	79.6	14.6	5.3	0.5	100.0	391
3	76.4	16.5	6.5	0.7	100.0	311
4+	75.4	12.7	11.5	0.3	100.0	713
<b>Mother's age at birth</b>						
<20	62.7	17.7	19.6	0.0	100.0	81
20–24	82.2	12.5	5.3	0.0	100.0	448
25–29	79.5	14.5	5.6	0.4	100.0	579
30–34	81.5	10.4	7.7	0.5	100.0	449
35–39	76.9	10.7	11.8	0.6	100.0	251
40–44	66.9	7.1	25.0	1.0	100.0	80
45–49	NP	NP	NP	NP	NP	1
<b>Total</b>	<b>78.9</b>	<b>12.4</b>	<b>8.3</b>	<b>0.3</b>	<b>100.0</b>	<b>1,889</b>

NP = not published

**Table 7.8 Wanted fertility rates**

*Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Tonga 2012*

Background characteristic	Total wanted fertility rates	Total fertility rate
<b>Residence</b>		
Urban	2.6	3.6
Rural	3.1	4.2
<b>Region</b>		
Urban Tongatapu	2.6	3.6
Rural Tongatapu	3.3	4.4
Outer islands	2.9	3.8
<b>Education</b>		
Primary or less	2.6	2.8
Secondary	3.2	4.4
More than secondary	2.7	3.3
<b>Wealth quintile</b>		
Lowest	3.9	5.6
Second	2.9	4.1
Middle	3.2	4.0
Fourth	2.6	3.4
Highest	2.5	3.4
<b>Total</b>	<b>3.0</b>	<b>4.1</b>

Note: Rates are calculated based on births to women aged 15–49 in the 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 Tongan women are considerably lower than the TFRs. Overall, Tongan women want 3.0 children, which coincides fairly well with the mean of the stated ideal numbers of children, which is 3.3 children per woman. The wanted fertility for women in urban Tongatapu is 2.6 children, significantly lower than the 3.3 for women in rural Tongatapu; women in the outer islands have a mean wanted fertility rate of 2.9.

Wanted fertility is slightly higher for women with secondary education as compared to women with post-secondary education; the difference between actual and wanted fertility for women with secondary education is twice as high as that for women with post-secondary education.

The differentials in wanted fertility by wealth quintile are similar to the results obtained for ideal number of children. Women in the lowest wealth quintile display high overall rates, and have a significant gap (of 1.7) between the wanted fertility rate (3.9) and the TFR (5.6); this gap decreases to 1.2 children for women in the second wealth quintile, and 0.8 children for women in the third wealth quintile. As wealth increases, the TFRs and wanted fertility rates decrease, but the gap between the two indicators remains fairly constant (0.8).

## CHAPTER 8 INFANT AND CHILD MORTALITY

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This chapter presents estimates for levels, trends and differentials of neonatal, postneonatal, infant, child and under-5 mortality, as well as perinatal mortality, in Tonga. The information presented in this chapter is important in examining Tonga's demographic trends, and for designing and evaluating the country's health policies and programmes. Primary and preventative health services focus on improving the quality of life of the Tongan people, including reducing infant and child mortality and the incidence of high-risk pregnancies. These services also aid the Ministry of Health by identifying a category of the population — particularly babies and their mothers — who are at high risk of mortality.

### 8.1 DEFINITIONS, METHODOLOGY AND ASSESSMENT OF DATA QUALITY

This report defines the measures or indicators of childhood mortality as follows:

- **Perinatal mortality:** The number of fetal losses of 22 weeks gestation or more plus neonatal deaths in the first seven days after birth, per 1,000 live births in a given year.
- **Neonatal mortality:** The number of deaths during the first 28 days of life, per 1,000 live births; most neonatal deaths usually occur during the first seven days after birth, and it is possible to differentiate between early and late neonatal deaths (WHO, 2006a).
- **Post-neonatal mortality:** The arithmetic difference between infant and neonatal mortality. The number of deaths of those aged 28–364 days, per 1,000 live births.
- **Infant mortality (1q0):** The probability of dying between birth and the first birthday.
- **Child mortality (4q1):** The probability of dying between exact age one and the fifth birthday.
- **Under-5 mortality (5q0):** The probability of dying between birth and the fifth birthday.

The data used in estimating these mortality rates were collected in the birth history section of the 2012 TDHS women's questionnaire. The first questions address the respondent's childbearing experience (the number of sons and daughters who live in the household, those who live elsewhere, and those who have died); for each live birth, information was recorded regarding the name, date of birth, and sex; whether the birth was single or multiple; and the survivorship status. For living children, information was obtained about their age and whether they resided with their mother. For children who had died, the respondent was asked to provide the child's age at death.

A retrospective birth history, such as that included in the 2012 TDHS, is susceptible to several data collection errors.

- Interviews were held only with surviving women aged 15–49; therefore, no data are available for children of women who have died. The resulting mortality estimates will be biased if the mortality rates of children of surviving and non-surviving women differ substantially.
- The under-reporting of events (births and deaths), especially in cases where deaths occur early in infancy. If such deaths are selectively omitted, the consequence will not only be a lower infant mortality rate and neonatal mortality rate, but also a low ratio of neonatal deaths to infant deaths, and of early neonatal deaths (occurring within one week) to neonatal deaths.
- The under-reporting of early infant deaths may increase with the length of time since the child's death (e.g. an early infant death that occurred ten years before the survey may be more likely to be omitted than an early infant death that occurred two years before the survey). Thus, an examination of these patterns over time is critical.
- Errors in dates of birth (birth transference; see Sullivan, 2007).

### 8.2 EARLY CHILDHOOD MORTALITY RATES: LEVELS AND TRENDS

The 2012 TDHS collected birth histories from 3,068 women. Childhood mortality rates for the 15-year period preceding the survey are presented by five-year periods in Table 8.1.



**Table 8.1: Early childhood mortality rates***Neonatal, post-neonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Tonga 2012*

Years preceding the survey	Early childhood mortality rates				
	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
0–4	8	9	17	6	23
5–9	5	4	9	3	12
10–14	6	6	12	3	15

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

Based on the definitions provided in Section 8.1, and using the values from the period 0–4 years preceding the survey, the different indicators can be interpreted as follows:

- 1) **Neonatal mortality.** The first month of life is associated with the highest risk to survival. The neonatal mortality rate is around 8 deaths per 1,000 live births, implying that 8 out of every 1,000 infant deaths occur during the first month of life.
- 2) **Postneonatal mortality.** In Tonga, postneonatal mortality is around 9 deaths per 1,000 births among infants during the five-year period before the survey.
- 3) **Under-5 mortality.** An under-5 mortality rate (5q0) of 23 means that it is likely that 23 out of 1,000 persons born will die before their fifth birthday.
- 4) **Child mortality.** A child mortality rate (4q1) of 6 means that there it is likely that 6 out of 1,000 persons aged one year will die before their fifth birthday.
- 5) **Infant mortality.** An infant mortality rate (1q0) of 17 means that it is likely that 17 out of 1,000 babies born will die before their first birthday.

All childhood mortality indicators declined during the periods 5–9 and 10–14 years before the survey, with the exception of child mortality (4q1), which remained stable. Subsequently, in the most recent period (0–4 years before the survey), all childhood mortality indicators increased, and reached rates that were between 1.3 and 2 times higher than the rates that prevailed 15 years before the survey. The calculated childhood mortality indicators need to be interpreted in comparison with other data sources. However, the calculated childhood mortality indicators need to be interpreted with caution, and in connection with the calculated standard errors as presented in Table 8.2.

**Table 8.2: Standard errors (SE) and 95% confidence interval (R-2SE – R+2SE) for the five-year childhood mortality rates, Tonga, 2012**

Years preceding the survey	R	SE	SE/R	R-2SE	R+2SE
<b>Neonatal mortality (NN)</b>					
0–4	8.4	2.7	0.3	3.1	13.8
5–9	4.8	1.6	0.3	1.5	8.0
10–14	5.8	2.1	0.4	1.5	10.1
<b>Postneonatal mortality (PNN)</b>					
0–4	9.1	2.6	0.3	3.8	14.4
5–9	4.3	1.7	0.4	0.8	7.8
10–14	6.0	2.2	0.4	1.7	10.4
<b>Infant mortality (1q0)</b>					
0–4	17.5	3.8	0.2	9.9	25.1
5–9	9.0	2.3	0.2	4.5	13.6
10–14	11.8	3.1	0.3	5.6	18.1
<b>Child mortality (4q1)</b>					
0–4	5.7	2.7	0.5	0.3	11.2
5–9	2.6	1.3	0.5	-0.1	5.3
10–14	3.0	1.8	0.6	-0.6	6.6
<b>Under-5 mortality (5q0)</b>					
0–4	23.2	4.7	0.2	13.7	32.6
5–9	11.6	2.5	0.2	6.6	16.7
10–14	14.8	3.5	0.2	7.9	21.8

Where:

- R = value of the estimated indicator (median estimate)
- SE = standard error of the estimate
- SE/R = relative standard error (i.e. ratio of the standard error of the median estimate)
- R-2SE = lower limit of the 95% confidence interval
- R+2SE = upper limit of the 95% confidence interval

The 95% confidence interval is calculated as follows:

**Lower limit** = The value of the estimated indicator (R) minus 2 times the standard error (SE) =

**(R – 2 x SE)**

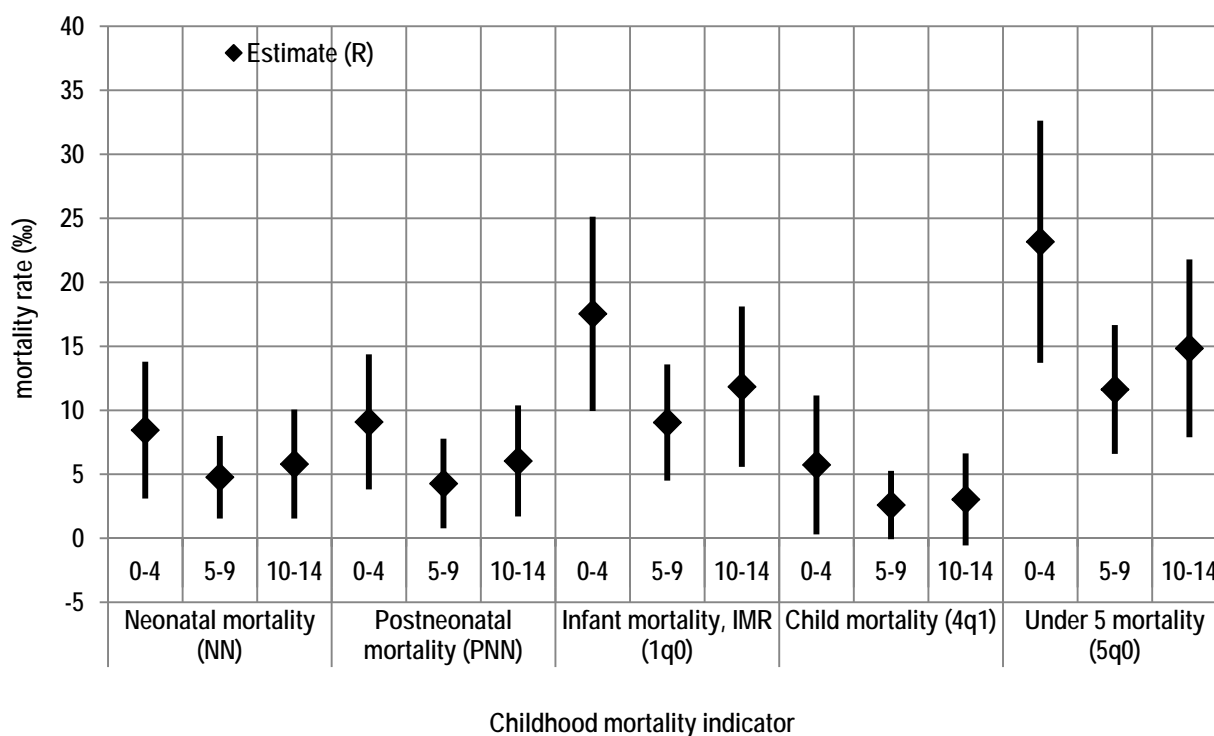
**Upper limit** = The value of the estimated indicator (R) plus 2 times the standard error (SE) =

**(R + 2 x SE)**

Based on the calculated SE, there is a 95% probability that the true value of the mortality rates of the three different periods (0–4, 5–9 and 10–14 years) includes a relatively wide range of possible outcomes (Figure 8.1, see length/range of the vertical line), which hampers a meaningful trend analysis.

While the estimated mortality values (R) of each indicator differ, and appear to show a better situation 10 to 15 years ago, their associated confidence intervals overlap and, therefore, include the same range of possible values. As a result, the true mortality value of each period could be located anywhere in the confidence interval, and as such, the true trend could theoretically be the opposite of what the R-values suggest.

**Figure 8.1: Childhood mortality rates and 95% confidence interval for the 15-year period before the survey, Tonga, 2012**



Note: Black vertical lines represent the range of the 95% confidence interval.

Based on the SEs and the associated 95% confidence interval, the following statements can be made with confidence with respect to the period 0–4 years before the survey (Table 8.2 and Figure 8.1).

<b>Neonatal mortality rate (NN):</b>	expected to be higher than <b>3.1</b> and lower than <b>13.8</b>
<b>Post-neonatal mortality rate (PNN):</b>	expected to be higher than <b>3.8</b> and lower than <b>14.4</b>
<b>Infant mortality rate (1q0):</b>	expected to be higher than <b>9.9</b> and lower than <b>25.1</b>
<b>Child mortality rate (4q1):</b>	expected to be higher than <b>0.3</b> and lower than <b>11.2</b>
<b>Under-5 mortality rate (5q0):</b>	expected to be higher than <b>13.7</b> and lower than <b>32.6</b>

Unfortunately, a clear trend of the levels of the different childhood mortality indicators during the 15-year period before the survey cannot be determined with confidence because of the wide range of the confidence interval caused by relatively large SEs and overlapping confidence intervals from one period to another.

The calculated childhood mortality indicators need to be interpreted in comparison with other data sources.

### 8.2.1 Comparison of TDHS results with the 2006 and 2011 population censuses

The estimated infant mortality rate from the 2012 TDHS (17) is entirely consistent with the rate derived from the 2011 Census, which was estimated at 17. However the child mortality rate derived from the 2011 Census (3 deaths per 1,000 persons) is consistent with earlier rates derived from the 2012 TDHS, and consequently the under-5 mortality rate from the 2011 Census (20 deaths per 1,000 persons) is lower than the value of 23 deaths per 1,000 persons derived from the 2012 TDHS.

The divergences for the child mortality rate and the under-5 mortality rate result from the use of different methodologies: the census derives child mortality indicators using data on children ever born and children surviving by age group of mother, while the TDHS uses data from the 15-year period preceding the TDHS survey. Because of this methodological difference in reference period between the 2012 TDHS and the census, comparison of survey-derived indicators from the same time period (as derived in Chapter 4) are necessary.

## 8.2.2 Comparison with data derived in Chapter 4 (Fertility)

The data in Table 4.4 (children ever born and children surviving), was analysed using a United Nations demographic software package,<sup>3</sup> with the following results: infant mortality: 18 deaths per 1,000 births; child mortality: 4 deaths per 1,000 persons; and under-5 mortality: 22 deaths per 1,000 persons. These results are consistent with the 2011 census. These data are also consistent with the 2006 census children ever born and children surviving data, which derived an infant mortality rate of 19 deaths per 1,000 births, a child mortality rate of 3 deaths per 1,000 persons, and an under-5 mortality rate of 22 deaths per 1,000 persons.

## 8.3 EARLY CHILDHOOD MORTALITY BY SOCIOECONOMIC CHARACTERISTICS

In Tonga, there are some differences in childhood mortality levels by socioeconomic background characteristics of women, such as place of residence, educational level or wealth status (Table 8.3).

**Table 8.3: Early childhood mortality rates by socioeconomic characteristics**

*Neonatal, post-neonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristic, Tonga 2012*

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
<b>Residence</b>					
Urban	7	7	14	4	18
Rural	7	7	14	4	18
<b>Region</b>					
Urban Tongatapu	7	7	14	4	18
Rural Tongatapu	8	9	17	5	22
Outer islands	4	2	6	0	6
<b>Mother's education</b>					
Secondary	6	7	13	5	18
More than secondary	9	7	16	3	19
<b>Wealth quintile</b>					
Lowest	12	8	20	2	22
Second	4	3	7	7	14
Middle	7	10	17	5	22
Fourth	7	10	17	0	17
Highest	2	2	4	7	11

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

While there are no differences between overall rural and urban rates, differences do emerge when rural areas are disaggregated: rural Tongatapu has the highest rates for all childhood mortality indicators, while the lowest rates for all childhood mortality indicators are in the outer islands. The under-5 mortality rate in the outer islands (6 deaths per 1,000 persons) is far lower than either rural Tongatapu (22 deaths per 1,000), and urban Tongatapu (18 deaths per 1,000). This may be a function of migration by higher risk families to rural Tongatapu, where services and employment are available but housing is less expensive than in urban Tongatapu.

In general, child survival is strongly linked to the mother's level of education. In Tonga, there are small differences that correlate to the mother's highest level of educational attainment, but these differences are counterintuitive — children of mothers with more than secondary-level education have *higher* rates for all childhood mortality indicators (except child mortality) than mothers with secondary-level education only.

It is generally the case that a woman's household wealth status is inversely associated with childhood mortality, and this is the case in Tonga, as presented in Table 8.3 — children growing up in households in the highest wealth quintile have lower neonatal, infant and under-5 mortality rates than those in the lowest wealth quintiles.

In summary, child mortality rates are highest in the poorest households in rural Tongatapu and, there are higher rates amongst children of more educated mothers, which is the opposite scenario to that which would be expected, since higher levels of mothers education are generally associated with lower mortality rates amongst children.

<sup>3</sup> The analysis used Version 4.1 of the MORTPAK package, Children Ever Born and Children Surviving (CEBCS) technique (employing the Far East Asian mortality pattern of the United Nations model life tables).

## 8.4 EARLY CHILDHOOD MORTALITY BY DEMOGRAPHIC CHARACTERISTICS

The demographic characteristics of both the mother and child play an important role in children's survival probability. Table 8.4 presents early childhood mortality by a number of these characteristics, including the sex of child, mother's age at birth, birth order, and previous birth interval for the 10-year period before the survey. In addition, it shows early childhood mortality rates by birth size for the five-year period before the survey.

**Table 8.4: Early childhood mortality rates by demographic characteristics**

*Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Tonga 2012*

Demographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
<b>Child's sex</b>					
Male	7	3	10	5	15
Female	7	10	17	4	21
<b>Mother's age at birth</b>					
<20	11	0	11	0	11
20–29	4	9	13	5	18
30–39	10	4	14	4	18
40–49	0	12	12	0	12
<b>Birth order</b>					
1	9	5	14	2	16
2–3	4	9	13	5	18
4–6	7	7	14	7	21
7+	11	3	14	0	14
<b>Previous birth interval</b> <sup>2</sup>					
<2 years	5	7	12	3	15
2 years	7	5	12	9	21
3 years	5	12	17	0	17
4+ years	5	8	13	7	20
<b>Birth size</b> <sup>3</sup>					
Small or very small	0	21	21	-	-
Average or larger	6	7	13	-	-
Do not or missing	186	27	213	-	-

- = not applicable

<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.

In contrast with general patterns, in Tonga, the estimated infant mortality rate for females (17 deaths per 1,000 births) is 7 deaths higher than that of males (10 deaths per 1,000 births); the under-5 mortality rates for females (21) is 6 deaths per 1,000 persons higher than that of males (15 deaths per 1,000 persons). This contrasts with the results of the 2006 and 2011 censuses, where rates were higher for males than for females.

The traditional hypothesis of 'too early and too late increases child's mortality' applies in Tonga for neonatal and postneonatal mortality rates: teenage mothers are most likely to lose a child in the neonatal period, while mothers in their 40s are most likely to lose a child aged between 1 and 12 months of age.

In general, higher birth orders are inversely associated with childhood mortality, but this is not clearly apparent for Tonga, where neonatal mortality rates are highest for birth order seven and above; for other indicators of child mortality there is no clear trend of mortality rates by birth order.

Birth interval length (the time period between the last birth and the previous birth) normally affects the risk of survival mostly during infancy, with a higher mortality risk for children born after a short birth interval (< 2 years) than for children born after longer birth intervals. However, this pattern is not observed in Tonga.

The more general patterns observed in other contexts are not apparent from these data. This may be because the rates of child mortality in Tonga are relatively low, and the analysis is thus based on a small number of deaths.

## 8.5 PERINATAL MORTALITY

Perinatal mortality refers to the number of foetal losses at 22 weeks gestation or more, plus early neonatal deaths in the first seven days after birth, per 1,000 live births in a given year.

In total, there were 14 perinatal deaths recorded during the 2012 TDHS: 2 stillbirths and 12 early neonatal deaths (Table 8.5). While a meaningful analysis is obviously not possible based on such a small number of deaths, the data point to patterns that could be of interest to Tonga Ministry of Health officials, including an increased risk of perinatal mortality affecting women who are:

- under 20 years of age;
- either experiencing their first pregnancy, or have experienced a gap of 27–38 months between pregnancies;
- live in rural Tongatapu;
- are in the lowest wealth quintile; and
- perhaps surprisingly, have higher levels of education.

**Table 8.5: 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, Tonga 2012*

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	2	22	72
20–29	2	5	8	924
30–39	1	5	9	635
40–49	0	0	0	74
<b>Previous pregnancy interval in months<sup>4</sup></b>				
First pregnancy	0	7	17	418
<15	0	1	8	177
15–26	1	0	2	501
27–38	1	3	15	258
39+	1	1	4	351
<b>Residence</b>				
Urban	2	1	6	381
Rural	1	11	9	1,324
<b>Region</b>				
Urban Tongatapu	2	1	6	381
Rural Tongatapu	0	10	11	921
Outer islands	1	1	4	403
<b>Mother's education</b>				
Primary or less	NP	NP	NP	12
Secondary	1	9	8	1,296
More than secondary	2	3	12	398
<b>Wealth quintile</b>				
Lowest	1	7	19	436
Second	0	0	0	351
Middle	0	2	7	347
Fourth	1	2	10	301
Highest	1	0	3	271
<b>Total</b>	<b>2</b>	<b>12</b>	<b>8</b>	<b>1,705</b>

NP = not published

<sup>1</sup> Stillbirths are foetal deaths in pregnancies lasting seven months or more.

<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 months or greater duration, expressed per 1,000.

<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 2012 TDHS examined the relative importance of maternal fertility patterns associated with increased risk of mortality. Generally, infants and children have a greater probability of dying if they are born to mothers who are too old or too young, if they are born after a short birth interval, or if they are of a high birth order.

In analysing the effects of high-risk fertility behaviour on child survival, a mother is classified as too young if she is less than 18, and too old if she is more than 34 at the time of birth. A short birth interval is defined as a birth occurring less than 24 months after the previous birth, and a child is of a high birth order if the mother has previously given birth to three or more children (i.e. if the child is of birth order 4 or higher).

Table 8.6 shows the percent distribution of births in the five-year period before the survey according to these elevated risk factors. The table also examines children's relative risk of dying by comparing the proportion of dead children in each specified high-risk category with the proportion dead among children not in any high-risk category. Although first-order births are commonly associated with an increased risk of mortality, they are not included in any high-risk category because they are considered an unavoidable risk.

Only 20% of births in Tonga are not in a high-risk category. An additional 23% of births are first-order births to mothers aged 18–34, which is considered an unavoidable risk category. The remaining 57% of births in Tonga are in at least one of the specified avoidable high-risk categories.

About 32% of births are in only one of the high-risk categories — birth order 3 or higher (13%), birth intervals shorter than 24 months (15%), and mother's age older than 34 (3%) — while 25% are in multiple high-risk categories. Births in multiple high-risk categories are most common among children whose mothers are older than 34 in conjunction with birth orders higher than three (about 11%), and birth intervals less than 24 months in conjunction with birth orders higher than three (also about 11%).

The second column of Table 8.6 shows the risk ratio of dying. When compared with those births that do not fall into any high-risk category, children born to mothers who are less than 18 have six times the risk of dying (risk ratio of 6.0), and children born to mothers who are older than 34 have a risk ratio of 1.6. However, combined, these constitute only about 4% of all births. By contrast, births occurring less than 24 months after the previous birth had a lower risk of dying (risk ratio of 0.9) as compared with those births that do not fall into any high-risk category. The remaining single high-risk category (birth order higher than 3) had no deaths (risk ratio of 0). These two single high-risk categories (births occurring less than 24 months after the previous birth, and birth order higher than 3) accounted for 28% of births.

The second column of Table 8.6 also shows the risk ratio of dying by multiple high-risk factors. The highest risk ratio (2.75) is for children born to mothers older than 34 less than 24 months after the previous birth, which accounted for 11% of all births.

The third column of Table 8.6 shows the potential for high-risk births among currently married women. A woman's current age, time elapsed since the last birth, and parity are used to determine the risk categories of potential births, assuming the woman conceived at the time of the survey. In the final data processing, the criteria for placing women into specific risk categories are adjusted to take into account gestation period.

Among currently married women in Tonga, 26% are not in any high-risk category, while 65% have the potential for giving birth to a child exposed to a higher risk of mortality; with 30% of married women fall into a single high-risk category, and 35% into multiple high-risk categories.

**Table 8.6: High-risk fertility behaviour**

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, Tonga 2012

Risk category	Births in the five years preceding the survey		Percentage of currently married women <sup>1</sup>
	Birth (%)	Risk ratio	
Not in any high risk category	19.6	1.00	26.1 <sup>a</sup>
<b>Unavoidable risk category</b>			
First order births between ages 18 and 34	23.2	1.36	8.9
<b>Single high-risk category</b>			
Mother's age <18	0.9	6.34	0.0
Mother's age >34	3.4	1.59	11.0
Birth interval <24 months	14.7	0.90	9.3
Birth order >3	13.1	0.00	9.4
<b>Subtotal</b>	<b>32.0</b>	<b>0.76</b>	<b>29.6</b>
<b>Multiple high-risk category<sup>2</sup></b>			
Age <18 and birth interval <24 months	0.0	-	0.0
Age >34 and birth interval <24 months	0.4	0.00	0.7
Age >34 and birth order >3	11.0	2.75	25.1
Age >34 and birth interval <24 months and birth order >3	3.0	1.71	3.0
Birth interval <24 months and birth order >3	10.9	0.99	6.5
<b>Subtotal</b>	<b>25.2</b>	<b>1.83</b>	<b>35.3</b>
<b>In any avoidable high-risk category</b>	<b>57.2</b>	<b>1.23</b>	<b>65.0</b>
Total	100.0	-	100.0
Number of births/women	1,703	-	1,747

- = not applicable

<sup>a</sup> Includes sterilised women.

<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 three months or older than 34 years and two months, latest birth less than 15 months ago, or latest birth being of order three or higher.

<sup>2</sup> Includes the category age <18 and birth order >3

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.

## 8.7 WOMEN'S EMPOWERMENT AND CHILD MORTALITY OUTCOMES

The 2012 TDHS Women's Questionnaire collected data on general background characteristics of female respondents (e.g. age, education, wealth quintile and employment status) and also data more specific to women's empowerment, such as women's participation in household decision-making, circumstances under which women feel that they are justified in refusing to have sexual intercourse with their husbands, and women's opinion on the number of reasons that justify wife beating.

The ranking of women on these three indices is then related to the survivorship of her children (Table 8.7).

**Table 8.7: Early childhood mortality rates by women's status**

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by indicators of women's status,<sup>1</sup> Tonga 2012

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
<b>Number of decisions in which women participate</b>			
0	25	2	27
1-2	30	22	52
3-4	10	3	13
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>2</sup></b>			
0	10	0	10
1-2	21	8	29
3	12	4	15
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>			
0	12	4	16
1-2	20	6	26
3-4	12	0	12
5	25	25	50

<sup>1</sup> Restricted to currently married women. See Table 13.7 for the list of decisions.

<sup>2</sup> See Table 13.11 for the list of reasons.

<sup>3</sup> See Table 13.9 for the list of reasons.



The first measure — women's participation in decision-making — requires little explanation because the ability to make decisions about one's own life is of obvious importance to women's empowerment (Table 8.7).

The other two measures derive from the notion that gender equity is essential to empowerment. Responses indicating that violence against wives by husbands is justified reflect the 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.

Similarly, 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 attitudes toward 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 three response categories for women's participation in household decision-making are 1) women do not participate in household decisions (category '0'), 2) women participate in one or two decision-making processes, and 3) women participate in three to four decision-making processes.

The data show that women who participate in three to four decision-making processes have children with lower infant and child mortality rates than women who participate in one or two decision-making processes. However, women who participate in no decisions also have lower infant and child mortality rates than those who participate in one or two decision-making processes.

The three response categories regarding women's control over their ability to decide when and who to have sex with were 1) women did not think they could refuse sexual intercourse with their husband (answer category '0'), 2) women stated one to two reasons why refusing to have sex was justified, and 3) women stated three reasons.

The data show that women who gave three reasons to refuse sexual intercourse with their husband have children with lower infant and child mortality rates than women who gave one or two reasons to refuse sexual intercourse with their husband. However, women who thought that they could give no reasons for refusing sex with their husband or partner have the lowest, infant and child mortality of all categories.

Violence against women has serious consequences for women's mental and physical well-being, including their reproductive and sexual health (WHO, 1999). One of the most common forms of violence against women worldwide is abuse by a husband or partner (Heise et al., 1999).

Women's attitudes toward violence against women are used as a proxy for women's perception of their status. Women who believe that a husband is justified in committing violence against his wife for any of the specified reasons may believe themselves to be low in status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for themselves and their children, affect their attitude toward contraceptive use, and impact their general well-being.

The different answer categories were divided into the number of reasons given why wife-beating is justified: '0' means there are no reasons to justify wife-beating, and '5' indicates five reasons why wife-beating is justified.

The data for infant and under-5 mortality indicate mortality rates are highest where five reasons to justify wife beating are given and are lowest where women state that there are three to four reasons for justifying wife-beating. However, the second lowest infant and child mortality rates occur for offspring of women who believe that there can be no justification for wife beating.

## **CHAPTER 9      REPRODUCTIVE HEALTH**

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This chapter presents findings on several key aspects of women's reproductive health, including antenatal, delivery and postnatal care, and general access to health services.

Information on antenatal, delivery and postnatal care is important for identifying subgroups of women who do not use such services, and is useful in planning for improvements in service delivery. Information on antenatal care (ANC) is presented according to the number of antenatal clinic visits made, the stage of pregnancy at the time of the first visit, the type of provider, and the specific services and information provided during ANC visits, including whether a tetanus toxoid injection was received. Similarly, delivery services are described according to the place of delivery, the type of person assisting the delivery, and the number of caesarean sections performed. Information is presented on whether a woman delivered her baby in a health facility or elsewhere, the time since the delivery of the first postnatal checkup, and from whom it was received. This information helps identify population groups of women who do not receive maternity care services. General information on access and barriers to using health services (for women) is also presented.

For the purposes of this report, a skilled birth attendant or provider includes a doctor, nurse, or midwife, or an auxiliary nurse or auxiliary midwife trained to deliver emergency obstetric and neonatal care as well as antenatal and postnatal care.

### **9.1      MATERNAL HEALTH**

Proper care during pregnancy, delivery and in the postnatal period is important for the health of mother and baby. During the 2012 TDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal, neonatal and child healthcare. For the last live birth during that period, mothers were asked whether they had obtained ANC during their pregnancy and whether they had received tetanus toxoid injections while they were pregnant. For each birth in the same period, mothers were also asked about the type of assistance they received at the time of delivery. Table 9.1 presents the results of key maternity care indicators.

**Table 9.1: Antenatal care**

Percent distribution of women aged 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, Tonga 2012

Background characteristic	Antenatal care provider					Total	Percentage receiving antenatal care from a skilled provider <sup>1</sup>	Number of women
	Doctor	Nurse or midwife	Other	No one	Missing			
<b>Mother's age at birth</b>								
<20	48.2	44.1	0	7.7	0	100	92.3	50
20–34	57.2	42.4	0.1	0.3	0	100	99.6	777
35–49	59.8	38.6	0	0.7	0.9	100	98.4	242
<b>Birth order</b>								
1	54.4	42.5	0	3	0	100	97	234
2–3	56.9	42.7	0.2	0	0.2	100	99.6	378
4–5	60.1	39.7	0	0.2	0	100	99.8	263
6+	58.4	40.8	0	0	0.7	100	99.3	193
<b>Residence</b>								
Urban	66	32.1	0.3	1.3	0.3	100	98.1	248
Rural	54.8	44.5	0	0.6	0.2	100	99.3	821
<b>Region</b>								
Urban Tongatapu	66	32.1	0.3	1.3	0.3	100	98.1	248
Rural Tongatapu	57.6	41.6	0	0.6	0.3	100	99.2	555
Outer island	48.9	50.5	0	0.6	0	100	99.4	266
<b>Mother's education</b>								
Primary or less	NP	NP	NP	NP	NP	NP	NP	8
Secondary	55.7	43.4	0.1	0.8	0.1	100	99	806
More than secondary	62.7	36.1	0	0.6	0.6	100	98.8	255
<b>Wealth quintile</b>								
Lowest	49.6	49.5	0	0.9	0	100	99.1	266
Second	53.1	46.9	0	0	0	100	100	226
Middle	64.2	33.8	0.3	1	0.6	100	98	219
Fourth	57.8	40.3	0	1.5	0.4	100	98.1	202
Highest	66.8	33.2	0	0	0	100	100	156
<b>Total</b>	<b>57.4</b>	<b>41.6</b>	<b>0.1</b>	<b>0.7</b>	<b>0.2</b>	<b>100</b>	<b>99</b>	<b>1,069</b>

NP = not published

<sup>1</sup> Skilled provider includes doctor, nurse, midwife, and auxiliary nurse/midwife.

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

Tonga has a fine record in this area: virtually all mothers (99%) in Tonga accessed ANC from a health professional at some stage during their pregnancy. This characteristic extends across all wealth quintiles, educational levels, regions and location of residence. Even older mothers and those having higher order births maintained their ANC attendance. Only among women aged less than 20 (who numbered 50 in total) and those having their first pregnancy was there a marginal reduction in ANC attendance. These figures reflect the effectiveness of Tonga's nursing and midwifery outreach programmes.

Not surprisingly, virtually all of these women deliver their babies in a health facility, attended by a skilled birth attendant. Furthermore, rapid access to emergency obstetric and neonatal care at Vaiola Hospital is available from anywhere on Tongatapu. The island roads are flat and the island is also serviced by regular domestic and international airlines. In addition, Tonga has an effective and functional national landline telephone system, with two additional entities providing cellular telephone coverage across the country.

The nursing stations on Tongatapu and the outer islands can communicate with Vaiola Hospital via telephone. Tonga's specialist medical staff — who are responsible for women's health, including comprehensive obstetric and newborn care — are located in the main hospital at Vaiola. The only inward transport options for outer island women who require emergency transfer for ANC, delivery or postnatal care are by boat or the country's domestic airlines. Not all islands have an airport and in some cases a transfer to Vaiola Hospital requires first a trip by boat and then a transfer to either another boat or an airplane.

Almost all (99%) of both urban and rural women in Tonga receive ANC from a health professional; wealth, educational levels, birth order and age do not appear to predict who is more likely to access care. In short, the 2012 Tonga DHS indicates antenatal care is accessed universally in Tonga.

There are some differences in the type of healthcare provider that different women access. Women from the upper wealth quintiles, and those with higher levels of education (secondary and tertiary level) are more likely than women from lower wealth quintiles or with a lower level of education to be seen by a doctor. This may be due to women from these groupings being seen as private cases by obstetricians. However, doctors still see over half the women from the lowest two wealth quintiles, and those with either no formal education or education only to primary level (the actual case numbers of these groupings are small). Doctors saw fewer than 50% of women aged less than 20. It is not known if these young women accessed care early or later in pregnancy. Generally speaking, younger single women tend to access ANC less often than those who are older, married and living in the urban area. Overall, just over 42% of pregnant women in Tonga saw only a nurse or midwife (and not a doctor); most of the remaining pregnant women would have also been seen by nurses and midwives, as well as a doctor, but the DHS records only the provider with the highest qualifications.

In general, the World Health Organization recommends that pregnant women have a minimum of four ANC visits during uncomplicated pregnancies. First-time mothers, or those with identified risk factors, should be seen more often. In the Pacific Islands, women who seek ANC from health professionals tend to be seen more than five times during a pregnancy. Starting ANC early allows health care professionals to: 1) screen and educate mothers about their diet; 2) educate women about what to expect throughout their pregnancy; 3) assist with the delivery and help determine where the delivery will take place; and 4) resolve uncertain dates and other matters. ANC does not, however, accurately identify all women who will develop problems or complications during labour.

In the 2012 TDHS, data on the number of ANC visits are available for about 79% of women who had a baby in the five years preceding the survey: 70% of both urban and rural women received more than four ANC visits for their most recent birth; about 6% received two to three visits, and only 1% received just one visit (Table 9.2). The number who received no visits (1%) is consistent with the data in Table 9.1. The median number of months for the first ANC visit is five months. Higher proportions of women received their first visit during the first trimester in urban areas than in the rural area.

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

*Percent distribution of women aged 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, Tonga 2012*

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
<b>Number of ANC visits</b>			
None	1.3	0.6	0.7
1	0.9	1.3	1.2
2–3	5.6	6.6	6.4
4+	71.7	70.0	70.4
Do not know/missing	20.5	21.6	21.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of months pregnant at time of first ANC visit</b>			
No antenatal care	1.3	0.6	0.7
<4	24.2	20.5	21.3
4–5	39.9	41.7	41.3
6–7	27.1	29.4	28.9
8+	6.2	5.6	5.7
Do not know/missing	1.4	2.3	2.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of women	248	821	1,069
Median months pregnant at first visit (for those with ANC)	5.3	5.4	5.4
Number of women with ANC	244	815	1,059

## 9.2 COMPONENTS OF ANTENATAL CARE

The specific types of services received by women who access ANC in Tonga are shown in Table 9.3. Information on the components or types of care received during pregnancy provides a general idea of the kinds of problems that are being seen at clinics. Overall just over 60% of expectant mothers in Tonga take iron tablets or syrup. This includes 42% of outer island women, 54% of women under the age of 20, 56% of women in the highest wealth quintile, and 69% of women in rural Tongatapu. Rural women are usually less likely than urban women to take iron supplements, but this is not the case in Tongatapu. Iron and folic acid are critical for the formation of haemoglobin, which gives blood its red colour and cellular division, much of which takes place in the developing foetus. While almost two-thirds of pregnant women were taking iron, it is not known if they took the entire course of tablets. In most populations there is a high fall-off rate in women taking iron tablets during pregnancy because of the unpleasant taste.

Most ministries of health in the Pacific Islands prescribe iron and folic acid tablets routinely for all pregnant women on their first visit but it is known that compliance is less than it should be. The supplements are given even if women do not have a low blood haemoglobin level. Among expectant mothers who are anaemic, parasitic infestation (with hookworms), poor diet (i.e. low in iron-rich foods) or frequent childbearing (insufficient gaps between pregnancies to replenish iron stores) are likely causes of their anaemia. Just under 3% of pregnant women in Tonga took medication for parasitic infestation in their last pregnancy. While the actual numbers of women on this medication are small, they have the following characteristics: they tend to be younger, in their second or third pregnancy, in the second wealth quintile, and live in rural Tongatapu. Women with higher-order pregnancies were no more likely than those with lower-order pregnancies to have taken this medication.

A review of selected services received by Tongan women who obtained ANC for their most recent birth shows that virtually all of them (99%) were weighed, and had their blood pressure checked and urine samples taken, affirming that they receive a high standard of ANC. Performing these checks at each antenatal visit is important: blood pressure is taken to exclude pregnancy-induced hypertension; urine is tested for sugar and protein to screen for diabetes and exclude pregnancy-induced hypertension, respectively; and blood is taken to test for blood group, rhesus factor, anaemia and certain blood-borne and other infections that can cause serious illness in the mother, baby or both.

Taking weight measurements during pregnancy is still routinely practiced in Tonga. Routine weighing during pregnancy has been abandoned by health services in developed countries because it is labour intensive, yields little useful information and is not particularly predictive of birth outcomes. Weighing is helpful in certain circumstances, however, such as when a woman appears to be retaining considerable body fluid during pregnancy-induced hypertension, or has accumulated excessive amniotic fluid.

One area where healthcare providers could improve is in warning pregnant women about the signs and symptoms of complications; overall, just under 65% of women recalled receiving information on complication during their last pregnancy. Whether the remaining 35% did not recall being told or were definitely not told cannot be determined. Women under the age of 20 and those who had only received primary education were most likely to report not being informed, but even in these subgroups more than 50% recalled being told what symptoms to watch for. Even the two women who had not received any formal education recalled being told the danger signs of pregnancy and the procedures that they went through in their clinics.

**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, Tonga 2012

Background characteristic	Among women with a live birth in the five years preceding the survey, during the pregnancy of last birth percentage who:			Among women who received ANC for their most recent birth in the five years preceding the survey, percentage who:					
	Took iron tablets or syrup	Took intestinal parasite drugs	Women with a live birth in the last five years (No.)	Were informed of signs of pregnancy complications	Were weighed	Had blood pressure measured	Had urine sample taken	Had blood sample taken	Women with ANC for their most recent birth (No.)
<b>Mother's age at birth</b>									
<20	54	4.7	50	51.4	100	100	100	96.7	46
20–34	60.7	2.6	777	64.5	99.5	99.4	99	97.4	775
35–49	61.9	2.7	242	67	100	100	100	98.2	238
<b>Birth order</b>									
1	57.5	2.4	234	59.9	99.7	99.3	98.4	98	227
2–3	60.8	4.2	378	65.1	99.6	99.6	99.6	97.4	378
4–5	59.7	2.5	263	66.1	99.7	99.7	99.1	97.4	262
6+	65.6	0.8	193	66.4	99.6	99.6	99.6	97.3	192
<b>Residence</b>									
Urban	61	2.1	248	65.5	99.3	99.3	99.3	98.3	244
Rural	60.6	3	821	64.1	99.7	99.6	99.2	97.3	815
<b>Region</b>									
Urban Tongatapu	61	2.1	248	65.5	99.3	99.3	99.3	98.3	244
Rural Tongatapu	69.2	4	555	63.6	100	99.7	99.2	96.8	550
Outer islands	42.5	0.8	266	65.2	99.2	99.5	99.2	98.3	265
<b>Mother's education</b>									
Primary or less	NP	NP	8	NP	NP	NP	NP	NP	8
Secondary	62.5	2.7	806	64.8	99.6	99.5	99.3	97.2	799
More than secondary	54.2	3	255	63.7	99.7	99.7	99.1	98.6	252
<b>Wealth quintile</b>									
Lowest	60.8	2.5	266	60.9	100	100	100	97.2	264
Second	64.1	4.9	226	68.2	99.3	98.6	98.7	96.7	226
Middle	59.6	1.1	219	65.4	99.6	99.6	99.6	97.8	215
Fourth	61	2.2	202	62.6	99.6	99.6	98.2	98.2	199
Highest	56.4	3	156	66.1	99.5	100	99.5	98.1	156
<b>Total</b>	<b>60.7</b>	<b>2.8</b>	<b>1,069</b>	<b>64.5</b>	<b>99.6</b>	<b>99.6</b>	<b>99.2</b>	<b>97.5</b>	<b>1,059</b>

NP = not published

Almost all women (98%) who attended ANC had a blood test taken for the reasons stated earlier. As with the other ANC procedures there were no real differences across all stated background characteristics whether it was age, birth order, residences, region, highest attained educational level or wealth quintile. In keeping with other data from Tonga regarding reproductive health, the very high percentage being tested is consistent with a comprehensive and quality service that is reaching its clientele.

### 9.3 TETANUS TOXOID

Tetanus toxoid immunisations are given to infants and children, and are followed up with booster injections in the early teenage years. Adults need booster injections every 10 years or so, or when clinically indicated, e.g. following severe potentially infected trauma injuries. Most Pacific Island countries have well established vaccination programmes that include tetanus toxoid, although some countries have fallen off in terms of penetration of the target population in recent years.

Tonga has continued to perform very well in reaching its vaccination targets, as a result of its well led and well distributed public health nursing system. During pregnancy, booster injections against tetanus are given to prevent neonatal tetanus, which was formerly a major cause of infant deaths. Table 9.4 shows that although less than half (41%) of expectant mothers in Tonga received two or more injections against tetanus during their last pregnancy, 71% were actually protected against tetanus – the remaining 30% by virtue of prior injections. Just under 30% were not completely protected against tetanus; however, based on Tonga's high rates of childhood immunisation, they should have received initial injections in childhood, which would still provide some protection. In contrast with these figures, almost complete coverage rates are reported by Tonga Ministry of health (Appendix E).

**Table 9.4: Tetanus toxoid injections**

*Among mothers aged 15–49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Tonga 2012*

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	42.6	63.9	50
20–34	41.7	72.5	777
35–49	38.9	68.3	242
<b>Birth order</b>			
1	54.9	68.6	234
2–3	37.8	74.2	378
4–5	39.6	70.0	263
6+	33.0	69.9	193
<b>Residence</b>			
Urban	44.9	72.7	248
Rural	40.0	70.7	821
<b>Region</b>			
Urban Tongatapu	44.9	72.7	248
Rural Tongatapu	40.3	72.6	555
Outer islands	39.3	66.6	266
<b>Mother's education</b>			
Primary or less	NP	NP	8
Secondary	39.7	71.5	806
More than secondary	45.5	70.4	255
<b>Wealth quintile</b>			
Lowest	41.5	75.1	266
Second	42.5	71.0	226
Middle	39.2	71.2	219
Fourth	40.6	66.8	202
Highest	41.9	70.3	156
<b>Total</b>	<b>41.1</b>	<b>71.2</b>	<b>1,069</b>

NP = not published

<sup>1</sup> Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within three years of the last live birth), or three or more injections (the last within five years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth.

Rural women were marginally less likely to be protected against tetanus than those living in urban Tongatapu. While neonatal, child and adult tetanus is rare it is a potentially fatal disease; hence the need to continue vaccinating against it.

#### **9.4 PLACE OF DELIVERY**

Table 9.5 shows where mothers delivered their babies in the five years preceding the 2012 TDHS. The data from ANC attendance accurately predict where most women would have delivered their babies. While the place of delivery is important in terms of access to equipment, drugs and services, the real determinant of safety during delivery is that the attendant (the individual performing the delivery) is skilled. In most cases this would be a midwife or an auxiliary nurse or auxiliary midwife.

In Tonga, a remarkable 97% of women deliver their babies in a public health facility. On Tongatapu this is most likely to be Vaiola Hospital. Just over 1% of women delivered their babies in the private sector, but it is not known if this means they were delivered by a private doctor in a public facility, or completely in a private facility. Only about 1% of women had a home birth. This home delivery rate is one of the lowest in the Pacific.

Overall, 98% of women in Tonga give birth in either a public or private facility, again consistent with the high percentages who receive ANC. The majority of women who gave birth were rural Tongatapu dwellers, aged 20–34, who had been educated up to secondary school level. They were spread evenly between the second and the fourth wealth quintile but there were more women in the lowest than in the highest wealth quintile.



**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, Tonga 2012*

Background characteristic	Health facility			Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector							
<b>Mother's age at birth</b>									
<20	99.0	1.0	0.0	0.0	0.0	0.0	100.0	100.0	72
20–34	97.2	1.1	0.9	0.3	0.6	0.0	100.0	98.2	1,330
35–49	93.5	2.9	2.4	0.5	0.7	0.0	100.0	96.4	302
<b>Birth order</b>									
1	98.5	1.1	0.2	0.0	0.2	0.0	100.0	99.6	422
2–3	96.5	1.4	1.1	0.0	1.0	0.0	100.0	97.9	634
4–5	95.7	1.1	1.3	1.5	0.4	0.0	100.0	96.8	387
6+	95.0	2.2	2.2	0.0	0.5	0.0	100.0	97.2	259
<b>Residence</b>									
Urban	95.8	1.9	1.4	0.0	0.9	0.0	100.0	97.7	380
Rural	96.8	1.2	1.0	0.4	0.5	0.0	100.0	98.1	1,323
<b>Region</b>									
Urban Tongatapu	95.8	1.9	1.4	0.0	0.9	0.0	100.0	97.7	380
Rural Tongatapu	96.6	1.4	0.9	0.6	0.5	0.0	100.0	98.0	921
Outer islands	97.4	0.9	1.2	0.0	0.5	0.0	100.0	98.3	403
<b>Mother's education</b>									
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	12
Secondary	96.8	1.1	1.1	0.4	0.6	0.0	100.0	97.9	1,295
More than secondary	96.7	2.2	0.5	0.0	0.5	0.0	100.0	98.9	396
<b>Antenatal care visits<sup>1</sup></b>									
None	NP	NP	NP	NP	NP	NP	NP	NP	8
1–3	92.1	6.1	1.8	0.0	0.0	0.0	100.0	98.2	81
4+	97.1	1.6	1.1	0.2	0.0	0.0	100.0	98.7	753
Do not know/missing	98.4	0.0	0.3	0.0	1.4	0.0	100.0	98.4	228
<b>Wealth quintile</b>									
Lowest	96.2	0.5	2.3	0.7	0.3	0.0	100.0	96.7	435
Second	98.2	0.0	0.0	0.8	1.0	0.0	100.0	98.2	351
Middle	98.0	0.2	1.4	0.0	0.4	0.0	100.0	98.2	347
Fourth	97.3	2.5	0.0	0.0	0.3	0.0	100.0	99.7	300
Highest	92.5	4.9	1.5	0.0	1.0	0.0	100.0	97.4	270
<b>Total</b>	<b>96.6</b>	<b>1.4</b>	<b>1.1</b>	<b>0.3</b>	<b>0.6</b>	<b>0.0</b>	<b>100.0</b>	<b>98.0</b>	<b>1,703</b>

NP = not published

<sup>1</sup> Includes only the most recent birth in the five years preceding the survey.

## 9.5 ASSISTANCE DURING DELIVERY

One of the most critical factors determining whether a woman survives an emergency, life-threatening situation during and in the period directly following delivery is the care she receives from a skilled birth attendant. The term ‘skilled birth attendant’ does not (and should not) include traditional birth attendants. Information on the person providing assistance during delivery and on the number of caesarean sections performed in the five years preceding the survey is presented in Table 9.6. Nearly all women who delivered in Tonga (98%) were attended by a skilled professional. Women may have received assistance from more than one professional (i.e. a combination of a doctor, midwife, nurse, auxiliary nurse and/or auxiliary midwife), but for purposes of the 2012 TDHS, only the highest-ranking health professional that attended their delivery is recorded.

A medical doctor attended 39% of deliveries; women from the higher wealth quintiles, those with post-secondary education, urban dwellers, women in their first pregnancy, and those under the age of 20 were more likely to be attended by a doctor. It may be possible to infer why women were attended by a physician — doctors were most likely present for deliveries of young women and those in their first pregnancies because of obstetric indications, whereas the attendance of doctors for women with higher levels of education and in the higher wealth quintiles would have been because of a preference on their part to be attended by a physician (which attracted a fee in some cases).

The majority (58%) of pregnant women in Tonga report that they have been attended to or assisted by a midwife, nurse or auxiliary nurse or auxiliary midwife during their delivery. Traditional birth attendants assisted with a very small number of deliveries (less than 1%), which is a much lower percentage than in some other countries in Polynesia and the rest of the Pacific Islands. A slightly larger (but still small) proportion of women were assisted by relatives (just over 1%), presumably at home. Whether these deliveries at home were planned is not known.

Providing caesarean sections that are safe for both the mother and baby requires that the health system have available adequate, qualified and skilled staff (including anaesthetists), drugs, logistics and other resources, and be well organised. Within a well-functioning health system, a tertiary-level maternity or delivery unit is expected to deliver between 5% and 15% of its babies by caesarean section, for widely accepted indications. Where a facility is delivering more premature babies, this percentage will be higher.

In Tonga 17% of deliveries were conducted by caesarean section; this proportion is rising, consistent with most other Pacific Island countries. In 2004 the national caesarean section rate for the country was just under 10%, and for Vaiola Hospital just over 10%. The 2012 TDHS indicates caesarean sections were more common among women living in urban Tongatapu, those who had received tertiary education, those in the middle to upper wealth quintiles, those in either their first or sixth (or higher) index pregnancies, and those in the 35–49 age group. Tonga will need to regularly audit its indications for caesarean section to ensure they are being performed for the correct reasons.

**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, Tonga 2012

Background characteristic	Person providing assistance during delivery							Total	Percentage delivered by a skilled provider <sup>1</sup>	Percentage delivered by C-section	Number of births
	Doctor	Nurse or midwife	Auxiliary nurse or midwife	Traditional birth attendant	Relative or other	No one	Do not know or missing				
<b>Mother's age at birth</b>											
<20	47.7	51.3	0	0	1	0	0	100	99	11.8	72
20–34	39.3	56.3	2.6	0.3	1	0.2	0.4	100	98.1	16.7	1,330
35–49	37.8	56.3	2.7	0	2.4	0	0.7	100	96.8	21.8	302
<b>Birth order</b>											
1	45.8	51.5	2	0	0.4	0.2	0.2	100	99.3	18.4	422
2–3	39	55.7	3.1	0.4	1.2	0	0.7	100	97.7	17	634
4–5	37.2	57.8	2.1	0.4	2	0.4	0.2	100	97.1	16.5	387
6+	33	61.9	2.5	0	1.9	0	0.5	100	97.5	18.2	259
<b>Place of delivery</b>											
Health facility	40	56.8	2.5	0	0.7	0	0	100	99.3	17.8	1,669
Elsewhere	(13.9)	(31.6)	(0)	(16.1)	(28.8)	(9.5)	(0)	(100)	(45.6)	(0)	25
Missing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	10
<b>Residence</b>											
Urban	46.9	46.9	2	0.5	3.5	0	0.2	100	95.8	20.4	380
Rural	37.2	58.7	2.6	0.2	0.6	0.2	0.5	100	98.5	16.5	1,323
<b>Region</b>											
Urban Tongatapu	46.9	46.9	2	0.5	3.5	0	0.2	100	95.8	20.4	380
Rural Tongatapu	41.9	53.1	3.4	0.2	0.8	0.2	0.5	100	98.4	18.4	921
Outer islands	26.4	71.4	1	0.2	0.3	0.2	0.5	100	98.8	12.4	403
<b>Mother's education</b>											
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	12
Secondary	36.3	58.2	3	0.3	1.7	0.2	0.4	100	97.4	16.6	1,295
More than secondary	49.4	49.1	1	0	0	0	0.5	100	99.5	20.6	396
<b>Wealth quintile</b>											
Lowest	30.1	62.6	4.6	0.5	1.5	0.3	0.3	100	97.4	14.4	435
Second	33.7	63	1.7	0	1.4	0	0.2	100	98.4	16.8	351
Middle	38.1	56.2	2.4	0.5	2	0.3	0.4	100	96.8	19	347
Fourth	46.1	51.5	1.3	0	0.9	0	0.3	100	98.9	21.2	300
Highest	55.8	41.5	1.5	0	0.3	0	1	100	98.7	16.8	270
<b>Total</b>	<b>39.4</b>	<b>56.1</b>	<b>2.5</b>	<b>0.2</b>	<b>1.3</b>	<b>0.1</b>	<b>0.4</b>	<b>100</b>	<b>97.9</b>	<b>17.4</b>	<b>1,703</b>

NP = not published

<sup>1</sup> Skilled provider includes doctor, nurse, midwife and auxiliary nurse or auxiliary midwife.

Notes:

1) If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## **9.6 POSTNATAL CHECKUP**

The postnatal period extends for six weeks (42 days) after the delivery of the baby and its placenta, and is characterised by breast feeding and the recovery of the mother's reproductive system to pre-pregnancy status (apart from her breasts if she continues to breastfeed). Pacific Island countries have different regimes for postnatal checkups for mother and baby. While two visits are considered ideal, a single visit six weeks after delivery is the usual scenario, especially in a busy or overstretched health service. Serious life-threatening complications are most likely to arise in the first few days after delivery. In most cases, a postnatal checkup takes place after the mother and her baby have been discharged from the health facility, and the checkup is conducted either in a clinic or in the mother's home. Table 9.7 shows the timing of women's first postnatal checkup in Tonga (ranging from less than 4 hours to 3–41 days), while Table 9.8 shows the type of health provider that performed the checkup.

**Table 9.7: Timing of first postnatal checkup**

*Among women aged 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, Tonga 2012*

Background characteristic	Time after delivery of mother's first postnatal checkup					No postnatal checkup <sup>1</sup>	Total	Number of women
	< 4 hours	4–23 hours	2 days	3–41 days	Don't know or missing			
<b>Mother's age at birth</b>								
<20	31.0	14.9	34.9	4.6	4.7	10.1	100.0	50
20–34	31.4	13.1	31.2	4.9	6.1	13.3	100.0	777
35–49	40.3	6.2	29.3	5.2	5.9	13.1	100.0	242
<b>Birth order</b>								
1	34.5	12.3	31.2	4.9	6.2	10.8	100.0	234
2–3	30.9	11.4	31.1	5.8	6.2	14.6	100.0	378
4–5	31.3	11.8	32.5	4.7	7.8	11.9	100.0	263
6+	40.0	11.0	28.0	3.9	2.6	14.5	100.0	193
<b>Residence</b>								
Urban	30.0	11.3	35.6	6.2	6.8	10.1	100.0	248
Rural	34.4	11.7	29.5	4.6	5.7	14.0	100.0	821
<b>Region</b>								
Urban Tongatapu	30.0	11.3	35.6	6.2	6.8	10.1	100.0	248
Rural Tongatapu	28.4	14.5	33.7	5.1	5.3	13.0	100.0	555
Outer islands	47.1	6.0	20.7	3.7	6.6	15.9	100.0	266
<b>Education</b>								
Primary or less	NP	NP	NP	NP	NP	NP	NP	8
Secondary	30.7	12.0	32.6	5.6	5.3	13.8	100.0	806
More than secondary	41.3	10.5	26.5	3.3	7.6	10.9	100.0	255
<b>Wealth quintile</b>								
Lowest	28.1	8.6	32.2	7.6	5.2	18.3	100.0	266
Second	34.1	10.0	29.4	6.7	4.7	15.2	100.0	226
Middle	28.7	17.4	34.2	2.5	7.6	9.6	100.0	219
Fourth	41.9	11.0	25.5	2.8	7.2	11.7	100.0	202
Highest	37.0	11.9	33.5	4.4	5.4	7.8	100.0	156
<b>Total</b>	<b>33.4</b>	<b>11.6</b>	<b>30.9</b>	<b>5.0</b>	<b>6.0</b>	<b>13.1</b>	<b>100.0</b>	<b>1,069</b>

NP = not published

<sup>1</sup> Includes women who received a checkup after 41 days.

**Table 9.8: Type of provider of first postnatal checkup**

*Among women aged 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, Tonga 2012*

Background characteristic	Type of health provider of mother's first postnatal checkup					Total	Number of women
	Doctor, nurse or midwife	Auxiliary nurse or midwife	Other	Do not know or missing	No postnatal checkup <sup>1</sup>		
<b>Mother's age at birth</b>							
<20	89.9	0.0	0.0	0.0	10.1	100.0	50
20–34	85.4	1.0	0.0	0.3	13.3	100.0	777
35–49	83.3	2.2	0.3	1.2	13.1	100.0	242
<b>Birth order</b>							
1	87.6	1.7	0.0	0.0	10.8	100.0	234
2–3	84.0	0.8	0.0	0.6	14.6	100.0	378
4–5	85.8	1.2	0.2	0.8	11.9	100.0	263
6+	83.7	1.5	0.0	0.3	14.5	100.0	193
<b>Residence</b>							
Urban	87.6	1.4	0.0	1.0	10.1	100.0	248
Rural	84.4	1.2	0.1	0.3	14.0	100.0	821
<b>Region</b>							
Urban Tongatapu	87.6	1.4	0.0	1.0	10.1	100.0	248
Rural Tongatapu	85.1	1.6	0.0	0.3	13.0	100.0	555
Outer islands	83.0	0.3	0.2	0.5	15.9	100.0	266
<b>Education</b>							
Primary or less	NP	NP	NP	NP	NP	NP	8
Secondary	84.1	1.4	0.1	0.6	13.8	100.0	806
More than secondary	88.5	0.7	0.0	0.0	10.9	100.0	255
<b>Wealth quintile</b>							
Lowest	80.4	0.5	0.0	0.8	18.3	100.0	266
Second	83.9	0.6	0.0	0.3	15.2	100.0	226
Middle	88.2	1.8	0.0	0.4	9.6	100.0	219
Fourth	86.4	0.7	0.3	0.8	11.7	100.0	202
Highest	89.3	3.0	0.0	0.0	7.8	100.0	156
<b>Total</b>	<b>85.2</b>	<b>1.2</b>	<b>0.1</b>	<b>0.5</b>	<b>13.1</b>	<b>100.0</b>	<b>1,069</b>

NP = not published

<sup>1</sup> Includes women who received a checkup after 41 days.

By Pacific Island standards the proportion of women first seen within 4 hours after delivery (33%) is quite high, while an additional 12% were seen in 4–23 hours, meaning at least 45% were seen within the first day (this does not count those who were seen 23–24 hours after delivery). Since virtually all births take place in a healthcare facility, it is presumed this first checkup is carried out at a facility. After the first 23 hours, an additional 31% of women are seen for their first postnatal checkup within two days. Thus, 76% of mothers and babies in Tonga receive their first checkup within two days of delivery. This is high by Pacific Island standards, and is evidence of a well set up, responsive public health system that is addressing the reproductive health needs of its population. Only 5% of women in Tonga were not seen until 3–41 days after delivery, while 6% of women were unable to recall when they and their babies were first checked.

A postnatal checkup is an ideal opportunity to raise the subject of family planning and the various modern methods that are freely available in Tonga. Tonga's contraceptive prevalence rate is likely to increase if women and their partners are advised of the rights and contraceptive options that are available to them for birth spacing. Older mothers (aged 35–49), women who had delivered their first babies or sixth or subsequent babies, women from the outer islands, those with tertiary education, and women in the fourth and highest wealth quintiles were more likely to have received a postnatal checkup for themselves and their baby in the first four hours.

The data regarding which health professional saw women and their babies for the first postnatal checkup aggregates doctors, nurses and midwives. It is not surprising then that 85% of women in Tonga received their first postnatal checkup from a doctor, midwife or nurse. Only 1% of women were checked by an auxillary nurse or auxillary midwife, while 13% of women did not access any postnatal care services. The women who did access services were equally distributed across all categories (age, birth order, residence, region, educational achievement and wealth quintile). Among women who did not access a postnatal checkup, outer island dwellers and women in the lowest wealth quintile seem to be over-represented, suggesting difficulties in accessing care following a delivery, when women have returned home.

## 9.7 PROBLEMS ACCESSING HEALTH CARE

As mentioned previously, the distance between islands in Tonga can complicate accessing health care that may not be available on a woman's own island — forcing outer island women to use domestic airlines services or local boats — while even on Tongatapu limiting factors may be a lack of the availability of an ambulance or vehicle. In addition, many other factors serve to determine a women's ability to access the health services she needs. These include permission (from a spouse, partner or family), availability of funds, availability of a healthcare provider (especially a female provider), other factors and combinations of these. Table 9.9 shows the percentage of women who report having serious problems in accessing health care for themselves when they were sick. In total, 3,068 women are reported on, including women who are not pregnant. In addition to the background characteristics for pregnant women discussed in this chapter, Table 9.9 includes employment in the last 12 months, marital status, and the number of living children rather than birth order.

About half of Tongan women (49%) report at least one problem in being able to access health care, and some cite more than one reason. This figure is less than some reported in similar studies undertaken in other Pacific Island countries. Women's concerns regarding access to health care include:

- 1) concern that certain drugs are not available (33%),
- 2) concern that a healthcare provider will not be available (29%),
- 3) having to take transport (26%),
- 4) getting money for treatment (25%),
- 5) not wanting to go alone (25%),
- 6) distance to the healthcare facility (22%),
- 7) concern that no female healthcare provider will be available (19%), and
- 8) getting permission to go for treatment (16%).

Women were the most likely to cite getting permission for treatment as an access issue if they were under the age of 20; did not have children; were unmarried, unemployed, or lived in a rural area; or had only a primary-level education. Getting money for treatment, the distance to the health facility and having to take transport were also cited by these groups of women as being problems in terms of getting access to health

care. This is understandable, as these issues all represent potential access challenges for women who live away from health facilities and rely on others (e.g. men or older women within the family) for permission, funds or both to access health care.

Not wanting to go alone was cited as an issue by young women, those with no children, those who were not married, the unemployed, and those who had received only a primary education. This reflects an absence of decision-making power or confidence among these groups of women, who are reliant on others to accompany them and perhaps even speak for them when they see a healthcare provider. Young women, those without children, unmarried women (there is marked overlap in these three categories) and women with only a primary school education expressed concerns about the non-availability of 1) a female healthcare provider, 2) any healthcare provider, and 3) drugs.

There are marked geographical differences in the types of problems cited by women in accessing health care. Women in urban Tongatapu and the outer islands report roughly similar levels of concern regarding the need to obtain permission, and getting money for treatment, while distance and transport concerns are more important to outer island women, as could be expected. Outer island women reported the lowest concerns of all three regions regarding going alone, no female provider, no provider, and no drugs, while women from rural Tongatapu reported the highest level of concern across all categories except for not wanting to go alone.



**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, Tonga 2012

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	26.9	34.5	30.1	34	46.2	34	37.9	39.3	63.4	658
20–34	14.3	23.1	22	25.6	22.4	16.5	27.1	30.8	47.2	1,406
35–49	10	22.3	18.1	22.8	15.3	13.5	25.1	30.7	42.6	1,004
<b>Number of living children</b>										
0	21	28.9	25.5	28.5	36.2	25.8	32	35	55.4	1,366
1–2	15.2	23.1	23.2	27.5	19.2	16.2	29.3	34.1	47.5	650
3–4	9.1	22.2	18.6	21.1	15.1	13.3	24.2	27.6	41.6	541
5+	8.2	21.6	17.6	25.8	13.9	12.3	24.2	29.7	42.8	511
<b>Marital status</b>										
Never married	22.5	30.2	26.5	29.6	38.1	27.3	33.6	36.3	56.8	1,140
Married or living together	11.5	22.2	20	24.2	17.6	14.9	26.6	31	45	1,747
Divorced, separated or widowed	12.1	24.2	21.5	30	16.9	11.2	19.2	24.4	41.5	181
<b>Employed within 12 months of survey</b>										
Not employed	17.9	27.2	23.7	27.4	27.4	21.2	29.2	32.1	49.8	1,839
Employed for cash	11.6	22.3	20.7	25.5	20.5	16	27.8	33	47.9	1,030
Employed not for cash	15	23.4	20.5	23.4	29.3	19.5	29.6	35.1	50.1	198
Missing	NP	NP	NP	NP	NP	NP	NP	NP	NP	2
<b>Residence</b>										
Urban	11.1	21.1	16.2	20.6	29	18.8	24.1	31.4	49	754
Rural	17	26.7	24.5	28.4	24	19.5	30.3	33	49.2	2,314
<b>Region</b>										
Urban Tongatapu	11.1	21.1	16.2	20.6	29	18.8	24.1	31.4	49	754
Rural Tongatapu	19.8	28.8	25.2	30.1	27.2	24.2	38.5	38.5	52.5	1,554
Outer islands	11.4	22.3	23.2	25	17.4	9.9	13.4	21.7	42.5	760
<b>Education</b>										
Primary or less	(28.4)	(45.3)	(32.7)	(48.9)	(44.8)	(38.6)	(39.3)	(42.2)	(67.6)	37
Secondary	15.9	26.4	23.3	27.5	26	20.3	28.8	32.5	50.6	2,334
More than secondary	14	20.6	19.3	22.1	21.4	15	27.9	32.4	43.3	697
<b>Wealth quintile</b>										
Lowest	11.4	28.9	29.1	38.2	23.1	17.3	25.6	29.4	54.6	557
Second	17.9	28.3	25.7	29.2	24.4	21	28.9	34.1	51.8	597
Middle	15.1	25.9	21.5	24.5	27.2	20	31.3	35.4	50.4	631
Fourth	17.5	23.6	20.8	23.7	26.2	20.3	30.4	33.9	47.6	650
Highest	15.6	20.4	16.2	18.4	24.7	17.7	27.2	29.7	42.4	632
<b>Total</b>	<b>15.6</b>	<b>25.3</b>	<b>22.5</b>	<b>26.5</b>	<b>25.2</b>	<b>19.3</b>	<b>28.8</b>	<b>32.6</b>	<b>49.2</b>	<b>3,068</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## CHAPTER 10 CHILD HEALTH

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This chapter presents findings on several areas of importance to children's health. The information presented on birth weight and birth size is important for the design and implementation of programmes aimed at reducing neonatal and infant mortality. Many early childhood deaths can be prevented by immunising children against preventable diseases and by ensuring that children receive prompt and appropriate treatment when they become ill. Information on vaccination coverage focuses on children aged 12–23 months. Overall coverage levels at the time of the survey and by 12 months of age are shown for this age group. Additionally, information on the source of vaccinations (whether based on a written vaccination card or on mother's recall) is shown. Differences in vaccination coverage between subgroups of the population further assist in programme planning.

Information on treatment practices and contact with health services among children with the three most important childhood illnesses — acute respiratory infection (ARI), fever and diarrhoea — helps when assessing national programmes aimed at reducing the mortality impact of these illnesses. Information is provided on the prevalence of ARI and fever, and their treatment with antibiotics. Treating diarrhoeal disease with oral rehydration therapy (including increased fluids) aids in assessing programmes that recommend such treatment. Because appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is also provided on the manner of disposing of children's faecal matter.

### 10.1 CHILD'S SIZE AT BIRTH

A child's birth weight or size at birth is an important indicator of its vulnerability to the risk of childhood illnesses and the child's chances of survival. Children whose birth weight is less than 2.5 kilograms (kg), or children reported to be 'very small' or 'smaller than average', are considered to have a higher-than-average risk of early childhood death. For births in the five years preceding the survey, birth weight was recorded in the questionnaire (if available) from either a written record or the mother's recall. Since birth weight may not be known for many babies, the mother's estimate of the baby's size at birth was also obtained. Even though this is subjective, it can be a useful proxy for a child's weight. Table 10.1 presents information on child's weight and size at birth according to background characteristics.

Most (94%) children in Tonga are weighed at birth, which is not surprising because many births take place in a health facility. Among children born in the five years before the survey with a reported birth weight, 4% weighed less than 2.5 kg at birth. Birth weight is generally lower among children born to younger women (age at birth less than 20 years) and older women (aged over 35), fourth- and fifth-order children, children of women with more than secondary education, children whose mothers smoke cigarettes or tobacco, and babies whose mothers are in lower wealth quintile households.

Table 10.1 includes information on a mother's assessment of her baby's size at birth. Less than 5% are reported to be very small, or smaller than average, which corresponds well with actual birth weight data (4% of births are under 2.5 kg).

**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, Tonga 2012

Background characteristic	Births with a reported birth weight <sup>1</sup>			Number of births	As a percentage of all births	Distribution of all live births by size of child at birth					Number of births
	Less than 2.5 kg (%)	2.5 kg or more (%)	Total (%)			Very small (%)	Smaller than average (%)	Average or larger (%)	Do not know or missing (%)	Total	
<b>Mother's age at birth</b>											
<20	8	92	100	67	93.5	2.2	4.2	91.5	2.2	100	72
20-34	3.4	96.6	100	1,253	94.3	0.7	3.7	93.9	1.7	100	1,330
35-49	6	94	100	283	93.7	1.2	4.4	92.9	1.4	100	302
<b>Birth order</b>											
1	4.4	95.6	100	397	94	0.9	4.9	92.7	1.4	100	422
2-3	3.2	96.8	100	602	94.9	0.7	3.5	93.7	2	100	634
4-5	6.1	93.9	100	359	92.8	1.4	4.6	92.1	1.9	100	387
6+	2.7	97.3	100	245	94.5	0.5	1.7	97	0.8	100	259
<b>Mother's smoking status</b>											
Smokes cigarettes or tobacco	5.1	94.9	100	276	94	0.9	5.6	91.3	2.1	100	294
Does not smoke	3.9	96.1	100	1,325	94.1	0.9	3.5	94.1	1.6	100	1,408
Missing	NP	NP	NP	2	NP	NP	NP	NP	NP	NP	2
<b>Residence</b>											
Urban	3.7	96.3	100	350	92.2	0.8	4.3	92.9	1.9	100	380
Rural	4.2	95.8	100	1,253	94.7	0.9	3.7	93.8	1.6	100	1,323
<b>Region</b>											
Urban Tongatapu	3.7	96.3	100	350	92.2	0.8	4.3	92.9	1.9	100	380
Rural Tongatapu	4.2	95.8	100	870	94.6	0.8	4.3	93.3	1.6	100	921
Outer islands	4.1	95.9	100	383	95	1.1	2.3	95	1.6	100	403
<b>Mother's education</b>											
Primary or less	NP	NP	NP	10	NP	NP	NP	NP	NP	NP	12
Secondary	3.9	96.1	100	1,221	94.3	0.9	3.8	93.6	1.7	100	1,295
More than secondary	4.7	95.3	100	372	93.8	1	4	93.3	1.7	100	396
<b>Wealth quintile</b>											
Lowest	5	95	100	406	93.3	0.6	2.9	94.3	2.2	100	435
Second	6.5	93.5	100	328	93.6	1.2	3.6	93.4	1.8	100	351
Middle	4.4	95.6	100	329	94.8	0.7	6.2	91.9	1.3	100	347
Fourth	2.5	97.5	100	279	92.9	1.3	3.6	93.5	1.6	100	300
Highest	1	99	100	261	96.8	0.6	3.1	95	1.3	100	270
<b>Total</b>	<b>4.1</b>	<b>95.9</b>	<b>100</b>	<b>1,603</b>	<b>94.1</b>	<b>0.9</b>	<b>3.8</b>	<b>93.6</b>	<b>1.7</b>	<b>100</b>	<b>1,703</b>

NP = not published

<sup>1</sup> Based on either a written record or the mother's recall.

## 10.2 VACCINATION COVERAGE

Universal immunisation of children against the eight vaccine-preventable diseases — tuberculosis, diphtheria, whooping cough (pertussis), tetanus, hepatitis B, *Haemophilus influenzae*, polio and measles — is crucial to reducing infant and child mortality. Additionally, information on immunisation coverage is important for monitoring and evaluating the Expanded Programme on Immunisation (EPI), which was initiated in 1974 by the World Health Organization (WHO) with the goal of making vaccines available to all children throughout the world.

The 2012 TDHS collected information on vaccination coverage for all living children born in the five years preceding the survey. According to guidelines developed by WHO, children are considered fully vaccinated when they have received a vaccination against tuberculosis (BCG vaccine), three doses each of vaccines effective against diphtheria, pertussis and tetanus (combined as DPT vaccine) and polio, and a measles vaccination by age 12 months. BCG should be given at birth or at first clinical contact; DPT and polio require three vaccinations at approximately age 6, 10 and 14 weeks; and measles should be given at or soon after reaching age 9 months.

Information on vaccination coverage was collected in two ways during the 2012 TDHS: 1) from vaccination cards shown to the interviewer, and 2) from mothers' verbal reports or recall. If vaccination cards were available, the interviewer copied vaccination dates directly onto the questionnaire. When there was no vaccination card for the child, or if a vaccine had not been recorded on the card as being given, the respondent was asked to recall the vaccines given to her child.

Table 10.2 shows the percentage of children aged 12–23 months who have received the various vaccinations by source of information (i.e. from a vaccination card or respondent recall). This is the youngest cohort of children who have reached the age by which they should be fully vaccinated. In Table 10.2, the rates of immunisation are in every case, lower when reliant on respondent's recall than where immunisation cards were sighted. Therefore, it would appear that mothers fail to accurately recall the full extent of their children's vaccination coverage. Furthermore, since cards may not be completely updated by staff administering vaccinations, placing more reliance on respondent recall, the data on vaccination coverage should be interpreted with caution. This is further exemplified by the almost complete coverage rates reported by Tonga Ministry of health (Appendix E).

Nevertheless, information in Table 10.2 suggests that about 46% of children aged 12–23 months were fully vaccinated at the time of the survey, about 89% had received the BCG vaccination, and 66% had been vaccinated against measles. Because the DPT and polio vaccines are often administered at the same time, their coverage rates are expected to be similar; 86% of children had received the first dose of DPT and 88% the first dose of polio vaccine. Similarly, 66% of children had received the third dose of DPT and 67% the third dose of polio vaccine.

Information in Table 10.3 shows vaccination coverage rates among children aged 12–23 months by background characteristics and may give some indication of the success of the immunisation programme in reaching all population subgroups. The vaccination coverage rate for all basic vaccinations is higher among female babies (50%) than male babies (44%). Higher-order births are less likely to be fully immunised (only 40% of sixth- or higher-order births received all basic vaccinations) than lower-order births (50% of first-order births are immunised). There are urban–rural differences in vaccination coverage: children residing in urban Tongatapu are more likely (53%) to be fully immunised than children in rural areas (44%). However, immunisation rates are similar in urban Tongatapu and the outer islands (both around 53%) and lower in rural Tongatapu (40%).

The percentage of children fully immunised varies by mother's education. About 57% of children whose mothers have higher than secondary-level education are fully immunised, compared with 43% of children whose mothers have only secondary-level education.

**Table 10.2: Vaccinations by source of information**

*Percentage of children aged 12–23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Tonga 2012*

Source of information	Vaccinations received (% of children receiving vaccine)										Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All <sup>1</sup>	None	
<b>Vaccinated at any time before survey</b>											
Vaccination card	48.2	48	46.5	46.5	48	46.5	46.5	30	30	0	148
Mother's report	41.2	38.1	26.8	19.2	39.9	29	21.3	36.2	16.3	7.6	159
Either source	89.4	86	73.3	65.7	87.9	75.5	67.8	66.2	46.3	7.6	307
<b>Vaccinated by 12 months of age<sup>2</sup></b>	<b>89.4</b>	<b>86</b>	<b>72.6</b>	<b>65.1</b>	<b>87.9</b>	<b>74.8</b>	<b>67.1</b>	<b>3.5</b>	<b>2.5</b>	<b>7.6</b>	<b>307</b>

BCG = tuberculosis vaccine; DPT = vaccine against diphtheria, pertussis and tetanus

<sup>1</sup> BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

<sup>2</sup> 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 vaccination.

Note: DPT 1 refers to the first dose of DPT vaccine; DPT 2 to the second dose, etc.

**Table 10.3: Vaccinations by background characteristic**

Percentage of children aged 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, Tonga 2012

Background characteristic	Vaccinations received (% of children receiving vaccine)										Vaccination card seen (%)	Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic <sup>1</sup>	None		
<b>Sex</b>												
Male	86.1	82.3	65.2	60.1	86.2	70.1	62.4	65.1	43.6	10.1	44.2	165
Female	93.2	90.3	82.8	72.2	89.8	81.8	74.1	67.4	49.5	4.7	52.9	143
<b>Birth order</b>												
1	87.1	84.5	74.7	65	84.9	76.1	67.5	66.4	50.5	7.7	45.4	62
2–3	91.1	88.9	75.4	68.2	89	75.4	71.3	67.1	48.1	5.5	55.2	128
4–5	89.7	83.4	65.9	56.8	86.7	73	60.8	73.1	43.5	10.3	33	73
6+	(87.4)	(84.1)	(77.6)	(74.4)	(90.6)	(79.5)	(69.7)	(51.6)	(40)	(9.4)	(56.8)	44
<b>Residence</b>												
Urban	91.1	82.9	73.8	66.8	85.6	73.9	69.3	71.4	52.6	5.6	51	71
Rural	88.9	86.9	73.2	65.4	88.5	76	67.4	64.6	44.4	8.2	47.4	236
<b>Region</b>												
Urban Tongatapu	91.1	82.9	73.8	66.8	85.6	73.9	69.3	71.4	52.6	5.6	51	71
Rural Tongatapu	88.5	88.5	74.2	63.7	88.4	75.2	63.7	63.6	39.8	7.7	43	155
Outer islands	89.7	84.1	71.2	68.6	88.7	77.7	74.4	66.5	53.2	9.2	55.7	82
<b>Mother's education</b>												
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	1
Secondary	88.2	85.2	73.2	65	85.9	75.8	66.3	63.9	43.3	8.5	48.1	236
More than secondary	93.3	88.5	74.6	69	94.2	75.5	73.7	74.6	57	4.7	49.2	70
<b>Wealth quintile</b>												
Lowest	88.4	88.2	76.6	66.3	88.4	78.5	69.3	65.9	45	5.7	52.3	79
Second	92.5	87.5	77.8	75.4	91	80	77.7	74.1	62.1	5	52.3	58
Middle	90.4	84.5	64.3	57.1	84.8	69	58.5	63	36.3	8.3	41.3	66
Fourth	86.8	86.6	75.9	67.7	89.3	77.1	69.2	62	39.4	9.5	51	57
Highest	89	82	72	62.7	85.7	72.4	64.7	66.2	51.5	11	42.6	47
<b>Total</b>	<b>89.4</b>	<b>86</b>	<b>73.3</b>	<b>65.7</b>	<b>87.9</b>	<b>75.5</b>	<b>67.8</b>	<b>66.2</b>	<b>46.3</b>	<b>7.6</b>	<b>48.2</b>	<b>307</b>

BCG = tuberculosis vaccine; DPT = vaccine against diphtheria, pertussis and tetanus; NP = not published

<sup>1</sup> BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

Notes:

1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

2) DPT 1 refers to the first dose of DPT vaccine; DPT 2 to the second dose, etc.

### 10.2.1 Trends in vaccination coverage

One way of measuring trends in vaccination coverage is to compare coverage rates among children of different ages. Table 10.4 shows the percentage of children who received vaccinations during their first year of life by current age. Such data provide information on trends in vaccination coverage over the past four years.

Table 10.4 shows that about 48% of children aged 12–23 months have vaccination cards compared with around 28% of children aged 36–59 months. This may be because vaccination cards for older children have been discarded or lost over the years. Therefore the data in this table should be interpreted with caution since there will be greater reliance on respondent recall on children’s vaccinations records from earlier years, for which respondents’ capacity to accurately recall children’s vaccinations records may be diminished.

However, the percentage of children who have not received any vaccinations by age 12 months has declined over the past four years, from 14% among children aged 48–59 months at the time of the survey, to about 8% among children aged 12–23 months.

**Table 10.4: Vaccinations in first year of life**

*Percentage of children aged 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, Tonga 2012*

Age in months	Vaccinations received (% of children receiving vaccine)										Vaccination card seen (%)	Number of children
	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic <sup>1</sup>	None		
12–23	89.4	86	72.6	65.1	87.9	74.8	67.1	3.5	2.5	7.6	48.2	307
24–35	86.8	83.4	68.3	59.9	84.9	69.1	61.2	2.1	1.4	12.1	34	383
36–47	85.4	83.6	71	59.4	84.2	71.8	60.2	2.3	1.5	13	28.2	334
48–59	84.6	80.6	66.3	61.3	83.1	69.8	61.1	6.3	3	13.5	28.6	302
<b>Total</b>	<b>86.6</b>	<b>83.5</b>	<b>69.5</b>	<b>61.4</b>	<b>85</b>	<b>71.2</b>	<b>62.4</b>	<b>3.4</b>	<b>2.1</b>	<b>11.6</b>	<b>34.6</b>	<b>1,326</b>

BCG = tuberculosis vaccine; DPT = vaccine against diphtheria, pertussis and tetanus

<sup>1</sup> BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

Notes:

1) 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.

2) DPT 1 refers to the first dose of DPT vaccine; DPT 2 to the second dose, etc.

### 10.3 ACUTE RESPIRATORY INFECTION

ARI is among the leading causes of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. During the 2012 TDHS, the prevalence of ARI was estimated by asking mothers whether their children aged less than five years 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 consistent with ARI. It should be noted that morbidity data 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 4% of children younger than five years showed symptoms of ARI at some time in the two weeks preceding the survey. The prevalence of ARI symptoms varies by age of child. Children aged 6–11 months are most likely to show symptoms of ARI (9%) than children in other age groups.

Coughing and rapid breathing are higher among children in Tongatapu (5%) than children in the outer islands (2%). The proportion of children with ARI symptoms is higher where wood, coconut parts or agricultural crops are used as a cooking fuel. The proportion of children with ARI symptoms decreases with increasing wealth quintile of the household, from a high of 6% among children living in the lowest wealth quintile households to less than 3% among children living in households of the fourth and highest wealth quintiles.

During the 2012 TDHS, mothers of children who had fever in the two weeks preceding the survey were asked about what was done to treat the illness. However, because only 70 children had ARI symptoms in the two weeks preceding the survey, meaningful cross comparison at statistically reliable levels is not possible. Consequently, these data have been excluded from the analysis.

**Table 10.5: Prevalence of symptoms of ARI**

*Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey according to background characteristics, Tonga 2012*

Background characteristic	Children under age five	
	Have symptoms of ARI (%) <sup>1</sup>	Number of children
<b>Age in months</b>		
<6	3.8	165
6–11	9.2	178
12–23	4.9	307
24–35	4.8	383
36–47	3.0	334
48–59	1.5	302
<b>Sex</b>		
Male	4.1	865
Female	4.4	805
<b>Mother's smoking status</b>		
Smokes cigarettes or tobacco	2.7	288
Does not smoke	4.5	1,381
Missing	NP	2
<b>Cooking fuel</b>		
Electricity or gas	3.2	867
Kerosene	NP	3
Wood, coconut parts or agricultural crops	5.3	795
Other fuel	NP	4
<b>Residence</b>		
Urban	5.2	375
Rural	3.9	1,295
<b>Region</b>		
Urban Tongatapu	5.2	375
Rural Tongatapu	4.8	895
Outer islands	1.9	400
<b>Mother's education</b>		
Primary or less	NP	12
Secondary	4.6	1,271
More than secondary	2.2	387
<b>Wealth quintile</b>		
Lowest	6.1	422
Second	4.8	347
Middle	3.8	338
Fourth	2.8	295
Highest	2.6	267
<b>Total</b>	<b>4.2</b>	<b>1,670</b>

NP = not published

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing that is chest-related) is considered a proxy for pneumonia.

## 10.4 FEVER

Fever is another symptom of acute infection in children. Illnesses that cause fever contribute to high levels of malnutrition and mortality. Fever can occur year-round; therefore, factors that cause it must be taken into account when interpreting prevalence of fever in Tonga.

Table 10.6 shows the percentage of children under age five years with fever during the two weeks preceding the survey, and the percentage receiving various treatments, by selected background characteristics. The patterns should be interpreted with caution due to small absolute numbers and because the answers of respondents are dependent upon their interpretation of 'fever', which can clearly vary from



mother to mother. In spite of this, about 10% of children under the age of five years had fever in the two weeks preceding the survey. The prevalence of fever varies by age of child. Fever is more common among children aged 6–11 months (22%) and 12–23 months (15%) than other children.

There are some variations in the prevalence of fever between children in urban and rural areas. Fever in the two weeks preceding the 2012 TDHS was more prevalent among urban children (16%) than among children living in rural areas (9%). In contrast, there are no significant variations in the prevalence of fever by mother's education level, or by household wealth.

Overall, about 64% of children with fever were taken to a health facility or provider for treatment. Children aged 36–47 months were more likely to be taken to a health facility or provider for treatment of fever than other children. Male children are slightly more likely to receive treatment (66%) than female children (62%). The percentage of children with fever taken to a health facility or provider for treatment is higher among those living in urban Tongatapu (75%) than among those living in rural Tongatapu (58%) or the outer islands (57%). Children with fever were more likely to be taken to a health facility or provider for treatment in households where their mothers had more than secondary education and were in the fourth and highest wealth quintiles.

**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, Tonga 2012*

Background characteristic	All children under age five		Children under age five with fever		
	Had fever (%)	Number of children	Advice or treatment sought from a health facility or provider <sup>1</sup>	Took antibiotic drugs	Number of children
<b>Age in months</b>					
<6	10.7	165	NP	NP	18
6–11	22.2	178	(66.9)	(24.3)	40
12–23	14.7	307	(63.1)	(18.2)	45
24–35	6.5	383	(53.0)	(11.9)	25
36–47	7.7	334	(85.3)	(28.4)	26
48–59	6.4	302	NP	NP	19
<b>Sex</b>					
Male	11.1	865	65.5	19.1	96
Female	9.5	805	61.6	19.6	76
<b>Residence</b>					
Urban	16.0	375	74.8	32.6	60
Rural	8.7	1,295	57.9	12.2	113
<b>Region</b>					
Urban Tongatapu	16.0	375	74.8	32.6	60
Rural Tongatapu	8.8	895	58.2	11.3	79
Outer islands	8.4	400	(57.0)	(14.6)	34
<b>Mother's education</b>					
Primary or less	NP	12	NP	NP	1
Secondary	11.0	1,271	61.4	19.6	140
More than secondary	8.1	387	(72.8)	(18.7)	31
<b>Wealth quintile</b>					
Lowest	11.0	422	56.0	15.7	46
Second	10.7	347	(59.1)	(20.1)	37
Middle	8.4	338	(58.8)	(19.4)	28
Fourth	10.8	295	(75.8)	(18.1)	32
Highest	10.9	267	(73.6)	(25.3)	29
<b>Total</b>	<b>10.3</b>	<b>1,670</b>	<b>63.7</b>	<b>19.3</b>	<b>172</b>

NP = not published

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

About 19% of children with fever received antibiotic drugs; of these, 33% received antibiotic drugs in urban Tongatapu, 11% received antibiotics in rural Tongatapu and 15% received them in the outer islands.

## 10.5 PREVALENCE 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 food preparation and disposal of excreta. In interpreting the findings of the 2012 TDHS, it should be borne in mind that prevalence of diarrhoea varies seasonally.

Table 10.7 shows the percentage of children under age five years with diarrhoea in the two weeks preceding the survey according to selected background characteristics. Overall, around 4% of all children under age five years had diarrhoea.

**Table 10.7: Prevalence of diarrhoea**

*Percentage of children under age five who had diarrhoea in the two weeks preceding the survey, by background characteristics, Tonga 2012*

Background characteristic	Diarrhoea in the two weeks preceding the survey		Number of children
	All diarrhoea	Diarrhoea with blood	
<b>Age in months</b>			
<6	1.4	0.0	165
6–11	8.2	0.0	178
12–23	6.7	0.2	307
24–35	3.8	0.2	383
36–47	3.4	0.2	334
48–59	2.4	0.0	302
<b>Sex</b>			
Male	4.7	0.0	865
Female	3.8	0.3	805
<b>Source of drinking water<sup>1</sup></b>			
Improved	4.3	0.1	1,356
Not improved	4.3	0.3	314
<b>Toilet facility<sup>2</sup></b>			
Improved, not shared	4.1	0.1	1,524
Non-improved or shared	6.7	0.0	141
Missing	NP	NP	5
<b>Residence</b>			
Urban	5.1	0.4	375
Rural	4.0	0.1	1,295
<b>Region</b>			
Urban Tongatapu	5.1	0.4	375
Rural Tongatapu	4.5	0.0	895
Outer islands	3.0	0.2	400
<b>Mother's education</b>			
Primary or less	NP	NP	12
Secondary	4.1	0.1	1,271
More than secondary	4.8	0.4	387
<b>Wealth quintile</b>			
Lowest	3.5	0.2	422
Second	2.5	0.0	347
Middle	5.2	0.0	338
Fourth	4.6	0.2	295
Highest	6.1	0.3	267
<b>Total</b>	<b>4.3</b>	<b>0.1</b>	<b>1,670</b>

NP = not published

<sup>1</sup> See Table 2.9 for definition of categories.

<sup>2</sup> See Table 2.10 for definition of categories.

The occurrence of diarrhoea varies by age of child. Children aged 6–23 months are more prone to diarrhoea than children in other age groups. Although the difference is not large, there is some variation in the prevalence of diarrhoea by child's sex, with male children more likely to have diarrhoea than female

children. Diarrhoea is more common among children who live in households with a non-improved or shared toilet facility than among children who live in households with an improved, non-shared toilet facility. Children living on Tongatapu are more likely (5%) to get sick with diarrhoea than outer island children (3%). Diarrhoea prevalence is surprisingly higher among children of mothers with more than a secondary level education, and also increases with wealth quintile.

During the 2012 TDHS, mothers of children who had diarrhoea in the two weeks preceding the survey were asked about what was done to treat the illness and about feeding practices. However, because only 71 children had diarrhoea in the two weeks preceding the survey, meaningful cross comparison at statistically reliable levels is not possible. Consequently, these data have been excluded from the analysis.

## 10.6 KNOWLEDGE OF ORAL REHYDRATION SALTS

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 oral rehydration salts (ORS). To ascertain how widespread the knowledge of ORS is in Tonga, respondents were asked whether they knew about ORS packets.

Table 10.8 shows that nearly all women (96%) who gave birth in the five years preceding the survey knew about ORS. Knowledge of ORS increases as women's age increases, from 83% among women aged 15–19 to 98% among women aged 35–49.

Knowledge of ORS packets does not vary much by mother's place of residence or education level. Similarly, there is no discernible relationship between knowledge of ORS packets and household wealth.

**Table 10.8: Knowledge of oral rehydration salts packets or pre-packaged liquids**

*Percentage of mothers aged 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, Tonga 2012*

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
<b>Age</b>		
15–19	(83.3)	26
20–24	93.4	143
25–34	96.1	567
35–49	97.7	334
<b>Residence</b>		
Urban	96.8	248
Rural	95.6	821
<b>Region</b>		
Urban Tongatapu	96.8	248
Rural Tongatapu	96.2	555
Outer islands	94.5	266
<b>Education</b>		
Primary	NP	8
Secondary	96.4	806
More than secondary	95.2	255
<b>Wealth quintile</b>		
Lowest	95.8	266
Second	94.7	226
Middle	95.5	219
Fourth	96.3	202
Highest	98.0	156
<b>Total</b>	<b>95.9</b>	<b>1,069</b>

NP = not published; ORS = oral rehydration salts

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 10.7 STOOL DISPOSAL

If human faeces are left uncontained, disease may spread by direct contact or by animal contact with the faeces. Proper disposal of children's stools is, therefore, extremely important in preventing the spread of disease. Table 10.9 presents information on the disposal of stools of children under age five years, by background characteristics.

About 40% of children's stools are disposed of hygienically: 20% are buried, 8% are rinsed into a toilet or latrine, while 12% of children use a toilet or latrine. The remainder are disposed of in the garbage (54%), rinsed in a ditch or drain, or left in the open. Children's stools are more likely to be disposed of safely as children grow older (27% for children aged less than 6 months compared with 72% for children aged 48–59 months).

Children are more likely to have their stools contained if they live in households with improved toilets that are not shared with other households (41%) than if they live in households using non-improved or shared toilet facilities (35%). There are no differences in stool disposal by education level. Surprisingly, children's stools are more likely to be contained in the poorest households (44%) than the wealthiest households (34%).

Children's stools are more likely to be contained in the outer islands (54%) than in the rural Tongatapu (38%), and least likely to be contained in urban Tongatapu (30%).

In contrast with the findings of the TDHS, Tonga Ministry of Health report almost universal sanitary disposal of stools in Tonga in 2012 (Appendix E).

**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, Tonga 2012

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of safely	Number of mothers	
	Child used toilet or latrine	Put or rinsed in toilet or latrine	Buried	Put or rinsed into drain or ditch	Thrown into garbage	Left in the open	Other				
<b>Age in months</b>											
<6	0.5	2.4	23.8	2	69.8	0.5	0	1	100	26.7	156
6–11	0	2.8	20.5	1.5	72.9	0.9	1	0.4	100	23.3	162
12–23	3.2	5.5	22.8	5	61.5	0.9	0	1.2	100	31.5	253
24–35	15.4	11.1	17.1	2.4	51.9	1.2	0.5	0.4	100	43.7	198
36–47	30	18.5	16.5	2.3	27.9	1	0.7	3.2	100	64.9	136
48–59	40.6	11.9	19.8	1.6	22.4	1.5	0	2.2	100	72.3	100
<b>Toilet facility<sup>1</sup></b>											
Improved, non- shared	12.5	7.9	20.5	2.8	53.5	1	0.4	1.4	100	41	916
Non-improved or shared	7	10.1	17.8	2.8	61.4	0.8	0	0	100	34.9	85
Missing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	3
<b>Residence</b>											
Urban	12.3	7.5	10.1	5.6	63.4	0	0.4	0.7	100	29.9	233
Rural	12	8.2	23.4	1.9	51.5	1.2	0.3	1.4	100	43.6	771
<b>Region</b>											
Urban Tongatapu	12.3	7.5	10.1	5.6	63.4	0	0.4	0.7	100	29.9	233
Rural Tongatapu	12.4	8.4	17.8	1.7	56.9	1.4	0.3	1.1	100	38.5	524
Outer islands	11.1	8	35.3	2.2	40.1	0.9	0.4	2.1	100	54.4	247
<b>Education</b>											
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	5
Secondary	11.4	8.3	20.6	2.7	54.3	1.1	0.3	1.4	100	40.3	761
More than secondary	14.2	7.5	19	2.7	54.7	0.6	0.4	0.9	100	40.7	237
<b>Wealth quintile</b>											
Lowest	13.4	11.2	19.3	1	52.9	0.9	0.4	0.9	100	43.9	242
Second	10.4	9.6	21.1	3.6	53	2	0	0.3	100	41.1	215
Middle	11.5	6.2	20.1	1.9	57.5	0.7	0.7	1.4	100	37.7	208
Fourth	13.5	5.6	24	4.3	50.4	0	0.5	1.7	100	43.1	186
Highest	11.1	6.6	16.7	3.6	58.6	1	0	2.3	100	34.5	152
<b>Total</b>	<b>12</b>	<b>8.1</b>	<b>20.3</b>	<b>2.8</b>	<b>54.3</b>	<b>1</b>	<b>0.3</b>	<b>1.2</b>	<b>100</b>	<b>40.4</b>	<b>1,004</b>

NP = not published

<sup>1</sup> See Table 2.10 for a definition of categories.

## **CHAPTER 11    NUTRITIONAL STATUS OF CHILDREN AND ADULTS**

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This chapter discusses the nutritional status of mothers and their children by assessing their anthropometric status, infant and child feeding practices, micronutrient intakes, food consumption patterns (of mothers), and the consequences of inadequate nutrition.

Adequate nutrition is important for good health and development, and the period from birth to age two years is critical. Unfortunately, this period is often marked by faltering growth, micronutrient deficiencies and common childhood illnesses such as diarrhoea and acute respiratory infection (ARI). Optimal feeding practices include early initiation of breastfeeding, exclusive breastfeeding during the first six months of life, continued breastfeeding for up to age 2 years and beyond, the timely introduction of complementary foods at age 6 months, frequency of feeding solid and/or semisolid foods, and the diversity of food groups fed to children aged 6–23 months.

A woman's nutritional status has important implications for her health as well as the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slow recovery from illnesses, and heightened risks of adverse pregnancy outcomes. For example, a woman who has a poor nutritional status, as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies has a greater risk of 1) obstructed labour, 2) having a baby with low birth weight, 3) producing lower-quality breast milk, 4) mortality due to postpartum haemorrhage, and 5) morbidity of both herself and her baby. Unfortunately, the only data to assess the nutritional status of mothers is their food intake in the 24 hours preceding the survey, because their anthropometric measurements were not collected.

### **11.1    NUTRITIONAL STATUS OF CHILDREN**

The nutritional status of children is an important indicator of their health and wellbeing. Poor nutrition in children under the age of 5 years is associated with an increased risk of morbidity and mortality. Usually there is catch-up growth in older childhood or adolescent children who experience growth retardation when they are less than three years old.

Poor nutritional status among children is related to maternal malnutrition, low birth weight, inadequate breastfeeding and weaning diets, and morbidity due to high levels of infectious diseases. Improvements in the nutritional status of children can reduce the severity of common childhood illnesses and reduce the risk of death. Malnutrition in children leads to short stature in adults, which is associated with reduced productivity and increased obstetrics risks for women.

During the 2012 TDHS, weight and height measurements were taken to assess the nutritional status of children. A digital scale measuring to the nearest 100 grams was used to measure weight. Weight and height data are used to compute three summary indices of nutritional status: height-for-age, weight-for-height, and weight-for-age. These three indices are expressed as standardised scores (z-scores) or standard deviation units from the median for the international reference population that was recently developed by WHO (WHO, 2006b). These references are based on the observation that well-nourished children from different countries and ethnic groups have similar growth potential up to at least age 7 years. Environmental factors such as infectious diseases, inadequate and unsafe diet, poverty and socioeconomic status (rather than a genetic predisposition) account for any deviations from the references. Children who fall more than two standard deviations (SDs) below the reference median (i.e.  $-2$  SDs) are regarded as undernourished, while those who fall more than three standard deviations below the reference median (i.e.  $-3$  SDs) are considered severely undernourished.

Weight-for-age is an indicator of body mass relative to chronological age, and is primarily a composite of weight-for-height and height-for-age, and fails to distinguish tall, thin children from short, well-proportioned children. Because it is influenced by both the height and weight of the child, weight-for-age is more difficult to interpret. Low weight-for-age or underweight can be used as a general indicator of child health and mortality risk. Children whose weight-for-age is below minus two standard deviations from the median ( $-2$  SDs) of the reference population are considered to be underweight. The measure reflects the effects of both acute and chronic malnutrition.

Height-for-age is a measure of linear growth potential. Low height-for-age, or stunting, indicates long-term cumulative inadequate nutrition and poor health. It is frequently associated with poor overall economic conditions, which can result in long-term inadequate caloric intake. This indicator changes slowly over time and does not vary by season. Children whose height-for-age is less than two standard deviations ( $-2$  SDs) from the median of the reference population are considered to be stunted or short for their age. Stunting is the outcome of a failure to receive adequate nutrition over an extended period of time and is also affected by recurrent or chronic illness

Low weight-for-height, or wasting, indicates a loss of weight or an insufficient weight gain relative to height. Wasting is generally associated with recent or ongoing severe weight loss. This indicator can vary by season, depending on the availability of food and the incidence of acute morbidity in the child population. Children whose weight-for-height is below minus two standard deviations ( $-2$  SD) from the median of the reference population are considered to be wasted (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey, and typically is the result of recent illnesses, especially diarrhea, or of a rapid deterioration in food supplies.

The prevalence (%) range used by WHO to categorise the public health significance of different measures of undernutrition (i.e.  $< -2$  SDs) is provided below.

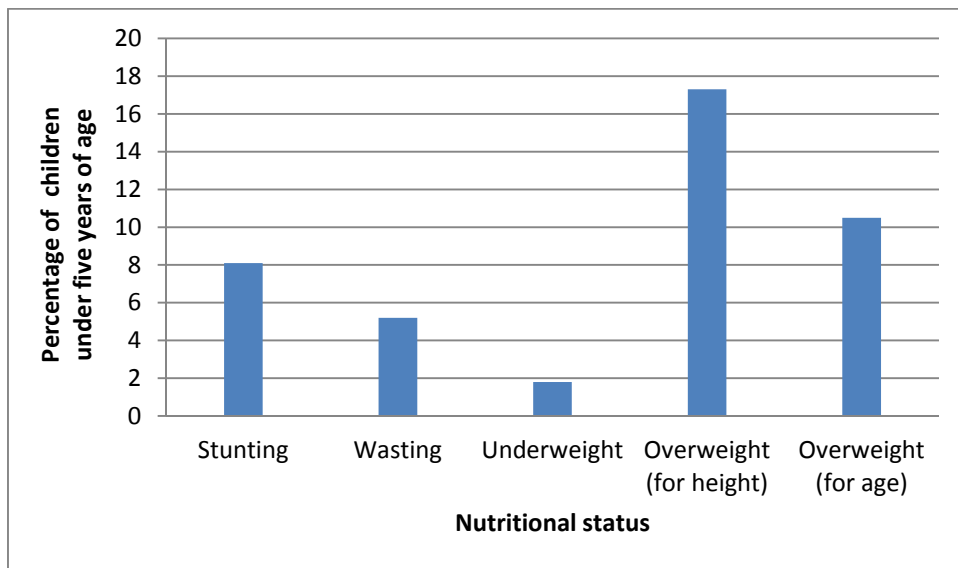
Public health significance	Prevalence of measures of undernutrition (%)		
	Height-for-age (stunted)	Weight-for-height (wasted)	Weight-for-age (underweight)
Low	$<20$	$<5$	$<10$
Medium	20–29	5–9	10–19
High	30–39	10–14	20–29
Very High	40+	15+	30+

Overall, 8% of children aged 0–5 years are two to three standard deviations below the median (i.e.  $-2$  or  $-3$  SD) height-for-age value of the reference population (Table 11.1 and Figure 11.1). Of these, about half had height-for-age measures  $-2$  SDs below the median, and half had height-for-age measures  $-3$  SDs below the median. Eight percent represents a low prevalence on the WHO guide. Consequently, a mean Z-score of 0.4 indicates a distribution shift above zero, which is the expected value of the reference distribution. This shows that on average, Tongan children less than 5 years of age achieve linear growth potential when compared to the WHO international growth references.

In total, around 5% of children aged less than 5 years have a weight-for-height measure  $-2$  or  $-3$  SDs below the median value for the reference population (Table 11.1 and Figure 11.1). Of these, 60% had a weight-for-height score that was  $-2$  SDs below the median and 40% a weight-for-height score  $-3$  SDs below the median. The overall figure of 5% represents a low prevalence on the WHO guide. However, 17% of children aged less than 5 years have a weight-for-height measure  $+2$  SDs above the median value for the reference population, which suggests that almost one in five children aged less than 5 years are overweight or obese for their height. This is supported by a mean Z-score for weight-for-height of 0.6, which indicates a distribution shift above zero, the expected value of the reference distribution.

In total, less than 2% of children aged less than 5 years have a weight-for-age measure  $-2$  or  $-3$  SDs below the median value for the reference population (Table 11.1 and Figure 11.1). This represents a low prevalence on the WHO guide. However, 10% of children aged less than 5 years have a weight-for-age measure  $+2$  SDs above the median value for the reference population, which suggests that almost one in ten children aged less than 5 years are overweight or obese for their age. This is supported by a mean Z-score for weight-for-age of 0.7, which indicates a distribution shift above zero, the expected value of the reference distribution.

**Figure 11.1: Nutritional status of children under 5 years of age, Tonga 2012**





**Table 11.1: Nutritional status of children**

Percentage of children under 5 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, Tonga 2012

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Mean Z-score (SD)	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Percentage above +2 SDs	Mean Z-score (SD)	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Percentage above +2 SDs	Mean Z-score (SD)	
<b>Age in months</b>												
<6	6.4	8.4	1.1	6.5	13.6	23.9	0.6	0.7	2.6	20.6	1.1	117
6-8	1.8	9.8	0.9	1.7	7	17.7	0.5	1.7	1.7	15.8	0.7	85
9-11	8.7	8.7	1.1	0	5.9	24.7	0.9	0	0	21.7	1.1	52
12-17	5.2	7.8	0.7	3.7	8	15.7	0.5	1	1	9.9	0.7	145
18-23	8.5	12.8	0.4	3.7	4.9	14.2	0.6	1.8	3	15.3	0.6	123
24-35	2.5	5.7	0.5	1.7	4.2	14.3	0.5	0	1.7	10.1	0.7	307
36-47	3.9	8.5	0.1	1.5	3.9	18.6	0.8	0.8	1.8	6.7	0.6	294
48-59	3.9	7.8	0	0.3	2.3	17.4	0.7	0	1.7	5	0.5	271
<b>Sex</b>												
Male	4.8	9.1	0.4	1.9	5.4	18.6	0.7	0.8	2.1	10.1	0.7	707
Female	4	7	0.5	2.3	5.1	16	0.5	0.3	1.4	10.9	0.7	687
<b>Birth interval in months<sup>2</sup></b>												
First birth <sup>3</sup>	5.7	7.2	0.5	3	6.6	16.6	0.6	1	3.3	11	0.6	301
<24	3.5	8.3	0.3	1.6	3.6	20	0.7	0	0.4	11.2	0.7	344
24-47	3.8	6.7	0.5	2.9	7.1	11.2	0.4	1.2	2.3	8.4	0.5	382
48+	3.7	9.8	0.5	1.2	5.4	23.3	0.8	0	0.8	13.4	0.8	182
<b>Size at birth<sup>2</sup></b>												
Very small	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	10
Small	(7)	(29.6)	(0.7)	(0)	(3.7)	(20.9)	(0.7)	(1.8)	(5.3)	(1.8)	(0.1)	43
Average or larger	3.9	6.7	0.5	2.4	5.8	16.5	0.6	0.6	1.6	11.2	0.7	1,139
Missing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	16
<b>Mother's interview status</b>												
Interviewed	4.2	7.8	0.5	2.3	5.7	16.8	0.6	0.6	1.8	10.6	0.7	1,209
Not interviewed but in household	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	16
Not interviewed, and not in the household <sup>4</sup>	6.3	11.2	0.2	0.9	1.4	20.7	0.9	0.5	1.8	8.1	0.7	169
<b>Mother's nutritional status<sup>5</sup></b>												
Thin (BMI<18.5)	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	1
Normal (BMI 18.5-24.9)	4.6	14	0	1.3	6.5	10.9	0.3	0.7	3.2	2	0.1	119
Overweight or obese (BMI >= 25)	4.1	7	0.5	2.5	5.9	17.5	0.6	0.6	1.7	11.8	0.7	1,074
Missing	(5.3)	(8.1)	(0)	(0)	(0)	(21.8)	(0.9)	(0)	(0)	(10.8)	(0.6)	28
<b>Residence</b>												
Urban	4.8	9	0.5	1.6	4.8	20.7	0.8	0	1.3	10.9	0.8	296
Rural	4.3	7.9	0.4	2.3	5.3	16.4	0.6	0.7	1.9	10.4	0.6	1,098

<b>Region</b>												
Urban Tongatapu	4.8	9	0.5	1.6	4.8	20.7	0.8	0	1.3	10.9	0.8	296
Rural Tongatapu	3.7	6.6	0.5	2.3	4.9	15.2	0.6	0.8	1.6	11.9	0.7	722
Outer islands	5.4	10.3	0.2	2.3	6.2	18.9	0.5	0.6	2.4	7.5	0.5	376
<b>Mother's education<sup>6</sup></b>												
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	7
Secondary	3.6	7.1	0.5	2.3	5.9	16.9	0.5	0.7	1.9	9.8	0.6	940
More than secondary	5.9	9.7	0.5	2.2	5.1	17	0.8	0.3	1.3	14.4	0.8	278
<b>Wealth quintile</b>												
Lowest	3.9	7.4	0.4	1.9	6.5	13.8	0.4	0.2	1.5	8.9	0.5	346
Second	3.5	7.8	0.4	4.1	6	15.6	0.5	1.7	2.9	7.8	0.6	316
Middle	4.8	8.4	0.4	0.8	4.4	20.2	0.8	0.2	1.5	11	0.8	296
Fourth	3.8	7.3	0.5	1.7	5.1	18.4	0.8	0.7	0.7	10	0.8	220
Highest	6.2	10.1	0.5	1.8	3.2	20.4	0.8	0	2	16.8	0.8	216
<b>Total</b>	<b>4.4</b>	<b>8.1</b>	<b>0.4</b>	<b>2.1</b>	<b>5.2</b>	<b>17.3</b>	<b>0.6</b>	<b>0.6</b>	<b>1.8</b>	<b>10.5</b>	<b>0.7</b>	<b>1,394</b>

BMI = body mass index; NP = not published; SD = standard deviation

<sup>1</sup> Includes children who are below -3 SDs from the International Reference Population median.

<sup>2</sup> First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

<sup>3</sup> Excludes children whose mothers were not interviewed.

<sup>4</sup> Includes children whose mothers are deceased.

<sup>5</sup> Excludes children whose mothers were not weighed and measured.

<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.

Notes:

1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

2) Table is based on children who slept in the household the night before the interview.

3) 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 with those based on the previously used NCHS/CDC/WHO standards.

4) Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

Slightly higher percentages of boys than girls aged less than 5 years are stunted and underweight. Equal percentages of boys and girls aged less than 5 years are underweight. Based on weight-for-height, slightly higher percentages of boys than girls aged less than 5 years are overweight and based on weight-for-age, slightly higher percentages of girls than boys are overweight.

There are no clear patterns in height-for-age, weight-for-height or weight-for-age by age in months or birth interval. Children whose mothers are overweight or obese are at greater risk of being overweight or obese themselves.

The prevalence of severely underweight and underweight children is slightly higher in the outer islands than in Tongatapu, while the prevalence of overweight children is lower in the outer islands than in Tongatapu.

The prevalence of overweight and obese children increases with the wealth quintile of the household.

According to the WHO category of public health significance, the total prevalence of underweight children in Tonga is below the 10% threshold, which indicates that underweight children are not a public health concern. However, the levels of overweight and obesity prevalence in childhood are a public health concern.

## 11.2 INFANT AND YOUNG CHILD FEEDING PRACTICES

The survival, growth, development, health and nutritional status of children are closely linked to feeding practices for infants and young children. The nutritional status of the mother during pregnancy and lactation also has an important impact on the health and nutritional status of a child. Exclusive breastfeeding is the most appropriate way to feed newborn babies during the first six months of their lives, as recommended by the United Nations Children's Fund (UNICEF) and WHO. Exclusive breastfeeding during the first six months provides optimal nutrition for the growing child, reduces exposure to environmental pathogens, and provides protection from environmental contamination such as poor water quality.

WHO and UNICEF recommend that solid food should only be given after six months of age, and that breastfeeding should continue into the second year of life. To support this recommendation, the following steps have been established by UNICEF and WHO for countries to follow.

### **Every facility providing maternity services and care for newborn infants should:**

1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
2. Train all healthcare staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should become separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practise rooming-in; that is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Source: WHO/UNICEF (1989)

Prolonged breastfeeding also increases duration of postpartum infertility; thus, breastfeeding acts as a natural contraceptive, affecting a mother's fertility and length of birth intervals.

### 11.2.1 Initial breastfeeding

Both mother and child benefit from early initiation of breastfeeding. The suckling action of the baby on the mother's breast releases the hormone oxytocin, which increases uterine contractions, improves the

expulsion of the placenta, and reduces the risk of haemorrhage following delivery. The infant benefits from the first breast milk, called colostrum, which is rich in nutrients and immunoglobulin that help protect against infections.

Table 11.2 shows the percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage of last children born in the five years preceding the survey who were ever breastfed, who started breastfeeding within one hour of delivery, and within one day of birth, and the percentage who received a prelacteal feed, by background characteristics.

In total, 91% of children in Tonga under the age of 5 years are breastfed. Overall, 79% of babies are breastfed within one hour of birth, which increases to 96% for those breastfed within one day of birth. Breastfeeding rates are highest in the outer islands, but starting feeding within one hour is most common in urban Tongatapu. Only 5% of children receive prelacteal feeds during the first three days of life. This practice is more common in Tongatapu.

### **11.2.2 Breastfeeding by age**

One indicator of the degree of breastfeeding is the percentage of children aged less than 6 months who are exclusively breastfed.

Table 11.3 presents data on the percentage of children who are breastfed by age. The total percentage of children who are exclusively breastfed decreases sharply with age, starting at 65% within the first month of life and decreasing to 22% by age 6 months. At the same time, the introduction of complementary foods increased sharply from about 6% from the first month of life to 55% by age 6–8 months. Early introduction of foods other than breast milk is not recommended. Plain water does not contain nutrients or the much-needed calories to support growth and development. Although WHO and UNICEF recommend exclusive breastfeeding, the results show that plain water and complementary foods are introduced to some babies less than 6 months of age in Tonga.

**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, Tonga 2012

Background characteristic	Breastfeeding among children born in last five years		Among last-born children ever breastfed:			
	Ever breastfed (%)	Number of children born in last five years	Started breastfeeding within one hour of birth (%)	Started breastfeeding within one day of birth <sup>1</sup> (%)	Received a prelacteal feed <sup>2</sup> (%)	Number of last-born children ever breastfed
<b>Sex</b>						
Male	91.8	883	78.8	95.9	4.8	529
Female	91.0	820	79.4	97.1	4.9	456
<b>Residence</b>						
Urban	90.8	380	84.0	94.8	6.0	225
Rural	91.6	1,323	77.6	96.9	4.5	760
<b>Region</b>						
Urban Tongatapu	90.8	380	84.0	94.8	6.0	225
Rural Tongatapu	89.8	921	81.0	96.8	5.8	504
Outer islands	95.9	403	71.1	97.2	2.0	256
<b>Mother's education</b>						
Primary or less	NP	12	NP	NP	NP	8
Secondary	91.9	1,295	78.7	96.0	4.7	747
More than secondary	89.7	396	80.7	97.7	5.6	230
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	91.5	1,668	79.4	96.7	4.7	970
Traditional birth attendant	NP	4	-	-	-	0
Other	NP	22	NP	NP	NP	13
No one	NP	2	-	-	-	0
Missing	NP	7	NP	NP	NP	2
<b>Place of delivery</b>						
Health facility	91.5	1,669	79.4	96.7	4.9	973
At home	NP	19	NP	NP	NP	8
Other	NP	6	NP	NP	NP	1
Missing	NP	10	NP	NP	NP	3
<b>Wealth quintile</b>						
Lowest	89.5	435	78.5	94.9	4.2	246
Second	93.3	351	82.4	97.0	3.5	210
Middle	92.7	347	75.9	98.4	5.4	202
Fourth	88.8	300	80.9	95.9	4.1	180
Highest	93.6	270	77.7	96.2	8.3	147
<b>Total</b>	<b>91.4</b>	<b>1,703</b>	<b>79.1</b>	<b>96.4</b>	<b>4.9</b>	<b>985</b>

NP = not published

<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 or midwife, or auxiliary midwife.

Note: Table is based on births in the last five years whether the children are living or dead at the time of interview.

**Table 11.3: Breastfeeding status by age**

*Percent distribution of youngest children under 3 years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under 3 years using a bottle with a nipple, according to age in months, Tonga 2012*

Age in months	Among children breastfeeding and consuming, percentage consuming:						Total	Percentage currently breast-feeding	Number of youngest child under 3 years	Percentage of all children using a bottle with a nipple <sup>1</sup>	Number of children
	Not breast-feeding	Breast milk only (exclusively breastfed)	Plain water only	Non-milk liquids/ juice	Other milk	Comple-mentary foods					
0-1	(13.6)	(65.3)	(1.9)	(0)	(13.2)	(6.1)	(100)	(86.4)	40	(19.3)	40
2-3	10.7	53.5	2.9	0	23.6	9.3	100	89.3	50	36.5	55
4-5	21.8	43.4	9.1	0	6.3	19.3	100	78.2	66	31.6	70
6-8	16.1	22.4	3.7	1.6	1.7	54.6	100	83.9	98	39.6	106
9-11	29.7	8.2	1.3	0	3.6	57.2	100	70.3	64	55.2	72
12-17	53	2.6	0.5	0	0	43.9	100	47	147	36.7	170
18-23	66.5	0.8	0.7	0	0	32.1	100	33.5	105	35.9	137
24-35	84.4	0.5	0	0	0	15.2	100	15.6	198	13.8	383
0-3	12	58.8	2.4	0	19	7.9	100	88	90	29.3	95
0-5	16.2	52.2	5.3	0	13.6	12.7	100	83.8	156	30.3	165
6-9	16.8	20.5	3.8	1.3	2.1	55.5	100	83.2	117	44.2	129
12-15	50.3	1.8	0.8	0	0	47.1	100	49.7	92	42.1	101
12-23	58.6	1.8	0.6	0	0	39	100	41.4	253	36.3	307
20-23	69.7	0	1	0	0	29.3	100	30.3	71	31.4	90

<sup>1</sup> Based on all children under three years.

Notes:

1) To ensure statistical reliability, percentages and rates based on 25-49 unweighted cases are shown within parentheses.

2) Breastfeeding status refers to a '24-hour' period (day and night prior to the survey). 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 or 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.

**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 age 6 months living with the mother who were breastfed 6 or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Tonga 2012

Background characteristic	Median duration (months) of breastfeeding among children born in the last three years <sup>1</sup>			Frequency of breastfeeding among children under age 6 months <sup>2</sup>			
	Any breastfeeding	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	12.6	2.5	3.3	100.0	5.7	4.4	70
Female	12.2	2.3	2.9	94.5	5.3	3.9	59
<b>Residence</b>							
Urban	(11.8)	(1.7)	(2.5)	(97.3)	(5.9)	(4.3)	30
Rural	12.6	2.7	3.3	97.6	5.5	4.1	98
<b>Region</b>							
Urban Tongatapu	(11.8)	(1.7)	(2.5)	(97.3)	(5.9)	(4.3)	30
Rural Tongatapu	12.3	2.2	2.3	97.8	5.2	4.2	65
Outer islands	(13.0)	(4.5)	(6.2)	(97.2)	(6.0)	(3.9)	33
<b>Total</b>	<b>12.3</b>	<b>2.4</b>	<b>3.1</b>	<b>97.5</b>	<b>5.6</b>	<b>4.2</b>	<b>128</b>
<b>Mean for all children</b>	<b>14.5</b>	<b>4.5</b>	<b>5.0</b>	-	-	-	-

- = 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.

Notes:

1) Median and mean durations are based on current status. Includes children living and deceased at the time of the survey.

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### **11.2.3 Median duration and frequency of breastfeeding**

Table 11.4 presents the median duration of breastfeeding, exclusive breastfeeding and predominantly breastfeeding among children born in the three years preceding the survey, and the mean number of feeds per day and per night by background characteristics.

WHO and UNICEF recommend exclusive breastfeeding for the first 6 months of an infant's life, and continued breastfeeding for at least 24 months. The mean duration of any breastfeeding among Tongan children born in the three years preceding the survey is 14.5 months. The mean duration for exclusive breastfeeding is 4.5 months, and is 5 months for predominantly breastfeeding. Clearly, the children do not meet the WHO and UNICEF recommendations for exclusive breastfeeding for six months and continued breastfeeding into the second year of life (with the introduction of complementary foods).

It is also recommended that babies be breastfed or fed on demand approximately 8–12 times every 24 hours. In Tonga, the overall mean number of feeds during the day is just under six and is just over four during the night, which indicates that the WHO and UNICEF recommended minimum frequency of breastfeeding (eight feeds) is achieved. There are no significant differences by sex or place of residence.

### **11.2.4 Types of complementary food and liquids consumed by children**

UNICEF and WHO recommend that solid food be introduced to infants from the age of 6 months because the nutritional requirements of the child cannot be adequately met by breast milk alone. In the transition to eating the family diet, children from the age of 6 months should be fed small quantities of solid and semisolid foods (complementary foods) throughout the day. The risk of malnutrition during this transition period is very high due to improper and unsafe food handling practices.

Mothers whose youngest child was under 3 years of age were asked about the types of foods and liquids consumed by the child in the day or night preceding the interview. The results are presented in Table 11.5.

While the best way to determine the nutrient content of the diet is to undertake a comprehensive nutrition survey using standard tools such as a comprehensive 24-hour diet recall tool (Briony, 2001), this survey provides some useful information on the range of foods recently consumed by young Tongan children.

#### **Liquids**

Overall, nearly 18% of all breastfeeding children under 3 years of age who live with their mothers reportedly consume infant formula, about 16% of these children consume infant formula at ages 6–8 months. The most common type of liquid consumed by breastfed children is 'other liquids' (38%) and other milk (30%).

#### **Solid or semisolid foods**

Food made from grains is reported to be the most common food consumed by breastfeeding children (51%) and non-breastfeeding children (83%). For breastfeeding children, after grains, the most commonly consumed foods are foods made from roots and tubers, which account for 46% of the diet. Fruits and vegetables that are rich in vitamin A are consumed by 52% of breastfeeding children and by 82% of non-breastfeeding children; 25% of breastfed and 46% of non-breastfed children consume foods made with oil fat and butter, while 28% of breastfed children and 52% of non-breastfed children consume sugary foods.



**Table 11.5: Foods and liquids consumed by children in the day or night preceding the interview**

Percentage of youngest children under 3 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, Tonga 2012

Age in months	Liquids			Solid or semi-solid foods								Any solid or semi-solid food	Food made with oil, fat and butter	Sugary 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				
<b>BREASTFEEDING CHILDREN</b>															
0-1	(13.4)	(11.7)	(4.7)	(4.7)	(7)	(2.6)	(5)	(7)	(2.4)	(5)	(0)	(7)	(5)	(4.7)	35
2-3	(30.5)	(23.8)	(1.8)	(5.5)	(7.2)	(6.7)	(1.8)	(6.7)	(1.8)	(5)	(3.5)	(10.4)	(1.8)	(1.8)	44
4-5	12.9	16.4	15.8	9.2	23.5	15.8	10	15.8	0	17.4	2.7	24.7	5.5	11.5	52
6-8	16.5	27.3	35.9	18.2	40.2	54.8	31.1	44.5	5.5	44	13.5	65	12.8	24.7	82
9-11	24.3	48	44.3	31.4	68.2	74	28.4	62.3	0	61.1	16.8	81.4	27.8	31.4	45
12-17	22	42.2	66.9	36.6	88.6	82.6	47	77	13.1	86.8	25.9	93.4	53.1	56.5	69
18-23	(6.6)	(24.4)	(65.1)	(2.1)	(83.4)	(85.2)	(44.4)	(79.6)	(14.3)	(74.7)	(23)	(95.7)	(44)	(34.3)	35
24-35	(17.4)	(38.2)	(70.5)	(43.1)	(92.5)	(87)	(67.4)	(70.5)	(21.5)	(83.3)	(33.8)	(97.1)	(54.9)	(53.5)	31
6-23	18.1	35.3	51.2	23.8	66.7	71.5	37.4	63	8	64.8	19.3	81.4	32.5	37	231
<b>Total</b>	<b>18.4</b>	<b>29.7</b>	<b>38.4</b>	<b>19.6</b>	<b>51.1</b>	<b>52</b>	<b>29.3</b>	<b>46.1</b>	<b>6.8</b>	<b>48</b>	<b>14.8</b>	<b>60.6</b>	<b>24.8</b>	<b>28.1</b>	<b>393</b>
<b>NON-BREASTFEEDING CHILDREN</b>															
0-11	69.8	65.1	40.3	28.4	60.2	54.0	32.2	42.3	9.3	41.2	6.7	65.7	19.2	20.8	59
12-17	43.2	62.5	71.2	45.9	90.9	81.3	50.3	75	16.3	87	25.1	97.2	38	56.8	78
18-23	27.6	47.5	81.1	33.4	84.8	93.5	63.2	88.9	17	89.4	26.3	100	60.5	63.9	70
24-35	21.6	45.9	82.2	30.7	86.6	87	51.9	80.4	15.1	91	24.3	97.3	53.7	57.2	167
6-23	42.6	58.1	70.7	39.9	87.8	84.3	54.8	78	15.6	83	22.1	97.2	44.7	54.5	183
<b>Total</b>	<b>34.9</b>	<b>52.7</b>	<b>73</b>	<b>33.9</b>	<b>82.8</b>	<b>81.7</b>	<b>50.4</b>	<b>74.7</b>	<b>14.8</b>	<b>81.8</b>	<b>22</b>	<b>92.5</b>	<b>46.1</b>	<b>52.5</b>	<b>375</b>

<sup>1</sup> Other milk includes fresh, tinned and powdered cow or other animal milk.

<sup>2</sup> Does not include plain water.

<sup>3</sup> Includes fortified baby food.

<sup>4</sup> Includes [list fruits and vegetables included in the questionnaire such as pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A].

Notes:

1) Breastfeeding status and food consumed refer to a 24-hour period (the day and night prior to the survey).

2) To ensure statistical reliability, percentages and rates based on 25-49 unweighted cases are shown within parentheses.

### 11.2.5 Feeding practices according to infant and young child feeding recommendations

The Global Strategy on Infant and Young Child Feeding (IYCF) (WHO, 2005) recommends the timely introduction of solid and semisolid foods from age 6 months, increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding as 'best practice'. These guidelines have been established by WHO.

Mothers with children aged 6–23 months living with them were asked about the kinds of foods and drinks that they fed their children and how often children ate food in the previous day or night. The list of foods in the questionnaire was categorised into the following food groups:

- a. infant formula, milk other than breast milk, cheese or yogurt or other milk products;
- b. foods made from grains, roots, and tubers, including porridge, fortified baby food from grains;
- c. vitamin A-rich fruits and vegetables (and red palm oil);
- d. other fruits and vegetables;
- e. eggs;
- f. meat, poultry, fish, and shellfish (and organ meats);
- g. legumes and nuts; and
- h. foods made with oil, fat, butter.

Minimum standards were defined with respect to food diversity (i.e. the number of food groups consumed) and feeding frequency (i.e. the number of times a child was fed), as well the consumption of breast milk or other milks or milk products.

To ensure nutritional requirements are met, it is recommended that children begin semisolid or solid foods from age 6 months. For breastfed children aged 6–8 months, it is recommended that solid foods be introduced two to three times daily, increasing to three to four times daily from age 9–24 months, with one to two snacks offered as required (WHO/PAHO, 2003).

For non-breastfed children, four to five solid or semisolid foods per day are recommended for children aged 6–24 months with one to two snacks offered as required (WHO, 2005).

To ensure that dietary requirements are met, it is advised that a protein-rich animal product (e.g. meat, poultry, fish or eggs) be included daily. It is also recommended that vitamin A-rich fruits and vegetables are included daily and that the diet contain an adequate fat content.

Foods from at least three food groups are recommended daily for breastfed children and at least four different food groups for non-breastfed children. Table 11.6 presents the number of children that were fed according to these recommendations by breastfeeding status, sex and area of residence.

Overall, 87% of children were fed breast milk or milk products the day before the survey, with 69% consuming three or four food groups per day and 40% being fed the recommended minimum number of times per day. Only 30% of children less than 2 years of age met all the IYCF practices (Table 11.6). More than two-thirds of children do not consume the recommended dietary recommendations required for good health.

The percentage of children aged 6–23 months who meet all IYCF practices increases with age. Female children, children living in urban Tongatapu, and children with mothers have more than a secondary level education are more likely than males to meet all IYCF practices. There is no pattern of feeding practice by wealth of household.

**Table 11.6: Infant and young child feeding practices**

Percentage of youngest children aged 6–23 months living with their mother who are fed according to three infant and young child feeding (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, Tonga 2012

Background characteristic	Among breastfed children aged 6–23 months, percentage fed:				Among non-breastfed children aged 6–23 months, percentage fed:					Among all children aged 6–23 months, percentage fed:				
	3+ food groups <sup>1</sup>	Minimum times or more <sup>2</sup>	Both 3+ food groups and minimum times or more	Number of breastfed children 6–23 months	Milk or milk products <sup>3</sup>	4+ food groups	4+ times or more	With 3 IYCF practices <sup>4</sup>	Number of non-breastfed children 6–23 months	Breast-milk or milk products	3+ or 4+ food groups <sup>5</sup>	Minimum times or more <sup>6</sup>	With all 3 IYCF practices	Number of all children 6-23 months
<b>Age</b>														
6–8	44	40	27.1	82	NP	NP	NP	NP	16	94.6	44.8	35.9	25.1	98
9–11	(71.4)	(39)	(32)	45	NP	NP	NP	NP	19	97.8	71.5	39.3	30.8	64
12–17	83.6	54.3	46.6	69	76.9	70.9	24.3	16.5	78	87.8	76.9	38.4	30.6	147
18–23	(87.7)	(37.9)	(37.9)	35	60.1	77	49.1	28	70	73.5	80.6	45.4	31.4	105
<b>Sex</b>														
Male	73	42.7	36	114	69.2	68.7	36.2	18.8	102	85.4	71	39.6	27.9	216
Female	62.9	44.8	35	117	73.8	74.8	32.6	25.8	81	89.3	67.7	39.8	31.3	198
<b>Residence</b>														
Urban	(67)	(49.3)	(39.6)	45	(81)	(79.4)	(35)	(27.7)	48	90.2	73.4	41.9	33.4	93
Rural	68.1	42.4	34.6	187	67.8	68.6	34.5	19.9	135	86.5	68.3	39.1	28.4	322
<b>Region</b>														
Urban Tongatapu	(67)	(49.3)	(39.6)	45	(81)	(79.4)	(35)	(27.7)	48	90.2	73.4	41.9	33.4	93
Rural Tongatapu	68.4	40.8	32.3	128	71.4	67.9	36.4	19.8	97	87.6	68.2	38.9	26.9	225
Outer islands	67.2	46.1	39.4	59	(58.4)	(70.2)	(29.4)	(20.2)	37	83.8	68.4	39.6	31.9	96
<b>Mother's education</b>														
Secondary	67.1	38.9	31.5	183	67.7	68.1	34.4	20.6	133	86.4	67.5	37	26.9	316
More than secondary	(70.8)	(62.4)	(50.8)	48	80.6	80.2	35.2	25.5	50	90.1	75.6	48.5	37.9	98
<b>Wealth quintile</b>														
Lowest	68.2	53.2	47.3	54	(67.1)	(55.4)	(29.4)	(17.6)	42	85.6	62.6	42.8	34.3	96
Second	69.4	47.9	42.3	55	(54.7)	(71.1)	(54.3)	(22.9)	35	82.5	70	50.4	34.8	90
Middle	69.2	31.6	23.6	59	(80)	(81.6)	(32)	(18.7)	30	93.3	73.3	31.7	21.9	88
Fourth	(64)	(41.6)	(29.2)	33	(70.9)	(70.9)	(21.2)	(17)	36	84.8	67.6	31	22.8	70
Highest	(66.1)	(45.2)	(32.1)	30	(83.8)	(81.5)	(37.1)	(32.6)	40	90.8	74.9	40.6	32.4	70
<b>Total</b>	<b>67.8</b>	<b>43.8</b>	<b>35.5</b>	<b>231</b>	<b>71.2</b>	<b>71.4</b>	<b>34.6</b>	<b>21.9</b>	<b>183</b>	<b>87.3</b>	<b>69.4</b>	<b>39.7</b>	<b>29.5</b>	<b>414</b>

NP = not published

<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 (and red palm oil); 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 aged 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> Non-breastfed children aged 6–23 months are considered to be fed with a minimum standard of three IYCF 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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### 11.3 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiencies are a consequence of malnutrition. Malnutrition is a key indicator of child health, and contributes to child morbidity and mortality. The causes of malnutrition include not eating enough nutritious food, poor feeding practices, parasitic infections, poor sanitation and other socio-cultural factors that influence feeding practices. Vitamin and mineral deficiencies are consequences of malnutrition. Vitamin A and iron are the key micronutrients that were selected as indicators in this survey.

Vitamin A is essential for keeping tissue cells healthy and for protecting the body against infections. It plays an important role in vision, and not getting enough vitamin A can cause eye damage. It is found in two forms: retinol, which is readily absorbed by the body and found in breast milk, fatty fish, eggs, milk and milk products; and carotene, which is a provitamin because it must be converted into vitamin A by the liver before it can be used. Vitamin A is found in green leafy vegetables, red and yellow fruits such as papaya and pandanus, and pumpkin. The liver can store an adequate amount of vitamin A for four to six months. Periodic dosing every six months with vitamin A supplements is a rapid, low-cost method of ensuring that children at risk do not develop vitamin A deficiency (Beaton et al., 1993).

Iron is a key mineral that is essential for proper brain function. Low iron intake can contribute to iron deficiency anaemia. Young children who are growing rapidly have the highest iron requirements, and thus are at highest risk for iron deficiency anaemia. Haemoglobin testing was not undertaken in this survey; therefore, levels of iron deficiency anaemia among children cannot be determined. Further research is required to determine the level of iron deficiency among young children in Tonga.

Mothers were asked whether they fed their children with vitamin A and iron-rich foods in the 24 hours preceding the survey. They were also asked whether their children had received iron supplements in the seven days preceding the survey, and deworming medication in the last 6 months. The results presented in Table 11.7 provide a rough estimate of the nutrient content of the diet, as a nutritional analysis of the diet was beyond the scope of this survey.

Overall, 89% of children were fed vitamin A-rich foods and 78% were fed iron-rich foods in the 24 hours preceding the survey. Not surprisingly, consumption of these foods increases with age of child and percentages are higher for children who are not breastfed. Percentages also increase with mother's age at birth and by level of mother's education; they are highest in rural Tongatapu and lowest in the outer islands. Iron supplementation in the seven days preceding the survey was received by 11% of children and peaked with children aged 18–23 months. Iron supplementation percentages are twice as high in urban Tonga as in rural Tonga. Eight percent of children received deworming medication in the six months preceding the survey. Deworming medication is most commonly administered to children aged 9–17 months. The percentage of children receiving the medication in urban Tonga (11%) is close to double the proportion that receives it in rural Tonga (7%), and increases with the wealth quintile of the household.

**Table 11.7: Micronutrient intake among children**

Among youngest children aged 6–35 months living with their mother, the percentage who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey; among all children aged 6–59 months, the percentage 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 aged 6–59 months who live in households that were tested for iodised salt, the percentage who live in households with adequately iodised salt, by background characteristics, Tonga 2012

Background characteristic	Among youngest children aged 6–35 months living with the mother:			Among all children aged 6–59 months:		
	Percentage who consumed foods rich in vitamin A in the 24 hours prior to survey <sup>1</sup>	Percentage who consumed foods rich in iron in the 24 hours prior to survey <sup>2</sup>	Number of children	Percentage given iron supplements in the 7 days prior to survey	Percentage given deworming medication in the 6 months prior to survey <sup>3</sup>	Number of children
<b>Age in months</b>						
6–8	62.2	43.1	98	8.0	5.0	106
9–11	81.7	66.6	64	9.4	11.4	72
12–17	92.8	86.9	147	13.1	10.6	170
18–23	97.8	84.5	105	15.4	6.3	137
24–35	96.1	89.8	198	10.6	8.8	383
36–47	-	-	0	12.4	9.5	334
48–59	-	-	0	9.9	4.1	302
<b>Sex</b>						
Male	89.5	79.2	320	11.4	8.1	777
Female	87.8	77.4	292	11.3	7.5	728
<b>Breastfeeding status</b>						
Breastfeeding	80.5	67.0	262	11.5	6.7	280
Not breastfeeding	95.4	87.6	342	11.0	8.0	1,139
Missing	NP	NP	8	14.8	9.1	86
<b>Residence</b>						
Urban	87.3	77.0	143	19.1	11.0	335
Rural	89.1	78.7	469	9.1	6.9	1,170
<b>Region</b>						
Urban Tongatapu	87.3	77.0	143	19.1	11.0	335
Rural Tongatapu	90.1	80.1	330	7.6	8.4	809
Outer islands	86.8	75.3	139	12.5	3.7	361
<b>Mother's education</b>						
Primary or less	NP	NP	3	NP	NP	9
Secondary	87.4	77.4	456	11.3	7.7	1,139
More than secondary	92.3	80.5	153	11.2	8.6	356
<b>Mother's age at birth</b>						
15–19	NP	NP	14	NP	NP	14
20–29	87.7	75.9	275	11.6	8.0	629
30–39	89.3	80.0	272	11.0	8.5	710
40–49	94.5	87.7	52	12.0	3.8	152
<b>Wealth quintile</b>						
Lowest	88.3	74.8	146	12.4	4.9	379
Second	87.6	76.5	126	10.8	5.9	311
Middle	88.2	80.1	131	9.9	8.6	304
Fourth	92.2	80.6	107	13.1	11.1	261
Highest	87.4	80.8	101	10.3	10.4	249
<b>Total</b>	<b>88.7</b>	<b>78.3</b>	<b>612</b>	<b>11.3</b>	<b>7.8</b>	<b>1,505</b>

- = not applicable; NP = not published

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil [if data are collected].

<sup>2</sup> Includes meat, (including organ meat).

<sup>3</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

Note: Information on vitamin A and iron supplements and deworming medication is based on the mother's recall.

## **11.4 MATERNAL NUTRITIONAL STATUS**

A woman's nutritional status has important implications for her health and the health of her children. Malnutrition in women results in reduced productivity, an increased susceptibility to infections, slow recovery from illness, and heightened risks of adverse pregnancy outcomes. For example, a woman who has poor nutritional status — as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies — has a greater risk of 1) obstructed labour, 2) having a baby with low birth weight, 3) producing lower-quality breast milk, 4) mortality due to postpartum haemorrhage, and 5) morbidity of both herself and her baby. Unfortunately, no anthropometric measurements were collected during the survey.

### **11.4.1 Mother's food consumption patterns**

Table 11.8 presents the types of foods consumed by mothers in the 24 hours preceding the survey. Overall, the most common food consumed by mothers were high-protein foods (89%, including meat, fish, shellfish, poultry and eggs) followed by vitamin A-rich foods (86%), root crops (83%) and grains (82%). About 54% of mothers consumed high fatty foods and nearly half of all mothers consumed sugary foods in the 24 hours preceding the survey. The most common drinks consumed by mothers was 'other liquids' (73%); 41% of women drank tea or coffee, and 45% drank milk in the 24 hours preceding the survey.

Consumption of fatty foods is higher amongst older women from higher wealth quintile households who reside in urban Tongatapu. Consumption of sugary foods is higher among younger women with higher levels of educational attainment who reside in urban Tongatapu.

**Table 11.8: Foods consumed by mothers in the day or night preceding the interview**

Among mothers aged 15–49 with a child under age 3 years living with them, the percentage who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Tonga 2012

Background characteristic	Liquids			Solid or semi-solid foods								Foods made with oil, fat or butter	Sugary foods	Number of women
	Milk	Tea/ coffee	Other liquids	Foods made from grains	Foods made from roots or tubers	Foods made from legumes	Meat, fish, shellfish, poultry or eggs	Cheese/ yogurt	Vitamin A-rich fruits or vegetables <sup>1</sup>	Other fruits or vegetables	Other solid or semi-solid food			
<b>Age</b>														
15–19	(54.8)	(43)	(83)	(91.2)	(82.3)	(22.8)	(94.6)	(40)	(85.8)	(65.6)	(32.3)	(48.4)	(57.1)	25
20–29	48.6	40.7	76.1	82.2	83	19.2	88.6	30.9	84.1	50.1	27.6	50.8	50.4	358
30–39	41.2	40.6	69.8	82.2	83.8	20.5	88.4	28.5	85.9	58.1	28.2	55.8	50.3	324
40–49	38.7	42.4	70.3	81.1	82.4	20	93.1	20.2	93.1	42.3	19.7	69.5	31.8	60
<b>Residence</b>														
Urban	54.9	60.8	72.5	86.7	82.6	36.9	90.8	43.7	84.3	70.7	48.9	70.1	62.6	179
Rural	41.9	34.8	73.4	81.1	83.4	14.7	88.5	25	86	48.2	20.9	49.5	45	589
<b>Region</b>														
Urban Tongatapu	54.9	60.8	72.5	86.7	82.6	36.9	90.8	43.7	84.3	70.7	48.9	70.1	62.6	179
Rural Tongatapu	45.2	34.2	76.4	83.1	87	14.3	90.9	25.2	87	47.4	19	47.9	47.5	412
Outer islands	34.1	36.4	66.6	76.5	75.1	15.8	82.9	24.4	83.8	49.9	25.1	53.2	39.3	177
<b>Education</b>														
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	5
Secondary	41.1	38.6	74.5	81.2	83.2	17.9	88.4	28	85.4	52.4	26	52	48.1	581
More than secondary	56.4	47	69.5	85.9	82.9	25.9	90.8	33.5	86.4	56.2	31.9	61	51.3	182
<b>Wealth quintile</b>														
Lowest	34.5	29.9	76.9	76	84.6	14.7	83.4	19.6	84.5	43.6	17.8	43.4	37.4	188
Second	39.5	38.4	71.3	79.4	84.1	15.2	89.4	22.2	87.8	52.2	25.1	50.2	50.1	159
Middle	40.3	40.3	68.8	85.8	82.2	20.6	92.5	30.7	86.9	53.5	30	52.1	47.4	162
Fourth	55.4	45.2	67.6	84.5	85.3	20.5	88.9	33.7	83.7	53.4	32.9	61	57.4	138
Highest	62.4	57.3	82.5	89.5	79	32.8	93	47.3	85	70.1	35.7	72	59.2	120
<b>Total</b>	<b>44.9</b>	<b>40.9</b>	<b>73.2</b>	<b>82.4</b>	<b>83.2</b>	<b>19.9</b>	<b>89.1</b>	<b>29.3</b>	<b>85.6</b>	<b>53.4</b>	<b>27.4</b>	<b>54.3</b>	<b>49.1</b>	<b>768</b>

NP = not published

<sup>1</sup> Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A.

Notes:

1) Foods consumed in the last '24-hour' period (day and night prior to the survey).

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

#### 11.4.2 Micronutrient intake of mothers

Breastfed children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Night blindness is an indicator of severe vitamin A deficiency, to which pregnant women are especially prone. During the 2012 TDHS, women were asked if they had difficulty with their vision during daylight, and if they had suffered from night blindness during their last pregnancy. The percentage of women with adjusted night blindness is the percentage of women who only suffer from vision difficulties at night. This underestimates the occurrence of night blindness in women who also have daytime vision problems. Vitamin A deficiency in pregnant women can cause birth defects.

Anaemia is a key health status indicator for maternal nutrition. It is estimated that 20% of perinatal mortality and 10% of maternal mortality are attributable to iron deficiency anaemia. Anaemia also results in an increased risk of premature delivery and low birth weight. Iron deficiency, a major cause of anaemia, is one of the top 10 risk factors in developing countries for 'lost years of healthy life' (WHO, 2002). Information on the prevalence of anaemia can be useful for the development of health intervention programmes designed to prevent and control anaemia (e.g. iron supplementation and fortification programmes). Iron supplementation by women during pregnancy protects both the mother and infant.

Table 11.9 presents data on the micronutrient intake of mothers. Overall, about 95% of mothers consume vitamin A-rich foods and 89% consume iron-rich foods. Consumption of vitamin A-rich foods is more common among women in rural Tongatapu than elsewhere, and consumption of iron-rich foods is least common in the outer islands. Just under 4% of women have night blindness; it is most common among women educated to more than secondary level from higher wealth quintiles who reside in urban Tongatapu. Over one-third (38%) of women took no iron tablets or syrup during the pregnancy of their last birth, while 44% took iron tablets or syrup for less than 60 days. Failure to take iron tablets or syrup is more common among women with higher levels of educational attainment who reside in the outer islands. Less than 3% of women took deworming medication.



**Table 11.9: Micronutrient intake among mothers**

Among women aged 15–49 with a child under age 3 years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among mothers aged 15–49 whose last child was born in the five years prior to the survey; during that pregnancy the percentage who suffered from night blindness, took iron tablets or syrup for specific numbers of days, and took deworming medication, by background characteristics, Tonga 2012

Background characteristic	Among women aged 15–49 with child under age three years living with her			Women aged 15–49 with last child born within five years prior to survey								
	Consumed Vitamin A-rich foods <sup>1</sup> (%)	Consumed iron-rich foods <sup>2</sup> (%)	Number of women	Night blindness reported	Night blindness adjusted <sup>3</sup>	Number of days women took iron tablets or syrup during pregnancy of last birth				Don't know/missing	Percentage of women who took deworming medication during pregnancy of last birth <sup>4</sup>	Number of women
						None	<60	60–89	90+			
<b>Age</b>												
15–19	(97.1)	(94.6)	25	(5.8)	(0)	(38.3)	(48)	(0)	(5.8)	(7.9)	(0)	26
20–29	94.8	88.6	358	3.4	1.7	34.5	48.1	1.4	1.2	14.9	3.4	437
30–39	95.1	88.4	324	4	2.4	43	40.1	0.3	2.3	14.2	2	474
40–49	96.5	93.1	60	1.4	1	34.4	45.8	0	0	19.8	3.8	133
<b>Residence</b>												
Urban	93.1	90.8	179	4.3	3.6	37.6	42.5	0	1	18.8	2.1	248
Rural	95.7	88.5	589	3.2	1.3	38.6	44.8	0.9	1.9	13.9	3	821
<b>Region</b>												
Urban Tongatapu	93.1	90.8	179	4.3	3.6	37.6	42.5	0	1	18.8	2.1	248
Rural Tongatapu	98.5	90.9	412	3.7	1.6	30.3	52.5	1.4	2.4	13.5	4	555
Outer islands	89.3	82.9	177	2.2	0.8	55.9	28.7	0	0.7	14.7	0.8	266
<b>Education</b>												
Primary or less	NP	NP	5	NP	NP	NP	NP	NP	NP	NP	NP	8
Secondary	94.8	88.4	581	2.7	1.4	36.5	45.1	0.8	1.7	16	2.7	806
More than secondary	96	90.8	182	6.2	3.4	44.6	41.3	0.6	1.7	11.8	3	255
<b>Wealth quintile</b>												
Lowest	94	83.4	188	2.7	1.5	38.4	46.1	0.6	2	12.9	2.5	266
Second	94.8	89.4	159	3	0	35.2	46.8	2	2.2	13.8	4.9	226
Middle	97.6	92.5	162	3.6	2.3	38.7	45.5	0	1.1	14.8	1.1	219
Fourth	93.8	88.9	138	4.2	2.3	37.8	41.3	0	1.1	19.8	2.2	202
Highest	95.6	93	120	4.6	4	43.2	39.5	0.9	1.9	14.6	3	156
<b>Total</b>	<b>95.1</b>	<b>89.1</b>	<b>768</b>	<b>3.5</b>	<b>1.9</b>	<b>38.4</b>	<b>44.2</b>	<b>0.7</b>	<b>1.7</b>	<b>15</b>	<b>2.8</b>	<b>1,069</b>

NP = not published

<sup>1</sup> Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil [if data are collected].

<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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

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

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Acquired immune deficiency syndrome (AIDS) was first recognised internationally in 1981. AIDS is caused by the human immunodeficiency virus (HIV), which compromises the body's immune system; if untreated, it places people at greater risk from infections, some cancers and ultimately death. The first case of HIV in Tonga was diagnosed in 1987. As of the end of 2012, 19 people had been diagnosed with HIV. The key mode of transmission in Tonga appears to be through sexual intercourse.

The response to HIV in Tonga has been guided by the Tonga National Strategic Plan for HIV and Sexually Transmitted Infections, 2009–2013 (Tonga Country Coordinating Mechanism and Ministry of Health, 2009). The Strategic Plan has five focus areas:

1. prevention of HIV and sexually transmitted infections (STIs),
2. treatment, care and support,
3. creating an enabling environment,
4. monitoring and evaluation, and
5. management and coordination.

Funding for the HIV response in Tonga has come from the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Pacific Response Fund (funded mainly by the governments of Australia and New Zealand).

Tonga's Ministry of Health takes the lead role in responding to HIV and other STIs, with support from numerous organisations and government partners. Given the low prevalence in Tonga, the main focus of the response has been on preventing sexual transmission. Initiatives include youth prevention programmes, peer education, condom campaigns, voluntary counselling and testing, and school-based family life education. Male and female condoms are both available at no charge in hospitals throughout Tonga and are being distributed through outreach programmes. However, past studies have shown that condom usage remains low.

ART is offered free of charge to people diagnosed and living with HIV, together with other treatments for opportunistic infections. Treatment reduces the HIV viral load and, thus, the infectivity of infected people. Testing for HIV is offered in all hospitals and at the Tonga Family Health Association. However, the number of people who have been tested for HIV has been low. In 2011, 62% of pregnant women were tested for HIV; no women tested positive and there were no cases of vertical transmission.

There are challenges to mounting an effective response in Tonga. Reaching key affected populations (such as men who have sex with men) and the taboo associated with high-risk behaviours often stand in the way of effective prevention programmes. Similarly, people's attitudes toward HIV and high-risk behaviour result in stigma and discrimination. Monitoring and evaluation is limited in Tonga, hindering analysis and utilisation of data for effective policies and programmes.

There are opportunities to further the response to HIV in Tonga, and the 2012 TDHS can help by providing useful population data on knowledge, attitudes and behaviours about HIV and associated risks. The 2012 TDHS collected a variety of information on knowledge, attitudes and practices related to HIV, and particularly HIV risk. This chapter summarises these findings at a national level, and examines various socio-cultural trends and characteristics associated with the data. The information can inform the development of targeted and tailored interventions for effective HIV prevention, and for treatment, care and support for people living with HIV and STIs in Tonga. The National Strategic Plan for HIV and STIs 2009–2013 is being reviewed and a next phase is being developed. The TDHS data will help inform this work.

### **12.1 KNOWLEDGE OF HIV AND AIDS, AND RISK FACTORS FOR TRANSMISSION**

Overall, most people (96% of females and 95% of males) aged 15–49 in Tonga have heard of AIDS (Table 12.1). There were no real differences in this knowledge between rural and urban areas, but among women, a clear trend was observed that this knowledge increases with increased education.

**Table 12.1: Knowledge of AIDS***Percentage of women and men aged 15–49 who have heard of AIDS, by background characteristics, Tonga 2012*

Background characteristic	Women		Men	
	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
<b>Age</b>				
15–24	92.1	1,151	89.9	532
..15–19	89.5	658	85.9	311
..20–24	95.4	493	95.5	221
25–29	97.1	503	98.2	193
30–39	98.3	774	99.4	320
40–49	97.7	640	98.6	292
<b>Marital status</b>				
Never married	92.3	1,140	90.6	567
..Ever had sex	(94.4)	39	97.9	111
..Never had sex	92.2	1,101	88.8	456
Married or living together	97.7	1,747	98.9	716
Divorced, separated or widowed	97.3	181	96.5	53
<b>Residence</b>				
Urban	96.6	754	97.0	338
Rural	95.3	2,314	94.7	998
<b>Region</b>				
Urban Tongatapu	96.6	754	97.0	338
Rural Tongatapu	95.7	1,554	95.6	666
Outer islands	94.6	760	93.0	332
<b>Education</b>				
Primary or less	(78.4)	37	NP	24
Secondary	95.0	2,334	94.4	1,066
More than secondary	98.7	697	99.0	246
<b>Wealth quintile</b>				
Lowest	93.8	557	94.5	275
Second	95.4	597	94.5	250
Middle	95.4	631	94.3	294
Fourth	96.1	650	96.3	272
Highest	97.2	632	96.9	245
<b>Total aged 15–49</b>	<b>95.6</b>	<b>3,068</b>	<b>95.3</b>	<b>1,336</b>
Total aged 50+	-	-	98.6	406
Total men aged 15+	-	-	96.0	1,742

NP = not published; - = not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Knowledge about how to prevent HIV infection (which causes AIDS) was somewhat less widespread than knowledge of AIDS, although still quite high. Table 12.2 illustrates the levels of knowledge of various prevention strategies:

- Using condoms — 73% of women and 77% of men knew this was protective.
- Being faithful and limiting intercourse to one, uninfected partner — 89% of women and 86% of men were aware this was protective.
- Using condoms and limiting intercourse to one, uninfected partner — this was the least common response, given by 71% of women and 74% of men.
- Abstaining from sex — 81% of women and 79% of men knew this was protective.

Knowledge about prevention methods tended to increase with age for both men and women, with adolescents aged 15–19 having the least knowledge about HIV prevention. A slightly higher percentage of women in the urban area compared with rural areas had accurate knowledge of HIV prevention. The converse was true for men: a higher percentage of men in rural areas possessed knowledge about HIV prevention compared to men in the urban area.

Having post-secondary education corresponded to greater knowledge about HIV prevention.

**Table 12.2: Knowledge of HIV prevention methods**

Percentage of women and men aged 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, Tonga 2012

Background characteristic	Women					Men				
	Using condoms	Limiting sexual intercourse to one uninfected partner	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1, 2</sup>	Abstaining from sexual intercourse	Number of women	Using condoms	Limiting sexual intercourse to one uninfected partner	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	64	83	61.8	72.8	1,151	71	79.9	68.2	71.8	532
..15–19	(59.2)	(78)	(57)	(66.4)	(658)	(64.7)	(74.1)	(61.5)	(67.4)	(311)
..20–24	70.2	89.6	68.2	81.5	493	79.8	88.1	77.5	77.9	221
25–29	77.4	93.4	76.2	85.3	503	77.1	87.8	75	82.8	193
30–39	78.8	92.5	76.1	85.3	774	80.2	91	77.6	83.9	320
40–49	77.2	91.8	75.6	85.3	640	82.4	92.3	80.9	86.3	292
<b>Marital status</b>										
Never married	63.7	81.8	61.1	71.9	1,140	71	80.3	68.3	73	567
..Ever had sex	(75.3)	(85.2)	(75.3)	(78.2)	(39)	(86.1)	(85.4)	(80.9)	(73.7)	(111)
..Never had sex	63.3	81.7	60.5	71.7	1,101	67.3	79.1	65.3	72.8	456
Married or living together	78.2	93.3	76.7	86.2	1,747	81.3	91	79.4	84.2	716
Divorced, separated or widowed	75.9	91.2	72.6	81.3	181	71.4	90	66.7	84.1	53
<b>Residence</b>										
Urban	75.7	89.6	72.9	80	754	69.8	82.4	66.7	79	338
Rural	71.7	88.7	69.9	80.8	2,314	78.8	87.7	76.7	79.6	998
<b>Region</b>										
Urban Tongatapu	75.7	89.6	72.9	80	754	69.8	82.4	66.7	79	338
Rural Tongatapu	75.4	90.3	73.9	85.2	1,554	84.3	93	83.6	82.5	666
Outer islands	64	85.4	61.6	71.8	760	67.9	77.2	63.1	73.7	332
<b>Education</b>										
Primary or less	(59.2)	(72.6)	(55.2)	(68.8)	(37)	(NP)	(NP)	(NP)	(NP)	(24)
Secondary	71.1	87.8	69.1	79.3	2,334	75.4	85.1	72.7	78.5	1,066
More than secondary	78.7	93.7	76.7	85.6	697	83.1	93	81.8	85.8	246
<b>Wealth quintile</b>										
Lowest	68.2	86.1	65.3	78	557	72.5	82.4	68.4	78.1	275
Second	70.2	89.2	68.5	81.6	597	77.7	87.3	76.8	79.5	250
Middle	72.3	89	70.4	80.7	631	77.2	86.8	74.7	78.9	294
Fourth	75.6	90.2	74.1	80.5	650	77.2	87.4	74.9	82.4	272
Highest	76.3	89.8	74	82	632	78.5	88.2	76.6	78.4	245
<b>Total aged 15–49</b>	<b>72.7</b>	<b>88.9</b>	<b>70.6</b>	<b>80.6</b>	<b>3,068</b>	<b>76.6</b>	<b>86.4</b>	<b>74.2</b>	<b>79.4</b>	<b>1,336</b>
Total men aged 50+	-	-	-	-	-	76.4	88.5	74.3	83.1	406
Total men aged 15+	-	-	-	-	-	76.5	86.9	74.2	80.3	1,742

NP = not published; - = not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse.

<sup>2</sup> Partner who has no other partners.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Misconceptions about how HIV is spread remain widespread in Tonga. As shown in Tables 12.3 and 12.4, the proportion of Tongan men with a comprehensive knowledge of HIV (21%) was slightly higher than that of women (18%). Comprehensive knowledge was defined as 1) knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, and that a healthy looking person can have the AIDS virus, and 2) rejecting the two most common local misconceptions about AIDS transmission or prevention.

About three-quarters of men and women aged 15–49 knew that a healthy looking person can have the AIDS virus. However, just one-third of men and women knew that AIDS cannot be spread by mosquito bites. Only half of respondents (47% of women and 49% of men) knew that sharing food with someone who has AIDS was not a risk for contracting the disease.

No real differences existed between rural and urban respondents. Comprehensive knowledge was least likely to be found among young people (aged 15–19), for both women (10%) and men (13%), while respondents with more than a secondary education were most likely to have a comprehensive knowledge (27% of women and 34% of men).

## **12.2 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION**

With regard to knowledge about mother-to-child transmission (MTCT) of HIV, about half of respondents (49% of women and 51% of men) knew that HIV can be spread by breastfeeding (Table 12.5). Only 26% of women and 14% of men knew that the risk of MTCT can be reduced when mothers take special drugs (e.g. ART) during pregnancy. Among pregnant women, just 57% were aware that HIV can be spread through breastfeeding and 30% were aware that the risk of MTCT can be reduced when mothers take ART during pregnancy. Knowledge of MTCT was greater among more educated respondents and increased with age.

## **12.3 ATTITUDES CONCERNING PEOPLE LIVING WITH HIV**

Overall acceptance of people living with HIV was very low. Just 3% of women and 11% of men aged 15–49 expressed overall tolerance and acceptance (Tables 12.6 and 12.7). Negative attitudes were measured using hypothetical situations such as a female teacher with HIV being allowed to teach (accepted by 18% of women and 20% of men), and willingness to buy food from a shopkeeper with HIV (accepted by 19% of women and 27% of men). A greater proportion of respondents would be prepared to care for a family member with HIV at home (68% of women and 70% of men), and many would not want to hide the fact that a family member had HIV (46% of women and 85% of men). Accepting attitudes increase only slightly with age for both men and women.

**Table 12.3: Comprehensive knowledge about AIDS — Women**

Percentage of women aged 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, Tonga 2012

Background characteristic	Percentage of respondents who say that:			Say a healthy looking person can have the AIDS virus and reject the two most common local misconceptions (%) <sup>1</sup>	Have 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	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>						
15–24	60.5	29.3	37.5	15	12.1	1,151
..15–19	54.8	28.1	31.6	13	10.2	658
..20–24	68.1	30.8	45.5	17.7	14.6	493
25–29	78.1	34.4	48.6	22	18.1	503
30–39	80.9	36.8	54.3	24.9	21.4	774
40–49	81.2	35.6	55.5	27	22.6	640
<b>Marital status</b>						
Never married	60.4	30.8	40.9	16.3	13.4	1,140
..Ever had sex	(68)	(32.6)	(55)	(15.3)	(13.7)	39
..Never had sex	60.1	30.7	40.4	16.3	13.4	1,101
Married or living together	80.2	34.1	50.8	23.5	19.9	1,747
Divorced, separated or widowed	80.8	41.2	54	29.2	21.8	181
<b>Residence</b>						
Urban	73	36.1	48.6	19.6	15.5	754
Rural	72.8	32.4	46.9	21.7	18.3	2,314
<b>Region</b>						
Urban Tongatapu	73	36.1	48.6	19.6	15.5	754
Rural Tongatapu	76.9	32.3	46.5	23	20	1,554
Outer islands	64.4	32.6	47.6	18.9	14.8	760
<b>Education</b>						
Primary or less	(56.3)	(14.3)	(24.4)	(12.6)	(10.2)	37
Secondary	70.4	30.5	43	18.1	14.8	2,334
More than secondary	82	43.8	63	31.8	27.4	697
<b>Wealth quintile</b>						
Lowest	65.8	27.9	42.2	17.3	12.3	557
Second	72.3	30.2	46.1	18	14.3	597
Middle	75.3	31.6	48	20.8	18.2	631
Fourth	75.3	34.5	47.7	22.8	20.3	650
Highest	74.6	41.6	51.8	26.2	22	632
<b>Total women aged 15–49</b>	<b>72.8</b>	<b>33.3</b>	<b>47.3</b>	<b>21.2</b>	<b>17.6</b>	<b>3,068</b>

<sup>1</sup> Two most common local misconceptions: mosquito bites and sharing food can spread AIDS.

<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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.4: Comprehensive knowledge about AIDS — Men**

Percentage of men aged 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, Tonga 2012

Background characteristic	Percentage of respondents who say that:			Say a healthy looking person can have the AIDS virus and reject the two most common local misconceptions (%) <sup>1</sup>	Have 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	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>						
15–24	66.5	23.4	35.5	16.0	14.0	532
..15–19	61.1	23.1	30.5	15.0	12.9	311
..20–24	74.0	23.9	42.6	17.5	15.6	221
25–29	78.2	33.7	48.6	24.1	21.0	193
30–39	81.9	38.7	59.4	31.3	27.1	320
40–49	83.2	39.8	61.7	31.6	29.0	292
<b>Marital status</b>						
Never married	67.0	26.2	37.9	17.7	15.5	567
..Ever had sex	72.6	22.9	38.4	16.4	13.2	111
..Never had sex	65.6	27.0	37.8	18.0	16.1	456
Married or living together	82.3	36.5	56.1	29.3	26.2	716
Divorced, separated or widowed	76.1	37.1	67.7	26.6	20.7	53
<b>Residence</b>						
Urban	70.2	32.5	53.3	22.6	18.2	338
Rural	77.4	32.0	47.3	24.8	22.5	998
<b>Region</b>						
Urban Tongatapu	70.2	32.5	53.3	22.6	18.2	338
Rural Tongatapu	81.2	32.3	47.2	25.0	23.6	666
Outer islands	69.7	31.4	47.4	24.5	20.4	332
<b>Education</b>						
Primary or less	(63.1)	(25.2)	(44.5)	(14.2)	(7.6)	24
Secondary	73.5	29.1	45.3	21.7	19.0	1,066
More than secondary	85.4	45.7	64.5	36.2	33.6	246
<b>Wealth quintile</b>						
Lowest	74.1	26.8	41.1	19.8	17.9	275
Second	77.0	30.9	48.8	23.1	21.2	250
Middle	72.5	31.9	48.6	22.5	19.0	294
Fourth	77.5	38.2	50.9	29.3	26.5	272
Highest	77.1	32.9	55.3	26.9	22.9	245
<b>Total men aged 15–49</b>	<b>75.5</b>	<b>32.1</b>	<b>48.8</b>	<b>24.2</b>	<b>21.4</b>	<b>1,336</b>
Total men aged 50+	77.7	33.6	52.9	23.5	20.4	406
Total men aged 15+	76.0	32.5	49.8	24.1	21.2	1,742

<sup>1</sup> The two most common local misconceptions are that mosquito bites and sharing food can transmit the AIDS virus.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of a 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.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses..

**Table 12.5: 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, Tonga 2012

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	36.5	21.7	13.8	1,151	38.2	9.4	7.1	532
..15–19	(32.7)	(17.5)	(10.5)	(658)	(31.2)	(8.4)	(6.3)	(311)
..20–24	41.6	27.3	18.3	493	48	10.8	8.4	221
25–29	54.8	23.8	15.9	503	51.2	13.1	9.6	193
30–39	55.3	30.1	18.4	774	61.2	19.9	16.1	320
40–49	58.5	30.8	18.9	640	61.1	18.1	13.8	292
<b>Marital status</b>								
Never married	35.6	19.2	11.6	1,140	39.5	9.5	7.5	567
..Ever had sex	(55)	(7.5)	(6)	(39)	(55.3)	(2.8)	(1.5)	(111)
..Never had sex	34.9	19.6	11.8	1,101	35.7	11.1	9	456
Married or living together	56.2	29.7	19	1,747	59.8	18.4	14.3	716
Divorced separated or widowed	61.1	34.5	22	181	44.7	11.1	6	53
<b>Currently pregnant</b>								
Pregnant	57.1	30	15.6	186	-	-	-	0
Not pregnant or not sure	48.3	25.8	16.4	2,882	-	-	-	0
<b>Residence</b>								
Urban	45.5	20.6	15.4	754	34.1	7.3	4.2	338
Rural	49.9	27.9	16.7	2,314	56.2	16.7	13.4	998
<b>Region</b>								
Urban Tongatapu	45.5	20.6	15.4	754	34.1	7.3	4.2	338
Rural Tongatapu	50.3	34.9	21	1,554	55.7	14.7	11.4	666
Outer islands	49.1	13.6	7.9	760	57.2	20.8	17.4	332
<b>Education</b>								
Primary or less	(41.3)	(5.7)	(1.9)	(37)	(NP)	(NP)	(NP)	(24)
Secondary	48.2	25.9	16.1	2,334	50.1	13.7	11	1,066
More than secondary	51.3	27.7	18.3	697	52.4	18.3	12	246
<b>Wealth quintile</b>								
Lowest	50.8	22.7	14.4	557	64.5	20.6	17.6	275
Second	49.6	24.1	15.9	597	52.7	11	7.2	250
Middle	49.2	28.2	17.3	631	46.5	13.5	11.6	294
Fourth	46.7	28.9	16	650	43.5	12.2	9.5	272
Highest	48.1	25.8	18.1	632	45.6	14.2	8.9	245
<b>Total aged 15–49</b>	<b>48.8</b>	<b>26.1</b>	<b>16.4</b>	<b>3,068</b>	<b>50.6</b>	<b>14.3</b>	<b>11.1</b>	<b>1,336</b>
Total men aged 50+	-	-	-	-	59.2	18.6	15.4	406
Total men aged 15+	-	-	-	-	52.6	15.3	12.1	1,742

NP = Not published; - = Not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.



**Table 12.6: Accepting attitudes toward those living with HIV/AIDS — Women**

*Among women aged 15–49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Tonga 2012*

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	63.0	14.2	14.7	43.8	2.3	1,060
..15–19	60.1	10.9	13.2	43.4	1.3	589
..20–24	66.6	18.3	16.4	44.2	3.6	471
25–29	68.8	19.6	19.3	44.4	2.5	488
30–39	70.5	21.9	18.7	46.2	4.5	761
40–49	73.8	25.3	19.8	48.5	4.5	625
<b>Marital status</b>						
Never married	62.8	14.2	14.8	44.4	2.0	1,052
..Ever had sex	(62.4)	(16.0)	(20.6)	(55.4)	(10.0)	37
..Never had sex	62.8	14.2	14.6	44.0	1.7	1,015
Married or living together	71.5	22.7	18.7	45.9	4.1	1,706
Divorced, separated or widowed	68.4	18.9	23.3	47.8	4.7	176
<b>Residence</b>						
Urban	61.6	27.7	21.3	58.1	5.3	729
Rural	70.4	16.7	16.3	41.3	2.7	2,205
<b>Region</b>						
Urban Tongatapu	61.6	27.7	21.3	58.1	5.3	729
Rural Tongatapu	70.0	14.5	15.1	39.8	2.7	1,487
Outer islands	71.3	21.2	19.0	44.4	2.9	718
<b>Education</b>						
Primary or less	(70.1)	(22.0)	(29.2)	(40.4)	(1.9)	29
Secondary	66.4	17.4	15.4	45.4	2.3	2,217
More than secondary	73.9	26.0	24.2	46.1	6.9	688
<b>Wealth quintile</b>						
Lowest	69.0	14.0	16.8	40.7	1.7	523
Second	65.7	16.2	14.2	44.1	2.1	570
Middle	67.6	19.4	17.2	48.5	3.2	602
Fourth	69.6	22.7	19.3	47.4	4.4	624
Highest	69.1	23.8	19.9	46.0	4.9	615
<b>Total aged 15–49</b>	<b>68.2</b>	<b>19.4</b>	<b>17.6</b>	<b>45.5</b>	<b>3.4</b>	<b>2,934</b>

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.7: Accepting attitudes toward those living with HIV and AIDS — Men***Among men aged 15–49 who have heard of HIV and AIDS, percentage expressing specific accepting attitudes toward people with HIV and AIDS, by background characteristics, Tonga 2012*

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	60.3	17.2	13.3	80.1	5.1	478
..15–19	58.7	16.7	11.4	76.0	4.5	267
..20–24	62.5	17.8	15.8	85.3	5.9	211
25–29	69.8	25.4	19.5	85.9	9.6	189
30–39	78.0	34.6	25.6	87.3	16.1	318
40–49	76.6	33.5	24.8	89.1	14.4	287
<b>Marital status</b>						
Never married	65.4	22.4	15.2	81.0	8.1	514
..Ever had sex	80.3	27.3	18.1	91.3	10.3	109
..Never had sex	61.4	21.1	14.4	78.2	7.5	405
Married or living together	73.2	29.2	23.5	87.4	12.5	708
Divorced, separated or widowed	68.3	29.8	17.2	87.7	9.6	51
<b>Residence</b>						
Urban	68.3	39.2	25.4	87.7	17.5	328
Rural	70.4	22.0	18.0	83.8	8.2	945
<b>Region</b>						
Urban Tongatapu	68.3	39.2	25.4	87.7	17.5	328
Rural Tongatapu	72.7	20.2	19.2	83.3	6.9	636
Outer islands	65.8	25.8	15.5	84.8	11.0	309
<b>Education</b>						
Primary or less	NP	NP	NP	NP	NP	23
Secondary	68.5	24.0	17.7	84.5	9.6	1,006
More than secondary	77.2	38.0	29.7	88.0	15.4	244
<b>Wealth quintile</b>						
Lowest	62.4	16.4	16.0	82.6	6.0	260
Second	71.5	24.4	17.3	84.9	8.9	236
Middle	72.1	26.2	19.0	82.9	8.6	278
Fourth	67.7	28.1	24.0	85.5	14.1	262
Highest	76.2	37.9	23.2	88.5	15.9	238
<b>Total men aged 15–49</b>	<b>69.9</b>	<b>26.5</b>	<b>19.9</b>	<b>84.8</b>	<b>10.6</b>	<b>1,273</b>
Total men aged 50+	76.4	28.3	17.1	90.1	8.9	400
Total men aged 15+	71.4	26.9	19.2	86.1	10.2	1,673

NP = not published

## 12.4 ATTITUDES CONCERNING MARRIED WOMEN NEGOTIATING SAFER SEXUAL RELATIONS WITH THEIR HUSBAND

Table 12.8 shows findings regarding both women's and men's beliefs about a female's right to protect herself (by refusing to have sex or asking to use a condom), if her husband has a sexually transmitted infection (STI). Among respondents aged 15–49, 85% of women and 91% of men believed that a woman has the right to refuse to have sex with her partner or ask that the partner use a condom if that partner has an STI. The belief in the right to a women's refusal increases slightly with age for both men and women.

**Table 12.8: Attitudes toward negotiating safer sexual relations with a husband**

*Percentage of women and men aged 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 or asking that they use a condom, by background characteristics, Tonga 2012*

Background characteristic	Percent of women who believe a wife is justified in			Percent of men who believe a wife is justified in		
	Refusing to have sexual intercourse	Refusing sexual intercourse or asking that they use a condom	Number of women	Refusing to have sexual intercourse	Refusing sexual intercourse or asking that they use a condom	Number of men
<b>Age</b>						
15–24	81.0	81.0	1,151	88.0	88.0	532
..15–19	(76.7)	(76.7)	658	84.7	84.7	311
..20–24	86.7	86.7	493	92.5	92.5	221
25–29	85.6	85.6	503	93.5	93.5	193
30–39	87.7	87.7	774	93.3	93.3	320
40–49	88.7	88.7	640	93.1	93.1	292
<b>Marital status</b>						
Never married	79.4	79.4	1,140	86.7	86.7	567
..Ever had sex	(84.9)	(84.9)	39	90.5	90.5	111
..Never had sex	79.2	79.2	1,101	85.8	85.8	456
Married or living together	88.4	88.4	1,747	94.2	94.2	716
Divorced, separated or widowed	87.9	87.9	181	96.9	96.9	53
<b>Residence</b>						
Urban	82.7	82.7	754	82.8	82.8	338
Rural	85.8	85.8	2,314	94.0	94.0	998
<b>Region</b>						
Urban Tongatapu	82.7	82.7	754	82.8	82.8	338
Rural Tongatapu	88.0	88.0	1,554	93.3	93.3	666
Outer islands	81.2	81.2	760	95.4	95.4	332
<b>Education</b>						
Primary or less	(74.4)	(74.4)	37	NP	NP	24
Secondary	84.1	84.1	2,334	91.4	91.4	1,066
More than secondary	88.7	88.7	697	90.8	90.8	246
<b>Total aged 15–49</b>	<b>85.0</b>	<b>85.0</b>	<b>3,068</b>	<b>91.2</b>	<b>91.2</b>	<b>1,336</b>
Total men aged 50+	-	-	-	94.4	94.4	406
Total men aged 15+	-	-	-	91.9	91.9	1,742

-- = not applicable; NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 12.5 SEXUAL BEHAVIOUR – MULTIPLE PARTNERS AND HIGHER-RISK PARTNERS

Respondents were asked if they had ever had sexual intercourse; if so, they were then asked about the total number of partners they had had during their lifetime, whether they had had two or more sexual partners during the 12 months preceding the survey, and whether any of these partners were 'non-live-in' (i.e. not married to them, or co-habiting with them), and thus higher-risk partners. Respondents were also asked about condom use with non-live-in partners (Tables 12.9 and 12.10).

Among adults aged 15–49, men have a greater number of sexual partners during their lifetime (mean of 3.5) than women (mean of 1.3). A higher percentage of men (8%) had two or more partners during the 12 months preceding the survey than did women (3%).

Higher-risk intercourse was defined as sex with a partner that was not a spouse or a live-in partner. A higher percentage of men (18%) had higher-risk intercourse in the 12 months preceding the survey than did women (5%). The proportion of respondents who had higher-risk intercourse or who had two or more partners in the previous year decreased with age for both males and females. As might be expected, younger (mostly unmarried) people are more likely to have had non-live in partners during the 12 months preceding the survey than older (married) people. This is especially the case for males aged 15–24 (61% of men compared with 19% of women).

The absolute number of respondents who had two or more partners in the 12 months preceding the survey was quite low, hence condom use was difficult to measure accurately. However, usage appears to be higher among male respondents (13%) than female respondents (6%). A greater proportion of men who engaged in higher-risk intercourse (22%) reported using condoms than did women (6%).

Male respondents were asked if they had paid for sexual intercourse in the 12 months preceding the survey. However, the number of males reporting paying for sex was too small to draw any conclusions.

**Table 12.9: Multiple sexual partners and higher-risk sexual intercourse in the 12 months preceding the survey — Women**

*Among women aged 15–49 who had intercourse in the 12 months preceding the survey: percentage who had intercourse with more than one partner, and who had higher-risk intercourse in the 12 months preceding the survey; among those having >1 partner in the 12 months preceding the survey, percentage using a condom at last intercourse; and among those having higher-risk intercourse in the 12 months preceding the survey, percentage reporting a condom was used at last higher-risk intercourse; and mean number of sexual partners during her lifetime for women who ever had intercourse, by background characteristics, Tonga 2012*

Background characteristic	Among respondents who had sexual intercourse in the 12 months preceding the survey:			Among respondents who had 2 or more partners in the 12 months preceding the survey:		Among respondents who had higher-risk intercourse in the 12 months preceding the survey:		Among respondents who ever had sexual intercourse:	
	Had >1 partners in the 12 months preceding the survey (%)	Had higher-risk intercourse in the 12 months preceding the survey (%) <sup>1</sup>	Number	Used a condom during last sexual intercourse (%)	Number	Used a condom at last higher-risk intercourse (%)	Number	Mean number of sexual partners in lifetime	Number
<b>Age</b>									
15–24	3.8	18.8	229	NP	9	(5.3)	43	1.3	258
..15–19	(6)	(34.9)	37	NP	2	NP	13	(1.8)	49
..20–24	3.4	15.7	192	NP	7	(5.1)	30	1.2	209
25–29	3.3	4.9	354	NP	12	NP	17	1.3	389
30–39	2.5	2.9	625	NP	15	NP	18	1.3	697
40–49	1.6	1.9	497	NP	8	NP	10	1.2	594
<b>Marital status</b>									
Never married	NP	NP	13	NP	2	NP	13	(1.4)	36
Married or living together	2.4	2.9	1,648	(4.3)	40	(10)	47	1.3	1,727
Divorced, separated or widowed	(4.6)	(62.3)	45	NP	2	(0)	28	1.4	174
<b>Residence</b>									
Urban	2.9	6	395	NP	12	NP	24	1.3	460
Rural	2.5	4.9	1,311	(0)	33	3.4	64	1.3	1,478
<b>Region</b>									
Urban Tongatapu	2.9	6	395	NP	12	NP	24	1.3	460
Rural Tongatapu	2.7	5.2	866	NP	24	(3.4)	45	1.3	988
Outer islands	2	4.3	445	NP	9	NP	19	1.2	490
<b>Education</b>									
Primary or less	NP	NP	19	-	0	NP	1	(1.2)	25
Secondary	3.1	5.5	1,300	(6.1)	40	7.6	72	1.3	1,472
More than secondary	1	4	387	NP	4	NP	16	1.2	441
<b>Wealth quintile</b>									
Lowest	3.8	5.4	366	NP	14	NP	20	1.4	410
Second	2.9	6.5	354	NP	10	NP	23	1.3	392
Middle	2.4	4.7	343	NP	8	NP	16	1.2	396
Fourth	2	5.9	338	NP	7	NP	20	1.2	388
Highest	1.5	3.1	306	NP	5	NP	10	1.3	352
<b>Total women aged 15–49</b>	<b>2.6</b>	<b>5.2</b>	<b>1,706</b>	<b>(5.5)</b>	<b>44</b>	<b>6.2</b>	<b>88</b>	<b>1.3</b>	<b>1,938</b>

NP = not published; - = not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

<sup>1</sup> Sexual intercourse with a partner who neither was a spouse nor who lived with the respondent.

**Table 12.10: Multiple sexual partners and higher-risk sexual intercourse in the 12 months preceding the survey— Men**

Among men aged 15–49 who had intercourse in the 12 months preceding the survey; percentage who had intercourse with more than one partner, and who had higher-risk intercourse in the 12 months preceding the survey; among those having >1 partner in the 12 months preceding the survey, percentage using a condom at last intercourse; and among those having higher-risk intercourse in the 12 months preceding the survey, percentage reporting a condom was used at last higher-risk intercourse; and mean number of sexual partners during his lifetime for men who ever had sexual intercourse, by background characteristics, Tonga 2012

Background characteristic	Among respondents who had sexual intercourse in the 12 months preceding the survey:			Among respondents who had 2+ partners in the 12 months preceding the survey:		Among respondents who had higher-risk intercourse in the 12 months preceding the survey:		Among respondents who ever had sexual intercourse:	
	Had >1 partners in the 12 months preceding the survey (%)	Had higher-risk intercourse in the 12 months preceding the survey (%) <sup>1</sup>	Number	Used a condom during last sexual intercourse (%)	Number	Used a condom at last higher-risk intercourse (%)	Number	Mean number of sexual partners in lifetime	Number
<b>Age</b>									
15–24	24.3	61.2	130	(17.4)	32	23	80	3.5	154
..15–19	(28.6)	(73.7)	36	NP	10	(27)	27	(2.8)	45
..20–24	22.6	56.4	94	NP	21	21	53	3.9	109
25–29	8.6	17.5	140	NP	12	NP	24	3	149
30–39	5.3	10	257	NP	14	(24.1)	26	4	266
40–49	2.6	4.7	251	NP	7	NP	12	3.2	260
<b>Marital status</b>									
Never married	32.8	97.7	64	NP	21	21	63	4.2	107
Married or living together	5.6	8.9	685	(10.4)	38	21.3	61	3.4	671
Divorced, separated or widowed	(16.3)	(61.6)	29	NP	5	NP	18	3.6	50
<b>Residence</b>									
Urban	7.9	21.9	196	NP	16	(23)	43	3.1	221
Rural	8.3	17	581	(6.8)	48	20.4	99	3.6	607
<b>Region</b>									
Urban Tongatapu	7.9	21.9	196	NP	16	(23)	43	3.1	221
Rural Tongatapu	6.9	16.2	373	(6.6)	26	22.9	61	3.8	397
Outer Islands	10.7	18.4	208	NP	22	(16.5)	38	3.1	210
<b>Education</b>									
Primary or less	NP	NP	16	NP	1	NP	2	NP	17
Secondary	9.2	19	603	11.1	55	21.2	115	3.4	638
More than secondary	4.9	15.8	159	NP	8	(20.1)	25	3.9	173
<b>Wealth quintile</b>									
Lowest	6	13.7	181	NP	11	(22.2)	25	3.3	189
Second	7.8	17.8	150	NP	12	(29.2)	27	3.4	156
Middle	10	19.4	161	NP	16	(19.4)	31	3.3	168
Fourth	9.5	22	145	NP	14	(7.1)	32	3.3	165
Highest	8.1	19.3	141	NP	11	(30.9)	27	4.2	151
<b>Total men aged 15–49</b>	<b>8.2</b>	<b>18.2</b>	<b>778</b>	<b>11</b>	<b>64</b>	<b>21.2</b>	<b>142</b>	<b>3.5</b>	<b>828</b>
Total men aged 50+	5.4	7.2	215	NP	12	NP	15	4.1	372
Total men aged 15+	7.6	15.8	993	13.4	75	21.6	157	3.7	1,200

NP = not published

<sup>1</sup> Sexual intercourse with a partner who neither was a spouse nor who lived with the respondent.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 12.6 MALE CIRCUMCISION

Male circumcision has a known protective effect against HIV infection, reducing the risk of infection by approximately 50% in circumcised men. Circumcision rates vary in different Pacific Island countries, depending on socio-cultural factors. In Tonga, male circumcision in young boys is almost universal, and 98% of male respondents reported being circumcised, with similar rates across all socio-demographic characteristics (Table 12.11).

**Table 12.11: Male circumcision**

*Percentage of men aged 15–49 who report having been circumcised, by background characteristics, Tonga 2012*

Background characteristic	Percentage circumcised	Number of men
<b>Age</b>		
15–24	98.2	532
..15–19	98.6	311
..20–24	97.6	221
25–29	97.6	193
30–39	96.7	320
40–49	98.5	292
<b>Residence</b>		
Urban	98.6	338
Rural	97.6	998
<b>Region</b>		
Urban Tongatapu	98.6	338
Rural Tongatapu	97.9	666
Other Rural	96.9	332
<b>Education</b>		
Primary or less	NP	24
Secondary	98.1	1,066
More than secondary	96.5	246
<b>Total men aged 15–49</b>	<b>97.8</b>	<b>1,336</b>
Total men aged 50+	98.6	406
Total men aged 15+	98.0	1,742

NP = not published

## 12.7 RATES OF SELF-REPORTED STI SYMPTOMS

Respondents were asked whether they had had an STI or certain symptoms indicative of STIs in the 12 months preceding the survey (Table 12.12). Of all respondents who reported ever having had sexual intercourse, 2% of both men and women aged 15–49 reported having an STI. Within this age group, 4% of women and 5% of men reported having experienced bad smelling genital discharge and 2% of both women and men reported having a genital ulcer or sore in the 12 months prior to the survey. The percent of respondents who had an STI, discharge, or a genital ulcer was 5% among women and 6% among men.

**Table 12.12: Self-reported prevalence of sexually transmitted infections and related symptoms**

*Among women and men aged 15–49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the 12 months preceding the survey, by background characteristics, Tonga 2012*

Background characteristic	Women					Men				
	STI	Bad smelling or abnormal genital discharge	Genital sore or ulcer	STI, genital discharge, sore or ulcer	Number of respondents who ever had sexual intercourse	STI	Bad smelling or abnormal genital discharge	Genital sore/ulcer	STI, genital discharge, sore or ulcer	Number of respondents who ever had sexual intercourse
<b>Age</b>										
15–24	1.8	6.4	1.8	7.3	263	5.4	7.4	1.5	9.8	158
..15–19	(4.5)	(16.1)	(4.5)	(16.1)	50	(3.8)	(7.6)	(1.9)	(7.6)	45
..20–24	1.2	4.2	1.1	5.3	213	6	7.3	1.4	10.7	113
25–29	2.2	4.3	2.5	5.1	393	3.2	5.4	1	8	154
30–39	1.6	4.5	1.1	5.7	708	1.6	5.7	2.4	7.3	287
40–49	1.2	3.4	1.2	3.8	603	1.1	2	0.7	2.7	280
<b>Marital status</b>										
Never married	(1.9)	(13.5)	(1.9)	(13.5)	39	5.8	10.2	3.6	13	111
Married or living together	1.8	4.2	1.6	5.1	1,747	1.5	3.8	1.2	5.2	716
Divorced, separated or widowed	0.5	4	0.9	4.9	181	7.6	6.4	0	9.4	53
<b>Male circumcision</b>										
Circumcised	-	-	-	-	-	2.5	4.9	1.5	6.6	859
Not circumcised	-	-	-	-	-	NP	NP	NP	NP	10
<b>Residence</b>										
Urban	1.7	2.2	0.5	3.4	472	1.1	8.2	0.7	8.6	228
Rural	1.6	5.1	1.8	5.8	1,495	2.9	3.6	1.7	5.6	652
<b>Region</b>										
Urban Tongatapu	1.7	2.2	0.5	3.4	472	1.1	8.2	0.7	8.6	228
Rural Tongatapu	1.8	5.8	2.4	6.4	996	3.5	4.3	2.5	6.8	423
Outer islands	1.3	3.7	0.7	4.6	499	1.7	2.2	0.3	3.4	229
<b>Education</b>										
Primary or less	(12.3)	(17.3)	(6)	(20.3)	26	NP	NP	NP	NP	18
Secondary	1.3	4.6	1.6	5.3	1,495	2.4	4.3	1.4	6.2	674
More than secondary	2.1	3	1	4.1	446	2.6	7	1.7	7.8	188
<b>Total aged 15–49</b>	<b>1.6</b>	<b>4.4</b>	<b>1.5</b>	<b>5.2</b>	<b>1,967</b>	<b>2.4</b>	<b>4.8</b>	<b>1.5</b>	<b>6.4</b>	<b>880</b>
Total men aged 50+	-	-	-	-	-	1	3.7	2.4	4.4	396
Total men aged 15+	-	-	-	-	-	2	4.4	1.7	5.8	1,276

NP = not published; STI = sexually transmitted infection; - = not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.



Among respondents reporting STI symptoms in the 12 months prior to the survey, 18% of women and 32% of men sought treatment at a clinic, hospital, private doctor, or other healthcare professional (Table 12.13). A small proportion sought treatment from a traditional healer (2% of women and 3% of men). Alarming, 76% of women and 56% of men sought no treatment or advice for their symptoms. This represents a missed opportunity for these men and women not only to be treated for their symptoms, but for healthcare providers to counsel them about STI and HIV prevention.

Because many STIs are asymptomatic, these self-reported rates would under-represent STI prevalence in Tonga. The fact that some respondents did report STI symptoms further confirms that STIs are present and circulating within the population; these infections can cause serious morbidity, as well as increase the likelihood of HIV transmission.

**Table 12.13: Women and men seeking treatment for sexually transmitted infections**

*Percentage of women and men aged 15–49 reporting an STI or symptoms of an STI in the 12 months preceding the survey who sought advice or treatment, Tonga 2012*

Service of advice or treatment	Women	Men
Clinic, hospital, private doctor or other health professional	17.8	32.3
Traditional healer	2.2	3.3
Advice or treatment from any other source	0.7	0.0
No advice or treatment	76.3	55.9
Number with STIs and symptoms of STIs	103	56

STI = Sexually Transmitted Infection

## 12.8 PREVIOUS HIV TESTING

In total, 72% of men and women aged 15–49 knew where to obtain an HIV test (Tables 12.14 and 12.15). This knowledge increased with age in both men and women. More women (14%) than men (8%) had ever been tested for HIV. Just 4% of women and 2% of men had been tested and received their results in the 12 months preceding the survey.

**Table 12.14: Coverage of prior HIV testing — Women**

Percentage of women aged 15–49 who know where to get an HIV test, distribution by testing status and by whether they received the results of the last test, percentage of women ever tested, and the percentage of women who received their test results the last time they were tested for HIV in the 12 months preceding the survey, according to background characteristics, Tonga 2012

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women 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 12 months preceding the survey	Number of women
		Ever tested and received results	Ever tested did not receive results	Never tested				
<b>Age</b>								
15–24	58.5	5.3	1.2	93.5	100.0	6.5	2.3	1,151
..15–19	51.1	1.6	0.1	98.3	100.0	1.7	0.3	658
..20–24	68.4	10.1	2.6	87.2	100.0	12.8	4.9	493
25–29	79.3	17.4	4.9	77.7	100.0	22.3	8.1	503
30–39	80.9	18.0	4.2	77.7	100.0	22.3	6.8	774
40–49	80.2	9.6	2.2	88.2	100.0	11.8	1.2	640
<b>Marital status</b>								
Never married	58.9	2.7	0.2	97.1	100.0	2.9	0.9	1,140
..Ever had sex	(60.3)	(22.4)	(0.0)	(77.6)	(100.0)	(22.4)	(5.8)	39
..Never had sex	58.9	2.0	0.2	97.8	100.0	2.2	0.7	1,101
Married or living together	80.2	17.3	4.6	78.1	100.0	21.9	6.4	1,747
Divorced, separated or widowed	76.6	9.3	1.4	89.2	100.0	10.8	2.5	181
<b>Residence</b>								
Urban	75.2	13.6	3.2	83.1	100.0	16.9	5.2	754
Rural	71.1	10.6	2.6	86.7	100.0	13.3	3.8	2,314
<b>Region</b>								
Urban Tongatapu	75.2	13.6	3.2	83.1	100.0	16.9	5.2	754
Rural Tongatapu	71.4	13.7	2.5	83.9	100.0	16.1	5.0	1,554
Outer islands	70.5	4.4	3.0	92.6	100.0	7.4	1.4	760
<b>Education</b>								
Primary or less	(51.7)	(6.9)	(0.0)	(93.1)	(100.0)	(6.9)	(0.0)	37
Secondary	69.7	10.4	2.9	86.7	100.0	13.3	3.8	2,334
More than secondary	81.2	14.9	2.5	82.7	100.0	17.3	5.3	697
<b>Wealth quintile</b>								
Lowest	69.9	11.7	3.8	84.5	100.0	15.5	5.0	557
Second	69.1	10.7	1.8	87.5	100.0	12.5	3.5	597
Middle	72.6	9.9	3.5	86.6	100.0	13.4	3.7	631
Fourth	73.0	11.2	2.3	86.5	100.0	13.5	4.2	650
Highest	75.4	13.4	2.6	84.0	100.0	16.0	4.4	632
<b>Total aged 15–49</b>	<b>72.1</b>	<b>11.4</b>	<b>2.8</b>	<b>85.8</b>	<b>100.0</b>	<b>14.2</b>	<b>4.1</b>	<b>3,068</b>

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.15: Coverage of prior HIV testing — Men**

Percentage of men aged 15–49 who know where to get an HIV test, distribution 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 who received their test results the last time they were tested for HIV in the 12 months preceding the survey, according to background characteristics, Tonga 2012

Background characteristic	Know where to get an HIV test (%)	Percent distribution of men by testing status and whether they received the results of the last test			Total	Percentage ever tested	Received results from last HIV test taken in the 12 months preceding the survey(%)	Number of men
		Ever tested and received results	Ever tested did not receive results	Never tested				
<b>Age</b>								
15–24	56.7	3.4	0.8	95.8	100.0	4.2	1.2	532
..15–19	50.1	2.2	0.9	96.9	100.0	3.1	1.7	311
..20–24	66.1	5.1	0.6	94.3	100.0	5.7	0.6	221
25–29	75.9	9.2	2.3	88.5	100.0	11.5	2.8	193
30–39	81.4	8.5	0.9	90.6	100.0	9.4	0.8	320
40–49	85.1	9.5	1.0	89.5	100.0	10.5	2.4	292
<b>Marital status</b>								
Never married	59.7	3.5	1.0	95.5	100.0	4.5	1.1	567
..Ever had sex	73.8	6.4	2.0	91.6	100.0	8.4	1.5	111
..Never had sex	56.3	2.8	0.7	96.5	100.0	3.5	0.9	456
Married or living together	80.5	9.1	1.1	89.8	100.0	10.2	2.1	716
Divorced, separated or widowed	79.2	10.5	1.8	87.7	100.0	12.3	0.0	53
<b>Residence</b>								
Urban	73.5	8.6	3.2	88.2	100.0	11.8	3.8	338
Rural	71.0	6.2	0.4	93.5	100.0	6.5	0.8	998
<b>Region</b>								
Urban Tongatapu	73.5	8.6	3.2	88.2	100.0	11.8	3.8	338
Rural Tongatapu	71.7	7.5	0.2	92.2	100.0	7.8	1.0	666
Outer islands	69.5	3.5	0.6	95.9	100.0	4.1	0.6	332
<b>Education</b>								
Primary or less	NP	NP	NP	NP	NP	NP	NP	24
Secondary	69.5	5.6	1.0	93.5	100.0	6.5	1.5	1,066
More than secondary	83.3	12.0	1.7	86.2	100.0	13.8	1.9	246
<b>Wealth quintile</b>								
Lowest	68.7	4.4	0.5	95.1	100.0	4.9	1.4	275
Second	65.9	6.3	0.9	92.8	100.0	7.2	1.7	250
Middle	69.4	5.7	0.8	93.5	100.0	6.5	0.8	294
Fourth	73.2	6.5	0.6	92.8	100.0	7.2	2.0	272
Highest	81.5	11.6	2.9	85.6	100.0	14.4	2.1	245
<b>Total men aged 15–49</b>	<b>71.6</b>	<b>6.8</b>	<b>1.1</b>	<b>92.1</b>	<b>100.0</b>	<b>7.9</b>	<b>1.6</b>	<b>1,336</b>
Total men aged 50+	75.3	7.5	0.6	91.9	100.0	8.1	1.2	406
Total men aged 15+	72.5	6.9	1.0	92.1	100.0	7.9	1.5	1,742

NP = not published

### 12.8.1 Previous antenatal HIV testing

Among women who gave birth in the two years preceding the survey, 50% received HIV counselling as part of their ANC and 23% were offered and accepted an HIV test as part of the ANC (Table 12.16). Only 19% were counselled about HIV, offered and accepted an HIV test, and were given the results of the test. This number is much lower than the ANC data presented by Tonga Ministry of Health (62%).

**Table 12.16: Pregnant women counselled and tested for HIV**

*Among all women aged 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, Tonga 2012*

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:		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 two years preceding the survey <sup>3</sup>
		Received results	Did not receive results		
<b>Age</b>					
15–24	45.3	18.7	2.9	17.0	134
..15–19	NP	NP	NP	NP	24
..20–24	45.3	18.9	2.8	17.5	110
25–29	57.3	25.7	7.1	22.2	193
30–39	49.3	24.3	5.4	19.5	242
40–49	(41.5)	(14.6)	(7.3)	(13.0)	43
<b>Residence</b>					
Urban	53.0	28.7	8.3	22.8	138
Rural	49.7	21.1	4.7	18.3	473
<b>Region</b>					
Urban Tongatapu	53.0	28.7	8.3	22.8	138
Rural Tongatapu	55.7	26.0	4.5	22.8	325
Outer islands	36.4	10.5	5.0	8.5	147
<b>Education</b>					
Primary or less	NP	NP	NP	NP	3
Secondary	50.7	22.4	5.3	19.6	473
More than secondary	50.8	24.9	6.2	18.9	135
<b>Total aged 15–49</b>	<b>50.4</b>	<b>22.9</b>	<b>5.5</b>	<b>19.4</b>	<b>611</b>

NP = not published

<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 to have the test 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 two years preceding the survey.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 12.9 PERCEPTIONS AND BELIEFS ABOUT ABSTINENCE FROM SEX AND FAITHFULNESS

Interesting differences are observed in attitudes and perceptions about faithfulness. The proportion of men and women who believe that young men and women should wait until marriage to have sex are quite similar (Table 12.17). The percentage of women and men who believe that young women should wait to have sexual intercourse until marriage is slightly higher (95% of women, 90% of men) than the percentage who believe young men should wait until marriage (88% of women, 86% of men). The percentage of respondents who believe that wives should only have sex with their husbands (90% of women, 90% of men) is similar to the percentage that believes husbands should only have sex with their wives (85% of women, 90% of men). However, the proportion of both men and women who think that married men and women are actually faithful to their married partners is low: only half of both men and women believe that the men they know only have sex with their wives, while 57% of women and 53% of men believe that the women they know only have sex with their husbands.

**Table 12.17: Perception and beliefs about abstinence and faithfulness**

	Women	Men
Proportion of all women and men aged 15–49 who believe or think that:		
Young men should wait until they are married to have sexual intercourse	87.8	85.8
Young women should wait until they are married to have sexual intercourse	94.5	89.5
Married men should only have sex with their wives	85.4	90.2
Most married men they know only have sex with their wives	48.5	49.3
Married women should only have sex with their husbands	89.6	90.1
Most married women they know only have sex with their husbands	56.8	53.3
Number of respondents	3,068	1,336

## 12.10 HIV RISK IN YOUNG PEOPLE

A subset of questions was asked specifically of young people aged 15–24 to gauge their risk of HIV infection (Table 12.18). Just 12% of young women and 14% of young men had a comprehensive knowledge of HIV and AIDS. Similarly, only 53% of young women and 61% of young men knew at least one source for obtaining condoms. Knowledge of where to obtain a condom increased slightly with age.

**Table 12.18: Comprehensive knowledge about AIDS and of a source of condoms among youth**

Percentage of young women and men aged 15–24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Tonga 2012

Background characteristic	Women			Men		
	Comprehensive knowledge of AIDS (%) <sup>1</sup>	Know a condom source (%) <sup>2</sup>	Number of respondents	Comprehensive knowledge of AIDS (%) <sup>1</sup>	Know a condom source (%) <sup>2</sup>	Number of respondents
<b>Age</b>						
15–19	10.2	42.8	658	12.9	50.0	311
..15–17	9.4	33.0	405	11.7	41.0	197
..18–19	11.5	58.4	253	15.0	65.8	114
20–24	14.6	66.2	493	15.6	75.7	221
..20–22	13.0	63.7	318	12.9	75.2	142
..23–24	17.4	70.7	176	20.4	76.6	79
<b>Marital status</b>						
Never married	11.6	46.8	904	13.4	58.1	446
..Ever had sex	NP	NP	15	9.1	81.3	73
..Never had sex	11.7	47.2	889	14.3	53.6	373
Ever married	13.7	74.8	247	17.1	73.9	86
<b>Residence</b>						
Urban	10.6	55.0	279	12.2	68.9	132
Rural	12.5	52.1	872	14.6	58.0	400
<b>Region</b>						
Urban Tongatapu	10.6	55.0	279	12.2	68.9	132
Rural Tongatapu	12.3	51.8	594	16.1	61.7	273
Outer islands	13.0	52.8	278	11.5	49.9	126
<b>Education</b>						
Primary	NP	NP	8	NP	NP	3
Secondary	10.4	49.2	940	12.6	58.3	468
More than secondary	19.6	70.0	203	24.9	77.1	60
<b>Wealth quintile</b>						
Lowest	11.2	50.4	194	13.1	56.8	94
Second	9.8	49.0	222	14.9	59.7	113
Middle	12.4	51.6	246	14.2	66.4	124
Fourth	10.8	53.8	253	13.7	57.9	118
Highest	16.0	58.7	236	14.2	61.8	83
<b>Total</b>	<b>12.1</b>	<b>52.8</b>	<b>1,151</b>	<b>14.0</b>	<b>60.7</b>	<b>532</b>

NP = not published

<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 12.2, 12.3, and 12.4.

<sup>2</sup> For this table, the following responses are not considered sources for condoms: friends, family members and home.

A very small proportion of adolescents aged 15–24 had sexual intercourse before age 15: less than 1% of women and just over 1% of men (Table 12.19). The proportion of respondents who had sexual intercourse by age 18 was also low: 6% of women and 13% of men.

About 20% of young men aged 15–24 used a condom at first sex compared with just 4% of young women the same age. Condom use at first sex was slightly higher in rural areas (22%) than the urban area (17%) for men (Table 12.20).

**Table 12.19: Age at first sexual intercourse among youth**

*Percentage of young women and men aged 15–24 who had sexual intercourse before age 15 and percentage of young women and men aged 18–24 who had sexual intercourse before age 18, by background characteristics, Tonga 2012*

Background characteristic	Women				Men			
	Had sexual intercourse before age 15 (%)	Number of respondents (15–24)	Had sexual intercourse before age 18 (%)	Number of respondents (18–24)	Had sexual intercourse before age 15 (%)	Number of respondents (15–24)	Had sexual intercourse before age 18 (%)	Number of respondents (18–24)
<b>Age</b>								
15–19	0.7	658	-	-	1.4	311	-	-
..15–17	1.1	405	-	-	0.9	197	-	-
..18–19	0	253	8	253	2.3	114	17.5	114
20–24	0.3	493	5.4	493	0.6	221	10.6	221
..20–22	0.5	318	6.5	318	1	142	10.8	142
..23–24	0	176	3.6	176	0	79	10.2	79
<b>Marital status</b>								
Never married	0.2	904	0.3	506	0.7	446	6.9	252
Ever married	1.5	247	19	240	2.8	86	31.4	82
<b>Knows condom source <sup>1</sup></b>								
Yes	0.7	608	7.5	475	1.8	323	13.9	242
No	0.3	543	4.3	272	0	209	10.3	93
<b>Residence</b>								
Urban	0.3	279	5.6	190	1.7	132	15	89
Rural	0.6	872	6.5	557	0.9	400	12.2	246
<b>Region</b>								
Urban Tongatapu	0.3	279	5.6	190	1.7	132	15	89
Rural Tongatapu	0.8	594	7	393	0	273	11.4	170
Outer islands	0.2	278	5.5	164	2.7	126	14.1	75
<b>Education</b>								
Primary or less	NP	8	NP	4	NP	3	NP	3
Secondary	0.2	940	7.8	543	1.1	468	12.5	273
More than secondary	1.1	203	1.5	199	1.1	60	14.2	59
<b>Wealth quintile</b>								
Lowest	1.1	194	13.4	129	2.5	94	15	60
Second	0	222	7.4	141	0	113	11.9	75
Middle	0.6	246	5.6	168	2	124	15.8	79
Fourth	0.9	253	3.7	166	0	118	11	72
Highest	0	236	2.7	143	1	83	(10.2)	49
<b>Total</b>	<b>0.5</b>	<b>1,151</b>	<b>6.3</b>	<b>746</b>	<b>1.1</b>	<b>532</b>	<b>12.9</b>	<b>334</b>

NP = not published; - = not applicable

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.20: Condom use at first sexual intercourse among youth**

Among young women and young men aged 15–24 who have ever had sexual intercourse, percentage who used a condom the first time they had sexual intercourse, by background characteristics, Tonga 2012

Background characteristic	Women		Men	
	Percentage who used a condom at first sexual intercourse	Number of respondents who have ever had sexual intercourse	Percentage who used a condom at first sexual intercourse	Number of respondents who have ever had sexual intercourse
<b>Age</b>				
15–19	11.9	50	22.0	45
..15–17	NP	11	NP	14
..18–19	(9.6)	39	(22.2)	31
20–24	2.2	213	19.2	113
..20–22	2.6	119	17.9	68
..23–24	1.8	94	(1.3)	45
<b>Marital status</b>				
Never married	NP	15	20.0	73
Ever married	4.3	247	20.1	86
<b>Knows condom source<sup>1</sup></b>				
Yes	4.9	189	22.4	123
No	2.0	74	(12.0)	36
<b>Residence</b>				
Urban	3.7	60	16.7	50
Rural	4.2	202	21.5	109
<b>Region</b>				
Urban Tongatapu	3.7	60	16.7	50
Rural Tongatapu	5.7	134	17.9	71
Outer islands	1.3	69	(28.3)	38
<b>Education</b>				
Primary or less	NP	5	NP	1
Secondary	5.0	215	21.7	136
More than secondary	(0.0)	43	NP	22
<b>Wealth quintile</b>				
Lowest	3.5	70	(25.2)	32
Second	1.3	57	(20.4)	40
Middle	3.9	59	(8.9)	34
Fourth	8.5	53	(21.3)	36
Highest	NP	24	NP	17
<b>Total</b>	<b>4.1</b>	<b>263</b>	<b>20.0</b>	<b>158</b>

NP = not published

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.



Among young men aged 15–24 who had sexual intercourse in the 12 months preceding the survey, 61% had higher-risk sexual intercourse (intercourse with someone who was neither a spouse nor a live-in partner), which was about three times higher than the rate for young women (19%). Rates of condom usage at last high-risk intercourse was also much higher among young men (23%) compared to young women (5%) (see Tables 12.21 and 12.22).

Among those who had sexual intercourse in the 12 months preceding the survey, the percentage of young women having higher-risk intercourse was higher among women aged 15–19 (35%) compared with women aged 20–24 (16%). The same was true for men; 74% of men aged 15–19 had higher-risk intercourse compared with 56% of men aged 20–24.

Rates of alcohol use during or prior to sex among young people in Tonga are low. Less than 1% of young women aged 15–24 reported having sex while being drunk themselves or with a partner who was drunk, as did just 5% of young men (Table 12.23). Higher percentages of ever-married respondents reported such behaviour; 4% of women and 17% of men had sex while they were drunk or with a drunken partner, compared with less than 1% of unmarried women and 3% of unmarried men. This behaviour is more common among young men who live in the urban area (8%) than among men who live in rural areas (4%).

Among youths aged 15–24 who reported having sexual intercourse in the 12 months preceding the survey, just 8% of women and 3% of men had been tested for HIV in the 12 months preceding the survey and had received the results (Table 12.24).

**Table 12.21: Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the 12 months preceding the survey — Women**

*Among young women aged 15–24 who had sexual intercourse in the past 12 months, the percentage who had higher-risk sexual intercourse in the 12 months preceding the survey, and among those having higher-risk intercourse in the 12 months preceding the survey, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Tonga 2012*

Background characteristic	Among respondents aged 15–24 who had sexual intercourse in the 12 months preceding the survey:		Among respondents 15–24 who had higher-risk intercourse in the 12 months preceding the survey:	
	Had higher-risk intercourse in the 12 months preceding the survey (%) <sup>1</sup>	Number of respondents	Reported using a condom at last higher-risk intercourse (%) <sup>1</sup>	Number of respondents
<b>Age</b>				
15–19	(34.9)	37	NP	13
..15–17	NP	7	NP	4
..18–19	(30.9)	30	NP	9
20–24	15.7	192	(5.1)	30
..20–22	17.4	108	NP	19
..23–24	13.4	84	NP	11
<b>Marital status</b>				
Never married	NP	11	NP	11
Ever married	14.6	218	(4.9)	32
<b>Knows condom source<sup>2</sup></b>				
Yes	15.1	165	(9.1)	25
No	28.3	64	NP	18
<b>Residence</b>				
Urban	20.4	52	NP	11
Rural	18.3	177	(4.8)	32
<b>Region</b>				
Urban Tongatapu	20.4	52	NP	11
Rural Tongatapu	21.0	117	(6.3)	25
Outer islands	13.1	60	NP	8
<b>Education</b>				
Primary or less	NP	2	NP	1
Secondary	17.7	188	(6.8)	33
More than secondary	(23.8)	39	NP	9
<b>Wealth quintile</b>				
Lowest	14.3	63	NP	9
Second	27.5	51	NP	14
Middle	(17.3)	48	NP	8
Fourth	(19.4)	44	NP	9
Highest	NP	23	NP	3
<b>Total 15–24</b>	<b>18.8</b>	<b>229</b>	<b>(5.3)</b>	<b>43</b>

NP = not published

<sup>1</sup> Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent.

<sup>2</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.22: Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months — Men**

*Among young men aged 15–24 who had sexual intercourse in the 12 months preceding the survey, the percentage who had higher-risk sexual intercourse in the 12 months preceding the survey, and among those having higher-risk intercourse in the 12 months preceding the survey, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Tonga 2012*

Background characteristic	Respondents 15–24 who had sexual intercourse in the 12 months preceding the survey:		Respondents 15–24 who had higher-risk intercourse in the 12 months preceding the survey:	
	Had higher-risk intercourse in the 12 months preceding the survey (%) <sup>1</sup>	Number of respondents	Reported using a condom at last higher-risk intercourse (%) <sup>1</sup>	Number of respondents
<b>Age</b>				
15–19	(73.7)	36	(27.0)	27
..15–17	NP	10	NP	9
..18–19	(69.6)	26	NP	18
20–24	56.4	94	21.0	53
..20–22	64.3	56	(18.9)	36
..23–24	(44.7)	38	NP	17
<b>Marital status</b>				
Never married	97.1	52	23.1	50
Ever married	37.4	78	(22.8)	29
<b>Knows condom source<sup>2</sup></b>				
Yes	59.4	101	25.8	60
No	(67.6)	29	NP	19
<b>Residence</b>				
Urban	(67.4)	39	(22.5)	26
Rural	58.6	91	23.2	54
<b>Region</b>				
Urban Tongatapu	(67.4)	39	(22.5)	26
Rural Tongatapu	54.2	61	(24.3)	33
Outer islands	(67.3)	30	NP	20
<b>Education</b>				
Primary or less	NP	1	-	0
Secondary	60.1	115	24.3	69
More than secondary	NP	14	NP	10
<b>Wealth quintile</b>				
Lowest	(58.8)	28	NP	16
Second	(47.0)	31	NP	15
Middle	(61.9)	31	NP	19
Fourth	(73.4)	26	NP	19
Highest	NP	14	NP	11
<b>Total 15–24</b>	<b>61.2</b>	<b>130</b>	<b>23.0</b>	<b>80</b>

NP = not published; - not applicable

<sup>1</sup> Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent.

<sup>2</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.23: Drunkenness during sexual intercourse among youth**

Among all young women and young men aged 15–24, the percentage who had sexual intercourse in the 12 months preceding the survey while being drunk and the percentage who had sexual intercourse in the 12 months preceding the survey when drunk or with a partner who was drunk, by background characteristics, Tonga 2012

Background characteristic	Women			Men		
	Had sexual intercourse in the 12 months preceding the survey when drunk (%)	Had sexual intercourse in the 12 months preceding the survey when drunk or with a partner who was drunk (%)	Number of respondents	Had sexual intercourse in the 12 months preceding the survey when drunk (%)	Had sexual intercourse in the 12 months preceding the survey when drunk or with a partner who was drunk (%)	Number of respondents
<b>Age</b>						
15–19	0.6	0.7	658	2.8	2.8	311
..15–17	0.4	0.4	405	0.9	0.9	197
..18–19	0.9	1.2	253	6.0	6.0	114
20–24	0.8	1.9	493	8.3	9.0	221
..20–22	0.5	0.9	318	7.9	9.0	142
..23–24	1.3	3.6	176	9.1	9.1	79
<b>Marital status</b>						
Never married	0.4	0.4	904	3.1	3.1	446
Ever married	1.5	4.0	247	15.3	17.1	86
<b>Knows condom source<sup>1+</sup></b>						
Yes	0.5	0.9	608	6.4	6.4	323
No	0.8	1.5	543	3.0	3.7	209
<b>Residence</b>						
Urban	0.5	1.9	279	8.4	8.4	132
Rural	0.7	0.9	872	4.0	4.4	400
<b>Region</b>						
Urban Tongatapu	0.5	1.9	279	8.4	8.4	132
Rural Tongatapu	1.0	1.3	594	3.4	4.0	273
Outer islands	0.0	0.2	278	5.2	5.2	126
<b>Education</b>						
Primary or less	NP	NP	8	NP	NP	3
Secondary	0.8	1.3	940	5.4	5.8	468
More than secondary	0.0	0.4	203	2.5	2.5	60
<b>Wealth quintile</b>						
Lowest	0.8	0.8	194	2.7	2.7	94
Second	1.7	2.0	222	3.3	3.3	113
Middle	0.0	0.3	246	4.4	4.4	124
Fourth	0.6	1.8	253	8.1	8.1	118
Highest	0.3	1.0	236	6.9	8.7	83
<b>Total 15–24</b>	<b>0.7</b>	<b>1.2</b>	<b>1,151</b>	<b>5.1</b>	<b>5.4</b>	<b>532</b>

NP = not published

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

**Table 12.24: Recent HIV tests among youth**

Among young women and men aged 15–24 who have had sexual intercourse in the 12 months preceding the survey, the percentage who have had an HIV test in the 12 months preceding the survey and received the results of the test, by background characteristics, Tonga 2012

Background characteristic	Women		Men	
	Tested for HIV and received results in the 12 months preceding the survey (%)	Number of respondents	Tested for HIV and received results in the 12 months preceding the survey (%)	Number of respondents
<b>Age</b>				
15–19	(5.5)	37	(7.1)	36
..15–17	NP	7	NP	10
..18–19	(6.7)	30	(3.3)	26
20–24	9.0	192	1.5	94
..20–22	10.9	108	0.0	56
..23–24	6.4	84	(3.7)	38
<b>Marital status</b>				
Never married	NP	11	(3.3)	52
Ever married	7.8	218	2.9	78
<b>Knows condom source<sup>1</sup></b>				
Yes	9.8	165	3.9	101
No	4.8	64	(0.0)	29
<b>Residence</b>				
Urban	7.4	52	(4.0)	39
Rural	8.7	177	2.7	91
<b>Region</b>				
Urban Tongatapu	7.4	52	(4.0)	39
Rural Tongatapu	9.2	117	2.8	61
Outer islands	7.6	60	(2.4)	30
<b>Education</b>				
Primary or less	NP	2	NP	1
Secondary	9.0	188	2.1	115
More than secondary	(5.9)	39	NP	14
<b>Wealth quintile</b>				
Lowest	10.9	63	(2.6)	28
Second	4.3	51	(0.0)	31
Middle	(9.9)	48	(2.8)	31
Fourth	(10.5)	44	(9.4)	26
Highest	NP	23	NP	14
<b>Total 15–24</b>	<b>8.4</b>	<b>229</b>	<b>3.1</b>	<b>130</b>

NP = not published

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 12.11 STANDARD PRECAUTIONS IN HEALTHCARE SETTINGS

Among respondents aged 15–49, 23% of both men and women received a medical injection (from a healthcare worker) during the 12 months preceding the survey (Table 12.25). Among these, 95% were known to have been injections using a clean needle and syringe taken from a new, unopened packet.

Among respondents who received a medical injection, 69% of women and 60% of men received the injection in a government hospital or a government health centre (Table 12.26). About one in five men and women received the injection at school. The majority of respondents indicated that they received a safe injection where the needle was taken from a new, unopened package, regardless of the institution where the injection was administered (Table 12.27).

**Table 12.25: Prevalence of medical injections**

Percentage of women and men aged 15–49 who received at least one medical injection in the 12 months preceding the survey, the average number of medical injections per person in the 12 months preceding the survey, 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, Tonga 2012

Background characteristic	Women					Men				
	Received a medical injection in the 12 months preceding the survey (%)	Medical injections per person in the 12 months preceding the survey (average no.)	Number of respondents	Last injection used syringe and needle from a new, unopened package (%)	Respondents receiving medical injections in the 12 months preceding the survey (no.)	Received a medical injection in the 12 months preceding the survey (%)	Medical injections per person in the 12 months preceding the survey (average no.)	Number of respondents	Last injection, used syringe and needle from a new, unopened package (%)	Respondents receiving medical injections in the last 12 months (no.)
<b>Age</b>										
15–24	28.3	0.4	1,151	94.5	326	28.4	0.5	532	95	151
..15–19	31.7	0.5	658	94.4	209	32.1	0.5	311	94.7	100
..20–24	23.9	0.4	493	94.8	118	23.2	0.5	221	95.7	51
25–29	24.6	0.4	503	95.1	124	18.7	0.3	193	93.2	36
30–39	22.6	0.5	774	96.7	175	17.2	0.3	320	94.3	55
40–49	14.3	0.5	640	93.7	91	22.2	0.4	292	95.6	65
<b>Residence</b>										
Urban	19	0.4	754	91.9	143	23.7	0.5	338	90.9	80
Rural	24.8	0.5	2,314	95.8	573	22.7	0.4	998	96.2	227
<b>Region</b>										
Urban Tongatapu	19	0.4	754	91.9	143	23.7	0.5	338	90.9	80
Rural Tongatapu	27.5	0.5	1,554	96.5	427	23.2	0.4	666	96	154
Outer islands	19.3	0.5	760	94	147	21.9	0.3	332	96.6	73
<b>Education</b>										
Primary or less	(12.2)	(0.2)	37	NP	5	NP	NP	24	NP	3
Secondary	24.9	0.5	2,334	95.2	582	23.9	0.4	1,066	94.4	254
More than secondary	18.7	0.3	697	94	130	19.4	0.3	246	(96.6)	48
<b>Wealth quintile</b>										
Lowest	25	0.7	557	96.3	139	24.1	0.4	275	94.2	66
Second	24	0.5	597	95.1	143	21.3	0.4	250	97.1	53
Middle	26.7	0.5	631	93.8	169	18.7	0.4	294	94.3	55
Fourth	22.1	0.4	650	97	144	24.5	0.4	272	91.2	67
Highest	19.2	0.4	632	93.1	121	26.8	0.4	245	97.7	66
<b>Total aged 15–49</b>	<b>23.4</b>	<b>0.5</b>	<b>3,068</b>	<b>95.1</b>	<b>717</b>	<b>23</b>	<b>0.4</b>	<b>1,336</b>	<b>94.8</b>	<b>307</b>
Total men aged 15+	-	-	-	-	-	21.8	0.5	1,742	94.2	379

NP = not published; - = not applicable

Notes:

1) Medical injections are those given by a doctor, nurse, pharmacist, dentist or other health worker.

2) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 12.26: Source of last medical injection**

*Percent distribution of women and men aged 15–49 who receive a medical injection in the 12 months preceding the survey by type of facility where the last injection was received, Tonga 2012*

Facility for Last medical injection	Women	Men
<b>Public sector</b>	<b>68.7</b>	<b>60.1</b>
Government hospital	60.0	55.2
Government health centre	8.7	4.9
<b>Private medical</b>	<b>0.7</b>	<b>3.8</b>
Other private medical (overseas)	0.7	3.8
School	19.7	21.3
Other	10.1	14.8
Missing	0.9	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>717</b>	<b>307</b>

**Table 12.27: Safe injection**

*Among women and men aged 15–49 who received an injection from a health worker in the 12 months preceding the survey, the percentage whose last injection was given with a syringe and needle taken from a new unopened package, according to type of facility where received the last injection, Tonga 2012*

Facility for last medical injection	Women	Men
<b>Public sector</b>	<b>95.6</b>	<b>93.6</b>
Government hospital	95.2	93.1
Government health centre	98.7	100.0
<b>Private medical</b>	<b>100.0</b>	<b>100.0</b>
Other private medical (overseas)	100.0	100.0
School	94.0	100.0
Other	94.9	90.8
Missing	75.0	-
<b>Total</b>	<b>95.3</b>	<b>94.5</b>
<b>Number</b>	<b>717</b>	<b>307</b>

- = not applicable

## 12.12 DISCUSSION

This chapter presents HIV-related knowledge, attitudes and practices among respondents aged 15–49, as revealed in the 2012 TDHS, including a subset of questions specifically for young people aged 15–24. Overall, the results indicate most Tongans have a basic knowledge of HIV, how it is transmitted and how to avoid infection. However, only 18% of women and 21% of men have a comprehensive knowledge of HIV. There are opportunities to further improve this knowledge, and to increase the acceptance of people living with HIV (PLHIV). There are also opportunities to reduce levels of risky behaviour within Tonga’s sexually active population.

Young adults aged 15–24 were the least likely to have comprehensive knowledge about HIV. There is a clear need to reach young people with information about HIV and how to prevent it before they become sexually active. Although only a small proportion of Tongan youth initiated sex at an early age (under age 15), the youth that have done so have exercised some risky behaviours.

It is likely that the common negative attitudes toward PLHIV observed in the survey are due to fear of HIV and AIDS, and/or cultural and religious beliefs relating to sexuality. Limited acceptance of PLHIV often arises from incomplete knowledge of transmission and fear of social contact with PLHIV. Many people are concerned about transmission through food purchases, and/or are not comfortable with a female teacher with HIV being allowed to teach. When people’s fears of infection can be allayed, a more positive and accepting attitude toward PLHIV can emerge. There is a need to reassure people that PLHIV pose absolutely no risk, as long as there is no blood-to-blood, sexual or vertical (mother-to-child) exposure, and that it is safe to live with and care for PLHIV provided these types of exposures are avoided. Increasing knowledge and reassurance can also be a means to encourage more people to access HIV testing, which brings direct benefits through increased treatment, reduced viral loads and reduced transmissibility of infection in people who have HIV and are treated. Community and religious leaders can play an important role in advancing understanding and acceptance of HIV and AIDS and in eliminating stigma and discrimination.

As long as some negative attitudes remain widely held, it is hard to encourage people with HIV or other STIs — and those at most risk of infection — to come forward to access health care, including voluntary and confidential counselling and testing. Negative community attitudes, combined with fears about breaches of confidentiality in healthcare settings, are strong disincentives to health-seeking behaviour. This places the whole community at greater risk, as a larger proportion of people who are infected with HIV remain unaware of their infected status, and may unknowingly infect others. HIV is also more easily transmitted when left untreated, as viral loads rise in both blood and other body fluids. Only by reducing stigma and ensuring confidentiality can health-seeking behaviours among people at risk of contracting HIV be encouraged, with associated reductions in risk levels for the whole community. Careful health communication is required to dispel misconceptions, myths and negative, stereotyped beliefs about HIV and people living with the virus.

The 2012 TDHS reveals that levels of risky sexual behaviour in Tonga are low, with low numbers of lifetime sexual partners among both men and women. Similarly, the proportion of adolescents with an early age of sexual onset is low, and the number of both men and women who have had two or more sexual partners in the 12 months preceding the survey was also low. This is likely due to religious and cultural beliefs that prevail throughout Tonga. However, young people are more likely to have multiple and non-live-in partners, and often fail to use condoms. Only 4% of young women and 20% of young men used a condom at first sex. This rate of condom use is too low to prevent circulation of STIs such as chlamydia, which requires condom use rates to rise to around 80–90% for effective control. Efforts should continue to maintain the low levels of risky sexual behaviour, but more needs to be done to ensure young people have access to condoms and the knowledge and skills to use them.

Women have lower rates of early initiation into sex, multiple or non-live-in partners, and condom use than do men. While every effort was made to train survey interviewers and ensure that interviews were conducted confidentially, the risk that ‘social desirability’ affected responses is always present when asking sensitive questions concerning sexual behaviour in surveys such as the 2012 TDHS. It is possible that men are more comfortable reporting such behaviours than women — and especially young women — given the widely held cultural beliefs about appropriate behaviour and roles for women, including the need to wait until marriage before having monogamous sex with one’s husband. These views are widely held by



both men and women, and this may influence female respondents' willingness to report sexual behaviour outside of or before marriage.

The 2012 TDHS has provided important baseline information about community knowledge and beliefs concerning HIV. This will be useful in improving the HIV response in Tonga, assisting policy-makers to develop and implement relevant policies, and in guiding managers in the design and implementation of programmes that can most effectively reach those in need. Such programmes could include prevention messages that aim at educating the population, encouraging the uptake of voluntary and confidential counselling and testing and associated services, and promoting more caring and accepting community attitudes toward PLHIV. The keys to making this happen include both public and school-based education, improving the status of women, and increasing community access to and the acceptance of condoms. The 2012 TDHS did not provide specific information on some of the key-affected populations often associated with HIV and AIDS. These populations include men who have sex with men, transgender populations, sex workers, and drug users. It will be important to supplement this TDHS with similar information on these populations.

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

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The study of women's empowerment is of considerable interest because of its association with other demographic and health outcomes. Understanding women's status and empowerment contributes to and provides better explanations of other related demographic and health outcomes. The 2012 TDHS Women's Questionnaire not only collected data on general background characteristics (e.g. age, education, wealth and employment status) of female respondents, but also data more specific to women's empowerment. This chapter examines women's empowerment through types of income earning, the magnitude of a woman's earnings relative to those of her husband or partner, and control over the use of a woman's earnings and those of her husband or partner.

The Women's Questionnaire also collected data on women's participation in household decision-making processes, the circumstances under which a woman is justified in refusing to have sexual intercourse with her husband or partner, and women's attitudes towards wife beating. For this report, three separate indices of empowerment were developed based on the number of household decisions in which the respondent participated, her opinion on the number of reasons that justify wife beating and the circumstances under which a woman is justified for refusing sexual intercourse with her husband or partner. The ranking of women on these three indices is then related to selected demographic and health outcomes, including contraceptive use, ideal family size, unmet need for contraception, and receipt of healthcare services during pregnancy, childbirth and the postnatal period.

### **13.1    EMPLOYMENT AND FORMS OF EARNINGS**

Like education, employment can be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Currently married 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. Table 13.1 shows the distribution of currently married women and men aged 15–49 who were employed in the 12 months preceding the survey by type of earnings and according to their age group. About 46% of currently married women and almost 92% of currently married men aged 15–49 were employed at some time in the year prior to the 2012 TDHS.

The percentage of currently employed women is lowest in the 15–19 age group and increases with age. The low employment rate among young women is expected because some are students at secondary school and higher learning institutions, and so are not available for work. The percentage of men employed also increases with age (from ages 20–44).

For those who are working, most women and men are likely to be paid in cash only (73% of women, 60% of men). Men are more likely to work but not receive payment (31%) than women (14%). However, women are more likely to be paid in cash and in-kind (11%) than working men (5%).

**Table 13.1: Employment and cash earnings of currently married women**

Percentage of currently married women and men aged 15–49 who were employed at any time in the 12 months preceding the survey and the percent distribution of currently married women and men employed in the 12 months preceding the survey by type of earnings, according to age, Tonga 2012

Age	Currently married respondents:		Percent distribution of currently married respondents employed in the 12 months preceding the survey, 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>									
Age									
15–19	(17.7)	31	NP	NP	NP	NP	NP	NP	5
20–24	24.5	181	(69.6)	(12.7)	(1.8)	(15.9)	(0)	(100)	44
25–29	40.4	362	80.7	9.7	1.5	7.4	0.6	100	146
30–34	46.5	332	73.5	7.6	0.9	17.9	0	100	154
35–39	51.9	309	69.6	14.7	2	13.7	0	100	160
40–44	53.7	302	70.3	9.3	1.7	18.7	0	100	162
45–49	59.7	231	71.4	13.1	3.8	11.7	0	100	138
<b>Total women aged 15–49</b>	<b>46.4</b>	<b>1,747</b>	<b>73</b>	<b>10.9</b>	<b>1.9</b>	<b>14</b>	<b>0.1</b>	<b>100</b>	<b>810</b>
<b>MEN</b>									
Age									
15–19	NP	13	NP	NP	NP	NP	NP	NP	6
20–24	73.7	56	(53.8)	(3.7)	(2)	(40.6)	(0)	(100)	41
25–29	88.8	131	68.1	7.2	2.6	22.1	0	100	116
30–34	94.5	132	57.6	5.7	2.3	34.3	0	100	125
35–39	94.5	124	61.1	5.1	4.4	29.5	0	100	118
40–44	99.4	141	62.5	4.2	4.5	28.8	0	100	140
45–49	93	118	52.7	5.4	3.5	37.6	0.7	100	110
<b>Total men aged 15–49</b>	<b>91.7</b>	<b>716</b>	<b>60.5</b>	<b>5.3</b>	<b>3.4</b>	<b>30.7</b>	<b>0.1</b>	<b>100</b>	<b>657</b>
Total men aged 50+	74.9	330	37.7	9.3	4.8	48.1	0	100	247
Total men aged 15+	86.4	1,046	54.2	6.4	3.8	35.5	0.1	100	904

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

## 13.2 CONTROL AND RELATIVE MAGNITUDE OF WOMEN'S EARNINGS

Currently married and employed women who earn cash for their work were asked about the relative magnitude of their earnings in comparison with their husband's or partner's earnings. In addition, these women were asked who the main decision-maker is in their household with regard to the use of their earnings. This information can provide insight into women's empowerment within the family and the extent of their control over household decision-making. It is expected that employment and earnings are more likely to empower women if women themselves control their own earnings and perceive their earnings as significant relative to those of their husband or partner. The 2012 TDHS asked about cash earnings of married women only.

Table 13.2 shows the distribution of currently married women who had cash earnings in the 12 months preceding the survey, and shows women's control over their own earnings, and their perception of the magnitude of their earnings relative to those of their husband or partner: 22% of women decide for themselves how their earnings are spent, 59% make decisions jointly with their husband or partner, while 17% report that the decision is mainly made by their husband or partner.

Younger women are generally more independent in making decisions on how their cash earnings are spent than older women. Rural Tongatapu women are more likely (26%) than urban Tongatapu women (21%) to make their own decisions on how their cash earnings are spent, while outer island women are the least likely (14%) to make their own decisions. Conversely, outer island men are more likely to make these decisions (26%) than men in urban Tongatapu (20%) or rural Tongatapu (11%). Joint decisions are more likely to involve older women than younger women and are more common in rural areas of Tongatapu (63%) than elsewhere.

Among working women, 36% report that their earnings exceed those of their husband or partner, and 32% that their earnings are less than those of their husband or partner. Only 3% of currently married working women report that their husband or partner does not bring in any money. Women earn more than their husband or partner in most (five out of seven) age groups and the proportion of women who earn less than their husband or partner is significantly lower in only one age group (35–39 years). Women who have no living children are more likely to earn more money than their husband than women with living children.

Women who reside in rural Tongatapu generally earn less money than their husband or partner, whereas women who reside in urban Tongatapu or the outer islands are equally likely to earn more money than their husband or partner. Women with higher levels of education generally earn more money than their husband or partner.

### **13.3 CONTROL OVER MEN'S CASH EARNINGS**

Table 13.3 shows data on who decides how men's cash earnings are spent, by background characteristics. Among married women whose husbands receive cash earnings, 22% report that their husband or partner is the main decision-maker on the use of his cash earnings. However, 30% of married men aged 15 and over report that they are the main decision-maker. Equal percentages (56%) of men and women report that decision-making is a joint process between a husband and a wife. Decision-making regarding spending of the earnings of a husband or partner is more likely to be a joint process among women with higher education levels.

**Table 13.2: Control over women's cash earnings and relative magnitude of women's earnings — Women**

Percent distribution of currently married women aged 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, Tonga 2012

Background characteristic	Person who decides how the wife's cash earnings are used:					Women's cash earnings compared with husband's cash earnings:						Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	More	Less	About the same	Husband/partner has no earnings	Do not know/ Missing	Total	
<b>Age</b>												
15–19	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	5
20–24	(30.9)	(49.7)	(15.4)	(4)	(100)	(34.3)	(29.8)	(25.8)	(6.4)	(3.7)	(100)	36
25–29	25.6	55.6	16.3	2.5	100	34.1	34.6	22.2	6	3.2	100	132
30–34	23	60.4	16.1	0.5	100	39.1	29.5	26.6	3.6	1.2	100	125
35–39	17.2	63.5	17.5	1.8	100	30.2	40	26.8	0.6	2.4	100	135
40–44	18	57.7	21.2	3.1	100	36.8	31	27.8	1.8	2.6	100	129
45–49	20.3	63.8	14.6	1.3	100	39.2	26	31.5	1.9	1.3	100	117
<b>Number of living children</b>												
0	34.1	48.3	13.5	4.1	100	42.8	28.9	23.5	1.5	3.2	100	98
1–2	23.1	58.2	16.6	2.1	100	33.5	33.5	23.5	6.4	3.2	100	205
3–4	19.6	57.7	21.2	1.5	100	36.7	35.4	24.3	1.2	2.3	100	202
5+	15	68.9	14.9	1.2	100	33.5	28.2	35.3	2.2	0.8	100	175
<b>Residence</b>												
Urban	21.3	57.1	19.7	2	100	38	30.5	23.5	4.6	3.4	100	170
Rural	21.7	60.2	16.2	2	100	35.1	32.5	27.9	2.5	1.9	100	510
<b>Region</b>												
Urban Tongatapu	21.3	57.1	19.7	2	100	38	30.5	23.5	4.6	3.4	100	170
Rural Tongatapu	25.5	62.8	11.3	0.4	100	32.8	34.5	30.1	2.3	0.4	100	336
Outer islands	14.4	55.1	25.6	4.9	100	39.6	28.8	23.7	3	4.9	100	174
<b>Education</b>												
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	7
Secondary	22.9	55.3	19.1	2.7	100	31.5	35.6	26.8	2.9	3.2	100	420
More than secondary	19.4	67	13	0.6	100	42.9	26.1	27.3	3.1	0.6	100	252
<b>Wealth quintile</b>												
Lowest	16.8	54.5	25.9	2.8	100	43.2	28	24	3.2	1.6	100	125
Second	24.4	55.3	18.8	1.5	100	31.3	33.4	28.6	4.5	2.2	100	116
Middle	23.1	60.5	15.2	1.2	100	35.7	41.2	18.1	1.9	3.1	100	120
Fourth	22	60.1	16	2	100	40.4	30.5	23.6	3	2.5	100	151
Highest	21.7	64.5	11.5	2.2	100	29.3	28.9	36.7	2.9	2.2	100	168
<b>Total</b>	<b>21.6</b>	<b>59.4</b>	<b>17.1</b>	<b>2</b>	<b>100</b>	<b>35.8</b>	<b>32</b>	<b>26.8</b>	<b>3.1</b>	<b>2.3</b>	<b>100</b>	<b>680</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 13.3: Control over men's cash earnings**

Percent distributions of currently married men aged 15–49 who receive cash earnings and of currently married women aged 15–49 whose husbands receive cash earnings, by person who decides how men's cash earnings are used, according to background characteristics, Tonga 2012

Background characteristic	Women						Men						
	Mainly wife	Husband and wife jointly	Mainly husband	Missing	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number
<b>Age</b>													
15–19	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	6
20–24	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	24
25–29	23.9	55.7	19.3	1.1	100	354	15.2	62.2	20.4	0	2.2	100	88
30–34	20.7	56.5	22.4	0.5	100	326	12	62.5	24.7	0	0.8	100	79
35–39	19.4	58.3	21.8	0.5	100	307	16	61	23	0	0	100	78
40–44	16.8	59.3	22.9	1	100	299	13.1	68.1	18	0	0.9	100	94
45–49	17.4	57.5	24.8	0.3	100	229	13.5	69.8	16.7	0	0	100	64
<b>Number of living children</b>													
0	19.4	55.5	23.3	1.8	100	220	12.6	55	29.5	1.4	1.5	100	62
1–2	22.2	54.9	21.5	1.4	100	523	11.1	63.1	24.1	0	1.7	100	146
3–4	22.8	54.2	22.2	0.8	100	508	21.4	64.5	14.1	0	0	100	123
5+	16.6	60.6	22.8	0	100	469	12.5	63.9	23.6	0	0	100	101
<b>Residence</b>													
Urban	20	56.7	22.3	1	100	401	22.8	46	28.6	0.7	1.9	100	127
Rural	20.6	56.2	22.3	0.8	100	1,319	11.1	69.4	19.1	0	0.3	100	305
<b>Region</b>													
Urban Tongatapu	20	56.7	22.3	1	100	401	22.8	46	28.6	0.7	1.9	100	127
Rural Tongatapu	23.3	54.7	21.5	0.5	100	881	9.4	69.5	21.2	0	0	100	188
Other Rural	15.4	59.3	23.8	1.5	100	438	14	69.3	15.8	0	0.9	100	117
<b>Education</b>													
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	6
Secondary	20.6	54.1	24.3	1	100	1,312	15.3	63.1	21.1	0	0.6	100	310
More than secondary	20.4	64.4	14.9	0.4	100	390	12.8	62.1	22.9	0.8	1.4	100	115
<b>Wealth quintile</b>													
Lowest	21.9	51.1	26.2	0.8	100	364	15.9	67.3	15.8	0	1.1	100	90
Second	19.8	54.5	25	0.7	100	350	12.9	61.8	25.3	0	0	100	75
Middle	17.9	58.5	23.2	0.4	100	350	14.8	61.5	21.9	1	0.9	100	90
Fourth	23.7	53.3	21.4	1.6	100	337	17.1	60.8	22	0	0	100	87
Highest	19.1	65.3	14.7	0.9	100	319	11.9	61.1	25.1	0	1.9	100	90
<b>Total aged 15–49</b>	20.5	56.3	22.3	0.9	100	1,720	14.6	62.5	21.9	0.2	0.8	100	432
Total aged 50+	-	-	-	-	-	-	12.7	56.4	30	0.9	0	100	116
Total men aged 15+	-	-	-	-	-	-	14.2	61.2	23.6	0.3	0.6	100	548

NP = not published; - = not applicable

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### **13.4 WOMEN'S CONTROL OVER HER OWN EARNINGS AND OVER THOSE OF HER HUSBAND**

The 2012 TDHS included questions addressing women's control over their own earnings and also over those of their husband. This information may help provide further insight into women's empowerment within the family directly and indirectly in the community.

Table 13.4 shows, for currently married women who earned cash in the 12 months preceding the survey, the person who decides how their cash earnings are used, and for all currently married women, the person who decides how their husband's or partner's cash earnings are used according to the relative magnitude of the earnings of women and their husband or partner.

If women earn more than their husband or partner, they are more likely to make decisions on their own about the use of their earnings (26%) than let their husband or partner make decisions about the use of their earnings (20%). In contrast, if women earn less than their husband or partner, they are equally likely to make decisions on their own or let their husband or partner make decisions about the use of their earnings (each about 20%). Where women's earnings are equal to their partners earnings, women are more likely than men to make decisions about how women's earnings are spent and are much more likely to make joint decisions (72%, as compared with 53% where women's earnings are higher, and 59% where women's earnings are lower than their husband or partners earnings). The general patterns are similar for decision-making regarding husband or partners earnings, with the exception that joint decision-making is more commonplace than for women's earnings, and a lower proportion of women make decisions over spending of their husband or partner's earnings.

**Table 13.4: Women's control over her own earnings and over those of her husband**

*Percent distributions of currently married women aged 15–49 with cash earnings in the 12 months preceding the survey by person who decides how the woman's cash earnings are used and of currently married women aged 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, Tonga 2012*

Women's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:					Number	Person who decides how husband's cash earnings are used:					Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total		Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	
More than husband or partner	26.5	53.1	19.7	0.6	100	243	20.9	58.9	19.9	0.3	100	243
Less than husband or partner	20.1	59.3	20.6	0	100	218	19.9	62.9	17.3	0	100	218
Same as husband partner	15.8	72	12.2	0	100	182	11.5	74.8	13.3	0.4	100	182
Husband or partner has no cash earnings or did not work	NP	NP	NP	NP	NP	21	-	-	-	-	-	0
Woman has no cash earnings	-	-	-	-	-	0	24.3	46.2	28.9	0.6	100	131
Woman did not work in 12 months preceding the survey	-	-	-	-	-	0	21.4	52.5	25.3	0.7	100	931
Do not know or missing	NP	NP	NP	NP	NP	16	NP	NP	NP	NP	NP	16
<b>Total<sup>1</sup></b>	<b>21.6</b>	<b>59.4</b>	<b>17.1</b>	<b>2</b>	<b>100</b>	<b>680</b>	<b>20.5</b>	<b>56.3</b>	<b>22.3</b>	<b>0.9</b>	<b>100</b>	<b>1,720</b>

NP = not published;

- = not applicable

<sup>1</sup> Excludes cases where a woman or her husband or partner has no earnings and includes cases where a woman does not know whether she earned more or less than her husband or partner.



## 13.5 WOMEN'S EMPOWERMENT

In addition to educational attainment, employment status and control over earnings, information was obtained on some direct measures of women's autonomy and status. Specifically, questions were asked about women's participation in household decision-making, their acceptance of wife beating and their opinions about the circumstances under which a woman is justified in refusing to have sexual intercourse with her husband or partner. Such information provides insight into women's control over their environment and their attitudes toward gender roles, both of which are relevant to understanding women's demographic and health behaviour.

The first measure — women's participation in decision-making — requires little explanation because the ability to make decisions about one's own life is of obvious importance to women's empowerment. The other two measures derive from the notion that gender equity is essential to empowerment. Responses that indicate a view that a husband beating his wife is justified reflect a low status of women, and signify the acceptance of norms that give men the right to use force against women, which is a violation of women's human rights. Similarly, beliefs about whether and when a woman can refuse to have sex with her husband or partner reflect issues of gender equity regarding sexual rights and bodily integrity. Besides yielding an important measure of empowerment, information about women's attitudes toward 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.

### 13.5.1 Women's participation in decision-making

To assess women's decision-making autonomy, questions were asked about women's participation in four types of household decisions: 1) the respondent's own health care, 2) making major household purchases, 3) making household purchases for daily needs, and 4) visiting her family or relatives. During the 2012 TDHS, currently married women were asked about decision-making. Having a final say in the decision-making processes is the highest degree of autonomy. Women are considered to participate in a decision if they alone or jointly with their husband or partner have the final say in that decision.

Table 13.5 shows decision-making in the household depends on what is being decided on. Making joint decisions is most common, especially for visits to family and relatives — women and men are equally likely to make independent decisions on this topic. Joint decision-making is least common for women's healthcare decisions, for which 30% of married women make their own decisions (the highest percentage for all decisions) and only 15% of men make the independent decision on behalf of his wife or partner (the lowest percentage for all decisions). Women are more likely than men to make independent decisions on major household purchases and purchases of daily household goods.

**Table 13.5: Women's participation in decision-making**

*Percent distribution of currently married women by person who usually makes decisions about four kinds of issues, Tonga 2012*

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
Own health care	30.0	53.8	15.1	0.2	0.1	0.8	100.0	1,747
Major household purchases	21.9	57.4	19.3	0.3	0.3	0.8	100.0	1,747
Purchases of daily household needs	26.2	55.1	17.4	0.4	0.2	0.8	100.0	1,747
Visits to her family or relatives	18.2	61.8	18.7	0.3	0.1	0.8	100.0	1,747

The 2012 TDHS also asked currently married men whether they think the husband or wife should have a greater say in making decisions about five different issues: 1) major household purchases, 2) household purchases for daily needs, 3) visits to wife's family or relatives, 4) what to do with the money the wife earns, and 5) how many children to have. Table 13.6 shows that 15% of men think husbands should have a greater say in decisions about major household purchases, and 14% about visits to the wife's family or relatives, while about 75% think these should be joint decisions. Only 19% think that women should have a greater say in decisions relating to purchases of daily household needs, compared to 65% who think that it should be a joint decision. Less than 4% of currently married men believe that the number of children to

have should be decided mainly by the husband, with 94% say the decision should be made jointly. Only 10% think that a wife should have a greater say in deciding what to do with money she earns, while 80% think it should be a joint decision.

**Table 13.6: Women's participation in decision making according to men**

*Percent distribution of currently married men aged 15–49 by the person who they think should have a greater say in making decisions about five kinds of issues, Tonga 2012*

Decision	Wife	Wife and husband equally	Husband	Do not know or depends	Missing	Total	Number of men
Major household purchases	9.4	74.4	15.0	1.3	0.0	100.0	716
Purchases of daily household needs	19.1	64.8	12.6	3.4	0.0	100.0	716
Visits to wife's family or relatives	8.1	75.0	13.8	2.9	0.2	100.0	716
What to do with the money wife earns	10.0	79.9	8.4	1.5	0.2	100.0	716
How many children to have	1.5	93.4	3.5	1.4	0.2	100.0	716

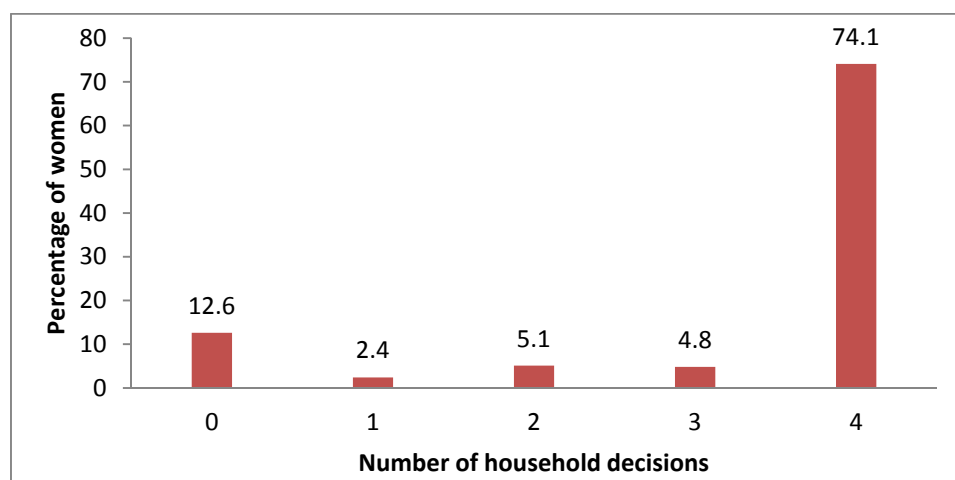
Table 13.7 shows how women's participation in decision-making varies by background characteristics. Although 74% of currently married women participate in making all four types of decisions, 13% have no say in any of the four decisions.

Women's participation in all four decisions increases with age, from 65% among women aged 15–19 to 78% among those aged 45–49. Women who are employed for cash are more likely than other women to participate in household decision-making: 78% employed for cash participate in making all household decisions, compared with 72% of unemployed women. This implies that wage or salaried employment is associated with a small increase in women's decision-making power.

The percentage of women who have a say in all four areas of decision-making increases with family size. Women with higher education levels are more likely to be involved in all household decisions compared with those with lower education levels, and the percentage of women who have a say in all four areas of decision-making increases with wealth quintile. Interestingly, the percentage of women who participate in none of the four decisions is highest in the outer islands (16%), and lowest in urban Tongatapu (11%).

Figure 13.1 shows the percentage of currently married women according to the number of decisions in which they participate, either alone or in conjunction with their husband or partner. The total number of women's decisions is the sum of decisions made by women alone plus the number of decisions made jointly with the husband. The total number of women's decisions is a good indicator of the strength of women's empowerment. Most women (74%) who participate in all four decisions; few women participate in some decisions but not others (5% in two or three of the four decisions, and 2% for women who participate in only one of the five decisions), while 13% report they do not participate in household decision-making.

**Figure 13.1: The number of decisions in which women participate, Tonga 2012**



**Table 13.7: Women's participation in decision-making by background characteristics***Percentage of currently married women aged 15–49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Tonga 2012*

Background characteristic	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives	Participate in all four decisions	Participate in none of the four decisions	Number of women
<b>Age</b>							
15–19	(79.6)	(79.6)	(71.9)	(67.5)	(65.1)	(13.7)	31
20–24	79.6	76.3	79.6	80.0	69.1	13.1	181
25–29	83.4	76.9	80.5	79.6	72.4	12.9	362
30–34	84.3	78.5	80.9	81.2	71.7	9.8	332
35–39	86.1	81.5	82.9	79.0	76.9	12.8	309
40–44	84.1	80.6	82.2	81.1	76.9	14.1	302
45–49	84.6	81.8	82.5	80.5	78.0	13.1	231
<b>Employment (12 months preceding survey)</b>							
Not employed	82.3	76.2	78.1	77.5	71.9	14.3	937
Employed for cash	86.2	83.4	85.0	83.6	77.5	10.4	680
Employed not for cash	83.1	79.6	84.8	79.1	72.5	11.3	130
Missing	NP	NP	NP	NP	NP	NP	1
<b>Number of living children</b>							
0	79.8	77.2	80.1	77.4	69.7	13.7	222
1–2	82.0	77.9	79.8	80.1	72.1	12.8	540
3–4	85.2	78.1	80.7	79.3	73.8	12.8	511
5+	86.5	83.2	84.1	81.9	78.8	11.5	474
<b>Residence</b>							
Urban	85.3	82.9	83.2	79.8	74.9	10.9	411
Rural	83.5	78.2	80.7	80.1	73.9	13.1	1,335
<b>Region</b>							
Urban Tongatapu	85.3	82.9	83.2	79.8	74.9	10.9	411
Rural Tongatapu	84.4	78.0	81.3	81.3	73.7	11.9	890
Outer islands	81.5	78.7	79.6	77.7	74.4	15.5	445
<b>Education</b>							
Primary or less	NP	NP	NP	NP	NP	NP	19
Secondary	83.0	78.0	80.1	78.3	72.6	13.4	1,329
More than secondary	87.5	84.6	86.0	86.6	80.3	9.1	399
<b>Wealth quintile</b>							
Lowest	79.4	74.9	76.1	75.1	69.6	17.8	369
Second	78.4	76.4	78.2	75.7	69.8	16.5	357
Middle	87.7	78.5	83.8	82.3	75.1	9.3	352
Fourth	85.9	82.8	82.7	81.8	76.0	10.2	345
Highest	88.9	84.6	86.5	86.1	80.9	8.3	324
<b>Total</b>	<b>83.9</b>	<b>79.3</b>	<b>81.3</b>	<b>80.0</b>	<b>74.1</b>	<b>12.6</b>	<b>1,747</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### **13.5.2 Men's attitudes toward wife's participation in decision-making**

Table 13.8 shows the percentage of currently married men who believe that a wife should make decisions alone or jointly with her husband on five different issues: 1) major household purchases, 2) household purchases for daily needs, 3) visits to wife's family or relatives, 4) what to do with the money the wife earns, and 5) the number of children to have.

Almost 70% of men believe that a wife alone or jointly with her husband should participate in all five specified decisions, compared with less than 3% of men who believe that a wife should not participate in any of the specified decisions. The proportion of men who feel that women should have a say in none of the specified decisions is highest in urban Tongatapu (almost 4%) and lowest in the outer islands (less than 2%), and declines with education level. The proportion of men who feel that women should have a say in none of the specified decisions increases with the wealth quintile of the household.

Almost 95% of men think that a wife alone or jointly with her husband or partner should make decisions about how many children to have, and about 90% think the same about how to spend the money she earns. Over 80% of men think that a wife alone or jointly with her husband or partner should make decisions about purchases for daily household needs, about major household purchases and about visits to her family or relatives.

### **13.5.3 Attitudes toward wife beating**

Violence against women has serious consequences for women's mental and physical well-being, including their reproductive and sexual health (WHO, 1999). One of the most common forms of violence against women worldwide is abuse by a husband or partner (Heise et al., 1999).

The 2012 TDHS gathered information on women's attitudes toward wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any of the specified reasons may believe themselves to be low in status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for them and their children, affect their attitude toward contraceptive use, and impact their general well being. Women were asked whether a husband is justified in beating his wife under five circumstances: the wife 1) burns the food, 2) argues with her husband or partner, 3) goes out without telling her husband or partner, 4) neglects the children, and 5) refuses her husband or partner sexual relations. Table 13.9 summarises women's attitudes toward wife beating in these five specific circumstances.

Data show that 29% of women find wife beating justified in certain circumstances. This indicates that although most Tongan women do not accept violence as part of male–female relationships, a sizeable minority do. The most widely accepted reasons for wife beating are neglecting the children (24%) followed by going out without informing the husband or partner (15%). About 8% of women feel that denying sex to the husband or partner or arguing with the husband or partner are justifications for wife beating, and about 6% of women feel that burning food justifies wife beating.

In Tonga, acceptance of wife beating for at least one of the specified reasons is higher for married women (31%) than for women who are divorced, separated or widowed (27%) or never married (26%), and increases with family size. Acceptance of wife beating for at least one of the specified reasons is highest in the outer islands (38%) and lowest in urban Tongatapu (21%), and declines with the wealth quintile of the household.

**Table 13.8: Men's attitude toward wives' participation in decision-making***Percentage of currently married men aged 15–49 who think a wife should have the greater say or an equal say with her husband on five specific kinds of decisions, by background characteristics, Tonga 2012*

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	NP	NP	NP	NP	NP	NP	NP	13
20–24	73.4	69.6	77.5	79.6	93.3	49.2	3.9	56
25–29	80.2	85.0	80.4	91.0	92.2	70.4	4.9	131
30–34	86.9	84.4	81.8	92.4	97.6	69.7	0.7	132
35–39	91.6	88.2	84.0	91.9	95.6	75.3	0.0	124
40–44	82.0	87.1	86.0	91.1	98.2	70.3	1.4	141
45–49	83.4	81.7	86.7	88.2	93.1	71.0	5.2	118
<b>Employment (12 months preceding survey)</b>								
Not employed	79.7	73.5	61.4	75.2	82.2	47.0	6.5	59
Employed for cash	84.0	84.9	84.7	91.9	95.6	73.0	2.4	432
Employed not for cash	84.3	84.8	85.6	89.9	96.8	68.2	2.2	224
Missing	NP	NP	NP	NP	NP	NP	NP	1
<b>Number of living children</b>								
0	79.8	80.5	76.2	85.2	92.1	61.2	4.2	114
1–2	83.2	81.3	84.4	91.5	95.6	70.3	3.3	226
3–4	86.5	87.8	83.7	90.1	96.0	71.2	1.0	203
5+	83.9	84.9	85.2	90.6	94.3	71.4	3.1	173
<b>Residence</b>								
Urban	86.1	86.2	86.5	89.5	92.7	74.3	3.5	181
Rural	83.0	83.1	81.9	90.0	95.6	67.7	2.4	535
<b>Region</b>								
Urban Tongatapu	86.1	86.2	86.5	89.5	92.7	74.3	3.5	181
Rural Tongatapu	89.6	87.2	80.3	89.7	94.8	74.1	3.0	346
Outer islands	70.8	75.7	84.9	90.5	97.1	56.0	1.5	189
<b>Education</b>								
Primary or less	NP	NP	NP	NP	NP	NP	NP	15
Secondary	82.5	82.5	81.7	88.5	94.2	67.5	3.1	547
More than secondary	89.6	89.8	87.3	95.1	97.8	75.8	0.5	154
<b>Wealth quintile</b>								
Lowest	81.3	83.0	82.1	92.2	97.9	68.0	1.5	167
Second	85.0	82.0	84.0	88.0	94.3	65.3	1.7	136
Middle	85.5	82.5	81.9	86.1	92.4	70.7	2.9	152
Fourth	82.9	86.7	84.3	91.7	95.9	72.0	3.5	131
Highest	84.4	85.9	83.7	91.4	93.3	71.1	4.2	130
<b>Total men aged 15–49</b>								
	<b>83.8</b>	<b>83.9</b>	<b>83.1</b>	<b>89.9</b>	<b>94.9</b>	<b>69.4</b>	<b>2.7</b>	<b>716</b>
Total men aged 50+	81.2	84.5	86.5	91.1	94.0	67.9	2.8	330
Total men aged 15+	82.9	84.1	84.2	90.3	94.6	68.9	2.7	1,046

NP = not published

**Table 13.9: Attitude toward wife beating — Women***Percentage of all women aged 15–49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tonga 2012*

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 intercourse with him		
<b>Age</b>							
15–19	6.0	6.6	12.7	21.5	5.5	26.5	658
20–24	6.7	7.9	14.4	22.9	6.5	27.8	493
25–29	6.3	11.0	17.0	25.6	9.7	31.7	503
30–34	7.1	9.0	15.6	23.7	8.5	29.3	410
35–39	6.6	6.3	15.7	25.7	6.5	28.9	364
40–44	6.8	9.1	15.7	26.7	9.9	33.1	362
45–49	5.0	5.8	15.6	21.7	7.5	25.5	277
<b>Employment (12 months preceding survey)</b>							
Not employed	6.4	7.6	15.2	24.1	7.0	29.0	1,839
Employed for cash	5.8	8.1	15.3	22.8	8.1	28.0	1,030
Employed not for cash	9.8	12.3	12.8	26.4	10.0	33.0	198
Missing	NP	NP	NP	NP	NP	NP	2
<b>Marital status</b>							
Never married	6.8	6.3	13.5	20.9	4.8	26.5	1,140
Married or living together	5.9	8.7	15.7	25.8	9.2	30.7	1,747
Divorced/separated/widowed	8.3	12.8	18.3	23.2	9.6	26.6	181
<b>Number of living children</b>							
0	6.7	7.3	13.6	21.3	6.4	27.5	1,366
1–2	5.7	9.4	15.4	22.5	8.2	27.2	650
3–4	6.5	9.6	16.7	28.2	9.9	32.0	541
5+	6.3	6.8	16.6	27.5	7.6	31.6	511
<b>Residence</b>							
Urban	3.0	4.2	9.2	15.9	4.1	20.9	754
Rural	7.5	9.3	17.0	26.4	8.7	31.5	2,314
<b>Region</b>							
Urban Tongatapu	3.0	4.2	9.2	15.9	4.1	20.9	754
Rural Tongatapu	6.8	7.2	13.4	23.8	7.6	28.4	1,554
Outer islands	8.9	13.7	24.3	31.8	10.9	37.8	760
<b>Education</b>							
Primary or less	(6.8)	(10.8)	(20.4)	(14.5)	(5.1)	(24.1)	37
Secondary	6.9	8.8	16.1	25.1	8.5	30.4	2,334
More than secondary	4.7	5.3	11.1	20.1	4.5	24.0	697
<b>Wealth quintile</b>							
Lowest	6.8	8.3	19.8	29.5	7.4	34.9	557
Second	8.6	11.2	15.4	24.7	10.7	30.3	597
Middle	4.4	7.4	14.4	23.8	7.5	28.8	631
Fourth	6.2	7.1	13.5	23.1	7.6	29.3	650
Highest	6.1	6.6	12.7	18.7	4.9	22.1	632
<b>Total</b>	<b>6.4</b>	<b>8.1</b>	<b>15.0</b>	<b>23.8</b>	<b>7.6</b>	<b>28.9</b>	<b>3,068</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

Men were also asked about their opinions on the justification of wife beating under certain circumstances (Table 13.10). As shown in Table 13.10, 18% of men agree that wife beating is justified for at least one of the specified reasons. Interesting, this percentage is lower than the percentage of women (29%) who agree with at least one of the reasons.

The most widely accepted reasons for wife beating are neglecting the children (16%) — which is again lower than the percentage cited by women (24%) — going out without informing the husband (8%, compared with 15% cited by women), and arguing with the husband or partner (7%). About 4% of men feel that denying sex to the husband is justification for wife beating (compared with 8% of women), and 2% of men feel that burning food is a justification (compared with 6% of women).

Younger men, men who live in the outer islands and men who have less education are more likely to agree that at least one of the specified reasons justifies wife beating. Acceptance of wife beating declines with increasing family size and as the wealth of the household increases.

**Table 13.10: Attitude toward wife beating — Men***Percentage of all men aged 15–49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tonga 2012*

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	2.3	11.9	13.4	25.4	6.7	28.9	311
20–24	2.4	6.6	9.0	19.1	5.9	23.2	221
25–29	1.0	4.8	4.1	14.3	3.4	16.3	193
30–34	1.8	7.2	10.2	16.1	4.6	17.9	170
35–39	0.7	7.1	9.5	13.8	5.0	19.5	150
40–44	3.0	5.4	5.9	16.9	4.0	18.8	159
45–49	1.1	4.2	1.2	7.4	1.1	9.6	132
<b>Employment (12 months preceding survey)</b>							
Not employed	2.0	7.8	9.4	21.3	4.8	23.4	387
Employed for cash	1.2	5.9	6.3	15.4	3.6	17.8	586
Employed not for cash	2.7	9.1	10.6	16.7	6.5	22.1	362
Missing	NP	NP	NP	NP	NP	NP	1
<b>Marital status</b>							
Never married	2.1	8.2	10.9	21.0	5.8	24.0	567
Married or living together	1.7	7.1	6.5	14.8	4.1	18.2	716
Divorced, separated, widowed	1.6	0.0	7.7	15.8	2.7	15.8	53
<b>Number of living children</b>							
0	1.7	8.2	10.3	20.0	4.9	22.5	706
1–2	2.0	5.0	5.9	14.4	5.6	19.1	245
3–4	1.7	7.7	7.8	15.7	3.6	18.1	208
5+	2.5	6.6	4.7	14.0	4.6	17.6	177
<b>Residence</b>							
Urban	1.4	8.8	7.2	14.2	1.9	15.9	338
Rural	2.0	6.8	8.8	18.6	5.7	22.1	998
<b>Region</b>							
Urban Tongatapu	1.4	8.8	7.2	14.2	1.9	15.9	338
Rural Tongatapu	1.5	6.4	9.0	17.9	6.1	21.5	666
Outer islands	3.1	7.5	8.3	20.0	4.9	23.3	332
<b>Education</b>							
Primary or less	NP	NP	NP	NP	NP	NP	24
Secondary	2.3	7.7	9.0	18.3	5.0	21.5	1,066
More than secondary	0.4	4.9	5.6	13.6	3.7	15.6	246
<b>Wealth quintile</b>							
Lowest	4.5	10.5	10.7	22.7	8.1	26.7	275
Second	1.0	6.2	5.9	15.1	3.5	17.9	250
Middle	1.3	7.1	10.4	18.0	4.0	21.7	294
Fourth	1.1	7.6	8.5	15.8	4.1	18.2	272
Highest	1.4	4.7	5.8	15.3	4.0	17.6	245
<b>Total men aged 15–49</b>	<b>1.9</b>	<b>7.3</b>	<b>8.4</b>	<b>17.5</b>	<b>4.8</b>	<b>20.6</b>	<b>1,336</b>
Total men aged 50+	1.0	4.7	4.5	9.6	1.8	11.1	406
Total men aged 15+	1.7	6.7	7.5	15.7	4.1	18.4	1,742

NP = not published



#### **13.5.4 Attitude toward refusing sexual intercourse with husband**

This section discusses women's behaviour and attitudes toward refusing to have sexual intercourse with their husband. Women's control and decision-making power over when and whom to have sex with has important implications for women's health and the health of their children. It is also a good indication of women's empowerment as it shows the extent of women's acceptance of such perceptions in society.

The 2012 TDHS included questions about whether a woman is justified in refusing to have sexual relations with her husband under three situations: 1) she knows the husband has a sexually transmitted infection, 2) she knows the husband has intercourse with other women, and 3) she is tired or not in the mood. These three issues have been addressed because they are directly related to women's rights and women's health.

Table 13.11 shows the percentage of women who believe that a wife is justified in refusing to have sex with her husband under specific circumstances, and shows that more than two-thirds (67%) of women believe that a woman has a right to refuse to have sex with her husband for all the specified reasons. The percentage of women who believe that a wife is justified in refusing to have sex with her husband under specific circumstances increases with age and family size, and is higher among employed women, women who are married or divorced, separated or widowed, and women who have higher education levels.

Table 13.12 shows the percentage of men who believe that a wife is justified in refusing to have sex with her husband or partner under specific circumstances. The data show that 80% of men believe that a woman has a right to refuse sex with the husband for all the specified reasons.

Men who have never married, men who are not employed, men with no children or one to two children only, men in urban Tongatapu, and men in the fourth and highest wealth quintiles are more likely than other men to think that a wife does not have the right to refuse sex with her husband or partner for all the reasons specified.

Table 13.13 shows the percentage of men who believe that a husband has a right to behave in the following ways if his wife refuses to have sex with him when he wants her to: 1) getting angry and reprimanding her, 2) refusing her financial support, 3) forcing her to have sex, and 4) having sex with another woman. This is important to understand because such attitudes in societies determine cultural differences and behaviours towards women. The study of such behaviours contributes to understanding some aspects of a woman's life that impact on her health and well being.

The results show that less than 1% of men agree that a man has the right to engage in all four of these actions if his wife refuses sex, while 81% disagree with any of these actions. About 15% of men believe that the most acceptable response if a wife refuses to have sex with her husband is for the husband to have sex with another woman. Around 4% say that it is justifiable for a man to get angry and reprimand his wife, 3% say that it is justifiable to refuse her financial support and 2% that it is justifiable to use force to have sex.

**Table 13.11: Attitude toward refusing sexual intercourse with husband — Women**

Percentage of all women aged 15–49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Tonga 2012

Background characteristic	Wife is justified in refusing intercourse with her husband if she:			Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Knows husband has a sexually transmitted disease	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15–19	76.7	82.3	65.5	58.1	12.6	658
20–24	86.7	89.2	74.3	65.3	5.2	493
25–29	85.6	89.5	76.6	69.9	5.8	503
30–34	86.1	91.4	79.3	71.0	4.8	410
35–39	89.5	90.4	76.9	70.1	4.5	364
40–44	89.4	92.8	80.4	73.2	3.3	362
45–49	87.8	91.4	82.3	72.7	3.2	277
<b>Employment (12 months preceding survey)</b>						
Not employed	83.2	87.3	71.9	65.2	8.2	1,839
Employed for cash	88.9	91.2	79.6	71.3	3.5	1,030
Employed not for cash	82.1	91.5	82.1	67.8	3.6	198
Missing	NP	NP	NP	NP	NP	2
<b>Marital status</b>						
Never married	79.4	84.8	67.7	59.8	10.4	1,140
Married or living together	88.4	91.0	78.9	71.4	4.0	1,747
Divorced, separated, widowed	87.9	93.6	85.7	77.7	3.8	181
<b>Number of living children</b>						
0	80.8	86.4	69.4	61.5	9.1	1,366
1–2	89.0	90.2	78.4	72.4	4.3	650
3–4	87.5	91.0	81.8	72.6	4.1	541
5+	88.6	91.3	79.4	71.6	3.8	511
<b>Residence</b>						
Urban	82.7	88.4	73.7	63.9	5.8	754
Rural	85.8	89.0	75.7	68.6	6.5	2,314
<b>Region</b>						
Urban Tongatapu	82.7	88.4	73.7	63.9	5.8	754
Rural Tongatapu	88.0	91.3	78.0	71.1	4.5	1,554
Outer islands	81.2	84.4	71.0	63.5	10.7	760
<b>Education</b>						
Primary or less	(74.4)	(84.7)	(70.6)	(60.8)	(13.5)	37
Secondary	84.1	87.8	74.8	66.7	7.0	2,334
More than secondary	88.7	92.6	76.8	70.3	3.8	697
<b>Wealth quintile</b>						
Lowest	84.7	89.5	74.3	67.3	7.1	557
Second	85.0	86.3	77.2	68.3	7.3	597
Middle	87.3	90.2	75.5	70.0	5.7	631
Fourth	84.8	90.2	74.4	66.2	5.3	650
Highest	83.3	88.0	74.4	65.4	6.6	632
<b>Total</b>	<b>85.0</b>	<b>88.9</b>	<b>75.2</b>	<b>67.4</b>	<b>6.3</b>	<b>3,068</b>

NP = not published

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

**Table 13.12: Attitude toward refusing sexual intercourse with husband — Men**

*Percentage of all men aged 15–49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Tonga 2012*

Background characteristic	Wife is justified in refusing intercourse with her husband if she:			Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Knows husband has a sexually transmitted disease	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15–19	84.7	87.9	75.6	70.2	7.8	311
20–24	92.5	90.8	84.2	81.3	3.2	221
25–29	93.5	93.4	88.8	84.3	3.5	193
30–34	91.2	90.7	84.6	75.6	2.0	170
35–39	95.7	94.6	84.4	81.7	2.7	150
40–44	91.5	93.4	84.7	79.7	3.5	159
45–49	95.0	93.4	90.4	88.1	3.9	132
<b>Employment (12 months preceding survey)</b>						
Not employed	85.5	86.5	74.1	69.4	7.9	387
Employed for cash	92.7	92.6	86.5	81.3	2.9	586
Employed not for cash	94.7	95.0	89.1	85.4	2.5	362
Missing	NP	NP	NP	NP	NP	1
<b>Marital status</b>						
Never married	86.7	88.4	79.3	74.4	6.7	567
Married or living together	94.2	93.7	86.2	81.7	2.5	716
Divorced, separated, widowed	96.9	93.8	94.9	90.0	1.3	53
<b>Number of living children</b>						
0	88.0	89.5	81.1	75.6	5.5	706
1–2	92.9	91.2	82.3	79.3	5.0	245
3–4	94.6	93.9	88.5	82.2	1.8	208
5+	97.6	97.2	89.7	88.1	0.8	177
<b>Residence</b>						
Urban	82.8	83.5	76.2	68.2	8.2	338
Rural	94.0	94.2	86.1	82.6	2.8	998
<b>Region</b>						
Urban Tongatapu	82.8	83.5	76.2	68.2	8.2	338
Rural Tongatapu	93.3	94.0	85.1	81.5	3.6	666
Outer islands	95.4	94.5	88.3	84.7	1.3	332
<b>Education</b>						
Primary or less	NP	NP	NP	NP	NP	24
Secondary	91.4	91.7	82.7	78.3	4.2	1,066
More than secondary	90.8	91.4	87.8	82.3	4.1	246
<b>Wealth quintile</b>						
Lowest	93.5	92.6	84.6	80.9	3.2	275
Second	93.3	94.8	85.1	82.1	2.2	250
Middle	91.5	93.9	84.0	79.2	3.2	294
Fourth	88.4	87.8	80.8	73.6	5.3	272
Highest	89.1	88.0	83.7	79.2	7.2	245
<b>Total men aged 15–49</b>						
Total men aged 15–49	91.2	91.5	83.6	79.0	4.2	1,336
Total men aged 50+	94.4	93.9	87.3	84.5	3.3	406
Total men aged 15+	91.9	92.1	84.5	80.2	4.0	1,742

NP = not published

**Table 13.13: Men's attitude toward a husband's rights when his wife refuses to have intercourse**

*Percentage of men aged 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, Tonga 2012*

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	8.8	6.0	3.8	14.0	1.4	79.5	311
20–24	8.0	2.4	3.1	15.0	0.3	79.3	221
25–29	2.8	3.4	2.8	9.6	0.0	85.7	193
30–34	4.0	1.8	0.7	19.6	0.3	76.6	170
35–39	5.5	4.0	2.7	12.0	0.7	82.1	150
40–44	1.5	1.8	1.4	19.1	0.0	78.4	159
45–49	1.1	1.6	0.4	17.4	0.0	81.6	132
<b>Employment (12 months preceding survey)</b>							
Not employed	6.7	4.0	3.6	10.9	1.0	84.1	387
Employed for cash	3.4	3.7	2.0	11.5	0.3	84.2	586
Employed not for cash	6.5	2.0	1.9	24.8	0.2	70.0	362
Missing	NP	NP	NP	NP	NP	NP	1
<b>Marital status</b>							
Never married	7.5	3.6	2.9	12.0	0.7	81.8	567
Married or living together	3.1	2.8	1.9	16.9	0.3	79.8	716
Divorced/separated/widowed	8.8	7.6	4.1	20.3	0.0	71.8	53
<b>Number of living children</b>							
0	6.5	3.9	2.6	12.7	0.7	82.0	706
1–2	4.9	3.2	3.6	17.0	0.2	78.0	245
3–4	4.2	2.6	2.4	14.4	0.5	81.9	208
5+	1.5	2.0	0.4	21.7	0.0	75.2	177
<b>Residence</b>							
Urban	2.6	2.3	1.0	7.2	0.7	91.5	338
Rural	6.1	3.7	2.9	17.6	0.4	76.6	998
<b>Region</b>							
Urban Tongatapu	2.6	2.3	1.0	7.2	0.7	91.5	338
Rural Tongatapu	6.1	2.8	2.8	22.0	0.3	72.5	666
Outer islands	5.9	5.3	3.1	8.6	0.7	84.7	332
<b>Education</b>							
Primary or less	NP	NP	NP	NP	NP	NP	24
Secondary	5.5	3.7	2.7	15.5	0.6	79.8	1,066
More than secondary	3.6	1.2	1.5	12.7	0.0	83.6	246
<b>Wealth quintile</b>							
Lowest	5.1	4.2	1.5	20.4	0.7	75.5	275
Second	2.3	3.7	2.0	20.2	0.2	75.6	250
Middle	6.0	1.6	3.4	13.3	0.0	81.6	294
Fourth	7.7	4.7	3.3	12.5	0.9	81.6	272
Highest	4.5	2.6	1.6	8.2	0.7	87.7	245
<b>Total men aged 15–49</b>	<b>5.2</b>	<b>3.3</b>	<b>2.4</b>	<b>14.9</b>	<b>0.5</b>	<b>80.4</b>	<b>1,336</b>
Total men aged 50+	2.4	1.0	0.6	16.5	0.0	81.8	406
Total men aged 15+	4.5	2.8	2.0	15.3	0.4	80.7	1,742

NP = not published

### 13.5.5 Women's empowerment indicators

The three sets of empowerment indicators — women's participation in making household decisions, women's attitudes toward wife beating, and their attitudes towards a wife's right to refuse sexual intercourse with her husband or partner — can be summarised into three separate indices. The first index shows the number of decisions (see Table 13.7 for the list of decisions) in which women participate alone or jointly with their husband or partner. This index ranges in value from 0–4 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, which ranges in value from 0–5, is the total number of reasons (see Table 13.9 for the list of reasons) for which the respondent feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self esteem and a higher status of women.

The final index, which ranges in value from 0–5, is the total number of circumstances (see Table 13.11 for the list of circumstances) in which a respondent feels that a woman is justified in refusing sexual intercourse with her husband or partner. This indicator reflects perceptions of sexual roles and women's rights over their bodies and relates positively to women's sense of self and empowerment.

It would be expected that women who participate in making household decisions are also more likely to have gender-egalitarian beliefs. That is, women who participate in more household decisions are more likely to disagree with all justifications of wife beating and agree with all justifications for refusing sex and women who support fewer justifications for wife beating are more likely to participate in household decision making and are more likely to accept all justifications for refusing sex.

Table 13.14 shows how these three indicators relate to each other. As the number of justifications for wife beating increases, the percentage of women who participate in all household decisions declines and as the number of household decisions women participate in increases, the percentage of women who disagree with all justifications for wife beating general declines. This is important because it indicates that if we can affect change in one area of women's empowerment, this change can have additional effects in other areas of women's lives.

However, as the number of reasons for refusing sexual intercourse increases, the percentage of women who participate in all household decision-making declines. Similarly, as the number of decisions in which women participate increases, the percentage of women who agree with all reasons for refusing sexual intercourse declines. This illustrates that further improvements in the alignment between women's right to refuse sexual intercourse and the other two indicators of women's empowerment is necessary.

**Table 13.14: Indicators of women's empowerment**

Percentage of women aged 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, Tonga 2012

Empowerment indicator	Currently married women		Disagree with all reasons justifying wife beating (%)	Agree with all reasons for refusing intercourse with husband (%)	Number of women
	Participate in all decision making <sup>1</sup> (%)	Number of women			
<b>Number of decisions in which women participate<sup>1</sup></b>					
0	0.0	220	80.6	75.7	220
1–2	0.0	149	54.4	73.0	149
3–4	93.9	1,379	69.1	70.5	1,379
<b>Number of reasons for which wife-beating is justified<sup>2</sup></b>					
0	74.4	1,210	100.0	68.1	2,181
1–2	76.2	377	0.0	66.0	628
3–4	67.5	124	0.0	65.0	198
5	(65.5)	36	0.0	66.6	61
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>3</sup></b>					
0	83.5	69	78.8	0.0	195
1–2	76.8	431	67.4	0.0	804
3	72.7	1,247	71.8	100.0	2,069

<sup>1</sup> Restricted to currently married women. See Table 13.7 for the list of decisions.

<sup>2</sup> See Table 13.9 for the list of reasons.

<sup>3</sup> See Table 13.11 for the list of reasons.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

### 13.6 CURRENT USE OF CONTRACEPTION BY WOMEN'S EMPOWERMENT STATUS

A woman's ability to control her fertility and use of contraceptive methods depends on the woman's decision and joint decision with her husband or partner. A woman's status and sense of empowerment have strong implications for a women's decision-making control in areas affecting her life. Women who have less control of other aspects of their life are less likely to have strong control over their fertility, and have less choice in using contraceptive methods without the husband's knowledge or cooperation.

Table 13.15 shows an inconsistent set of relationships between each of the three indicators of women's empowerment with current use of contraceptive methods by currently married women aged 15–49. Women who participate in more household decisions are slightly more likely to use any method of contraception or any modern method of contraception compared with other women. This is a direct relationship between empowerment and use of contraception. However, as the number of reasons for which wife beating is justified increases, the proportion of women currently using any method (or any modern method) of contraception also increases and as the number of reasons given for refusing sexual intercourse increases, the proportion of women currently using any method (or any modern method) of contraception declines. These relationships are counterintuitive.

**Table 13.15: Current use of contraception by women's status***Percent distribution of currently married women aged 15–49 by current contraceptive method, according to selected indicators of women's status, Tonga 2012*

Empowerment indicator	Any method	Modern methods					Any traditional method	Not currently using	Total	Number of women
		Any modern method	Female sterilisation	Male sterilisation	Temporary modern female methods <sup>1</sup>	Male condom				
<b>Number of decisions in which women participate<sup>2</sup></b>										
0	28	24.6	12.9	0	10	1.7	3.4	72	100	220
1–2	35.4	27.9	8.1	0	18.2	1.5	7.5	64.6	100	149
3–4	34.9	29	14.7	0.1	12.7	1.6	5.9	65.1	100	1,379
<b>Number of reasons for which wife beating is justified<sup>3</sup></b>										
0	31.6	26.8	13.3	0.1	12.1	1.3	4.7	68.4	100	1,210
1–2	39.5	31.4	15.8	0	13.1	2.4	8.1	60.5	100	377
3–4	40.1	33	12	0	18.6	2.3	7.1	59.9	100	124
5	(41.5)	(33.2)	(19.7)	(0)	(13.5)	(0)	(8.3)	(58.5)	(100)	36
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>										
0	41.9	39.7	14.7	0	23.9	1.1	2.2	58.1	100	69
1–2	31.5	24.9	12.4	0	10.9	1.6	6.6	68.5	100	431
3	34.5	28.9	14.3	0.1	12.9	1.6	5.6	65.5	100	1,247
<b>Total</b>	<b>34.1</b>	<b>28.4</b>	<b>13.9</b>	<b>0</b>	<b>12.8</b>	<b>1.6</b>	<b>5.7</b>	<b>65.9</b>	<b>100</b>	<b>1,747</b>

<sup>1</sup> Birth control pill, intrauterine device, injectable contraceptives, implants, female condom, diaphragm, foam or jelly and lactational amenorrhea method.<sup>2</sup> See Table 13.7 for the list of decisions.<sup>3</sup> See Table 13.9 for the list of reasons.<sup>4</sup> See Table 13.11 for the list of reasons.

Notes:

1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

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

### 13.7 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

A woman's status and empowerment can significantly influence her decision-making about aspects of life that affect her well being, and many studies prove that status and empowerment are important factors for controlling and reducing fertility, through: 1) the desire to reduce family size as more women become more empowered, and 2) an increase in a woman's ability to control her ideal family size through the use of family planning methods as empowerment increases.

Women's fertility preferences differ from that of men, in that women typically prefer to have fewer children. As a woman becomes more empowered to negotiate fertility decision-making, she has more control over contraceptive use and, thus, her chances of becoming pregnant and giving birth. Table 13.16 shows how women's ideal family size and their unmet need for family planning vary by the indicators of empowerment.

**Table 13.16: Women's empowerment and ideal number of children and unmet need for family planning**

*Mean ideal number of children for women aged 15–49 and the percentage of currently married women aged 15–49 with an unmet need for family planning, by indicators of women's empowerment, Tonga 2012*

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	4.0	199	20.1	10.0	30.0	220
1–2	3.4	141	10.4	13.4	23.8	149
3–4	4.0	1,314	12.4	12.1	24.5	1,379
<b>Number of reasons for which wife-beating is justified<sup>4</sup></b>						
0	3.2	2,048	12.4	13.3	25.7	1,210
1–2	3.5	603	13.6	9.7	23.3	377
3–4	3.5	189	20.8	5.7	26.6	124
5	1.9	60	(9.7)	(12.2)	(21.9)	36
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>5</sup></b>						
0	2.4	182	16.8	10.7	27.6	69
1–2	3.3	759	12.7	11.9	24.6	431
3	3.3	1,959	13.2	12.1	25.2	1,247
<b>Total</b>	<b>3.3</b>	<b>2,900</b>	<b>13.2</b>	<b>12.0</b>	<b>25.2</b>	<b>1,747</b>

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.

<sup>2</sup> See Table 7.4 for the definition of unmet need for family planning.

<sup>3</sup> Restricted to currently married women. See Table 13.7 for the list of decisions.

<sup>4</sup> See Table 13.9 for the list of reasons.

<sup>5</sup> See Table 13.11 for the list of reasons.

Note: To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

The data indicate that there are no clear relationships between decision-making power and ideal number of children. However, there appear to be consistent relationships between unmet need for family planning for reasons of spacing or limiting family size and empowerment indicators. These relationships are such that as the number of decisions in which women participate and the number of reasons for refusing sexual intercourse increase, the percentage of women with an unmet need declines. Also, as the number of reasons for justifying wife besting increases, the unmet need increases.



## 13.8 WOMEN'S STATUS AND REPRODUCTIVE HEALTH CARE

Table 13.17 illustrates how women's use of antenatal, delivery and postnatal care services varies by their empowerment level as measured by the three indicators of empowerment. In societies where health care is widespread, women's empowerment may not affect their access to reproductive health services. In other societies, increased empowerment of women is likely to improve their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood.

Table 13.17 indicates that in Tonga, perhaps because access to antenatal care and receiving assistance from a skilled provider during childbirth is close to universal, there is no clear relationship with the three women's empowerment indicators. Around three-quarters of women receive postnatal care, but access to these services does not appear to be associated with women's empowerment.

**Table 13.17: Reproductive health care by women's empowerment**

*Percentage of women aged 15–49 with a live birth in the five years preceding the survey who received antenatal care (ANC), delivery assistance and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Tonga 2012*

Empowerment indicator	Received ANC from health personnel	Received delivery assistance from health personnel	Received PNC from health personnel within two days of delivery <sup>1</sup>	Number of women with a child born in the five years preceding the survey
<b>Number of decisions in which women participate<sup>2</sup></b>				
0	98.2	98.2	73.4	124
1–2	100.0	99.2	79.7	89
3–4	99.2	98.3	75.9	770
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>				
0	99.0	98.8	74.8	744
1–2	98.6	95.8	77.0	219
3–4	100.0	98.9	81.3	80
5	(100.0)	(100.0)	(78.5)	27
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>				
0	97.0	95.4	76.0	51
1–2	99.7	97.2	76.2	261
3	98.9	98.7	75.7	757
<b>Total</b>	<b>99.0</b>	<b>98.2</b>	<b>75.8</b>	<b>1,069</b>

ANC = antenatal care; PNC = postnatal care

<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 13.7 for the list of decisions.

<sup>3</sup> See Table 13.9 for the list of reasons.

<sup>4</sup> See Table 13.11 for the list of reasons.

Notes:

1) To ensure statistical reliability, percentages and rates based on 25–49 unweighted cases are shown within parentheses.

2) 'Health personnel' includes doctor, nurse, midwife, or auxiliary nurse or auxiliary midwife.

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## APPENDIX A: SAMPLE IMPLEMENTATION

**Table A.1: Sample implementation — Women**

*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, Tonga 2012*

Result	Residence		Region			Total
	Urban	Rural	Urban Tongatapu	Rural Tongatapu	Outer islands	
<b>Selected households</b>						
Completed (C)	97.1	98.8	97.1	98.7	99.0	98.3
Household present but no competent respondent at home (HP)	1.2	0.5	1.2	1.0	0.1	0.7
Refused (R)	0.8	0.0	0.8	0.0	0.0	0.2
Dwelling not found (DNF)	0.3	0.0	0.3	0.0	0.0	0.1
Household absent (HA)	0.5	0.3	0.5	0.4	0.3	0.4
Dwelling vacant/address not a dwelling (DV)	0.0	0.3	0.0	0.0	0.6	0.2
Other (O)	0.1	0.0	0.1	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of sampled households	768	1,775	768	816	959	2,543
<b>Household response rate (HRR)<sup>1</sup></b>	<b>97.8</b>	<b>99.5</b>	<b>97.8</b>	<b>99.0</b>	<b>99.9</b>	<b>99.0</b>
<b>Eligible women</b>						
Completed (EWC)	94.3	97.8	94.3	96.9	98.6	96.7
Not at home (EWNH)	4.1	1.1	4.1	1.9	0.3	2.0
Refused (EWR)	0.8	0.3	0.8	0.5	0.2	0.5
Partly completed (EWPC)	0.5	0.0	0.5	0.1	0.0	0.2
Incapacitated (EWI)	0.4	0.7	0.4	0.6	0.9	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of women	1,009	2,165	1,009	1,079	1,086	3,174
<b>Eligible women response rate (EWRR)<sup>2</sup></b>	<b>94.3</b>	<b>97.8</b>	<b>94.3</b>	<b>96.9</b>	<b>98.6</b>	<b>96.7</b>
<b>Overall response rate (ORR)<sup>3</sup></b>	<b>92.2</b>	<b>97.3</b>	<b>92.2</b>	<b>96.0</b>	<b>98.5</b>	<b>95.7</b>

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\text{HRR} = \frac{100 * C}{C + HP + R + O}$$

<sup>2</sup> Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\text{EWRR} = \frac{100 * \text{EWC}}{\text{EWC} + \text{EWNH} + \text{EWR} + \text{EWPC} + \text{EWI}}$$

<sup>3</sup> The overall response rate (ORR) is calculated as:

$$\text{ORR} = \text{HRR} * \text{EWRR}/100$$

**Table A.2: Sample implementation — Men**

*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, Tonga 2012*

Result	Residence		Region			Total
	Urban	Rural	Urban Tongatapu	Rural Tongatapu	Outer islands	
<b>Selected households</b>						
Completed (C)	97.4	99.0	97.4	98.5	99.4	98.5
Household present but no competent respondent at home (HP)	1.0	0.5	1.0	1.0	0.0	0.6
Refused (R)	0.5	0.0	0.5	0.0	0.0	0.2
Dwelling not found (DNF)	0.3	0.0	0.3	0.0	0.0	0.1
Household absent (HA)	0.5	0.2	0.5	0.5	0.0	0.3
Dwelling vacant/address not a dwelling (DV)	0.0	0.3	0.0	0.0	0.6	0.2
Other (O)	0.3	0.0	0.3	0.0	0.0	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of sampled households	384	887	384	408	479	1,271
Household response rate (HRR) <sup>1</sup>	98.2	99.5	98.2	99.0	100.0	99.1
<b>Eligible men</b>						
Completed (EMC)	90.2	95.8	90.2	94.6	96.9	93.9
Not at home (EMNH)	5.2	1.4	5.2	2.6	0.2	2.6
Postponed (EMP)	0.0	0.2	0.0	0.2	0.3	0.2
Refused (EMR)	1.6	0.6	1.6	1.1	0.0	0.9
Partly completed (EMPC)	0.8	0.2	0.8	0.3	0.2	0.4
Incapacitated (EMI)	1.8	1.5	1.8	1.1	1.9	1.6
Other (EMO)	0.5	0.2	0.5	0.0	0.5	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of men	620	1,235	620	615	620	1,855
Eligible men response rate (EMRR) <sup>2</sup>	90.2	95.8	90.2	94.6	96.9	93.9
<b>Overall response rate (ORR)<sup>3</sup></b>	<b>88.5</b>	<b>95.4</b>	<b>88.5</b>	<b>93.7</b>	<b>96.9</b>	<b>93.1</b>

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\text{HRR} = \frac{100 * C}{C + \text{HP} + R + O}$$

<sup>2</sup> Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\text{EMRR} = \frac{100 * \text{EMC}}{\text{EMC} + \text{EMNH} + \text{EMR} + \text{EMPC} + \text{EMI} + \text{EMO}}$$

<sup>3</sup> The overall response rate (ORR) is calculated as:

$$\text{ORR} = \text{HRR} * \text{EMRR}/100$$

## APPENDIX B: ESTIMATES OF SAMPLING ERRORS

### Estimates of sampling errors

The main objective of a Demographic and Health Survey (DHS) is to provide estimates of a number of basic demographic and health variables through interviews with a scientifically selected probability sample chosen from a well-defined population: women of reproductive age (15–49). Estimates from a sample survey are affected by two types of errors: non-sampling and sampling. 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. Non-sampling errors are systematic errors that would be present even if the entire population was covered. Although numerous efforts were made during the implementation of the 2012 Tonga Demographic and Health Survey (TDHS) to minimise this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, are the errors that result from taking a sample of the covered population through a particular sample design and can be evaluated statistically. The sample of respondents selected in the 2012 TDHS 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.

For the entire covered population and for large subgroups, the 2012 TDHS sample is generally sufficiently large to provide reliable estimates. For such populations the sampling error is small and less important than the non-sampling error. However, for small subgroups, sampling errors become very important in providing an objective measure of reliability of the data.

Sampling errors are usually measured in terms of the *standard error* for a particular statistic (e.g. mean, percentage), 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% of all possible samples of identical size and design.

If the sample of respondents had been selected by simple random sampling, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2012 TDHS sample was the result of a multistage stratified design, and, consequently, it is necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2012 TDHS is the Integrated Sample Survey Analysis (ISSA) Sampling Error Module. This module uses the Taylor linearisation 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 linearisation 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:

$$SE^2(r) = \text{var}(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_h - 1} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

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  $h^{th}$  stratum,
- $y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{th}$  cluster in the  $h^{th}$  stratum,
- $x_{hi}$  is the sum of the weighted number of cases in the  $i^{th}$  cluster in the  $h^{th}$  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 2012 TDHS, there were 106 non-empty clusters. Hence, 106 replications were created. The variance of a rate  $r$  is calculated as follows:

$$SE^2(r) = \text{var}(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which,

$$r_i = kr - (k-1)r(i)$$

where  $r$  is the estimate computed from the full sample of 106 clusters,

$r(i)$  is the estimate computed from the reduced sample of 105 clusters ( $i$ th cluster excluded), and

$k$  is the total number of clusters.

In addition to the standard error, ISSA Software Program computes the design effect (DEFT) for each estimate, 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. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2012 TDHS are calculated for selected variables considered to be of primary interest for the women's survey and for men's surveys, respectively. The results are presented in this appendix for the country as a whole, and for urban and rural areas. For each variable, a name code, the type of statistic (mean, proportion, or rate) and the base population are presented in Table B.1.

**Table B.1: List of selected variables for sampling errors, Tonga 2012**

Variable (Code)	Estimate	Base population
Urban (URBAN)	Proportion	All women and all men
Illiterate (ILLITER)	Proportion	All women and all men
No education (NOEDUC)	Proportion	All women and all men
Education (EDUC)	Proportion	All men
Secondary education (SECOND)	Proportion	All women
Net attendance ratio (ATTEND)	Ratio	
Never married (NEVMAR)	Proportion	All women and all men
Currently married (CURMAR)	Proportion	All women and all men
Married before age 20 (AGEM20)	Proportion	Women aged 20–49
Currently pregnant (PREGNANT)	Proportion	All women
Children ever born (EVBORN)	Mean	All women
Children surviving (SURVIV)	Mean	All women
Children ever born to women aged 40–49 (EVB)	Mean	Women aged 40–49
Know any contraceptive method (KMETHO)	Proportion	Currently married women and currently married men
Know any modern contraceptive method (KMODME)	Proportion	Currently married men
Ever used any contraceptive method (EVUSE)	Proportion	Currently married women and currently married men
Currently using any contraceptive method (CUSE)	Proportion	Currently married women and currently married men
Currently using a modern method (CUMODE)	Proportion	Currently married men
Currently using pill CUPILL)	Proportion	Currently married women and currently married men
Currently using IUD (CUIUD)	Proportion	Currently married women and currently married men
Currently using injectables (CUINJ)	Proportion	Currently married men
Currently using condom (CUCOND)	Proportion	Currently married men
Currently using female sterilisation (CUFSTER)	Proportion	Currently married women
Currently using male sterilisation (CUMSTER)	Proportion	Currently married men
Currently using periodic abstinence (CUPABS)	Proportion	Currently married women and currently married men
Currently using withdrawal (CUWITH)	Proportion	Currently married men
Used public sector source (PSOURC)	Proportion	Current users of modern methods
Want no more children (NOMORE)	Proportion	Currently married women and currently married men
Want to delay birth at least two years (DELAY)	Proportion	Currently married women and currently married men
Ideal family size (IDEAL)	Mean	All women and all men
Mothers received tetanus injection for last birth (TETANU)	Proportion	
Mothers received medical assistance at delivery (MEDELI)	Proportion	Births occurring 1–59 months before interview
Having diarrhoea in two weeks before survey (DIAR2W)	Proportion	Children age 0–59 months
Treated with oral rehydration salts (ORSRTE)	Proportion	Children with diarrhoea in two weeks before interview
Taken to a health provider (MEDTRE)	Proportion	Children with diarrhoea in two weeks before interview
Vaccination card seen (HCARD)	Proportion	Children aged 12–23 months
Received BCG (BCG)	Proportion	Children aged 12–23 months
Received DPT (3 doses) (DPT)	Proportion	Children aged 12–23 months
Received Polio (3 doses) (POLIO)	Proportion	Children aged 12–23 months
Received measles (MEASLE)	Proportion	Children aged 12–23 months
Weight-for-age (-2SD) (WGAGE)	Proportion	Children aged 0–59 months
Neonatal mortality (0–4 years)*	Rate	Children exposed to the risk of mortality
Neonatal mortality (5–9 years)*	Rate	Children exposed to the risk of mortality
Neonatal mortality (10–14 years)*	Rate	Children exposed to the risk of mortality
Neonatal mortality (0–10 years)	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (0–4 years)*	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (5–9 years)*	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (10–14 years)*	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (0–10 years)	Rate	Children exposed to the risk of mortality
Infant mortality (0–4 years)*	Rate	Children exposed to the risk of mortality
Infant mortality (5–9 years)*	Rate	Children exposed to the risk of mortality
Infant mortality (10–14 years)*	Rate	Children exposed to the risk of mortality
Infant mortality (0–10 years)	Rate	Children exposed to the risk of mortality
Child mortality (0–4 years)*	Rate	Children exposed to the risk of mortality
Child mortality (5–9 years)*	Rate	Children exposed to the risk of mortality
Child mortality (10–14 years)*	Rate	Children exposed to the risk of mortality
Child mortality (0–10 years)	Rate	Children exposed to the risk of mortality
Under-5 mortality (0–4 years)*	Rate	Children exposed to the risk of mortality
Under-5 mortality (5–9 years)*	Rate	Children exposed to the risk of mortality
Under-5 mortality (10–14 years)*	Rate	Children exposed to the risk of mortality
Under-5 mortality (0–10 years)	Rate	Children exposed to the risk of mortality

\* Total population only



Tables B.2 to B.9 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% confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the SE considering simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (example, as calculated for *children ever born to women aged 40–49* [code: EVB40]) can be interpreted as follows: the overall average from the national sample is 4.204 and its SE is 0.116. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate (i.e.  $4.204 \pm 2 \times 0.116$ ). There is a high probability (95%) that the *true* average number of children ever born to all women aged 40–49 is between 3.973 and 4.435.

Sampling errors are analysed for the national woman sample and for two separate groups of estimates: 1) means and proportions, and 2) complex demographic rates. The SE/R for the means and proportions range between 0.2% and 69.8%; the highest SE/Rs are for estimates of very low values (e.g. *illiterate*). The SE/R is less than 1% for four variables, between 1–5% for 16 variables, between 5–10% for six variables and more than 10% for nine variables. Therefore, most estimates for the country as a whole are small, except for estimates of very small proportions. However, for mortality rates (complex demographic rates), the SE/Rs are all over 10% and almost all over 20%.

**Table B.2: Sampling errors for total women, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	0.246	0.008	3068	3068	0.981	0.031	0.231	0.261
ILLITER	0.001	0.001	3059	3060	1.199	0.698	0	0.002
NOEDUC	0.002	0.001	3068	3068	0.986	0.452	0	0.003
SECOND	0.988	0.002	3068	3068	1.076	0.002	0.984	0.992
ATTEND	0.927	0.006	2059	2116	1.014	0.006	0.915	0.939
NEVMAR	0.372	0.009	3068	3068	1.039	0.024	0.353	0.39
CURMAR	0.569	0.01	3068	3068	1.113	0.017	0.549	0.589
AGEM20	0.183	0.01	2372	2410	1.217	0.053	0.164	0.203
PREGNANT	0.061	0.005	3068	3068	1.104	0.078	0.051	0.07
EVBORN	2.013	0.042	3068	3068	0.951	0.021	1.929	2.096
SURVIV	1.973	0.041	3068	3068	0.941	0.021	1.892	2.055
EVB40	4.204	0.116	656	640	1.112	0.027	3.973	4.435
KMETHO	0.984	0.004	1722	1747	1.259	0.004	0.977	0.992
EVUSE	0.604	0.015	1722	1747	1.279	0.025	0.574	0.634
CUSE	0.341	0.013	1722	1747	1.114	0.037	0.315	0.366
CUPILL	0.021	0.004	1722	1747	1.109	0.183	0.013	0.028
CUIUD	0.037	0.005	1722	1747	1.06	0.131	0.027	0.046
CUFSTER	0.139	0.009	1722	1747	1.113	0.067	0.12	0.157
CUPABS	0.031	0.005	1722	1747	1.181	0.16	0.021	0.041
PSOURC	0.919	0.012	518	513	0.968	0.013	0.896	0.943
NOMORE	0.307	0.013	1722	1747	1.188	0.043	0.28	0.333
DELAY	0.165	0.01	1722	1747	1.117	0.061	0.145	0.185
IDEAL	3.266	0.067	2902	2900	1.439	0.021	3.132	3.4
PERINAT	8.48	2.621	1635	1705	1.076	0.309	3.238	13.722
TETANU	0.411	0.02	1042	1069	1.325	0.048	0.371	0.451
MEDELI	0.979	0.004	1632	1703	1.08	0.005	0.97	0.988
DIAR2W	0.043	0.006	1605	1670	1.132	0.151	0.03	0.055
ORSTRE	0.554	0.06	67	71	0.94	0.109	0.433	0.675
MEDTRE	0.63	0.063	67	71	0.979	0.1	0.504	0.756
HCARD	0.482	0.031	303	307	1.054	0.063	0.421	0.543
BCG	0.894	0.019	303	307	1.097	0.022	0.855	0.933
DPT	0.657	0.032	303	307	1.176	0.049	0.593	0.722
POLIO	0.678	0.028	303	307	1.044	0.042	0.622	0.735
MEASLE	0.662	0.031	303	307	1.137	0.047	0.599	0.724
WGTAJE	0.017	0.004	1404	1447	1.061	0.209	0.01	0.024

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.3: Sampling errors for urban women sample, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	1	0	951	754	-	0	1	1
ILLITER	0	0	945	750	-	-	0	0
NOEDUC	0.004	0.002	951	754	0.947	0.465	0	0.008
SECOND	0.985	0.005	951	754	1.155	0.005	0.976	0.994
ATTEND	0.918	0.013	573	449	1.093	0.014	0.891	0.945
NEVMAR	0.387	0.015	951	754	0.937	0.038	0.357	0.417
CURMAR	0.545	0.017	951	754	1.074	0.032	0.511	0.58
AGEM20	0.157	0.016	740	602	1.226	0.105	0.124	0.19
PREGNANT	0.054	0.008	951	754	1.145	0.156	0.037	0.07
EVBORN	1.78	0.067	951	754	0.898	0.038	1.645	1.914
SURVIV	1.749	0.066	951	754	0.905	0.038	1.616	1.881
EVB40	3.755	0.226	189	153	1.059	0.06	3.303	4.208
KMETHO	0.982	0.006	506	411	1.066	0.006	0.969	0.995
EVUSE	0.558	0.025	506	411	1.144	0.045	0.508	0.609
CUSE	0.319	0.019	506	411	0.922	0.06	0.281	0.357
CUPILL	0.024	0.007	506	411	1.044	0.296	0.01	0.038
CUIUD	0.029	0.008	506	411	1.048	0.268	0.014	0.045
CUFSTER	0.112	0.013	506	411	0.901	0.113	0.087	0.137
CUPABS	0.03	0.008	506	411	1.003	0.255	0.014	0.045
PSOURC	0.838	0.033	146	119	1.078	0.039	0.772	0.904
NOMORE	0.382	0.022	506	411	1.035	0.059	0.337	0.427
DELAY	0.191	0.021	506	411	1.219	0.112	0.148	0.234
IDEAL	2.941	0.095	883	700	1.159	0.032	2.751	3.132
PERINAT	6.349	3.592	465	381	0.995	0.566	0	13.534
TETANU	0.449	0.038	304	248	1.342	0.084	0.374	0.525
MEDELI	0.958	0.014	463	380	1.187	0.015	0.929	0.987
DIAR2W	0.051	0.013	457	375	0.998	0.247	0.026	0.077
ORSTRE	0.665	0.088	24	19	0.846	0.132	0.49	0.84
MEDTRE	0.624	0.117	24	19	0.936	0.188	0.389	0.859
HCARD	0.51	0.056	87	71	1.043	0.109	0.399	0.622
BCG	0.911	0.028	87	71	0.94	0.031	0.854	0.968
DPT	0.668	0.049	87	71	0.983	0.074	0.57	0.767
POLIO	0.693	0.054	87	71	1.092	0.077	0.586	0.8
MEASLE	0.714	0.052	87	71	1.084	0.073	0.609	0.818
WGTAGE	0.013	0.005	388	304	0.939	0.414	0.002	0.024

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.4: Sampling errors for rural women sample, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	0	0	2117	2314	-	-	0	0
ILLITER	0.001	0.001	2114	2311	1.148	0.699	0	0.003
NOEDUC	0.001	0.001	2117	2314	1.168	1.003	0	0.002
SECOND	0.989	0.002	2117	2314	1.042	0.002	0.984	0.993
ATTEND	0.93	0.007	1486	1666	0.983	0.007	0.917	0.943
NEVMAR	0.367	0.011	2117	2314	1.056	0.03	0.344	0.389
CURMAR	0.577	0.012	2117	2314	1.119	0.021	0.553	0.601
AGEM20	0.192	0.012	1632	1807	1.205	0.061	0.169	0.216
PREGNANT	0.063	0.006	2117	2314	1.079	0.09	0.052	0.074
EVBORN	2.089	0.052	2117	2314	0.962	0.025	1.985	2.192
SURVIV	2.047	0.05	2117	2314	0.947	0.024	1.947	2.147
EVB40	4.344	0.133	467	487	1.127	0.031	4.078	4.611
KMETHO	0.985	0.005	1216	1335	1.302	0.005	0.976	0.994
EVUSE	0.618	0.018	1216	1335	1.312	0.03	0.581	0.655
CUSE	0.347	0.016	1216	1335	1.141	0.045	0.316	0.379
CUIPILL	0.02	0.004	1216	1335	1.123	0.226	0.011	0.029
CUIUD	0.039	0.006	1216	1335	1.045	0.149	0.027	0.05
CUFSTER	0.147	0.011	1216	1335	1.13	0.078	0.124	0.17
CUPABS	0.031	0.006	1216	1335	1.203	0.192	0.019	0.043
PSOURC	0.944	0.011	372	395	0.93	0.012	0.922	0.966
NOMORE	0.284	0.016	1216	1335	1.219	0.056	0.252	0.315
DELAY	0.157	0.011	1216	1335	1.086	0.072	0.134	0.18
IDEAL	3.369	0.083	2019	2200	1.478	0.025	3.203	3.535
PERINAT	9.093	3.207	1170	1324	1.054	0.353	2.679	15.508
TETANU	0.4	0.023	738	821	1.305	0.058	0.353	0.446
MEDELI	0.985	0.004	1169	1323	1.059	0.004	0.978	0.993
DIAR2W	0.04	0.007	1148	1295	1.167	0.184	0.025	0.055
ORSTRE	0.513	0.076	43	52	0.954	0.149	0.36	0.666
MEDTRE	0.632	0.075	43	52	1.003	0.118	0.483	0.782
HCARD	0.474	0.036	216	236	1.041	0.076	0.402	0.546
BCG	0.889	0.024	216	236	1.103	0.027	0.842	0.936
DPT	0.654	0.039	216	236	1.193	0.06	0.576	0.733
POLIO	0.674	0.033	216	236	1.018	0.049	0.608	0.74
MEASLE	0.646	0.037	216	236	1.127	0.058	0.571	0.721
WGTAJE	0.018	0.004	1016	1142	1.051	0.236	0.01	0.027

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.5: Sampling errors for total men, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	0.253	0.013	1298	1336	1.085	0.052	0.227	0.279
NOEDUC	0.003	0.002	1298	1336	1.143	0.608	0	0.006
EDUC	0.982	0.004	1298	1336	1.09	0.004	0.974	0.99
NEVMAR	0.425	0.016	1298	1336	1.193	0.039	0.392	0.457
CURMAR	0.536	0.016	1298	1336	1.179	0.03	0.503	0.569
KMETHO	0.997	0.002	730	716	1.118	0.002	0.992	1.001
KMODME	0.997	0.002	730	716	1.118	0.002	0.992	1.001
EVUSE	0.627	0.023	730	716	1.311	0.037	0.58	0.674
CUSE	0.228	0.019	730	716	1.247	0.085	0.189	0.266
CUMODE	0.123	0.014	730	716	1.129	0.112	0.095	0.15
CUPILL	0.016	0.005	730	716	1.062	0.308	0.006	0.026
CUIUD	0.007	0.003	730	716	1.009	0.446	0.001	0.013
CUINJ	0.023	0.006	730	716	1.001	0.239	0.012	0.035
CUCOND	0.032	0.007	730	716	1.053	0.215	0.018	0.045
CUFSTER	0.033	0.009	730	716	1.389	0.276	0.015	0.052
CUMSTER	0.007	0.003	730	716	0.835	0.371	0.002	0.012
CUPABS	0.041	0.009	730	716	1.181	0.212	0.023	0.058
CUWITH	0.064	0.01	730	716	1.152	0.163	0.043	0.085
NOMORE	0.381	0.024	730	716	1.335	0.063	0.333	0.429
DELAY	0.181	0.015	730	716	1.075	0.085	0.15	0.211
IDEAL	3.585	0.14	1204	1220	1.51	0.039	3.304	3.865

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.6: Sampling errors for urban men sample, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	1	0	423	338	-	0	1	1
NOEDUC	0	0	423	338	-	-	0	0
EDUC	0.991	0.004	423	338	0.906	0.004	0.983	0.999
NEVMAR	0.423	0.029	423	338	1.192	0.068	0.366	0.481
CURMAR	0.535	0.027	423	338	1.115	0.051	0.481	0.589
KMETHO	0.995	0.005	227	181	1.02	0.005	0.986	1.005
KMODME	0.995	0.005	227	181	1.02	0.005	0.986	1.005
EVUSE	0.602	0.035	227	181	1.07	0.058	0.533	0.672
CUSE	0.227	0.034	227	181	1.23	0.151	0.158	0.295
CUMODE	0.127	0.024	227	181	1.103	0.192	0.078	0.176
CUPILL	0.015	0.009	227	181	1.09	0.58	0	0.033
CUIUD	0.004	0.004	227	181	0.912	1.002	0	0.011
CUINJ	0.025	0.009	227	181	0.895	0.371	0.006	0.044
CUCOND	0.043	0.015	227	181	1.129	0.356	0.012	0.073
CUFSTER	0.023	0.011	227	181	1.162	0.508	0	0.046
CUMSTER	0.018	0.009	227	181	0.982	0.484	0.001	0.035
CUPABS	0.056	0.019	227	181	1.235	0.339	0.018	0.093
CUWITH	0.044	0.018	227	181	1.287	0.4	0.009	0.079
NOMORE	0.422	0.033	227	181	0.996	0.078	0.356	0.487
DELAY	0.152	0.023	227	181	0.976	0.154	0.105	0.198
IDEAL	2.382	0.13	408	326	0.988	0.054	2.123	2.641

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.7: Sampling errors for rural men sample, Tonga 2012**

Code	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
URBAN	0	0	875	998	-	-	0	0
NOEDUC	0.004	0.002	875	998	1.086	0.608	0	0.008
EDUC	0.979	0.005	875	998	1.069	0.005	0.968	0.989
NEVMAR	0.425	0.02	875	998	1.175	0.046	0.386	0.464
CURMAR	0.536	0.02	875	998	1.177	0.037	0.497	0.576
KMETHO	0.997	0.003	503	535	1.167	0.003	0.992	1.003
KMODME	0.997	0.003	503	535	1.167	0.003	0.992	1.003
EVUSE	0.636	0.029	503	535	1.355	0.046	0.577	0.694
CUSE	0.228	0.023	503	535	1.238	0.102	0.182	0.274
CUMODE	0.121	0.016	503	535	1.126	0.135	0.088	0.154
CUPILL	0.016	0.006	503	535	1.042	0.362	0.004	0.028
CUIUD	0.008	0.004	503	535	0.997	0.492	0	0.016
CUINJ	0.023	0.007	503	535	1.021	0.298	0.009	0.036
CUCOND	0.028	0.008	503	535	1.026	0.269	0.013	0.043
CUFSTER	0.037	0.012	503	535	1.39	0.316	0.014	0.061
CUMSTER	0.003	0.002	503	535	0.711	0.564	0	0.007
CUPABS	0.036	0.01	503	535	1.166	0.27	0.016	0.055
CUWITH	0.071	0.013	503	535	1.098	0.178	0.046	0.096
NOMORE	0.367	0.03	503	535	1.398	0.082	0.307	0.427
DELAY	0.19	0.019	503	535	1.078	0.099	0.153	0.228
IDEAL	4.023	0.181	796	894	1.544	0.045	3.662	4.384

DEFT = design effect; N = number of unweighted cases; R = value of the statistic; R±2SE = 95% confidence limit;

SE = standard error of the statistic; SE/R = relative standard error; WN = number of weighted cases.

Note: Variable codes are defined in Table B.1.

**Table B.8: Sampling errors for childhood mortality rates for the ten-year period preceding the survey by place of residence, Tonga 2012**

Variable	R	SE	SE/R	R-2SE	R+2SE
<b>Urban</b>					
Neonatal mortality	6.844	2.579	0.377	1.686	12.003
Post-neonatal mortality	6.745	2.444	0.362	1.857	11.633
Infant mortality	13.59	3.497	0.257	6.595	20.584
Child mortality	3.84	2.123	0.553	-0.405	8.085
Under-5 mortality	17.377	3.482	0.2	10.413	24.341
<b>Rural</b>					
Neonatal mortality	6.629	1.822	0.275	2.985	10.273
Post-neonatal mortality	6.802	1.871	0.275	3.06	10.544
Infant mortality	13.432	2.656	0.198	8.12	18.743
Child mortality	4.355	2.147	0.493	0.06	8.649
Under-5 mortality	17.728	3.568	0.201	10.591	24.864
<b>Total</b>					
Neonatal mortality	6.677	1.524	0.228	3.629	9.725
Post-neonatal mortality	6.787	1.55	0.228	3.688	9.887
Infant mortality	13.464	2.201	0.164	9.061	17.867
Child mortality	4.247	1.745	0.411	0.757	7.738
Under-5 mortality	17.654	2.888	0.164	11.879	23.429

R = value of the statistic; R±2SE = 95% confidence limit; SE = standard error of the statistic; SE/R = relative standard error

**Table B.9: Sampling error for childhood mortality rates by age groups, Tonga 2012**

Variable	R	SE	SE/R	R-2SE	R+2SE
<b>0-4</b>					
Neonatal mortality	8.446	2.673	0.316	3.1	13.792
Post-neonatal mortality	9.092	2.637	0.29	3.818	14.365
Infant mortality	17.537	3.795	0.216	9.948	25.127
Child mortality	5.733	2.715	0.474	0.303	11.163
Under-5 mortality	23.17	4.73	0.204	13.709	32.63
<b>5-9</b>					
Neonatal mortality	4.769	1.612	0.338	1.545	7.992
Post-neonatal mortality	4.276	1.749	0.409	0.778	7.775
Infant mortality	9.045	2.271	0.251	4.504	13.586
Child mortality	2.6	1.335	0.514	-0.071	5.27
Under-5 mortality	11.621	2.517	0.217	6.588	16.654
<b>10-14</b>					
Neonatal mortality	5.8	2.129	0.367	1.542	10.058
Post-neonatal mortality	6.041	2.169	0.359	1.703	10.378
Infant mortality	11.841	3.133	0.265	5.575	18.108
Child mortality	3.032	1.798	0.593	-0.565	6.629
Under-5 mortality	14.837	3.473	0.234	7.891	21.783

R = value of the statistic; R±2SE = 95% confidence limit; SE = standard error of the statistic; SE/R = relative standard error

## APPENDIX C: DATA QUALITY TABLES

**Table C.1: Household age distribution**

*Single-year age distribution of the de facto household population by sex (weighted), Tonga 2012*

Age	Women		Men	
	Number	Percent	Number	Percent
0	174	2.5	189	2.9
1	159	2.3	163	2.5
2	198	2.8	193	2.9
3	163	2.3	209	3.2
4	179	2.5	160	2.4
5	161	2.3	162	2.5
6	176	2.5	191	2.9
7	159	2.3	179	2.7
8	187	2.7	171	2.6
9	182	2.6	186	2.8
10	153	2.2	177	2.7
11	164	2.3	192	2.9
12	193	2.7	176	2.7
13	163	2.3	163	2.5
14	166	2.4	144	2.2
15	138	2.0	147	2.3
16	144	2.1	137	2.1
17	164	2.3	129	2.0
18	148	2.1	117	1.8
19	117	1.7	124	1.9
20	104	1.5	122	1.9
21	117	1.7	106	1.6
22	104	1.5	93	1.4
23	86	1.2	98	1.5
24	95	1.4	81	1.2
25	100	1.4	73	1.1
26	106	1.5	95	1.5
27	96	1.4	64	1.0
28	113	1.6	74	1.1
29	76	1.1	103	1.6
30	95	1.3	92	1.4
31	80	1.1	69	1.1
32	102	1.4	84	1.3
33	84	1.2	67	1.0
34	90	1.3	64	1.0
35	64	0.9	59	0.9
36	94	1.3	49	0.8
37	67	0.9	55	0.8
38	79	1.1	64	1.0
39	76	1.1	76	1.2
40	84	1.2	81	1.2
41	73	1.0	73	1.1
42	88	1.3	90	1.4
43	64	0.9	82	1.3
44	80	1.1	57	0.9
45	80	1.1	49	0.7
46	57	0.8	68	1.0
47	53	0.8	66	1.0
48	59	0.8	59	0.9
49	38	0.5	60	0.9
50	55	0.8	43	0.7
51	56	0.8	35	0.5
52	74	1.1	60	0.9
53	45	0.6	46	0.7
54	59	0.8	40	0.6
55	45	0.6	29	0.4
56	40	0.6	30	0.5
57	52	0.7	38	0.6
58	47	0.7	29	0.4
59	44	0.6	46	0.7
60	51	0.7	29	0.4
61	41	0.6	38	0.6
62	33	0.5	33	0.5
63	39	0.6	28	0.4



64	40	0.6	35	0.5
65	44	0.6	30	0.5
66	26	0.4	36	0.5
67	35	0.5	25	0.4
68	35	0.5	16	0.2
69	27	0.4	14	0.2
70+	341	4.9	285	4.4
Do not know/missing	0	0.0	4	0.1
<b>Total</b>	<b>7,023</b>	<b>100.0</b>	<b>6,550</b>	<b>100.0</b>

**Table C.2: Age distribution of eligible and interviewed women**

*De facto household population of women aged 10–54, interviewed women aged 15–49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Tonga 2012*

Age group	Household population of women aged 10–54	Interviewed women aged 15–49		Percent of women
		Number	Percent	
10–14	838	-	-	-
15–19	711	698	22.4	98.2
20–24	507	483	15.5	95.4
25–29	491	476	15.3	97.0
30–34	450	434	13.9	96.4
35–39	381	361	11.6	94.9
40–44	390	379	12.2	97.2
45–49	287	279	9.0	97.1
50–54	290	-	-	-
<b>15–49</b>	<b>3,217</b>	<b>3,111</b>	<b>100.0</b>	<b>96.7</b>

- = not applicable

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.

**Table C.3: Age distribution of eligible and interviewed men**

*De facto household population of men aged 10–94, interviewed men aged 15–94 and percent of eligible men who were interviewed (weighted), by five-year age groups, Tonga 2012*

Age group	Household population of men aged 10–94	Interviewed men aged 15–94		Percentage of eligible men interviewed
		Number	Percent	
10–14	462	-	-	-
15–19	293	274	15.6	93.6
20–24	234	224	12.7	95.4
25–29	192	174	9.9	90.9
30–34	184	175	9.9	94.7
35–39	145	139	7.9	96.3
40–44	204	190	10.8	93.2
45–49	149	143	8.1	95.4
50–54	98	93	5.3	94.6
55–59	85	83	4.7	97.3
60–64	86	81	4.6	94.6
65–69	56	54	3.1	96.0
70–74	55	53	3.0	95.9
75–79	52	50	2.9	96.9
80–84	26	22	1.2	84.8
85–89	8	3	0.2	40.7
90–94	3	1	0.1	50.0
<b>15–94</b>	<b>1,871</b>	<b>1,760</b>	<b>100.0</b>	<b>94.1</b>

- = not applicable

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.

**Table C.4: Completeness of reporting***Percentage of observations missing information for selected demographic and health questions (weighted), Tonga 2012*

Subject	Percentage with missing information	Number of cases
Month only (births in last 15 years)	0.31	4,617
Month and year (births in last 15 years)	0.07	4,617
Age at death (deceased children born in the last 15 years)	0.00	79
Age/date at first union (ever married women) <sup>1</sup>	0.15	1,928
Age/date at first union (ever married men) <sup>1</sup>	0.81	1,159
Respondent's education (all women)	0.00	3,068
Respondent's education (all men)	0.04	1,742
Diarrhea in last 2 weeks (living children aged 0–59 months)	4.36	1,670
Height (living children aged 0–59 months from Household Questionnaire)	6.11	1,781
Weight (living children aged 0–59 months from Household Questionnaire)	5.69	1,781
Height or weight (living children aged 0–59 months from Household Questionnaire)	6.16	1,781

<sup>1</sup> Both year and age missing**Table C.5: Births by calendar years***Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Tonga 2012*

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
2012	298	2	299	100	100	100	101.5	107.5	101.6	-	-	-
2011	319	9	328	100	100	100	115.9	102.9	115.5	-	-	-
2010	377	10	387	99.8	100	99.8	101.6	233.7	103.6	115.4	181	116.4
2009	335	2	337	100	100	100	125.7	0	124.3	97.9	15.6	95.5
2008	307	11	318	100	100	100	93.3	119.7	94.1	94.1	279.4	96.3
2007	317	7	324	100	100	100	109.4	11.7	105.8	101.8	89.3	101.5
2006	317	3	320	99.5	74.1	99.2	129.7	92.7	129.2	101.7	55.9	100.9
2005	305	5	310	99.7	100	99.7	114.2	14.8	111.3	98.2	129.4	98.6
2004	305	4	310	99.3	100	99.3	96.1	101.6	96.1	97.3	86.1	97.1
2003	322	5	327	99.7	100	99.7	103	71.8	102.4	111.2	163.9	111.8
2012–2008	1,636	33	1,669	99.9	100	100	107.1	122.9	107.4	-	-	-
2007–2003	1,566	24	1,591	99.6	96.6	99.6	109.9	42.8	108.4	-	-	-
2002–1998	1,313	21	1,334	99.2	100	99.2	105.3	90	105	-	-	-
1997–1993	916	25	941	99.6	100	99.6	112.7	193.9	114.3	-	-	-
1992 and earlier	624	16	640	99.6	100	99.6	113.4	117.2	113.5	-	-	-
<b>All</b>	<b>6,055</b>	<b>120</b>	<b>6,175</b>	<b>99.6</b>	<b>99.3</b>	<b>99.6</b>	<b>108.9</b>	<b>103.1</b>	<b>108.8</b>	<b>-</b>	<b>-</b>	<b>-</b>

- = not applicable; D = dead; L = living; T = total

<sup>1</sup> Both year and month of birth given.<sup>2</sup> (Bm/Bf) \* 100, where Bm and Bf are the numbers of male and female births, respectively.<sup>3</sup> [2Bx/(Bx-1+Bx+1)] \* 100, where Bx is the number of births in calendar year x.

**Table C.6: Reporting of age at death in days**

*Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0–6 days, for five-year periods of birth preceding the survey (weighted), Tonga 2012*

Age at death (days)	Number of years preceding the survey				Total 0–19
	0–4	5–9	10–14	15–19	
<1	9	3	2	0	13
1	2	4	1	4	11
2	0	0	2	0	2
5	1	0	0	0	1
7	2	0	0	0	2
14	0	0	2	0	2
28	0	0	1	0	1
<b>Total 0–30</b>	<b>14</b>	<b>7</b>	<b>8</b>	<b>4</b>	<b>33</b>
<b>Percent early neonatal<sup>1</sup></b>	<b>84.2</b>	<b>100.0</b>	<b>62.3</b>	<b>100.0</b>	<b>84.3</b>

<sup>1</sup>  $\frac{3}{4}$  6 days / = 30 days

**Table C.7: Reporting of age at death in months**

*Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Tonga 2012*

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>	14	7	8	4	33
1	1	1	2	1	5
2	5	0	0	0	5
3	2	3	0	0	5
4	2	0	2	2	6
5	2	1	1	0	4
6	1	0	1	2	3
7	0	0	0	1	1
8	0	1	0	0	1
9	0	1	0	1	3
10	0	1	1	0	1
12	0	0	1	0	1
1 Year	2	1	0	1	3
<b>Total 0–11</b>	<b>27</b>	<b>16</b>	<b>14</b>	<b>11</b>	<b>68</b>
<b>Percent neonatal<sup>2</sup></b>	<b>53.4</b>	<b>42.0</b>	<b>54.5</b>	<b>36.9</b>	<b>48.3</b>

<sup>1</sup> Includes deaths under one month reported in days.

<sup>2</sup> Under one month/under one year.

**Table C.8: Nutritional status of children**

Percentage of children under 5 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, Tonga 2012

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Mean Z-score (SD)	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Percentage above +2 SDs	Mean Z-score (SD)	Percentage below -3 SDs	Percentage below -2 SDs <sup>1</sup>	Percentage above +2 SDs	Mean Z-score (SD)	
<b>Age in months</b>												
<6	1.9	5.6	1	0.7	7.1	22.1	0.8	0.7	1.3	32.8	1.6	119
6-8	0	9.7	0.7	0	7	17.6	0.5	0	2.6	18.3	0.8	86
9-11	4.2	7	1	0	7	20.8	0.5	0	0	19.5	0.8	54
12-17	2.6	6.4	0.5	2.6	11.2	15	0.3	1	1	9.5	0.4	142
18-23	6.9	11.3	0.2	1.3	3.2	16	0.5	2.5	3.7	16	0.5	118
24-35	1.4	4.8	0.8	1	4.3	10.1	0.3	0.3	2.7	12	0.6	314
36-47	2.5	6.1	0.4	1.5	3.1	15.2	0.6	0.8	2.3	9.8	0.6	296
48-59	3	5.9	0.3	0.3	2.2	14.9	0.6	0	1.6	10.3	0.6	277
<b>Sex</b>												
Male	3.5	7.9	0.5	1.3	4.9	16.2	0.5	0.8	2.4	12.4	0.6	724
Female	1.7	5	0.7	0.8	4.6	13.7	0.5	0.3	1.8	15.1	0.7	682
<b>Birth interval in months<sup>2</sup></b>												
First birth <sup>3</sup>	3.5	6.5	0.7	1.3	5.1	14.5	0.4	1	3.5	14.9	0.7	302
<24	2.4	6.9	0.4	0.9	3.5	17.5	0.7	0.2	1.5	15.1	0.7	349
24-47	2.3	5.4	0.6	1.1	7.2	9.5	0.3	1	2.5	9.9	0.5	386
48+	0.8	7.7	0.7	1.2	3.7	20	0.7	0	0.4	17.8	0.9	183
<b>Size at birth</b>												
Very small	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	10
Small	(6.5)	(27.8)	(0.3)	(0)	(3.4)	(18)	(0.7)	(1.7)	(5)	(8.2)	(0.3)	46
Average or larger	2.2	5.5	0.6	1.1	5.1	14.5	0.5	0.6	2	14.2	0.7	1,147
Missing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	16
<b>Mother's interview status</b>												
Interviewed	2.4	6.5	0.6	1.1	5.1	14.6	0.5	0.6	2.1	13.8	0.7	1,221
Not interviewed but in household	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	16
Not interviewed, and not in the household <sup>4</sup>	4.4	7.1	0.4	0.5	2.7	17.5	0.7	0.5	1.8	12.1	0.7	170
<b>Mother's nutritional status</b>												
Thin (BMI<18.5)	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	1
Normal (BMI 18.5-24.9)	2	10.9	0.2	1.3	9	5.8	0	1.3	3.2	3.3	0	118
Overweight/obese (BMI >= 25)	2.3	5.9	0.6	1.1	4.8	15.4	0.5	0.5	2.1	15.2	0.7	1,084
Missing	(5.1)	(5.1)	(0)	(0)	(0)	(23)	(1)	(0)	(0)	(12.7)	(0.7)	30

<b>Residence</b>												
Urban	2.1	6.9	0.6	0.8	4	18.3	0.6	0	1.3	13.5	0.8	297
Rural	2.7	6.4	0.5	1.1	5	14.1	0.5	0.7	2.3	13.8	0.6	1,110
<b>Region</b>												
Urban Tongatapu	2.1	6.9	0.6	0.8	4	18.3	0.6	0	1.3	13.5	0.8	297
Rural Tongatapu	2.4	5.5	0.6	0.8	4.5	13.4	0.5	0.6	1.8	15.4	0.7	728
Outer islands	3.3	8	0.4	1.6	5.9	15.5	0.4	1	3.1	10.6	0.5	381
<b>Mother's education<sup>5</sup></b>												
Primary or less	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	6
Secondary	2	5.9	0.6	1	5.4	14.4	0.4	0.7	2.3	13.2	0.6	948
More than secondary	3.7	8.2	0.6	1.6	4	15.4	0.6	0.3	1.6	16.9	0.8	282
<b>Wealth quintile</b>												
Lowest	2.8	6.5	0.4	0.6	5.7	13	0.3	0.2	2.2	11.3	0.4	346
Second	2.4	5.7	0.5	2	5.3	11.5	0.4	1.4	3.1	8.6	0.5	313
Middle	2.2	6.3	0.7	0	4	16	0.6	0.2	1.3	15.9	0.8	299
Fourth	2.3	6.6	0.6	1	4.6	18.2	0.8	0.6	1	16.1	0.9	230
Highest	3.4	7.5	0.6	1.8	3.6	18.4	0.6	0.4	2.7	19.4	0.8	218
<b>Total</b>	<b>2.6</b>	<b>6.5</b>	<b>0.6</b>	<b>1</b>	<b>4.7</b>	<b>15</b>	<b>0.5</b>	<b>0.6</b>	<b>2.1</b>	<b>13.7</b>	<b>0.7</b>	<b>1,406</b>

BMI = body mass index; NP = not presented; SD = standard deviation

<sup>1</sup> Includes children who are below -3 standard deviations (SDs) 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> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Notes:

1) Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation (SD) units from the median of the NCHS/CDC/WHO Child Growth Standards.

2) Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

3) To ensure statistical reliability, percentages and rates based on 25-49 unweighted cases are shown within parentheses.

## APPENDIX D: LIST OF PEOPLE INVOLVED IN THE 2012 TDHS

### DEMOGRAPHIC AND HEALTH SURVEY STAFF LISTING

<b>Ministry of Health</b>	<b>Female Interviewers (ctd.)</b>	<b>Male Interviewers (ctd.)</b>
Sela Paasi	Loloma Siale	Sitaleki Sonatane Latu
Sione Hufanga	Eseta L. Paea	Sosaia Palavi
Amelia Tu'ipulotu	Sanitina Makaafi	Thomas Tai
<b>Department of Statistics</b>	Naomi Vailanu	Timote Afu
Sione Lolohea	Ilaisaane Fahamokioa	Viliami Tu'ipulotu
Winston Fainga'anuku	Tefini Fevaleaki	<b>Measurement Nurses</b>
Vaimoana Soakimi	Taliola Tu'inauvai	Evilini Tai
Lu'isa Koloamatangi	Mele 'Apikotoa	Fifita Fili
<b>Fieldwork Supervisors</b>	Emeline Takai	Kalolaine Malolo
Afu Tei	Malia Tutoe	Manatu Vea
Alisi Fifita	Pelatouna Tupou	Mele Latavao
Iunisi Vaikimo'unga	Siosi'ana Kalapa	Ofa Talanoa
Mele Fangaloka	Fakanonoa Ngaluola	Powai Schaaf
Samisoni Fotu	Kalolaine Latu	Sela Tu'itupou
Seilini Soakai	Uikelotu Filikitonga	Sivihiva Kivalu
Seini Mavae	Aspasia Hala'ufia	Vasitai Toli
Seini Pasa	Setaita Tu'ulakitau	<b>Field Editors</b>
Siope Faka'osi	Lupe'eva Tausinga	Malia Pousini
Sulia Nonu	Meleane Niu	Elena Pahulu
Telesia Tu'itupou	Funaki Johnson	Losaline Faiva
<b>Female Interviewers</b>	Mele Pasimati Mahe	Ilima Pongi
Soana Tangifua	Mele 'Akino	Fakanonoa Latavao
Piula Fifita	Meliame Tupou	Mapui Vaiangina
Maa'imoa Talisa	<b>Male Interviewers</b>	Mele Sivoki Lasike
Melaia Fetuani	Anthony Tu'inukuafe	Mele Tupou
Felila Lama	Haieti Pohiva	Akesa 'Ahokava
Uinise Taufu	Ikani Tonga	Nancy Savelio
Pingiki Fonoifua	Kalani Palu	<b>Data Processing (Coders &amp; Operators)</b>
Katokakala Tongamoa	Liongi Fangupo	Asela 'Iloa
Manafonu Siola'a	Loti Petelo	Karolina Muller
Naomi Tupe	Makisi Moala	Katalina 'Elika
Sulia Nau Pongi	Nofokau'alu Palanite	Katalina V. Pole
Fe'ofa'aki Pilivi	Poasi Hungalu	Kilisitina Makoni
Vika Finau	Salesi Panipo'oi	Lusitania Hafoka
Kakala Ve'ehala	Samisoni Salt	Ma'u Hemaloto
Charlene Pousima	Silio Vahe	Pita Pongi
Lu'isa Tangitau	Sione 'Alofi	Salome T. Kaho
Fifita Latu	Sione 'Otukolo	Silia Falesiva
Paeahelotu Maile	Siosiuu Taumoha'apai	Taniela Hoponoa
		Tevita Masila

## APPENDIX E: DATA PROVIDED BY TONGA MINISTRY OF HEALTH

**Table E.1: Child Immunisation, 2012**

Vaccination	No. of children to be Immunised	No. of children immunised	Percentage (%) coverage
BCG 1	2579	2573	99.8
POLIO 1	2768	2764	99.8
Polio 2	2682	2678	99.8
Polio 3	2501	2496	99.8
HEP B Birth Dose	2579	2579	100
DPT/HIB/HEP B 1	2768	2764	99.8
DPT/HIB/HEP B 2	2682	2676	99.8
DPT/HIB/HEP B 3	2501	2496	99.8
MR 1	2713	2702	99.6
MR 2	2635	2626	99.6
DPT 4	2635	2626	99.6
TOTAL	29043	28980	99.8

**Table E.2: Antenatal care, 2012**

Antenatal care	Dose	No. to be immunised	No. immunised	Percentage (%) covered
TT 1	0.5	941	940	99.9
TT 2	0.5	862	851	98.7
TT Booster	0.5	716	698	97.5
TOTAL		2519	2489	98.8

**Table E.3: Sanitation, 2012**

	Number	Percentage (%) covered
No. of households with safe water supply/total households	19422	99.9
No. of households with sanitary toilet/total households	19361	99.6
No. of households with sanitary refuse disposal/total households	19324	99.5

## **APPENDIX F: 2012 TDHS QUESTIONNAIRES**



2012 DEMOGRAPHIC AND HEALTH SURVEY  
**HOUSEHOLD QUESTIONNAIRE**

**TONGA**  
 STATISTICS DEPARTMENT/MINISTRY OF HEALTH

**IDENTIFICATION**

VILLAGE NAME _____ CENSUS BLOCK ..... NAME OF HOUSEHOLD HEAD _____ HOUSEHOLD NUMBER ..... URBAN/RURAL ..... (URBAN=1, RURAL=2) HOUSEHOLD SUB-SELECTED FOR MALE SURVEY? 1 YES 2 NO	<table border="1" style="margin: auto;"> <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> <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> <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> <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> <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>																				

**INTERVIEWER VISITS**

	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY <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> 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>								
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER <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>								
RESULT*	_____	_____	_____	RESULT <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>								
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:20px; height:20px;"></td></tr></table>								
TIME	_____	_____										

**\*RESULT CODES:**

- 1 COMPLETED
- 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
- 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
- 4 POSTPONED
- 5 REFUSED
- 6 DWELLING VACANT OR ADDRESS NOT A DWELLING
- 7 DWELLING DESTROYED
- 8 DWELLING NOT FOUND
- 9 OTHER \_\_\_\_\_  
 (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD	<table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>		
TOTAL ELIGIBLE WOMEN	<table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>		
TOTAL ELIGIBLE MEN	<table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>		

LANGUAGE OF INTERVIEW 1 ENGLISH 2 TONGAN 3 OTHER \_\_\_\_\_

LANGUAGE OF RESPONDENT 1 ENGLISH 2 TONGAN 3 OTHER \_\_\_\_\_

TRANSLATOR USED? 1 YES 2 NO

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE	<table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>		

<b>SUPERVISOR</b> NAME _____ <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> DATE _____ <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>					<b>FIELD EDITOR</b> NAME _____ <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> DATE _____ <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>					<b>OFFICE EDITOR</b> <table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>			<b>KEYED BY</b> <table border="1" style="display: inline-table;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>		

**Introduction and Consent**

Hello. My name is \_\_\_\_\_ and I am working for the Tonga Statistics Department and Ministry of Health. We are conducting a national survey about various health issues. We would very much appreciate your participation in this survey. The survey usually takes between 10 and 15 minutes to complete.

*Malo e lelei. Ko hoku hingoa ko \_\_\_\_\_ pea 'oku ou ngaue he Potungaue Satisitika mo e Potungaue Mo'ui. 'Oku mau fakahoko 'a e savea fakafonua felave'i mo e mo'ui. 'E hounga 'aupito ho'o kau mai ke fakakakato 'a e fatongia ni pea mo e Potungaue Mo'ui. 'Oku fakafuofua ki he miniti 'e 15-20 'a e taimi 'e fiema'u ai ke fakakakato 'a e fiema'u 'o e savea.*

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, 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.

*I he konga 'o e savea 'e 'oatu ai ha ngaahi fehu'i felave'i pea mo ho famili. Ko e ha 'a e fakamatala te ke foaki mai 'e tauhi malu aupito pea 'e 'ikai to e faka'ataa ke 'ilo ki ai ha taha. 'Oku tau'ataina pe ke kau mai ki he savea ni pea ka a'u atu ki ha fehu'i 'oku 'ikai te ke fie tali pea 'e lelei pe ke fakaha mai kae hoko atu ki he fehu'i hoko pe ko hono faka'osi ai pe 'o e savea. Neongo ia oku 'iai 'a e faka'amu te ke fie kau mai ko e 'uhi 'oku fu'u mahu'inga 'aupito ho'o ngaahi a'usia.*

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

**HOUSEHOLD SCHEDULE**

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY		
				Does (NAME) usually live here?	Did (NAME) stay here last night?		MARITAL STATUS	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15 OR OVER	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
	<p>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.</p> <p>Kataki kae 'omaiange e hingoa 'o kinautolu 'oku nofo he 'api ni 'o kau ai mo kinautolu na'a nau mohe 'I heni 'anepo, kamata mei he 'ulu 'o e famili.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.</p> <p>THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-22 FOR EACH PERSON.</p>	<p>What is the relationship of (NAME) to the head of the household?</p> <p>Ko e ha 'a e kainga/felave 'I 'a (HINGOA) ki he 'ulu 'o e famili?</p> <p>SEE CODES BELOW.</p>	<p>Is (NAME) male or female?</p> <p>Tangata pe Fefine</p>	<p>Does (NAME) usually live here?</p> <p>Oku angamaheni ke nofo heni 'a (HINGOA)?</p>	<p>Did (NAME) stay here last night?</p> <p>Na'e nofo heni 'a (HINGOA) 'anepo?</p>	<p>How old is (NAME) on his/her last birthday?</p> <p>Na'e ta'u fiha 'a (HINGOA) 'I hono 'aho fa'ele'1 fakamuimui?</p>	<p>What is (NAME'S) current marital status?</p> <p>Ko e ha e tu'unga fakamali 'a (HINGOA)?</p> <p>1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER</p>			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
01		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	<input type="checkbox"/>	01	01	01
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	02	02	02
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	03	03	03
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	04	04	04
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	05	05	05
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	06	06	06
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	07	07	07
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	08	08	08
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	09	09	09
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	10	10	10

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD                          | 08 = BROTHER OR SISTER        |
| 02 = WIFE OR HUSBAND               | 09 = NIECE/NEPHEW BY BLOOD    |
| 03 = SON OR DAUGHTER               | 10 = NIECE/NEPHEW BY MARRIAGE |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 11 = OTHER RELATIVE           |
| 05 = GRANDCHILD                    | 12 = ADOPTED/FOSTER/STEPCHILD |
| 06 = PARENT                        | 13 = NOT RELATED              |
| 07 = PARENT-IN-LAW                 | 98 = DON'T KNOW               |

LINE NO.	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				IF AGE 0-4 YEARS
	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE				BIRTH REGISTRATION
	<p>Is (NAME)'s natural mother alive?</p> <p>Does (NAME)'s natural mother usually live in this household or was she a guest last night? <i>Oku nofo pe 'I he 'api ni 'a e fa'e na'a ne fa'ele'1 mai 'a (hingoa) pe na'e 'a'ahi mai pe ia ki 'api ni 'ane po?</i></p> <p>IF YES: What is her name?</p> <p>RECORD MOTHER'S LINE NO.</p> <p>IF NO, RECORD '00'.</p>	<p>Does (NAME)'s natural father usually live in this household or was he a guest last night? <i>Oku nofo pe 'I he 'api ni 'a e tamai totonu 'a (hingoa) pe na'e a'ahi mai pe ia 'ane po?</i></p> <p>IF YES: What is his name?</p> <p>RECORD FATHER'S LINE NO.</p> <p>IF NO, RECORD '00'.</p>	<p>Has (NAME) ever attended school? <i>Na'e 'osi 'alu a (hingoa) o ako 'I ha 'api ako?</i></p> <p>IF NO AND LAST MEMBER: SKIP TO Q.101.</p>	<p>What is the highest level of school (NAME) has attended? <i>Koe ha e tu'unga mau'olunga taha kuo ne a'usia he'ene ako?</i></p> <p>What is the highest year (NAME) completed at that level?</p> <p>SEE CODES BELOW.</p>	<p>Did (NAME) attend school at any time during the 2012 school year? <i>Na'e ma'u ako 'a (hingoa) lolotonga a e ta'u ako kuo 'osi 2011?</i></p>	<p>During this school year, what level and year is (NAME) attending? <i>Koe ha e levolo pe tu'unga ako 'oku lolotonga ako ai 'a (hingoa) he ta'u ni?</i></p> <p>SEE CODES BELOW.</p>	<p>Did (NAME) attend school at any time during the previous school year, that is, 2011? <i>Na'e ma'u ako nai 'a (hingoa) he ta'u ako atu koe, 2010?</i></p>	<p>During that school year, what level and year did (NAME) attend? <i>I he lolotonga 'ene ma'u ako kolia, koe ha e levolo moe tu'unga na'a ne ako ai?</i></p> <p>SEE CODES BELOW.</p>	<p>Does (NAME) have a birth certificate? <i>Oku 'I ai ha tohi ta'u 'a (hingoa)?</i></p> <p>IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? <i>Kapau 'oku hala: Kuo 'osi tohi nai a (hingoa) ha tohi mafai fakapule'anga?</i></p> <p>1 = YES, SEEN 2 = YES, NOT SEEN 3 = REGISTERED 4 = NEITHER 8 = DON'T KNOW</p>		
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
01	Y N DK 1 2 8 ↓ GO TO 14	<input type="text"/>	Y N DK 1 2 8 ↓ GO TO 16	<input type="text"/>	Y N 1 2 ↓ GO TO 23	LEVEL YEAR <input type="text"/> <input type="text"/>	Y N 1 2 ↓ GO TO 20	LEVEL YEAR <input type="text"/> <input type="text"/>	Y N 1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
02	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
03	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
04	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
05	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
06	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
07	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
08	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
09	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>
10	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8 ↓ GO TO 16	<input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 20	<input type="text"/> <input type="text"/>	1 2 ↓ GO TO 23	<input type="text"/>	<input type="text"/>

CODES FOR Qs. 17, 19, AND 21: EDUCATION

<b>LEVEL</b>	<b>YEAR</b>
0 = PRE-SCHOOL	00 = LESS THAN 1 YEAR COMPLETED
1 = PRIMARY	(USE '00' FOR Q. 17 ONLY.)
2 = SECONDARY	THIS CODE IS NOT ALLOWED
3 = TERTIARY	FOR Qs. 19 AND 21)
4 = VOCATIONAL	98 = DON'T KNOW
5 = OTHER	
8 = DON'T KNOW	

LINE NO.	HOUSEHOLD HEALTH EXPENDITURE						DISABILITY			HARDSHIPS	
	INPATIENT		OUTPATIENT		OVERSEA PATIENT		ILLNESS/ INJURY	DISABILITY STATUS		CHILDREN ELIGIBILITY	ADULT ELIGIBILITY
	In the last six months was (NAME) admitted overnight to stay at a health facility? <i>I he mahina e 6 kuo'osi na'e fakatokoto nai 'a (Hingoa) i ha fa'ahinga falemahaki pe Senita Mo'ui?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR IN-PATIENT MODULE	In the last four weeks did (NAME) receive care from a health provider, a pharmacy, or a traditional healer without staying overnight? <i>I he uike 'e fa kuo'osi, kuo talatala nai 'a (Hingoa) ki ha fa'ahinga falemahaki, fale faito'o ki he mo'ui pe faito'o faka-Tonga 'o 'ikai fakatokoto?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR OUT-PATIENT MODULE	In the last 6 months did (NAME) send to other countries overseas for medical treatment? <i>I he mahina e ono kuo'osi, na'e 'ave nai 'a (Hingoa) ki ha to e fonua muli ki ha fa'ahinga faito'o?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR OUT-PATIENT MODULE	Was (NAME) ill or injured in the last four weeks? <i>I he uike 'e 4 kuo'osi, na'e hoko nai ha puke pe lavea kia (Hingoa)?</i>	Do you consider yourself (NAME) to have a disability or a long term health conditions (which lasted for 12 months or that is likely to last at least 12 months) and affect your day to day activities? <i>Oku ke mo'ua nai ha fa'ahinga faingata'a'ia 'aia oku fakafe'atungia ki ho'o ngaue faka'aho 'i he mahina 'e 12 kuo'osi pe 'e ngalingali tolonga he mahina 'e 12 ka hoko mai?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR DISABILITY MODULE	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR HARDSHIP QUESTIONS	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR HARDSHIP QUESTIONS
	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
	Y N DK 1 2 8 ↓ GO TO 25		Y N DK 1 2 8 ↓ GO TO 27		Y N DK 1 2 8 ↓ GO TO 29		Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32			
01	Y N DK 1 2 8 ↓ GO TO 25	01	Y N DK 1 2 8 ↓ GO TO 27	01	Y N DK 1 2 8 ↓ GO TO 29	01	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	01	01	01
02	Y N DK 1 2 8 ↓ GO TO 25	02	Y N DK 1 2 8 ↓ GO TO 27	02	Y N DK 1 2 8 ↓ GO TO 29	02	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	02	02	02
03	Y N DK 1 2 8 ↓ GO TO 25	03	Y N DK 1 2 8 ↓ GO TO 27	03	Y N DK 1 2 8 ↓ GO TO 29	03	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	03	03	03
04	Y N DK 1 2 8 ↓ GO TO 25	04	Y N DK 1 2 8 ↓ GO TO 27	04	Y N DK 1 2 8 ↓ GO TO 29	04	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	04	04	04
05	Y N DK 1 2 8 ↓ GO TO 25	05	Y N DK 1 2 8 ↓ GO TO 27	05	Y N DK 1 2 8 ↓ GO TO 29	05	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	05	05	05
06	Y N DK 1 2 8 ↓ GO TO 25	06	Y N DK 1 2 8 ↓ GO TO 27	06	Y N DK 1 2 8 ↓ GO TO 29	06	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	06	06	06
07	Y N DK 1 2 8 ↓ GO TO 25	07	Y N DK 1 2 8 ↓ GO TO 27	07	Y N DK 1 2 8 ↓ GO TO 29	07	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	07	07	07
08	Y N DK 1 2 8 ↓ GO TO 25	08	Y N DK 1 2 8 ↓ GO TO 27	08	Y N DK 1 2 8 ↓ GO TO 29	08	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	08	08	08
09	Y N DK 1 2 8 ↓ GO TO 25	09	Y N DK 1 2 8 ↓ GO TO 27	09	Y N DK 1 2 8 ↓ GO TO 29	09	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	09	09	09
10	Y N DK 1 2 8 ↓ GO TO 25	10	Y N DK 1 2 8 ↓ GO TO 27	10	Y N DK 1 2 8 ↓ GO TO 29	10	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	10	10	10

TICK HERE IF CONTINUATION SHEET USED

(2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed?  
 (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?  
 (2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?

YES  → ADD TO NO   
 YES  → ADD TO NO   
 YES  → ADD TO NO

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY		
				Does (NAME) usually live here?	Did (NAME) stay here last night?		MARITAL STATUS	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15 OR OVER	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
	<p>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.</p> <p>Kataki kae 'omaiange e hingoa 'o kinautolu 'oku nofo he 'api ni 'o kau ai mo kinautolu na'a nau mohe 'I heni 'anepo, kamata mei he 'ulu 'o e famili.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.</p> <p>THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-22 FOR EACH PERSON.</p>	<p>What is the relationship of (NAME) to the head of the household?</p> <p>Ko e ha 'a e kainga/felave'l 'a (HINGOA) ki he 'ulu 'o e famili?</p> <p>SEE CODES BELOW.</p>	<p>Is (NAME) male or female?</p> <p>Tangata pe Fefine</p>	<p>Does (NAME) usually live here?</p> <p>Oku angamaheni ke nofo heni 'a (HINGOA)?</p>	<p>Did (NAME) stay here last night?</p> <p>Nai'e nofo heni 'a (HINGOA) 'anepo?</p>	<p>How old is (NAME) on his/her last birthday?</p> <p>Na'e ta'u fiha 'a (HINGOA) 'I hono 'aho fa'ele'l fakamuimui?</p>	<p>What is (NAME'S) current marital status?</p> <p>Ko e ha e tu'unga fakamali 'a (HINGOA)?</p> <p>1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER</p>			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
11		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	<input type="text"/>	11	11	11
12		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	12	12	12
13		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	13	13	13
14		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	14	14	14
15		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	15	15	15
16		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	16	16	16
17		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	17	17	17
18		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	18	18	18
19		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	19	19	19
20		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="text"/>	20	20	20

**CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD                          | 08 = BROTHER OR SISTER        |
| 02 = WIFE OR HUSBAND               | 09 = NIECE/NEPHEW BY BLOOD    |
| 03 = SON OR DAUGHTER               | 10 = NIECE/NEPHEW BY MARRIAGE |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 11 = OTHER RELATIVE           |
| 05 = GRANDCHILD                    | 12 = ADOPTED/FOSTER/STEPCHILD |
| 06 = PARENT                        | 13 = NOT RELATED              |
| 07 = PARENT-IN-LAW                 | 98 = DON'T KNOW               |

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE				BIRTH REGISTRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? <i>Oku nofo pe 'I he 'api ni 'a e fa'e na'a ne fa'ele' mai 'a (hingoa) pe na'e 'a'ahi mai pe ia ki 'api ni 'ane po?</i>	Is (NAME)'s natural father alive? <i>Oku kei mo'ui pe 'a e tamai totonu 'a (hingoa)?</i>	Does (NAME)'s natural father usually live in this household or was he a guest last night? <i>Oku nofo pe 'I he 'api ni 'a e tamai totonu 'a (hingoa) pe na'e 'a'ahi mai pe ia 'ane po?</i>	Has (NAME) ever attended school? <i>Na'e 'osi 'alu a (hingoa) o ako 'I ha 'api ako?</i>	What is the highest level of school (NAME) has attended? <i>Koe ha e tu'unga mau'olunga taha kuo ne a'usia he'ene ako?</i>	Did (NAME) attend school at any time during the 2012 school year? <i>Na'e ma'u ako 'a (hingoa) lolotonga a e ta'u ako kuo 'osi 2011?</i>	During this school year, what level and year is (NAME) attending? <i>Koe ha e levolo pe tu'unga ako 'oku lolotonga ako ai 'a (hingoa) he ta'u ni?</i>	Did (NAME) attend school at any time during the previous school year, that is, 2011? <i>Na'e ma'u ako nai 'a (hingoa) he ta'u ako atu koe, 2010?</i>	During that school year, what level and year did (NAME) attend? <i>I he lolotonga 'ene ma'u ako koia, koe ha e levolo moe tu'unga na'a ne ako ai?</i>	Does (NAME) have a birth certificate? <i>Oku 'I ai ha tohi ta'u 'a (hingoa)?</i>
		IF YES: What is her name?		IF YES: What is his name?	IF NO AND LAST MEMBER: SKIP TO Q.101.	What is the highest year (NAME) completed at that level?	SEE CODES BELOW.	SEE CODES BELOW.	SEE CODES BELOW.	SEE CODES BELOW.	IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? <i>Kapau 'oku hala: Kuo 'osi tohi nai a (hingoa) ha tohi mafai fakapule'anga?</i>
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 23	LEVEL YEAR [ ] [ ]	Y N 1 2 GO TO 20	LEVEL YEAR [ ] [ ]	Y N 1 2 GO TO 23	LEVEL YEAR [ ] [ ]	[ ]
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

CODES FOR Qs. 17, 19, AND 21: EDUCATION

- |                |   |
|----------------|---|
| <b>LEVEL</b>   | <b>YEAR</b>                                 |
| 0 = PRE-SCHOOL | 00 = LESS THAN 1 YEAR COMPLETED             |
| 1 = PRIMARY    | (USE '00' FOR Q. 17 ONLY.)                  |
| 2 = SECONDARY  | THIS CODE IS NOT ALLOWED FOR Qs. 19 AND 21) |
| 3 = TERTIARY   | 98 = DON'T KNOW                             |
| 4 = VOCATIONAL |   |
| 5 = OTHER      |   |
| 8 = DON'T KNOW |   |

LINE NO.	INPATIENT		OUTPATIENT		OVERSEA PATIENT		ILLNESS/ INJURY	DISABILITY STATUS		IF AGE 1-16 YEARS	IF AGE 16 AND OVER
	In the last six months was (NAME) admitted overnight to stay at a health facility? <i>I he mahina e 6 kuo'osi na'e fakatokoto nai 'a (Hingoa) i ha fa'ahinga falemahaki pe Senita Mo'ui?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR IN-PATIENT MODULE	In the last four weeks did (NAME) receive care from a health provider, a pharmacy, or a traditional healer without staying overnight? <i>I he uike 'e fa kuo'osi, kuo talatala nai 'a (Hingoa) ki ha fa'ahinga falemahaki, fale faito'o ki he mo'ui pe faito'o faka-Tonga 'o 'ikai fakatokoto?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR OUT-PATIENT MODULE	In the last 6 months did (NAME) send to other countries overseas for medical treatment? <i>I he mahina e ono kuo'osi, na'e 'ave nai 'a (Hingoa) ki ha to e fonua muli ki ha fa'ahinga faito'o?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR OUT-PATIENT MODULE		Was (NAME) ill or injured in the last four weeks? <i>I he uike 'e 4 kuo'osi, na'e hoko nai ha puke pe lavea kia (Hingoa)?</i>	Do you consider yourself (NAME) to have a disability or a long term health conditions (which lasted for 12 months or that is likely to last at least 12 months) and affect your day to day activities <i>Oku ke mo'ua nai ha fa'ahinga faingata'a'ia 'aia oku fakafe'atungia ki ho'o ngaue faka'aho 'i he mahina 'e 12 kuo'osi pe 'e ngalingali tolonga he mahina 'e 12 ka hoko mai?</i>	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR DISABILITY MODULE	CIRCLE LINE NUMBER OF PERSON ELIGIBLE FOR HARDSHIP QUESTIONS
	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
11	Y N DK 1 2 8 ↓ GO TO 25	11	Y N DK 1 2 8 ↓ GO TO 27	11	Y N DK 1 2 8 ↓ GO TO 29	11	Y N DK 1 2 8	Y N DK 1 2 8 ↓ GO TO 32	11	11	11
12	1 2 8 ↓ GO TO 25	12	1 2 8 ↓ GO TO 27	12	1 2 8 ↓ GO TO 29	12	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	12	12	12
13	1 2 8 ↓ GO TO 25	13	1 2 8 ↓ GO TO 27	13	1 2 8 ↓ GO TO 29	13	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	13	13	13
14	1 2 8 ↓ GO TO 25	14	1 2 8 ↓ GO TO 27	14	1 2 8 ↓ GO TO 29	14	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	14	14	14
15	1 2 8 ↓ GO TO 25	15	1 2 8 ↓ GO TO 27	15	1 2 8 ↓ GO TO 29	15	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	15	15	15
16	1 2 8 ↓ GO TO 25	16	1 2 8 ↓ GO TO 27	16	1 2 8 ↓ GO TO 29	16	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	16	16	16
17	1 2 8 ↓ GO TO 25	17	1 2 8 ↓ GO TO 27	17	1 2 8 ↓ GO TO 29	17	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	17	17	17
18	1 2 8 ↓ GO TO 25	18	1 2 8 ↓ GO TO 27	18	1 2 8 ↓ GO TO 29	18	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	18	18	18
19	1 2 8 ↓ GO TO 25	19	1 2 8 ↓ GO TO 27	19	1 2 8 ↓ GO TO 29	19	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	19	19	19
20	1 2 8 ↓ GO TO 25	20	1 2 8 ↓ GO TO 27	20	1 2 8 ↓ GO TO 29	20	Y N DK 1 2 8	1 2 8 ↓ GO TO 32	20	20	20



**HOUSEHOLD CHARACTERISTICS**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the <b>main</b> source of drinking water for members of your household? <i>Koe ha e ma'u'anga vai lahitaha ki he inu 'ae famili?</i>	CISTERN/TANK PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 CISTERN/TANK OWNED BY COMMUNITY ..... 21 OWNED BY NEIGHBOURS ..... 22 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32  BOTTLED WATER ..... 41  OTHER _____ 96 (SPECIFY)	→ 103 → 103
102	What is the <b>main</b> source of water used by your household for other purposes such as cooking and handwashing?  <i>Koe ha e ma'u'anga vai lahitaha 'a e famili ki he feime'atokoni mo e foo?</i>	CISTERN/TANK PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 CISTERN/TANK OWNED BY COMMUNITY ..... 21 OWNED BY NEIGHBOURS ..... 22 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32  BOTTLED WATER ..... 41  OTHER _____ 96 (SPECIFY)	→ 106
103	Where is that water source located? <i>Oku tu'u 'I fe 'a e ma'u'anga vai koia?</i>	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? <i>Koe ha e fuoloa 'ae 'alu kiai 'o 'omai e vai pea toe foki mai?</i>	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? <i>Ko hai 'oku fa'a 'alu 'o 'omai e vai ma'ae 'api moe famili?</i>	ADULT WOMAN ..... 1 ADULT MAN ..... 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? <i>Oku ke toe fai ha me'a ki he vai ke hao moe leleiange ki he inu?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 108
107	What do you usually do to make the water safer to drink? <i>Ko e ha e me'a 'oku ke fakahoko ke hao mo leleiange vai ki he inu?</i> Anything else? <i>Oku toe 'I ai mo ha me'a kehe?</i>  RECORD ALL MENTIONED.	BOIL ..... A ADD BLEACH/CHLORINE ..... B STRAIN THROUGH A CLOTH ..... C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) ..... D SOLAR DISINFECTION ..... E LET IT STAND AND SETTLE ..... F  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																																													
108	<p>What kind of toilet facility do members of your household usually use?</p> <p><i>Koe ha e fa'ahinga kalasi 'o e falemalolo (hufanga he fakatapu) 'oku fa'a ngaue'aki 'e ho'o famili pe 'api?</i></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>COMPOSTING TOILETS.....31</p> <p>BUCKET TOILET..... 41</p> <p>HANGING TOILET..... 51</p> <p>NO FACILITY/BUSH/BEACH ..... 61</p> <p>OTHER _____ 96 (SPECIFY)</p>	→ 111																																																																																													
109	<p>Do you share this toilet facility with other households?</p> <p><i>Oku mou vahevahe 'ae falemalolo (hufanga he fakatapu) mo ha ngaahi famili kehe?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 111																																																																																													
110	<p>How many households use this toilet facility?</p> <p><i>Koe famili pe 'api 'e fiha 'oku nau ngaue'aki 'ae falemalolo (hufanga he fakatapu)?</i></p>	<p>NO. OF HOUSEHOLDS</p> <p>IF LESS THAN 10 ..... <input type="text"/> <input type="text"/></p> <p>10 OR MORE HOUSEHOLDS ..... 95</p> <p>DON'T KNOW ..... 98</p>																																																																																														
111	<p>Does your household have:</p> <p><i>Oku ma'u 'I ho 'api pe famili 'a e ngaahi me'a ni?</i></p> <p>Electricity? <i>uhila?</i></p> <p>A radio? <i>letio?</i></p> <p>A television? <i>televisione?</i></p> <p>A mobile telephone? <i>telefoni to'oto'o?</i></p> <p>A landline telephone? <i>telefoni laine?</i></p> <p>A refrigerator? <i>aisi fakamokomoko?</i></p> <p>A deep freezer? <i>aisi momoko?</i></p> <p>A gas stove <i>sitou kasa?</i></p> <p>A kerosene stove? <i>sitou kalasini?</i></p> <p>A mirowave oven? <i>ovani micro-wave?</i></p> <p>An electric jug or kettle? <i>tipota pe tikatele 'uhila?</i></p> <p>A rice cooker? <i>kulo pe me'a haka'anga laise?</i></p> <p>A blender? <i>misini 'oku ne momosi, fakamolou mo fakahuhu'a 'a e me'akai, fua'l'aka.</i></p> <p>A sewing machine? <i>misini tuitui?</i></p> <p>A CD/cassette player? <i>me'alea 'oku ta moe ngaue'aki ai e</i></p> <p>A video or DVD player? <i>misini vitio 'oku ngaue'aki ai e DVD?</i></p> <p>A water pump? <i>misini pamu vai?</i></p> <p>A washing machine? <i>misini fo?</i></p> <p>A computer? <i>komipiuta?</i></p> <p>An electric fan? <i>I 'uhila?</i></p> <p>An air conditioner? <i>misini 'ea fakamokomoko?</i></p> <p>A bed? <i>mohenga?</i></p> <p>A table? <i>tepile?</i></p> <p>A chair? <i>sea?</i></p> <p>A sofa? <i>sea sofa?</i></p> <p>A food safe? <i>feitu'u malu kihe tuku'anga me'akai?</i></p> <p>A cupboard? <i>kopate?</i></p> <p>A clock or wall clock? <i>uasi holisi?</i></p> <p>A generator? <i>misini generator?</i></p> <p>A solar power? <i>misini ma'u'anga ivi mei he la'aa?</i></p>	<table> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr><td>ELECTRICITY .....</td><td>1</td><td>2</td></tr> <tr><td>RADIO .....</td><td>1</td><td>2</td></tr> <tr><td>TELEVISION .....</td><td>1</td><td>2</td></tr> <tr><td>MOBILE TELEPHONE .....</td><td>1</td><td>2</td></tr> <tr><td>NON-MOBILE TELEPHONE ..</td><td>1</td><td>2</td></tr> <tr><td>REFRIGERATOR.....</td><td>1</td><td>2</td></tr> <tr><td>DEEP FREEZER .....</td><td>1</td><td>2</td></tr> <tr><td>GAS STOVE .....</td><td>1</td><td>2</td></tr> <tr><td>KEROSENE STOVE .....</td><td>1</td><td>2</td></tr> <tr><td>MICROWAVE OVEN .....</td><td>1</td><td>2</td></tr> <tr><td>ELECTRIC JUG/KETTLE .....</td><td>1</td><td>2</td></tr> <tr><td>RICE COOKER .....</td><td>1</td><td>2</td></tr> <tr><td>BLENDER .....</td><td>1</td><td>2</td></tr> <tr><td>SEWING MACHINE .....</td><td>1</td><td>2</td></tr> <tr><td>CD/CASSETTE PLAYER .....</td><td>1</td><td>2</td></tr> <tr><td>VIDEO OR DVD PLAYER .....</td><td>1</td><td>2</td></tr> <tr><td>ELECTRIC WATER PUMP ...</td><td>1</td><td>2</td></tr> <tr><td>WASHING MACHINE .....</td><td>1</td><td>2</td></tr> <tr><td>DESK/LAP TOP .....</td><td>1</td><td>2</td></tr> <tr><td>ELECTRIC FAN .....</td><td>1</td><td>2</td></tr> <tr><td>AIR CONDITIONER .....</td><td>1</td><td>2</td></tr> <tr><td>BED .....</td><td>1</td><td>2</td></tr> <tr><td>TABLE .....</td><td>1</td><td>2</td></tr> <tr><td>CHAIR .....</td><td>1</td><td>2</td></tr> <tr><td>SOFA .....</td><td>1</td><td>2</td></tr> <tr><td>FOOD SAFE .....</td><td>1</td><td>2</td></tr> <tr><td>CUPBOARD .....</td><td>1</td><td>2</td></tr> <tr><td>CLOCK OR WALL CLOCK ...</td><td>1</td><td>2</td></tr> <tr><td>GENERATOR .....</td><td>1</td><td>2</td></tr> <tr><td>SOLAR POWER .....</td><td>1</td><td>2</td></tr> </tbody> </table>		YES	NO	ELECTRICITY .....	1	2	RADIO .....	1	2	TELEVISION .....	1	2	MOBILE TELEPHONE .....	1	2	NON-MOBILE TELEPHONE ..	1	2	REFRIGERATOR.....	1	2	DEEP FREEZER .....	1	2	GAS STOVE .....	1	2	KEROSENE STOVE .....	1	2	MICROWAVE OVEN .....	1	2	ELECTRIC JUG/KETTLE .....	1	2	RICE COOKER .....	1	2	BLENDER .....	1	2	SEWING MACHINE .....	1	2	CD/CASSETTE PLAYER .....	1	2	VIDEO OR DVD PLAYER .....	1	2	ELECTRIC WATER PUMP ...	1	2	WASHING MACHINE .....	1	2	DESK/LAP TOP .....	1	2	ELECTRIC FAN .....	1	2	AIR CONDITIONER .....	1	2	BED .....	1	2	TABLE .....	1	2	CHAIR .....	1	2	SOFA .....	1	2	FOOD SAFE .....	1	2	CUPBOARD .....	1	2	CLOCK OR WALL CLOCK ...	1	2	GENERATOR .....	1	2	SOLAR POWER .....	1	2	
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112	What type of fuel does your household <b>mainly</b> use for cooking? <i>Koe ha e ma'u'anga ivi (power and heat) 'oku ngaue'aki lahitaha 'e ho famili ki he feime'atokoni?</i>	ELECTRICITY ..... 01 GAS ..... 02 KEROSENE ..... 03 WOOD ..... 04 COCONUT PARTS ..... 05  NO FOOD COOKED IN HOUSEHOLD ..... 95  OTHER _____ 96 (SPECIFY)	→ 115      → 117
113	In this household, is food cooked on an open fire, an open stove or a closed stove? <i>I 'api ni, 'oku fakahoko e feime'atokoni 'I he afi pe 'oku tafu pea ata'ata ki tu'a pe koha sitou 'oku 'ata pe ki tu'a pe koha sitou 'oku tapuni malu?</i> PROBE FOR TYPE.	OPEN FIRE ..... 1 OPEN STOVE ..... 2 CLOSED STOVE WITH CHIMNEY ..... 3  OTHER _____ 6 (SPECIFY)	→ 115
114	Does this (fire/stove) have a chimney, a hood, or neither of these? <i>Oku 'I ai ha halanga paipa pe ko ha fakafale ki he afi pe sitou pe 'oku hala fakatou'osi?</i>	CHIMNEY ..... 1 HOOD ..... 2 NEITHER ..... 3	
115	Is the cooking usually done in the house, in a separate building, or outdoors? <i>Oku fa'a fakahoko 'ae feime'atokoni 'I fale pe 'I ha fale 'e taha pe 'I tu'a?</i>	IN THE HOUSE ..... 1 IN A SEPARATE BUILDING ..... 2 OUTDOORS ..... 3  OTHER _____ 6 (SPECIFY)	→ 117
116	Do you have a separate room which is used as a kitchen? <i>Oku 'I ai ha loki makehe 'oku ngaue'aki kihe feime'atokoni?</i>	YES ..... 1 NO ..... 2	
117	<b>MAIN MATERIAL OF THE FLOOR.</b> <i>Naunau lahitaha 'oku ngaohi mei ai e faliki 'o e fale?</i> RECORD OBSERVATION.	NATURAL FLOOR GRAVEL/SAND ..... 11 RUDIMENTARY FLOOR WOOD PLANKS ..... 21 COCONUT MIDRIBS ..... 22 FINISHED FLOOR PARQUET OR POLISHED WOOD ..... 31 CEMENT ..... 32 CEMENT WITH CERAMIC ..... 33 CEMENT WITH CARPET ..... 34  OTHER _____ 96 (SPECIFY)	
118	<b>MAIN MATERIAL OF THE ROOF.</b> <i>Naunau lahitaha 'oku ngaohi mei ai e 'ato 'o e fale?</i> RECORD OBSERVATION.	NATURAL ROOFING NO ROOF ..... 11 LOCAL THATCH ..... 12 RUDIMENTARY ROOFING WOOD PLANKS ..... 21 FINISHED ROOFING METAL ..... 31  OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																														
119	<b>MAIN MATERIAL OF THE EXTERIOR WALLS.</b> <i>Naunau lahitaha 'oku ngaohi mei ai e holisi 'o e fale?</i> 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)																															
120	How many rooms in this household are used for sleeping? <i>Koe loki mohe 'e fiha he fale ni?</i>	ROOMS ..... <input type="text"/> <input type="text"/>																															
121	Does any member of this household own this house? <i>Oku 'l ai ha tokotaha he famili 'oku 'a'ana 'a e fale ni?</i>	YES ..... 1 NO ..... 2																															
122	Does any member of this household own any (other) house? <i>Oku toe 'l ai ha fale kehe 'oku ma'u 'e ha tokotaha he 'api ni?</i>	YES ..... 1 NO ..... 2																															
123	Does any member of this household own:  A watch? <i>uasi?</i> A bicycle? <i>pasikala?</i> A motorcycle or motor scooter? A car or truck? <i>ka pe koe loli?</i> Animal cart? <i>taulani 'oku toho 'e ha monumanu (hufanga he fakatapu)?</i> A boat? <i>vaka?</i> An Outboat motor? A canoe? <i>popao</i> A fishing gear? <i>naunau taumata'u pe toutai?</i>	<table 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>WATCH .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BICYCLE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOTORCYCLE/SCOOTER ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>CAR/TRUCK .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>ANIMAL CART .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BOAT .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOTOR .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>CANOE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>FISHING GEAR .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	WATCH .....	1	2	BICYCLE .....	1	2	MOTORCYCLE/SCOOTER ...	1	2	CAR/TRUCK .....	1	2	ANIMAL CART .....	1	2	BOAT .....	1	2	MOTOR .....	1	2	CANOE .....	1	2	FISHING GEAR .....	1	2	
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124	Does any member of this household own any: <i>Oku 'l ai tokotahaha h 'api ni 'oku ne ma'u ha?</i>  a: residential land? <i>kelekele 'api nofo'anga?</i> b: agricultural land? <i>kelekele ki he ngoue?</i> c. commercial land? <i>kelekele 'oku fai ai ha ngaue fefakatau'aki?</i>	<table 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>RESIDENTIAL LAND .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>AGRICULTURAL LAND .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>COMMERCIAL LAND .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	RESIDENTIAL LAND .....	1	2	AGRICULTURAL LAND .....	1	2	COMMERCIAL LAND .....	1	2																			
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125	Does this household own any livestock or poultry? <i>Oku ma'u 'e he 'api ko 'eni ha fanga monumanu pe fanga moa?</i>	YES ..... 1 NO ..... 2	→ 127																														
126	How many of the following animals does this household own? <i>Koe monumanu 'e fiha 'a e 'api ni?</i>  IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.  Pigs <i>Puaka</i>  Ducks <i>Pato</i>  Chickens? <i>Moa</i>  Cattles <i>Pulu</i>  Goats <i>Kosi</i>  Sheeps <i>Sipi</i>  Horses <i>Hoosi</i>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>PIGS .....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>DUCKS .....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>CHICKENS .....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>CATTLES.....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>GOATS.....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>SHEEPS.....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td>HORSES.....</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> </tbody> </table>	PIGS .....	<input type="text"/>	<input type="text"/>	DUCKS .....	<input type="text"/>	<input type="text"/>	CHICKENS .....	<input type="text"/>	<input type="text"/>	CATTLES.....	<input type="text"/>	<input type="text"/>	GOATS.....	<input type="text"/>	<input type="text"/>	SHEEPS.....	<input type="text"/>	<input type="text"/>	HORSES.....	<input type="text"/>	<input type="text"/>										
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127	Does any member of this household have a bank account? <i>Oku 'l ai ha tokotaha he 'api 'oku 'l ai ha'ane tohi pangike?</i>	YES ..... 1 NO ..... 2																															

128 THE FOLLOWING QUESTIONS WILL BE USED TO MEASURE FAMILY/HOUSEHOLD MATERIAL WELL-BEING OR HARDSHIP ASK THE HEAD OF THE HOUSEHOLD OR ANY ADULT MEMBER OF THE HOUSEHOLD				
		Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it? OR Is it because you don't want it (DW)
129	Enough money to replace any worn out furniture NAME) have? <i>'Oku 'i ai nai ha pa'anga fe'unga ke fakatau mai'aki ha fakafale 'o e ngaahi naunau fakafale kuo fu'u motu'a mo maumau?</i>	YES ..... 1 NO ..... 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
130	goods such as refrigerator or washing machine? <i>'Oku 'i ai nai ha pa'ang fe'unga ke fakatau mai'aki ha fakafale 'o e ngaahi naunau fakafale kuo maumau hange ko e 'aisi mo e misini foo?</i>	YES ..... 1 NO ..... 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
131	Regular savings for emergencies? <i>'Oku 'i ai nai ha pa'anga 'oku toutou tanaki pe tauhi ki ha fakatamaki 'e hoko mai pe ko ha ha me'a fakatu'upake?</i>	YES ..... 1 NO ..... 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
132	All medicine prescribed by your doctor, when you are sick? <i>'Oku 'i ai nai ha pa'ang fe'unga ke fakatau mai'aki 'a e ngaahi fairo'o mo e fo'lakau 'oku fakangofua 'e he toketaa kehe ke ma'u lolotonga ho'o puke?</i>	YES ..... 1 NO ..... 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
133	Having your own means of transportation (car, boat, motorcycle, etc.) <i>'Oku 'i ai pe ha'o me'alele ki he fefononga'aki hange koe kaa, vaka pe pasikala?</i>	YES ..... 1 NO ..... 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
134	Which one of the following statements best describes how well your household has been keeping up with bills and credit commitments in the last 12 months? <i>Ko e fe 'i he ngaahi fakamatala ko 'eni te ne lava 'o fakafofonga'i lelei 'a e fakakakato 'o e ngaahi fiema'u fakapa'anga mo e fakamo'ua fakapa'anga ho famili i he mahina 'e 12 kuohili?</i>		KEEPING UP WITH BILLS WITHOUT ANY DIFFICULTIES ..... 1 BUT IS IS A STRUGGLE FROM TIME TO TIME ..... 2 BUT IT IS A CONSTANT STRUGGLE ..... 3 HAVE FALLEN BEHIND WITH SOME OF THEM ..... 4 HAVE FALLEN BEHIND WITH MANY OF THEM ..... 5	
135	Generally, how would you rate your standard of living? <i>Ko e ha ha'o fakamaau ki he tu'unga 'i ai ho famili?</i>		WELL ABOVE AVERAGE ..... 1 ABOVE AVERAGE ..... 2 AVERAGE ..... 3 BELOW AVERAGE ..... 4 WELL BELOW AVERAGE ..... 5	

**INPATIENT HEALTH EXPENDITURES**

136	CHECK COLUMN 24: ONE OR MORE <input type="checkbox"/> INPATIENTS NO <input type="checkbox"/> INPATIENTS	→ 154		
137	CHECK COLUMN 24 AND COLUMN 2: ENTER THE LINE NUMBER AND NAME OF EACH HOUSEHOLD MEMBER WHO WAS AN INPATIENT. Now I would like to ask some questions about the household members who stayed overnight in a health facility in the <b>last six months</b> .			
138	LINE NUMBER FROM COLUMN 24 IN HOUSEHOLD SCHEDULE	INPATIENT 1 LINE NUMBER <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>	INPATIENT 2 LINE NUMBER <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>	INPATIENT 3 LINE NUMBER <input style="width:20px; height:20px;" type="text"/> <input style="width:20px; height:20px;" type="text"/>
139	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	INPATIENT NAME _____	INPATIENT NAME _____	INPATIENT NAME _____
140	Where did (NAME) most recently stay overnight for health care? <i>Koe fe feitu'u na'e nofo pea mohe fakamuimui taha ai 'a (hingoa) 'I he'ene puke pe fiema'u ki he'ene mo'ui?</i>	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY) _____  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY) _____  OTHER _____ 96 (SPECIFY) _____	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY) _____  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY) _____  OTHER _____ 96 (SPECIFY) _____	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY) _____  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY) _____  OTHER _____ 96 (SPECIFY) _____
141	What was the main reason for (NAME) to seek care this most recent time? <i>Ko e ha e 'uhinga lahi 'a e kumi tokoni fakafalemahaki fakamuimui taha 'a (hingoa)?</i>	PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY) _____	PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY) _____	PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY) _____
142	How much money in total did (NAME) spend on treatment and services received during the most recent overnight stay? We want to know about all the costs for the stay, including any charges for laboratory tests, drugs, or other items.	TOTAL COST <input style="width:40px; height:20px;" type="text"/>  NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 143) ←	TOTAL COST <input style="width:40px; height:20px;" type="text"/>  NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 143) ←	TOTAL COST <input style="width:40px; height:20px;" type="text"/>  NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 143) ←

142A	<p>How much of the total cost did (NAME) spend on the following items: <i>Ko e ha e fakamole fakapa'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i></p> <p>Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i></p> <p>Ticket moderators? <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i></p> <p>Drugs? <i>Faito'o moe Fo'akau</i></p> <p>Lab. Tests? <i>Sivi fakakemi</i></p> <p>Other diagnostic tests? <i>Ngaahi sivi kehe?</i></p> <p>Anything else (SPECIFY)? <i>Na'e toe 'I ai mo ha fakamole kehe?</i></p> <p>Total</p>	<p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>
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142B CHECK THE TOTAL IN 142A: IF IT EQUALS THE TOTAL COST IN 142 GO 142C; IF NOT GO BACK TO 142 AND CORRECT IT.

142C	<p>From which of the following sources did you raise money to pay for the most recent treatment? Please specify how much was contributed from each source:</p> <p>Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family? <i>No mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling assets? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'ae nofo fakafalemahaki fakamuimui taha?</i></p> <p><i>Kataki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i></p> <p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>
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142D CHECK THE TOTAL IN 142C: IF IT EQUALS THE TOTAL COST IN 142 GO TO 143; IF NOT GO BACK TO 142C AND CORRECT IT.

143	<p>Did (NAME) stay overnight at a medical facility another time in the last six months? <i>Na'e toe nofo falemahaki (pe kiliniki) 'a (hingoa) 'I ha toe feitu'u 'e taha he mahina e ono kuo hili?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO TO 138 IN ← FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE INPATIENTS, GO TO 152)</p>
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144	<p>Where did (NAME) stay the next-to-last time he/she stayed overnight for health care? <i>Na'e nofo 'I fe he'ene nofo fakafalemahaki hono ua koia?</i></p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>
145	<p>What was the main reason for (NAME) to seek care this next-to-last time? <i>Koe ha e tefito' 'uhinga 'a e kumi pe sio fakafalemahaki hono ua 'a (hingoa)?</i></p>	<p>PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY)</p>	<p>PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY)</p>	<p>PREGNANCY/ DELIVERY ..... 01 DELIVERY COMPLICATIONS 02 ILLNESS ..... 03 ACCIDENT ..... 04 OTHER _____ 06 (SPECIFY)</p>
146	<p>How much money in total did (NAME) spend on treatment and services received during the next-to-last overnight stay? We want to know about all the costs for the stay, including any charges for laboratory tests, drugs, or other items.</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 147) ←</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 147) ←</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 147) ←</p>
146A	<p>How much of the total cost did (NAME) spend on the following items: <i>Ko e ha e fakamole fakapa 'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i> Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i> Ticket moderators? <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i> Drugs? <i>Totongi 'o e Faito'o moe Fo'll'akau</i> Lab. Tests? <i>Sivi fakakemi</i> Other diagnostic tests? <i>Ngaahi Sivi kehe?</i> Anything else (SPECIFY)?</p> <p>Total</p>	<p>CONS. <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"/><input type="text"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>	<p>CONS. <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"/><input type="text"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>	<p>CONS. <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"/><input type="text"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>



146B	CHECK THE TOTAL IN 146A: IF IT EQUALS THE TOTAL COST IN 146 GO TO 146C; IF NOT GO BACK TO 146 AND CORRECT IT.			
146C	<p>From which of the following sources did you raise money to pay for the next-to-last treatment? Please specify how much was contributed from each source:</p> <p>Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family? <i>Pa'anga na'e no mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling assets? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'ae nofo fakafalemahaki hono ua fakamuimui taha?</i></p> <p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p>
146D	CHECK THE TOTAL IN 146C: IF IT EQUALS THE TOTAL COST IN 146 GO TO 147; IF NOT GO BACK TO 146C AND CORRECT IT.			
147	<p>Besides the two stays you have told me about, did (NAME) stay overnight in a medical facility another time in the last six months? <i>Tukukehe ange 'ae nofo fakafalemahaki 'e ua kuo ke talamai fekau'aki mo (hingoa) na'e to e nofo fakafalemahaki 'I ha toe taimi kehe he mahina 'e ono kuo hili?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO TO 138 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE INPATIENTS, GO TO 152)</p>
148	<p>Where did (NAME) stay the second-to-last time he/she stayed overnight for health care? <i>Na'e nofo pe tokoto 'I fe he'ene nofo fakafalemahaki hono tolu koia?</i></p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OTHER PUBLIC FACILITY _____ 24 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY 32 PHARMACY 33 OTHER PRIVATE MED. FACILITY _____ 34 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>

149	<p>What was the main reason for (NAME) to seek care this second-to-last time?</p> <p><i>Koe ha e tefito'i 'uhinga 'ene nofo fakafalemahaki hono tolu koia?</i></p>	<p>PREGNANCY/ DELIVERY ..... 01          DELIVERY          COMPLICATIONS 02          ILLNESS ..... 03          ACCIDENT ..... 04          OTHER          _____ 06          (SPECIFY)</p>	<p>PREGNANCY/ DELIVERY ..... 01          DELIVERY          COMPLICATIONS 02          ILLNESS ..... 03          ACCIDENT ..... 04          OTHER          _____ 06          (SPECIFY)</p>	<p>PREGNANCY/ DELIVERY ..... 01          DELIVERY          COMPLICATIONS 02          ILLNESS ..... 03          ACCIDENT ..... 04          OTHER          _____ 06          (SPECIFY)</p>
150	<p>How much money in total did (NAME) spend on treatment and services received during the second-to-last overnight stay? We want to know about all the costs for the stay, including any charges for laboratory tests, drugs, or other items.</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/          FREE ..... 000000          IN KIND ..... 999995          DON'T KNOW . 999998          (GO TO 151) ←</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/          FREE ..... 000000          IN KIND ..... 999995          DON'T KNOW . 999998          (GO TO 151) ←</p>	<p>TOTAL COST <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"/><input type="text"/></p> <p>NO COST/          FREE ..... 000000          IN KIND ..... 999995          DON'T KNOW . 999998          (GO TO 151) ←</p>
150A	<p>How much of the total cost did (NAME) spend on the following items? <i>Ko e ha e fakamole fakapa 'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i></p> <p>Consultation fees?  <i>Totongi 'o e sio ki he toketaa?</i></p> <p>Ticket moderators?  <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i></p> <p>Drugs?  <i>Totongi 'o e Faito'o moe Fo'l'akau</i></p> <p>Lab. Tests?  <i>Sivi fakakemi</i></p> <p>Other diagnostic tests?  <i>Ngaahi Sivi kehe?</i></p> <p>Anything else (SPECIFY)?</p> <p>Total</p>	<p>CONS. <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"/><input type="text"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>	<p>CONS. <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"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>	<p>CONS. <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"/></p> <p>TICK. <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"/></p> <p>DRUG <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"/></p> <p>LAB. <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"/></p> <p>DIAG <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"/></p> <p>_____ <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"/></p> <p>TOTAL <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"/></p>
150B	CHECK THE TOTAL IN 150A: IF IT EQUALS THE TOTAL COST IN 150 GO TO 150C; IF NOT GO BACK TO 150 AND CORRECT IT.			
150C	<p>From which of the following sources did you raise money to pay for the second-to-last treatment? Please specify how much was contributed from each source:</p> <p>Income?  <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family?  <i>Pa'anga na'e no mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources?  <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family?  <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources?  <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling assets?  <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'ae nofo fakafalemahaki fakamuimui taha?</i></p> <p><i>Kataki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i></p> <p>INCO. <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"/><input type="text"/></p> <p>B.FAMIL <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"/></p> <p>_____ <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"/></p> <p>A. 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FAMIL <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"/></p> <p>_____ <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"/></p> <p>ASSET. <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"/></p> <p>TOTAL <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"/></p>	<p>INCO. <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"/><input type="text"/></p> <p>B.FAMIL <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"/></p> <p>_____ <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"/></p> <p>A. FAMIL <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"/></p> <p>_____ <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"/></p> <p>ASSET. <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"/></p> <p>TOTAL <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"/></p>
150D	CHECK THE TOTAL IN 150C: IF IT EQUALS THE TOTAL COST IN 150 GO TO 151; IF NOT GO BACK TO 150C AND CORRECT IT.			

151	<p>Besides the three stays you have told me about, did (NAME) stay overnight in a medical facility another time in the last six months? <i>Tuku keheange 'a e nofo fakafalemahaki 'e tolu kuo ke 'osi talanoa mai kiai, na'e toe 'i ai ha nofo fakafalemahaki a (hingoa) 'i ha feitu'u 'e taha 'i ha taimi kehe lolotonga e mahina 'e 6 kuo hili?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 152)</p>	<p>YES ..... 1 NO ..... 2 (GO TO 138 IN ← FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE INPATIENTS, GO TO 152)</p>
152	<p>In total, how many times did (NAME) stay overnight in a medical facility in the last six months?</p>	<p>NUMBER OF INPATIENT VISITS <input type="text"/> <input type="text"/></p>	<p>NUMBER OF INPATIENT VISITS <input type="text"/> <input type="text"/></p>	<p>NUMBER OF INPATIENT VISITS <input type="text"/> <input type="text"/></p>
153	<p><i>I he fakakatoa na'e tu'o fiha e nofo fakafalemahaki ('aho moe po'uli) a (hingoa) lolotonga e mahina 'e ono kuo hili?</i></p>	<p>GO BACK TO 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 154</p>	<p>GO BACK TO 138 IN NEXT COLUMN; OR, IF NO MORE INPATIENTS, GO TO 154</p>	<p>GO TO 138 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE INPATIENTS, GO TO 154</p>

OUTPATIENT HEALTH EXPENDITURES

154	CHECK COLUMN 26: ONE OR MORE <input type="checkbox"/> OUTPATIENTS ↓	NO <input type="checkbox"/> → 173 OUTPATIENTS		
155	CHECK COLUMN 26: ENTER THE LINE NUMBER AND NAME OF EACH HOUSEHOLD MEMBER WHO WAS AN OUTPATIENT. Now I would like to ask some questions about the household members who consulted a provider for health care in the <u>last four weeks</u> , without having stayed overnight.			
156	LINE NUMBER FROM COLUMN 26 IN HOUSEHOLD SCHEDULE	OUTPATIENT LINE NUMBER <input type="text"/> <input type="text"/>	OUTPATIENT LINE NUMBER <input type="text"/> <input type="text"/>	OUTPATIENT LINE NUMBER <input type="text"/> <input type="text"/>
157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
158	From what type of health provider did (NAME) get care most recently without staying overnight? <i>Ko e fe 'i taha 'o e ngaahi feitu'u ko 'eni na'a ke talatala fakamui ki ai?</i>	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... 42 FRIEND/RELAT. 43  OTHER _____ 44 (SPECIFY)	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #  OTHER _____ 44 (SPECIFY)	PUBLIC /AGREE SECTOR HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #  OTHER _____ 44 (SPECIFY)

157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
159	What was the main reason for (NAME) to seek care this most recent time? <i>Ko e ha 'a e 'uhinga tefito na'a ke talatala ai?</i>	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____. 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____. 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____. 22 (SPECIFY)
160	How much money in total did (NAME) spend on treatment and services received during the most recent consultation? Please include the consulting fee and any expenses for other items including drugs and tests.	TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 161) ←	TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 161) ←	TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 161) ←
160A1	How much of the total cost did (NAME) spend on the following items: <i>Ko e ha e fakamole fakapa 'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i> Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i> Ticket moderators? <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i> Drugs? <i>Totongi 'o e Faito'o moe Fo'lakau</i> Lab. Tests? <i>Sivi fakakemi</i> Other diagnostic tests? <i>Ngaahi Sivi kehe?</i> Anything else (SPECIFY)?  Total	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
160A2	How much of the total cost did (NAME) spend on the following items:  Public Sector <i>Pule'anga</i>  Private Sector <i>Kautaha taautaha</i>  Other Sector  Traditional Healer (Practitioner) <i>Faito'o faka-Tonga</i> Religious Healer(Practitioner) <i>Faito'o faka-Lotu</i>	<i>Ko e ha 'a e lahi 'o e fakamole fakalukufua na'a ke fakamole he ngaahi me'a ni?</i> PS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> PRS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	PS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> PRS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	PS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> PRS <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RP <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____																																																																																																																																																																								
160B	CHECK THE TOTAL IN 160A1: IF IT EQUALS THE TOTAL COST IN 160 GO TO 160C; IF NOT GO BACK TO 160 AND CORRECT IT.																																																																																																																																																																											
160C	<p>From which of the following sources did you raise money to pay for the most recent consultation? Please specify how much was contributed from each source:</p> <p>Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family? <i>Pa'anga na'e no mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling assets? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'ae nofo fakafalemahaki fakamuimui taha?</i></p> <p><i>Kataki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i></p> <p>INCO. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>B.FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>A. FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>ASSET. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>TOTAL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p>																																																									<p>INCO. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>B.FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>A. FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>ASSET. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>TOTAL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p>																																																									<p>INCO. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>B.FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>A. FAMIL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>_____ <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>ASSET. <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p> <p>TOTAL <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table></p>																																																								
160D	CHECK THE TOTAL IN 160C: IF IT EQUALS THE TOTAL COST IN 160 GO 161; IF NOT GO BACK TO 160C AND CORRECT IT.																																																																																																																																																																											
161	<p>Did (NAME) get care another time in the last four weeks without staying overnight? <i>Na'e 'iai ha'o to e talatala 'i he uike 'e fa kouhili 'o 'ikai fakatokoto?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>	<p>YES ..... 1 NO ..... 2 (GO TO 156 IN ← FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>																																																																																																																																																																								
162	<p>From what type of health provider did (NAME) get care the next-to-last time without staying overnight? <i>Ko e fe 'i taha 'o e ngaahi feitu'u ko 'eni na'a ke talatala fakamuimui ki ai kimu'a ho'o talatala fakamuimuitaha?</i></p>	<p>PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)</p> <p>OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... 42 FRIEND/RELAT. 43</p> <p>OTHER _____ 44 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)</p> <p>OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #</p> <p>OTHER _____ 44 (SPECIFY)</p>	<p>PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)</p> <p>OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #</p> <p>OTHER _____ 44 (SPECIFY)</p>																																																																																																																																																																								

157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
163	What was the main reason for (NAME) to seek care this next-to-last time? <i>Ko e ha 'a e 'uhinga tefito na'a ke talatala ai he fo'i talatala pe ko 'eni?</i>	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)
164	How much money in total did (NAME) spend on treatment and services received during the next-to-last consultation? Please include the consulting fee and any expenses for other items including drugs and tests.	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 165) ←	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 165) ←	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . . 999998 (GO TO 165) ←
164A	How much of the total cost did (NAME) spend on the following items: <i>Ko e ha e fakamole fakapa 'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i> Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i> Ticket moderators? <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i> Drugs? <i>Faito'o moe Fo'akau</i> Lab. Tests? <i>Sivi fakakemi</i> Other diagnostic tests? <i>Ngaahi sivi kehe?</i> Anything else (SPECIFY)? <i>Na'e toe 'i ai mo ha fakamole kehe?</i> Total	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
164B	CHECK THE TOTAL IN 164A: IF IT EQUALS THE TOTAL COST IN 164 GO TO 164C; IF NOT GO BACK TO 164 AND CORRECT IT.			
164C	From which of the following sources did you raise money to pay for the next-to-last consultation? Please specify how much was contributed from each source:  Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i> Borrowing from friend/family? <i>Pa'anga na'e no mei ha kaungame'a/famili?</i> Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i> Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i> Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i> Selling asset? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i> Total	<i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'a e talatala ko 'eni?</i> <i>Kataki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i> INCO. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> B.FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> A. FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ASSET. <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	INCO. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> B.FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> A. FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ASSET. <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	INCO. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> B.FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> A. FAMIL <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> ASSET. <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
164D	CHECK THE TOTAL IN 164C: IF IT EQUALS THE TOTAL COST IN 164 GO 165; IF NOT GO BACK TO 164C AND CORRECT IT.			
165	Besides the two visits you have told me about, did (NAME) get care another time in the last four weeks without staying overnight? <i>Makeheange mei ho'o talatala na'a ke fakaha mai, na'e to e 'iai ha'o talatala he uike 'e fa kuo hili?</i>	YES ..... 1 NO ..... 2 (GO BACK TO ← ) 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)	YES ..... 1 NO ..... 2 (GO BACK TO ← ) 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)	YES ..... 1 NO ..... 2 (GO TO 156 IN ← ) FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE OUTPATIENTS, GO TO 170)
166	From what type of health provider did (NAME) get care the second-to-last time without staying overnight? <i>Ko e fe 'i taha 'o e ngaahi feitu'u ko 'eni na'a ke talatala fakamuimui ki ai kimu'a ho'o ongo talatala fakamuimuitaha?</i>	PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... 42 FRIEND/RELAT. 43  OTHER _____ 44 (SPECIFY)	PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #  OTHER _____ 44 (SPECIFY)	PUBLIC /AGREE SECTOR REF. HOSPITAL 21 DISTRICT HOSPITAL ... 22 HEALTH CENTER ..... 23 OUTREACH 24 COMM. HEALTH WORKER 25 OTHER PUBLIC FACILITY _____ 26 (SPECIFY)  PRIVATE MEDICAL SECTOR CLINIC ..... 31 DISPENSARY . 32 PHARMACY ... 33 OTHER PRIVATE MED. FACILITY _____ 35 (SPECIFY)  OTHER SOURCE TRADITIONAL PRACTITIONER 41 CHURCH ..... # FRIEND/RELAT. #  OTHER _____ 44 (SPECIFY)



157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
167	What was the main reason for (NAME) to seek care this second-to-last time? <i>Ko e ha 'a e 'uhinga tefito na'a ke talatala ai he fo'i talatala pe ko 'eni?</i>	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)	RESPIRATORY ILLNESS . . . . . 01 TUBERCULOSIS . . . 02 DIARRHEA . . . . . 03 INTESTINAL WORMS 04 MALARIA . . . . . 05 FEVER . . . . . 06 SKIN DISEASE . . . . 07 STD . . . . . 08 HIV/AIDS . . . . . 09 VCT . . . . . 10 FAMILY PLANNING . 11 DIABETES . . . . . 12 EYE INFECTION . . . 13 DENTAL . . . . . 14 ACCIDENT/INJURY . 15 REGULAR CHECK-UP . . . . . 16 VACCINATION . . . . 17 DELIVERY . . . . . 18 ANTENATAL CARE 19 POSTNATAL CARE . . . . . 20 PHYSIOTHERAPY 21 OTHER _____ 22 (SPECIFY)
168	How much money in total did (NAME) spend on treatment and services received during the second-to-last consultation? Please include the consulting fee and any expenses for other items including drugs and tests.	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . 999998 (GO TO 169) ←	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . 999998 (GO TO 169) ←	TOTAL COST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> NO COST/ FREE . . . . . 000000 IN KIND . . . . . 999995 DON'T KNOW . 999998 (GO TO 169) ←
168A	How much of the total cost did (NAME) spend on the following items: <i>Ko e ha e fakamole fakapa 'anga fakalukufua 'a (HINGOA) ki he ngaahi me'a ni?</i> Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i> Ticket moderators? <i>Totongi 'o e tokotaha 'oku ngaue ki he tikite folau?</i> Drugs? <i>Faito'o moe Fo'Yakau</i> Lab. Tests? <i>Sivi fakakemi</i> Other diagnostic tests? <i>Ngaahi sivi kehe?</i> Anything else (specify)? <i>Na'e toe 'i ai mo ha fakamole kehe?</i> Total	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CONS. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TICK. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DRUG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> LAB. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DIAG <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"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TOTAL <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
168B	CHECK THE TOTAL IN 168A: IF IT EQUALS THE TOTAL COST IN 168 GO 168C; IF NOT GO BACK TO 168 AND CORRECT IT.			

157	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	OUTPATIENT NAME _____	OUTPATIENT NAME _____	OUTPATIENT NAME _____
168C	<p>From which of the following sources did you raise money to pay for the second-to-last treatment? Please specify how much was contributed from each source:</p> <p>Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family? <i>Pa'anga na'e no mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling asset? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'a e talatala ko 'eni?</i> <i>Kataki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i></p> <p>INCO. <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"/><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"/><input type="text"/><input type="text"/></p> <p>B.FAMIL <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"/><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"/><input type="text"/></p> <p>_____ <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"/><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"/><input type="text"/></p> <p>A. 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FAMIL <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"/><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"/><input type="text"/></p> <p>_____ <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"/><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"/><input type="text"/></p> <p>ASSET. <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"/><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"/><input type="text"/></p> <p>TOTAL <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"/><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"/><input type="text"/></p>	<p>INCO. <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"/><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"/><input type="text"/></p> <p>B.FAMIL <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"/><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"/><input type="text"/></p> <p>_____ <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"/><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"/><input type="text"/></p> <p>A. FAMIL <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"/><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"/><input type="text"/></p> <p>_____ <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"/><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"/><input type="text"/></p> <p>ASSET. <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"/><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"/><input type="text"/></p> <p>TOTAL <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"/><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"/><input type="text"/></p>
168D	CHECK THE TOTAL IN 168C: IF IT EQUALS THE TOTAL COST IN 168 GO 169; IF NOT GO BACK TO 168C AND CORRECT IT.			
169	<p>Besides the three visits you have told me about, did (NAME) get care another time in the last four weeks without staying overnight? <i>Makeheange mei he talatala 'e tolu kuo ke fakaha mai, na'a ke to e talatala he uike 'e fa kuohili 'o ikai fakatokoto?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO ← 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>	<p>YES ..... 1 NO ..... 2 (GO TO 156 IN ← FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE OUTPATIENTS, GO TO 170)</p>
170	In total, how many times did (NAME) get care from a health provider in the last four weeks, without staying overnight?	NUMBER OF OUTPATIENT VISITS <input type="text"/> <input type="text"/>	NUMBER OF OUTPATIENT VISITS <input type="text"/> <input type="text"/>	NUMBER OF OUTPATIENT VISITS <input type="text"/> <input type="text"/>
171	<i>Ko e ha leva 'a e lahi fakakatoa ho'o talatala mei ha fa'ahinga feitu'u pe he uike 'e 4 kuohili?</i>	GO BACK TO 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 172	GO BACK TO 156 IN NEXT COLUMN; OR, IF NO MORE OUTPATIENTS, GO TO 172	GO TO 156 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE OUTPATIENTS, GO TO 172
172	(Not including the costs for the health care consultations you told me about), how much did all members of your household spend on health-related items in the last four weeks? We want to include all health-related items such as drugs, vitamins, herbal remedies, family planning methods, and so on.	SPENT ON HEALTH LAST FOUR WEEKS ..... <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"/> <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"/> <input type="text"/>		

**OVERSEAS TREATMENT**

173	CHECK COLUMN 28: ONE OR MORE <input type="checkbox"/> OVERSEAS TREATMENT NO <input type="checkbox"/> OVERSEAS TREATMENT	→ 182		
174	CHECK COLUMN 28 AND 2: ENTER THE LINE NUMBER AND NAME OF EACH HOUSEHOLD MEMBER WHO HAS OVERSEAS OVERSEAS TREATMENT. Now I would like to ask some questions about the household members who recieved an health treatment overseas in the last <b><u>six months</u></b> .			
175	LINE NUMBER FROM COLUMN 28 IN HOUSEHOLD SCHEDULE OVERSEAS TREATMENT LINE NUMBER <input style="width:30px; height:20px;" type="text"/>	OVERSEAS TREATMENT LINE NUMBER <input style="width:30px; height:20px;" type="text"/>	OVERSEAS TREATMENT LINE NUMBER <input style="width:30px; height:20px;" type="text"/>	
176	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE OVERSEAS TREATMENT NAME _____	OVERSEAS TREATMENT NAME _____	OVERSEAS TREATMENT NAME _____	
177	In which counry did you receive health services? <i>Ko e fe nai 'a e fonua na'e fakahoko ai 'a e faito'o?</i>	COUNTRY NEW ZEALAND 21 AUSTRALIA ... 22 UNITED STATES 23 OTHERS ..... 24 COUNTRY _____ (SPECIFY)	COUNTRY NEW ZEALAND 21 AUSTRALIA ... 22 UNITED STATES 23 OTHERS ..... 24 COUNTRY _____ (SPECIFY)	COUNTRY NEW ZEALAND 21 AUSTRALIA ... 22 UNITED STATES 23 OTHERS ..... 24 COUNTRY _____ (SPECIFY)
178	What was the main reason for (NAME) to seek care <i>Ko e ha nai 'a e 'uhinga tefito 'o e faito'o ko 'eni 'i mull?</i>	CANCER ..... 01 MEDICAL 02 CHECKUP OTHER 03 _____ (SPECIFY)	CANCER ..... 01 MEDICAL 02 CHECKUP OTHER 03 _____ (SPECIFY)	CANCER ..... 01 MEDICAL 02 CHECKUP OTHER 03 _____ (SPECIFY)
179	How much in total did you pay out-of pocket for this treatment? <i>Ko e ha nai 'a e pa'anga fakakatoa na'e fakamole ki he faito'o ko 'eni?</i>	TOTAL COST <input style="width:50px; height:20px;" type="text"/> NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 199998 (GO TO 180) ←	TOTAL COST <input style="width:50px; height:20px;" type="text"/> NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 199998 (GO TO 180) ←	TOTAL COST <input style="width:50px; height:20px;" type="text"/> NO COST/ FREE ..... 000000 IN KIND ..... 999995 DON'T KNOW . 999998 (GO TO 180) ←

179A	<p>How much of the total cost did (NAME) spend on the following items:</p> <p>Travel? <i>Fakamole ki he folau</i></p> <p>Consultation fees? <i>Totongi 'o e sio ki he toketaa?</i></p> <p>Treatment fees? <i>Totongi 'o e faito'o na'e fai?</i></p> <p>Drugs? <i>Faito'o moe Fo'l'akau</i></p> <p>Lab. Tests? <i>Sivi fakakemi</i></p> <p>Other diagnostic tests? <i>Ngaahi sivi kehe?</i></p> <p>Anything else (SPECIFY)? <i>Na'e toe 'l ai mo ha fakamole kehe?</i></p> <p>Total</p>	<p><i>Koe ha e lahi e pa'anga mei he fakamole fakalukufua na'e fakamole kihe ngaahi me'a ni?</i></p> <p>CONS. <input type="text"/></p> <p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>CONS. <input type="text"/></p> <p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>CONS. <input type="text"/></p> <p>CONS. <input type="text"/></p> <p>TICK. <input type="text"/></p> <p>DRUG <input type="text"/></p> <p>LAB. <input type="text"/></p> <p>DIAG <input type="text"/></p> <p>_____ <input type="text"/></p> <p>TOTAL <input type="text"/></p>
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179B CHECK THE TOTAL IN 179A: IF IT EQUALS THE TOTAL COST IN 179 GO 179C; IF NOT GO BACK TO 179 AND CORRECT IT.

NAME FROM HHQ1 IN HOUSEHOLD SCHEDULE	OVERSEAS TREATMENT NAME _____	OVERSEAS TREATMENT NAME _____	OVERSEAS TREATMENT NAME _____
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179C	<p>From which of the following sources did you raise money to pay for the most recent treatment? Please specify how much was contributed from each source:</p> <p>Income? <i>Pa'anga ma'u mai (kau ai e vahe)?</i></p> <p>Borrowing from friend/family? <i>Pa'anga na'e no mei ha kaungame'a/famili?</i></p> <p>Borrowing from other sources? <i>Pa'anga na'e no mei ha feitu'u kehe?</i></p> <p>Assistance from friend/family? <i>Pa'anga tokoni mei ha kaungame'a/famili?</i></p> <p>Assistance from other sources? <i>Tokoni mei ha feitu'u kehe?</i></p> <p>Selling assets? <i>Pa'anga ma'u mei he fakatau ha ngaahi koloa?</i></p> <p>Social Health Insurance? <i>Malu'i Mo'ui</i></p> <p>Government? (Overseas Medical Treatment) <i>Mei he Pa'anga Faito'o 'a e Pule'anga?</i></p> <p>Total</p>	<p><i>Na'e ma'u mei fe 'a e pa'anga na'e totongi 'aki 'a e faito'o ko 'eni? Katakaki koe ha e lahi e pa'anga mei he ngaahi feitu'u takitaha?</i></p> <p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p>	<p>INCO. <input type="text"/></p> <p>B.FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>A. FAMIL <input type="text"/></p> <p>_____ <input type="text"/></p> <p>ASSET. <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p> <p>TOTAL <input type="text"/></p>
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179D	CHECK THE TOTAL IN 179C: IF IT EQUALS THE TOTAL COST IN 179 GO TO 180; IF NOT GO BACK TO 179C AND CORRECT IT.			
179E		GO TO 175 FOR NEXT RESPONDENT; IF NO MORE GO TO 180	GO TO 175 FOR NEXT RESPONDENT; IF NO MORE GO TO 180	GO TO 175 FOR NEXT RESPONDENT; IF NO MORE GO TO 180
180	<p>In the past 12 months, do you feel that your household's health has had an impact on your household's financial situation?</p> <p><i>I he mahina 'e 12 kuohili, 'oku ke tui nai oku 'ai ha uesia 'e he mo'ui lelei ho famili a ho'omou tu'unga fakapa'anga?</i></p>	<p>NOT AT ALL 21</p> <p>SLIGHTLY . . . 22</p> <p>QUITE A LOT 23</p> <p>A LOT 24</p>		
181	<p>Looking back over the past 12 months, do you feel your household's health has been affected by a lack of money?</p> <p><i>I he mahina 'e 12 kuohili, 'oku ke tui 'oku 'I ai ha uesia 'a e tu'unga mo'ui lelei ho famili ko e 'uhi ko e masivesiva fakapa'anga?</i></p>	<p>NOT AT ALL 21</p> <p>SLIGHTLY 22</p> <p>QUITE A LOT 23</p> <p>A LOT 24</p>		

DISABILITY

182	CHECK COLUMN 31: ONE OR MORE <input type="checkbox"/> DISABLED NO <input type="checkbox"/> DISABLED	→ 200		
183	CHECK COLUMN 31: ENTER THE LINE NUMBER AND NAME OF EACH HOUSEHOLD MEMBER WHO STATED THEY . ARE DISABLED OR HAVE LONG TERM HEALTH CONDITIONS IN THE LAST 12 MONTHS OR LIKELY TO LAST AT LEAST 12 MONTHS.			
184	LINE NUMBER FROM COLUMN 30 IN HOUSEHOLD SCHEDULE	DISABLED PERSON 1 LINE NUMBER <input type="text"/> <input type="text"/>	DISABLED PERSON 2 LINE NUMBER <input type="text"/> <input type="text"/>	DISABLED PERSON 3 LINE NUMBER <input type="text"/> <input type="text"/>
185	NAME FROM COLUMN 2 IN HOUSEHOLD SCHEDULE	NAME _____	NAME _____	NAME _____
186	Which type of disability(ies) or health condition do you (does NAME) have? <i>Ko e ha nai 'a e fa'ahinga faingata'a'ia 'oku mo'ua ai 'a (HINGOA)?</i>	PHYSICAL IMPAIRMENT 1 VISUAL IMPAIRMENT 2 HEARING IMPAIRMENT 3 SPEECH DISORDER 4 INTELLECTUAL IMPAIRMENT 5 LONG STANDING ILLNESS/HEALTH CONDITION 6 MENTAL HEALTH 7 OTHER _____ 9 (SPECIFY)	PHYSICAL IMPAIRMENT 1 VISUAL IMPAIRMENT 2 HEARING IMPAIRMENT 3 SPEECH DISORDER 4 INTELLECTUAL IMPAIRMENT 5 LONG STANDING ILLNESS/HEALTH CONDITION 6 MENTAL HEALTH 7 OTHER _____ 9 (SPECIFY)	PHYSICAL IMPAIRMENT 1 VISUAL IMPAIRMENT 2 HEARING IMPAIRMENT 3 SPEECH DISORDER 4 INTELLECTUAL IMPAIRMENT 5 LONG STANDING ILLNESS/HEALTH CONDITION 6 MENTAL HEALTH 7 OTHER _____ 9 (SPECIFY)
187	At what age you (NAME) first have this disability/or health condition? <i>Ko e ha nai 'a e ta'u motu'a 'o (HINGOA) 'i he taimi na'a ne fuofua ma'u ai 'a e faingata'a ni?</i>  if age is less than one year enter "00" in the box	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
188	What caused this/these disability/ties? <i>Ko e ha nai 'i he ngaahi 'uhinga ni na'a ne fakatupu 'a e palopalema?</i>	DISABLED SINCE BIRTH 1 ILLNESS/ SICKNESS 2 INJURY/ ACCIDENT 3 OTHER _____ 9 (SPECIFY)	DISABLED SINCE BIRTH 1 ILLNESS/ SICKNESS 2 INJURY/ ACCIDENT 3 OTHER _____ 9 (SPECIFY)	DISABLED SINCE BIRTH 1 ILLNESS/ SICKNESS 2 INJURY/ ACCIDENT 3 OTHER _____ 9 (SPECIFY)

189	<p>I'm interested to find out if this/ disability/health condition have given you difficulty in doing your day to day activities.</p> <p>Do you have any difficulties in carrying out your day to day activities?</p> <p><i>Oku 'iai nai hao faingata'a'ia hono fakahoko ho ngaahi fatongia faka'aho?</i></p>	<p>YES ..... 1 NO ..... 2 (GO TO 196) ←</p>	<p>YES ..... 1 NO ..... 2 (GO TO 196) ←</p>	<p>YES ..... 1 NO ..... 2 (GO TO 196) ←</p>
190	<p>Have you(NAME) had difficult bathing or showering?</p> <p><i>Oku 'iai nai ha faingata'a'ia 'o IHINGOA) hono tauhi ia ke ma'a (kaukau)?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>
191	<p>Have you(NAME) had difficult dressing?</p> <p><i>Oku 'iai ha faingata'a'ia 'o (HINGOA) i hono tui hono vala?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>
192	<p>Have you(NAME) had difficult in using the toilet?</p> <p><i>Oku 'iai ha faingata'a'ia 'o (HINGOA) i hono ngaue'aki 'a e fakamalolo?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>
193	<p>Have you(NAME) had difficult in getting in or out of a chair, bed or from the ground?</p> <p><i>Oku 'iai ha faingata'a'ia 'o (HINGOA) i he'ene tu'u mei he sea mohenga pe mei he faliki?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>
194	<p>Have you(NAME) had difficult eating?</p> <p><i>Oku 'iai ha faingata'a'ia 'o (HINGOA) i he'ene kai?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>
195	<p>Have you(NAME) had difficult in walking across the room without help?</p> <p><i>Oku 'iai ha faingata'a'ia 'o (HINGOA) i he'ene lue mei loki ki he loki ta'etokoni'?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>

196	<p>Now I want to find out if you (NAME) use any aids to assist you with your disability/condition?</p> <p>Do you usually use any aids, such as glasses(lens), walker wheelchair, etc?</p> <p><i>Oku ke ngaue'aki nai ha me'angaue ke tokoni'i koe?</i></p>	<p>YES ..... 1 NO ..... 2 (GO TO 198) ←</p>	<p>YES ..... 1 NO ..... 2 (GO TO 198) ←</p>	<p>YES ..... 1 NO ..... 2 (GO TO 198) ←</p>
197	<p>What type of aids do you usually use?</p> <p><i>Ko e ha 'a e ngaahi me'angaue oku ke ngaue'aki?</i></p> <p>Note: the answer can be more than one</p>	<p>GLASSES A OR CONTACT LENSES CANE B CRUTHERS C WALKER D WHEEL CHAIR E HEARING AIDS F</p> <p>OTHER X (SPECIFY)</p>	<p>GLASSES A OR CONTACT LENSES CANE B CRUTHERS C WALKER D WHEEL CHAIR E HEARING AIDS F</p> <p>OTHER X (SPECIFY)</p>	<p>GLASSES A OR CONTACT LENSES CANE B CRUTHERS C WALKER D WHEEL CHAIR E HEARING AIDS F</p> <p>OTHER X (SPECIFY)</p>
198	<p>Who usually provide assistance or look after you in this household?</p> <p><i>Ko hai 'oku ne fa'a tokoni'i 'a (HINGOA) 'i he famili ni?</i></p>	<p>RELATIVES 1 FRIENDS 2 WORKER 3 VOLUNTEER 4</p> <p>OTHER 9 (SPECIFY)</p>	<p>RELATIVES 1 FRIENDS 2 WORKER 3 VOLUNTEER 4</p> <p>OTHER 9 (SPECIFY)</p>	<p>RELATIVES 1 FRIENDS 2 WORKER 3 VOLUNTEER 4</p> <p>OTHER 9 (SPECIFY)</p>
199	<p>Do you receive any form of assistance in cash or in-kind from outside this household?</p> <p><i>Oku fa'a ma'u tokoni nai 'a (HINGOA) fakapa'anga pe ha to e me'a'ofa mei ha feitu'u makeheange mei he famili ni?</i></p>	<p>NONE 1 RELATIVES 2 FRIENDS 3 COMMUNITY 4 CHURCH 5 NATIONAL NGOS 6 INTERNATIONAL NGOS 7 GOVERNMENT 8</p> <p>OTHER 9 (SPECIFY)</p>	<p>NONE 1 RELATIVES 2 FRIENDS 3 COMMUNITY 4 CHURCH 5 NATIONAL NGOS 6 INTERNATIONAL NGOS 7 GOVERNMENT 8</p> <p>OTHER 9 (SPECIFY)</p>	<p>NONE 1 RELATIVES 2 FRIENDS 3 COMMUNITY 4 CHURCH 5 NATIONAL NGOS 6 INTERNATIONAL NGOS 7 GOVERNMENT 8</p> <p>OTHER 9 (SPECIFY)</p>



HARDSHIPS FOR CHILDREN AGED 1-15 YEARS

200	<p>CHECK COLUMN 32 FOR CHILDREN AGED 1-15 IN THE HOUSEHOLD SCHEDULE                  IF THERE IS ONE OR MORE CHILDREN IN THE HOUSEHOLD, MARK THE FIRST BOX AND ASK THE FOLLOWING QUESTIONS                  IF NO CHILDREN AGED 1-15, MARK THE SECOND BOX THEN GO TO QUESTION 212</p> <p>NOTE THAT THE HEAD OF THE HOUSEHOLD OR SPOUSE OR ANY ADULT SHOULD ANSWER ALL QUESTIONS ABOUT ALL CHILDREN IN THIS HOUSEHOLD.</p>			
201	<p>CHECK COLUMN 32:</p> <p style="text-align: center;">                     ONE OR MORE CHILDREN AGED 1-15 <input type="checkbox"/> <span style="margin-left: 150px;">NO CHILDREN AGED 1-15 <input type="checkbox"/></span> <span style="float: right;">→ 212</span> </p>			
		Is it essential for everyone?	Do you have it?	Is it because you cannot afford it? OR Is it because you don't want it
202	<p>New properly fitting, shoes  <i>Oku i ai ha'o su fo'ou 'e ua pea</i>  <i>'oku na hao lelei pe?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
203	<p>Three meals a day  <i>'Oku ke ma'u ha houa</i>  <i>ma'ume'atoki 'e tolu he 'aho?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
204	<p>Some new, not second-hand clothes  <i>'Oku i ai pe ha'o vala fo'ou ka</i>  <i>'oku 'ikai ko ha vala motu'a kuo</i>  <i>'osi tui 'e ha taha?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
205	<p>Celebrations on special occasions such as birthdays, Christmas or religious festival?  <i>'Oku fa'a fakahoko ha fakafiefia</i>  <i>he ngaahi 'aho hange ko e, fa'aho, Kilisimasi mo e fakalotu?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
206	<p>One meal with meat, chicken, fish or vegetarian equivalent daily  <i>'Oku ke ma'u pe kai ha kiki hange</i>  <i>koe pulu, ika moe moa he taha 'o e ngaahi houa kai?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
207	<p>All school uniform and equipment required (eg. Books, pen, etc)  <i>'Oku ma'u kakato atu ho'o</i>  <i>naunau 'oku fiema'u ki he ako, kau ai e kau ai e peni moe pepa?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
208	<p>Enough beds and bedding for every child in the household  <i>'Oku lahi fe'unga pe 'a e mohe'anga mo e ngaahi naunau mohenga ki he fanau kotoa pe he 'api ni?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
209	<p>To participate in school trips and school events that costs money  <i>'Oku i ai pe ha pa'anga fe'unga</i>  <i>ki he ngaahi 'a'ahi 'ae ako ki he ngaahi feitu'u kehekehe mo e fiema'u fakapa'anga e 'apiako?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
210	<p>Bicycle  <i>'Oku i ai ha'o pasikala?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>
211	<p>A suitable place to study or do homework  <i>'Oku i ai ha feitu'u fe'unga ke</i>  <i>ako ai mo fakahoko ai 'ene ngaue fakaako i 'api?</i></p>	<p>YES ..... 1                      NO ..... 2</p>	<p>Y N                      1 2 →                      ↓</p>	<p>Can't afford..... 1                      Don't want..... 2</p>

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HARDSHIPS FOR ADULTS AGED 16 YEARS AND OVER

212 CHECK COLUMN 33 AND 2 FOR ADULT ELIGIBILITY AND NAME IN THE HOUSEHOLD SCHEDULE  
RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE ADULTS AGED 16 AND OVER TO BE ASKED THE FOLLOWING QUESTIONS  
IF MORE THAN SIX ADULTS IN THIS HOUSEHOLD, USE CONTINUATION QUESTIONNAIRE

213 CHECK COLUMN 33:  
ONE OR MORE ADULTS AGED 16 AND OVER  NO ADULTS AGED 16 AND OVER  → 301

		ADULT 1			ADULT 2			ADULT 3		
214	LINE NUMBER FROM COLUMN 32  NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/>	NAME _____		LINE NUMBER ..... <input type="text"/>	NAME _____		LINE NUMBER ..... <input type="text"/>	NAME _____	

		Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?
215	Two pairs of properly fitting shoes, including a pair of all-weather shoes <i>'Oku 'i ai pe ha'o su lelei' e ua 'o kau ai 'ae su teke malava ke tui 'i ha fa'ahinga taimi pe 'o e fa'ahi ta'u?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
216	Two meals a day <i>'Oku ke ma'u ha houa ma'ume'atoki e ua he 'aho?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
217	A small amount of money to spend each week on yourself <i>'Oku 'i ai pe ha'o ki'i seniti si'isi'i fe'unga pe keke fakamole pe kiate koe 'i he uike kotoa pe ?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
218	Clothes to wear for social or family occasions such as parties or special church occasions? <i>'Oku 'i ai pe ha'o vala fe'unga ke tui ki he ngaahi fakataha'anga fakasosiale pea fakataha'anga makehe 'oe lotu?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
219	Replace worn-out clothes by some new (not second-hand) ones <i>'Oku 'i ai pe ha pa'anga fe'unga ke fakatau mai 'aki ha vala fo'ou 'aupito ke fetongj e ngaahi vala kuo fu'u motu'a, 'oku 'ikai kau heri e vala kuo 'osi ngaue'aki?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
220	To get together with friends/family for a drink/meal at least monthly <i>'Oku 'i ai pe ha pa'anga pa'anga fe'unga ke ke fakamole ki ha fakataha o ma'u me'atokoni fakataha mo e kaungame'a pe famili tu'o taha he mahina?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
221	Presents for friends or family once a year <i>'Oku 'i ai pe ha pa'anga fe'unga ke malava keke fakatau ha me'a'ofa ki ho ngaahi kaungame'a pe famili tu'o taha he ta'u?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
222	Enoung money to be able to visit friends and family in hospital or other institutions <i>'Oku 'i ai pe ha pa'anga fe'unga ke malava ke ke a'ahi ai ki ho kaungame'a, famili 'i falemahaki pe ko ha feitu'u pe?</i>	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
		(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)			(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)			(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)		

		ADULT 4			ADULT 5			ADULT 6		
214	LINE NUMBER FROM COLUMN 7  NAME FROM COLUMN 2	LINE NUMBER ..... <input type="text"/>			LINE NUMBER ..... <input type="text"/>			LINE NUMBER ..... <input type="text"/>		
		Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)
215	Two pairs of properly fitting shoes, including a pair of all-weather shoes 'Oku 'i ai pe ha'o su lelei 'e ua 'o kau ai 'ae su teke malava ke tui 'i ha fa'ahinga taimi pe 'o e fa'ahi ta'u?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
216	Two meals a day 'Oku ke ma'u ha houa ma'ume'atoki 'e ua he 'aho?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
217	A small amount of money to spend each week on yourself 'Oku 'i ai pe ha'o ki'i seniti si'si'i fe'unga pe keke fakamole pe kiate koe 'i he uike kotoa pe ?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
218	Clothes to wear for social or family occasions such as parties or special church occasions? 'Oku 'i ai pe ha'o vala fe'unga ke tui ki he ngaahi fakataha'anga fakasosiale pea fakataha'anga makehe 'oe lotu?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
219	Replace worn-out clothes by some new (not second-hand) ones 'Oku 'i ai pe ha pa'anga fe'unga ke fakatau mai 'aki ha vala fo'ou 'aupito ke fetongi e ngaahi vala kuo fu'u motu'a, 'oku 'ikai kau heni e vala kuo 'osi ngaue'aki?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
220	To get together with friends/family for a drink/meal at least monthly 'Oku 'i ai pe ha pa'anga fe'unga ke ke fakamole ki ha fakataha o ma'u me'atokoni fakataha mo e kaungame'a pe famili tu'o taha he mahina?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
221	Presents for friends or family once a year 'Oku 'i ai pe ha pa'anga fe'unga ke malava keke fakatau ha me'a'ofa ki ho ngaahi kaungame'a pe famili tu'o taha he ta'u?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
222	Enough money to be able to visit friends and family in hospital or other institutions 'Oku 'i ai pe ha pa'anga fe'unga ke malava ke ke a'ahi ai ki ho kaungame'a, famili 'i falemahaki pe ko ha feitu'u pe?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
		(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)			(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)			(GO TO 214 FOR NEXT ADULT OR, IF NO MORE, GO TO 301)		

**WEIGHT, HEIGHT/LENGTH MEASUREMENT FOR CHILDREN AGE 0-5**

301	CHECK COLUMN 11 AND 2. RECORD THE LINE NUMBER AND AGE FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 302. IF MORE THAN SIX CHILDREN, USE HOUSEHOLD CONTINUATION QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
302	LINE NUMBER FROM COLUMN 11 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 _____
303	What is (NAME'S) birth date?  IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK DAY, MONTH AND YEAR.	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"/>
304	CHECK 303: CHILD BORN IN JANUARY 2007 OR LATER?	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←
305	WEIGHT IN KILOGRAMS	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>
306	HEIGHT/LENGTH IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
307	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
308	RESULT OF WEIGHT AND HEIGHT/LENGTH MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
309		GO BACK TO 302 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 310		
		CHILD 4	CHILD 5	CHILD 6
302	LINE NUMBER FROM COLUMN 11 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 _____
303	What is (NAME'S) birth date?  IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK DAY, MONTH AND YEAR.	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"/>
304	CHECK 303: CHILD BORN IN JANUARY 2007 OR LATER	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←	YES ..... 1 NO ..... 2 (GO TO 303 FOR NEXT CHILD OR, IF NO MORE, GO TO 310) ←
305	WEIGHT IN KILOGRAMS	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>
306	HEIGHT/LENGTH IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
307	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
308	RESULT OF WEIGHT AND HEIGHT/LENGTH MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
309		GO BACK TO 302 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 310		

BLOOD PRESSURE, WEIGHT, HEIGHT MEASUREMENT FOR WOMEN AGE 15-49

310	CHECK COLUMN 9 AND COLUMN 2. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 331. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).  A FINAL OUTCOME FOR THE BLOOD PRESSURE MEASUREMENT MUST BE RECORDED IN 312, WEIGHT AND HEIGHT IN 314 AND 315.			
		WOMAN 1	WOMAN 2	WOMAN 3
311	LINE NUMBER (COLUMN 9)  NAME (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 _____
312	BLOOD PRESSURE IN MMHG	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>
313	RESULT OF BLOOD PRESSURE MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
314	WEIGHT IN KILOGRAMS	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
315	HEIGHT IN CENTIMETERS	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
316	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
317	GO BACK TO 311 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE WOMEN GO TO 318			
		WOMAN 4	WOMAN 5	WOMAN 6
311	LINE NUMBER (COLUMN 9)  NAME (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 _____
312	BLOOD PRESSURE IN MMHG	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>
313	RESULT OF BLOOD PRESSURE MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
314	WEIGHT IN KILOGRAMS	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
315	HEIGHT IN CENTIMETERS	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
316	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
317	GO BACK TO 311 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE WOMEN GO TO 318			

**BLOOD PRESSURE, WEIGHT, HEIGHT MEASUREMENT FOR MEN AGE 15 OR OVER**

318	CHECK COLUMN 10 AND COLUMN 2. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE MEN IN 319. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).  A FINAL OUTCOME FOR THE BLOOD PRESSURE MEASUREMENT MUST BE RECORDED IN 320, THE WEIGHT AND HEIGHT IN 322 AND 323.			
		MAN 1	MAN 2	MAN 3
319	LINE NUMBER (COLUMN 10)  NAME (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 _____
320	BLOOD PRESSURE IN MMHG	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>
321	RESULT OF BLOOD PRESSURE MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
322	WEIGHT IN KILOGRAMS	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
323	HEIGHT IN CENTIMETERS	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
324	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
325	GO BACK TO 319 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE MEN CHECK THAT ALL QUESTIONS ARE COMPLETED			
		MAN 4	MAN 5	MAN 6
319	LINE NUMBER (COLUMN 10)  NAME (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 _____
320	BLOOD PRESSURE IN MMHG	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>	SYSTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/> DIASTOLIC ..... <input type="text"/> <input type="text"/> <input type="text"/>
321	RESULT OF BLOOD PRESSURE MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
322	WEIGHT IN KILOGRAMS	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
323	HEIGHT IN CENTIMETERS	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
324	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
325	GO BACK TO 319 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE MEN CHECK THAT ALL QUESTIONS ARE COMPLETED			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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NAME OF SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

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NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_



2012 DEMOGRAPHIC AND HEALTH SURVEYS  
**WOMAN'S QUESTIONNAIRE**

**TONGA**  
 STATISTICS DEPARTMENT/MINISTRY OF HEALTH

IDENTIFICATION					
VILLAGE NAME _____	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>				
CENSUS BLOCK .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				
NAME OF HOUSEHOLD HEAD _____					
HOUSEHOLD NUMBER .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>				
URBAN/RURAL .....	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>				
(URBAN=1, RURAL=2)					
NAME AND LINE NUMBER OF WOMAN _____	<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>				

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table> MONTH <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table> YEAR <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>
RESULT*	_____	_____	_____	RESULT <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>
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 TONGAN    3 OTHER    \_\_\_\_\_  
 LANGUAGE OF RESPONDENT    1 ENGLISH    2 TONGAN    3 OTHER    \_\_\_\_\_  
 TRANSLATOR USED?    1 YES    2 NO    (SPECIFY)

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____ <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>	DATE _____ <table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>	<table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>	<table border="1" style="width: 20px; height: 20px; display: inline-table;"></table>

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Malo>Hello. My name is \_\_\_\_\_ and I am working for Tonga Statistics Department and Ministry of Health. 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 20 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 since your views are 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 (NAME OF ISLAND/ CURRENT PLACE OF RESIDENCE)? <i>Koe ha e fuoloa ho'o nofo hokohoko 'I he feitu'u ko 'eni? kolo,</i> <i>pe koe motu pe 'api nofo'anga?</i> 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></table> ALWAYS ..... 95 VISITOR ..... 96			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> → 108						
103	Just before you moved here, did you live in Tongatapu Urban or Tongatapu Rural or Outer Island or overseas? <i>Kimu'a pea ke toki hiki mai ki heni na'a ke nofo 'I Nuku'alofa</i> <i>pe 'I he ngaahi motu pe 'I muli?</i>  IF OVERSEAS, ASK IF IN OTHER PACIFIC ISLANDS.	TONGATAPU URBAN ..... 1 TONGATAPU RURAL ..... 2 OUTER ISLANDS ..... 3 OTHER PACIFIC ISLANDS ..... 4 OTHER COUNTRIES ..... 5									
104	CHECK 102: LESS THAN 1 YEAR <input type="checkbox"/> 1 YEAR OR MORE <input type="checkbox"/>		→ 106								
105	Where were you living 1 year ago? <i>Na'a ke nofo 'I fe he ta'u 'e taha kuo hili ?</i>	TONGATAPU URBAN ..... 1 TONGATAPU RURAL ..... 2 OUTER ISLANDS ..... 3 OTHER PACIFIC ISLANDS ..... 4 OTHER COUNTRIES ..... 5									
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? <i>Na'a ke nofo 'I fe he ta'u 'e nima kuo hili ?</i>	TONGATAPU URBAN ..... 1 TONGATAPU RURAL ..... 2 OUTER ISLANDS ..... 3 OTHER PACIFIC ISLANDS ..... 4 OTHER COUNTRIES ..... 5									

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	In what month and year were you born? <i>Ko e fe 'a e mahina moe ta'u na'e fa'ele'l al koe?</i>	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? <i>Na'a ke ta'u fiha nai 'ihe hokosia koia ho 'aho fa'ele'l fakamuimui taha?</i> COMPARE AND CORRECT 108 AND/OR 109 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
110	Have you ever attended school? <i>Na'a ke ako nai 'l ha 'apiako?</i>	YES ..... 1 NO ..... 2	→ 114
111	What is the highest level of school you attended: primary, secondary, or higher? <i>Koe ha a'e tu'unga ako ma'olunga taha na'ake a'usia, lautohi pule'anga, ngaahi kolisi pe koha ako 'oku toe mau'olunga ange?</i>	PRE-SCHOOL ..... 0 PRIMARY ..... 1 SECONDARY ..... 2 TERTIARY ..... 3 VOCATIONAL ..... 4 OTHER ..... 5	
112	What is the highest year you completed at that level? <i>Koe ha e levolo ma'olunga taha na'ake lava'l 'l ho'o ako?</i>	YEAR ..... <input type="text"/> <input type="text"/>	
113	CHECK 111:  PRE-SCHOOL OR PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/>		→ 118
114	Now I would like you to read this sentence to me. <i>I he taimi ni teu kole atu leva kiate koe keke kataki mu'a 'o lau mai 'ae ngaahi setesi ko 'eni?</i> 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	→ 116
115	SHOW CARD IN <b>TONGAN</b> TO RESPONDENT. FOR INTERVIEW IN OTHER LANGUAGE, SHOW CARD IN OTHER LANGUAGE TO RESPONDENT  IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me? <i>Teke lava nai 'o lau mai ha konga 'o e fo'l setesi ko 'eni kia au?</i>	CANNOT READ AT ALL IN TONGAN ... 1 ABLE TO READ ONLY PARTS OF SENTENCE IN TONGAN ..... 2 ABLE TO READ WHOLE SENTENCE ... 3 NO CARD WITH REQUIRED LANGUAGE ..... 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED ..... 5	
116	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? <i>Kuo ke kau nai kiha polokalama 'ako laukonga mo tohi pe koha fa'ahinga polokalama kau'aki moe ako ke lautohi mo tohi? ('oku 'ikai kau heni ho'o ako helautohi pule'anga)</i>	YES ..... 1 NO ..... 2	
117	CHECK 114 and 115:  CODE '2', '3' OR '4' CIRCLED IN 114 OR 115 <input type="checkbox"/> CODE '1' CIRCLED IN 114 AND 115 OR CODE '5' CIRCLED IN 114 <input type="checkbox"/>		→ 119
118	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? <i>Oku ke fa'a lau nusipepa pe makasini he meimei 'aho kotoa pe tu'o taha he uike, pe si'si'l he tu'a taha he uike pe 'oku 'ikai pe keke lau 'e koe 'a e ngaahi me'a ni</i>	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
119	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? <i>Oku ke fanongo letio he meimei 'aho kotoa pe tu'o taha pe he uike, pe si'isi'l he tu'o taha he uike pe 'oku 'ikai pe keke fanongo letio koe?</i>	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
120	Do you watch television almost every day, at least once a week, less than once a week or not at all? <i>Oku ke mamata televisione he meimei 'aho kotoa pe tu'o nai he uike pe si'isi'l he tu'o taha he uike pe 'oku 'ikai pe teke mamata televisione koe ia?</i>	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
121	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? <i>Tuku kehe ange 'a e mamata televisione, 'oku ke ngaue'aki nai 'a e komipiuta he 'aho kotoa pe, tu'o taha he uike pe si'isi'l he tu'o taha he uike pe 'oku 'ikai pe keke ngaue'aki 'e koe 'ae komipiuta?</i>	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
122	What is your religion? <i>Koe ha 'a e siasi pe koe lotu 'oku ke kau ki a'i?</i>	NONE ..... 10 FREE WESLEYAN CHURCH ..... 11 ROMAN CATHOLIC ..... 12 LATTER DAY SAINTS ..... 13 FREE CHURCH OF TONGA ..... 14 CHURCH OF TONGA ..... 15 TOKAIKOLO CHRIS' ..... 16 ANGLICAN/CHURCH OF ENGLAND ..... 17 7th DAY ADVENTIST ..... 18 ASSEMBLIES OF GOD ..... 19 CONSTITUTIONAL CHURCH OF TONGA ... 20 GOSPEL CHURCH ..... 21 BAHAI FAITH ..... 22 HINDUS ..... 23 ISLAM/MUSLIM ..... 24 BUDDHIST ..... 25 OTHER _____ 96 (SPECIFY)  REFUSED TO ANSWER ..... 97 DON'T KNOW ..... 98	
123	What is your Ethnic Origin? <i>Koe ha ho tangata'l fonua pe koe tangata'l fonua fe 'oku ke kau kia'i?</i>	TONGAN ..... 1 PART-TONGAN ..... 2 EUROPEAN ..... 3 FIJIAN ..... 4 FIJIAN INDIAN ..... 5 CHINESE ..... 6 OTHER PACIFIC ISLANDS ..... 7 OTHER ASIAN ..... 8  OTHER _____ 9 (SPECIFY)	

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? <i>I he taimi ni kataki pe teu fehu'l atu 'a e ngaahi fehu'l fekau'aki mo ho'o ngaahi fa'ele kotoa pe 'I ho'o mo'ui hufanga 'I he fakatapu. Kuo ke 'osi fanau'l ha pepe?</i>	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? <i>Oku toko fiha ho'o fanau fefine pe tangata, ko e fanau totonu eni 'oku lolotonga nofo mo koe he taimi ni ?</i>	YES ..... 1 NO ..... 2	→ 204								
203	How many sons live with you? <i>Oku toko fiha ho fanau tangata 'oku nofo mo koe he taimi ni ?</i> And how many daughters live with you? <i>Oku toko fiha ho fanau fefine 'oku nofo mo koe he taimi ni ?</i> IF NONE, RECORD '00'.	SONS LIVING WITH HER ... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS LIVING WITH HER <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? <i>Oku 'I ai ha'o fanau, 'ofefine pe foha mo'oni 'oku nau kei mou'l ka 'oku 'ikai ke nofo fakataha mo koe he taimi ni ?</i>	YES ..... 1 NO ..... 2	→ 206								
205	How many sons are alive but do not live with you? <i>Oku toko fiha ho fanau tangata 'oku 'ikai te nau nofo mo koe ?</i> And how many daughters are alive but do not live with you?  IF NONE, RECORD '00'.	SONS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE . <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died? <i>Kuo 'I ai nai ha'o fanau mo'oni na'e fanau'l mo'ui kinautolu ka kuo nau pekia?</i>  IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? Na'e 'I ai nai ha pepe na'e fanau'l mai pea tangi pe ha mei ai ha ngaahi faka'ilonga 'oku moui ka na'e 'ikai pe ke mo'ui ia hili hono fanau'l mai ?	YES ..... 1 NO ..... 2	→ 208								
207	How many boys have died? <i>Ko ho'o fanau tangata 'e toko fiha na'e mate ?</i> And how many girls have died? <i>Ko ho fanau fefine 'e toko fiha na'e mate ?</i>  IF NONE, RECORD '00'.	BOYS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><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 '00'.	TOTAL ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208:  Just to make sure that I have this right: you have had in TOTAL ____ births during your life. Is that correct? <i>Kataki kou fiema'u pe ke fakapapau'l. Koe tu'olahi ho'o fa'ele fakakatoa lolotonga ho'o mo'ui koe toko .....? 'Oku tonu nai eni?</i>  YES <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208:  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.

*I he taimi ni kataki fakamolemole teu tohi mo lekooti leva 'a e hingoa 'a ho'o fanau na'ake fanau'l tatau pe 'oku nau kei moui pe 'ikai 'o kamata pe mei he lahi kihe si'isi'i' taha.*

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	218	219	220	221
What name was given to your (first/next) baby? <i>Hingo ho'o ' uluaki pepe</i>  (NAME) (HINGOA)	Were any of these births twins? <i>Na'e 'I ai ha fa'ele mahanga</i>	Is (NAME) a boy or a girl? <i>tamasi'i pe ta'ahine</i>	In what month and year was (NAME) born? <i>ko fe mahina moe ta'u na'e fa'elei a'l a'e ki'l tamasi'i/ta'ahine</i>  PROBE: What is his/her birthday? <i>koe ha hono 'aho fa'elei ?</i>	Is (NAME) still alive? <i>na'e moui</i>	How old was (NAME) at his/her last birthday? <i>aho fa'elei fkmuumui ki'l tamasi'i' pe ta'ahine?</i>  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you? <i>oku nofo mo koe?</i>	RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	How old was (NAME) when he/she died? <i>na'e ta'u fiha nai a'e ki'l tamasi'i/ta'ahine he taimi na'e si'l mate a'i?</i> IF '1 YR', PROBE: How many months old was (NAME)? <i>kapau na'e ta'u 1, na'e mahina nai 'e fiha 'ae tamasi'i/ta'ahine?</i>  RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.  vahaa o'e tamasi'i/ta'ahine	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth? <i>kataki na'e toe ;iai nai ha fanau na'e fa'elei mai ne nau moui pe 'ihe na'e mate?</i>
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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	
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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	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? <i>Hingo ho'o' uluaki pepe</i>  (NAME) (HINGOA)	Were any of these births twins? Na'e 'I ai ha fa'ele mahanga	Is (NAME) a boy or a girl? tamasii pe ta'ahine	In what month and year was (NAME) born? <i>ko fe mahina moe ta'u na'e fa'elei a'l a'e ki'l tamasi'i/ta'ahine</i>  PROBE: What is his/her birthday? <i>Ko oi a tena aso fanau? koe ha hono 'aho fa'elei ?</i>	Is (NAME) still alive?  <i>na'e moui</i>	How old was (NAME) at his/her last birthday? <i>aho fa'elei fkmuumi ki'l tamasi'i pe ta'ahine?</i>  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you? oku nofo mo koe?	RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	How old was (NAME) when he/she died? <i>na'e ta'u fiha nai a'e ki'l tamasi'i/ta'ahine he taimi na'e si'l mate a'i?</i> IF '1 YR', PROBE: How many months old was (NAME)? <i>kapau na'e ta'u 1, na'e mahina nai 'e fiha 'ae tamasi'i/ta'ahine?</i>  RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.  vahaa o'e tamasi'i/ta'ahine	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth? <i>kataki na'e toe ;iai nai ha fanau na'e fa'elei mai ne nau moui pe 'ihe na'e mate?</i>
07	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH
08	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH
09	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH
10	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH
11	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH
12	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 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS .. 3 <input type="text"/> <input type="text"/>	YES .... 1 ADD BIRTH NO ..... 2 NEXT BIRTH

222	<p>Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.  <i>Na'e toe 'I ai ha'o fa'ele na'e moui hili ho'o fa'ele fakamuimui taha?</i></p>	<p>YES ..... 1  NO ..... 2</p>
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 2007: 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	<p>CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2007 OR LATER. IF NONE, RECORD '0' AND SKIP TO 226.</p>	<input type="checkbox"/>



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 2007, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now? <i>Oku ke lolotonga feitama?</i>	YES ..... 1 NO ..... 2 UNSURE ..... 8	→ 229
227	How many months pregnant are you? <i>Ko ho mahina fiha 'eni?</i>  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 want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all? <i>I he taimi na'ake feitama ai, na'ake fiema'u pe keke feitama, pe na'ake loto keke toe ki'I tatali pe na'e 'ikai pe teke toe fiemau 'e koe ha toe fanau?</i>	THEN ..... 1 LATER ..... 2 NOT AT ALL ..... 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth? <i>Na'e 'I ai na'e lolotonga pe 'a ho'o feitama na'e to e pepe pe na'e to'o pe ta'ofi 'a ho'o feitama pe na'e pekia 'a e pepe?</i>	YES ..... 1 NO ..... 2	→ 237
230	When did the last such pregnancy end? <i>Na'e fakangata 'ane'e 'a e feitama koia?</i>	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
231	CHECK 230:  LAST PREGNANCY ENDED IN <input type="checkbox"/> JAN. 2007 OR LATER LAST PREGNANCY ENDED BEFORE <input type="checkbox"/> JAN. 2007		→ 237
232	How many months pregnant were you when the last such pregnancy ended? <i>Na'a ke mahina fiha nai 'i he taimi na'e hoko ai?</i>  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 2007, have you had any other pregnancies that did not result in a live birth? <i>Talu mei Sanuali 2006 na'e toe 'I ai nai ha'o feitama na'e 'ikai ke fanau'I mai ai ha pepe mo'ui?</i>	YES ..... 1 NO ..... 2	→ 235
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2007. EKE A'E 'AHO NA'E HOKO A'I HA FEITAMA NA'E MATE A'I A'E PEPE TALU MEI SANUALI 2007 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 2007? <i>Na'e 'I ai ha'o tamato pe ta'ofi ho'o feitama pe pekia 'a e pepe kimu'a he 2007?</i>	YES ..... 1 NO ..... 2	→ 237
236	When did the last such pregnancy that terminated before 2007 end? <i>Ko fe nai taimi na'e hoko a'l kimua kuo 'osi 2007?</i>	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																												
237	<p>When did your last menstrual period start?  <i>Ko fe taimi fakamuimui taha na'e kamata ai ho'o puke fakamahina?</i></p> <p>_____</p> <p>(DATE, IF GIVEN)  ('AHO, KAPAU NA'E FAKAHA MAI)</p>	<table border="0"> <tr> <td>DAYS AGO .....</td> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>WEEKS AGO .....</td> <td>2</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>MONTHS AGO .....</td> <td>3</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>YEARS AGO .....</td> <td>4</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>IN MENOPAUSE/ HAS HAD HYSTERECTOMY ...</td> <td>994</td> <td></td> <td></td> </tr> <tr> <td>BEFORE PREGNANT WITH LAST BIRTH .....</td> <td>995</td> <td></td> <td></td> </tr> <tr> <td>NEVER MENSTRUATED .....</td> <td>996</td> <td></td> <td></td> </tr> </table>	DAYS AGO .....	1	<input type="checkbox"/>	<input type="checkbox"/>	WEEKS AGO .....	2	<input type="checkbox"/>	<input type="checkbox"/>	MONTHS AGO .....	3	<input type="checkbox"/>	<input type="checkbox"/>	YEARS AGO .....	4	<input type="checkbox"/>	<input type="checkbox"/>	IN MENOPAUSE/ HAS HAD HYSTERECTOMY ...	994			BEFORE PREGNANT WITH LAST BIRTH .....	995			NEVER MENSTRUATED .....	996			
DAYS AGO .....	1	<input type="checkbox"/>	<input type="checkbox"/>																												
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BEFORE PREGNANT WITH LAST BIRTH .....	995																														
NEVER MENSTRUATED .....	996																														
238	<p>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?  <i>Mei he 'osi 'a e puke fakamahina ki he puke fakamahina hoko, 'oku ke pehe 'oku 'I ai ha ngaahi 'aho 'e malava ke feitama ai ha fefine kapau 'e feohi fakamali?</i></p>	<p>YES .....</p> <p>NO .....</p> <p>DON'T KNOW .....</p> <p>1</p> <p>2</p> <p>8</p>	<p>→ 301</p>																												
239	<p>Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?  <i>Koe taimi nai ko 'eni 'oku kimu'a he puke fakamahina, lolotonga a e puke fakamahina, hili 'ae puke fakamahina pe koe vaeua'anga malie 'o e taimi 'o e puke fakamahina 'e taha kihe taha.</i></p>	<p>JUST BEFORE HER PERIOD BEGINS .....</p> <p>DURING HER PERIOD .....</p> <p>RIGHT AFTER HER PERIOD HAS ENDED .....</p> <p>HALFWAY BETWEEN TWO PERIODS .....</p> <p>OTHER _____</p> <p>(SPECIFY)</p> <p>DON'T KNOW .....</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>6</p> <p>8</p>																													



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.  <i>Katakai pe teu talanoa atu leva fekau'aki moe fakakaukau' o'e famili fekau'aki moe ngaahi founga kehekehe 'oku malava ke ngaue'aki ke ta'ofi 'aki ha hoko ha feitama pe ko hano fakatuai 'ene hoko.</i>                  Which ways or methods have you heard about?  <i>Koe ha nai ha founga (fakavaha fanau) kuo ke 'osi fanongo ai?</i>                  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	<p>FEMALE STERILIZATION Women can have an operation to avoid having any more children.                  FAKANGATA 'O E KAKAI FEFINE: 'E malava pe ke fai ha ki'l tafa si'isi'l pe ki he hou'eiki fefine ke 'oua t nau toe feitama pe ma'u fanau.</p>	YES ..... 1 NO ..... 2	Have you ever had an operation to avoid having any more children?  YES ..... 1 NO ..... 2
02	<p>MALE STERILIZATION Men can have an operation to avoid having any more children.                  FAKANGATA 'OE KAKAI TANGATA: 'E lava pe ke fai foki moha kii tafa pe kihe hou'eiki tangata ke 'oua tenau toe malava ke fakafanau.</p>	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	<p>PILL Women can take a pill every day to avoid becoming pregnant.                  KOE FO'IAKAU FAKAVAHA: 'Oku malava pe ke folo fo'l'akau faka'aho 'a e k</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
04	<p>IUD Women can have a loop or coil placed inside them by a doctor or a nurse.                  KOE LUPU: 'Oku malava pe ke fokotu'u ha lupu 'I he kakai fefine-hange pe ha ki'l me'l uaea siisii pea kuopau ke fakahoko 'ae ngaue koia 'ehe neesi pe pe koe toketa.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
05	<p>INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.                  KOE HUUHU: 'Oku malava pe ke fai ha ki'l huhu ki he fefine ke 'oua na'a feitama 'Iha mahina 'e taha pe laka hake ai.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
06	<p>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.                  KOE KII ME'ANGAUE 'OKU TUI MO FOKOTUJI KIHE SINO: Oku malava pe ke fakahu mo fokotu'u ha ki'l me'angaue si'isi'l ki he uma 'oe fefine 'eha toketaa pe neesi ke ta'ofi 'ae feitama 'I he ta'u 'e taha pe koha ngaahiu ta'u.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
07	<p>CONDOM Men can put a rubber sheath on their penis before sexual intercourse.                  KONITOMU: 'E malava pe 'ehe kakai tangata 'o fakatuai 'a e fo'l ulapa kofukofu ko 'eni 'I honau fakatangata kimu'a he'enua mohe moe fefine.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
08	<p>FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.                  KONITOMU MA'AE Hou'eiki Fefine: 'E malava pe 'ehe kakai fefine 'o ngaue'aki 'a e kofukofu 'o tuku 'I loto 'ate kinautolu kimu'a pea toki mohe mo hono mali.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
09	<p>LACTATIONAL AMENORRHEA METHOD (LAM)                  KO E TAIMI ENI 'OKU FAKAHUUHU AI 'A E PEPE PEA 'IKAI LEVA KE TOE PUKE FAKAMAHINA 'A E FA'E: 'Oku malava 'a e founga ko 'eni ke ta'ofi ai ha feitama 'a ha fefine.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
10	<p>RHYTHM METHOD 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.                  KO E FOUNGA FAKAVAHA FAKANATULA (FAKATAIMI): 'E malava pe ke faka'ehi'ehi 'ae fefine pea 'oua 'e mohe mo hono hoa 'I he ngaahi 'aho koia 'o e mahina 'oku malava ke feitama ai.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
11	<p>WITHDRAWAL Men can be careful and pull out before climax.                  KO E TO'O 'O FAKAPUNA KI TU'A: 'Oku malava pe 'e he kakai tangata o to'o ki tu'a honau fakatangata kimu'a pea toki puna hufanga 'I he fakatapu (koe to'o eni kimu'a pea puna ki tu'a 'ae huhu'a 'ae kakai tangata)</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
12	<p>EMERGENCY CONTRACEPTION As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within five days to prevent pregnancy.                  FO'IAKAU FAKAVAVEVAVE: 'E malava ke folo 'e he fefine ha fo'l'akau hili 'ene mohe mo hono mali 'I loto 'I he 'aho 'e nima ke 'oua na'a hoko 'a e feitama.</p>	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
13	<p>Have you heard of any other ways or methods that women or men can use to avoid pregnancy?                  Kuo ke fanongo nai ha toe founga kehe 'oku ngaue'aki 'e he kakai fefine ke ta'ota'ofi 'enua feitama.</p>	YES ..... 1 _____ (SPECIFY) _____ (SPECIFY) NO ..... 2	YES ..... 1 NO ..... 2  YES ..... 1 NO ..... 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	CHECK 302: 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? <i>Kuo ke fanongo nai ha toe founga kehe 'oku ngaue'aki 'e he kakai fefine ke ta'ota'ofi 'enau feitama.</i>	YES ..... 1 NO ..... 2	→ 306
305	ENTER '0' IN THE CALENDAR IN EACH BLANK MONTH.		→ 333
306	What have you used or done? <i>Ko e ha ha me'a kuo ke 'osi ngaue'aki pe fakahoko?</i> 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. <i>Kataki pe teu talanoa atu leva fekau'aki moe fakakaukau'l o'e famili fekau'aki moe ngaahi founga kehekehe 'oku malava ke ngaue'aki ke ta'ofi 'aki ha hoko ha feitama pe ko hano fakatuai 'ene hoko. How many living children did you have at that time, if any? Na'e toko fiha ho'o fanau 'I he taimi koia? IF NONE, RECORD '00'.</i>	NUMBER OF CHILDREN ..... <input type="text"/>	
308	CHECK 302 (01): WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/>		→ 311A
309	CHECK 226: 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? <i>Oku ke lolotonga ngaue'aki ha me'a pe ko ha founga ke toloi pe ta'ofi'ofi 'aki ha'o feitama?</i>	YES ..... 1 NO ..... 2	→ 322
311	Which method are you using? <i>Koe ha 'a e founga 'oku ke ngaue'aki?</i> CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION ..... A MALE STERILIZATION ..... B PILL ..... C IUD ..... D INJECTABLES ..... E IMPLANTS ..... F CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD ..... K RHYTHM METHOD ..... L WITHDRAWAL ..... M OTHER _____ X (SPECIFY)	→ 316 A → 315 → 315 → 319A
311A	CIRCLE 'A' FOR FEMALE STERILIZATION.		
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? <i>E lava nai keu sio ki he peketi fo'l'akau 'oku ke ngaue'aki?</i> May I see the package of condoms you are using? <i>E malava nai keu sio kihe peketi pe puha 'o e konitomu 'oku ke ngaue'aki?</i> RECORD NAME OF BRAND IF PACKAGE SEEN.	PACKAGE SEEN ..... 1 BRAND NAME _____ (SPECIFY) <input type="text"/> PACKAGE NOT SEEN ..... 2	→ 314

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	Do you know the brand name of the (pills/condoms) you are using? <i>Oku ke ;iloi nai a'e fa'ahinga fo'l 'akau pe konitomu 'oku ke n gaue'aki?</i>  RECORD NAME OF BRAND.	BRAND NAME _____ <input type="text"/> <input type="text"/> (SPECIFY)  DON'T KNOW ..... 98	
314	How many (pill cycles/condoms) did you get the last time? <i>Koe ha nai e lahi 'o e fo'l 'akau (fakamahina) pe konitomu na'a ke ma'u fakamuimui taha?</i>	NUMBER OF PILL CYCLES/CONDOMS ... <input type="text"/> <input type="text"/> <input type="text"/>  DON'T KNOW ..... 998	
315	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? <i>Na'e fiha nai e totongi fakalukufua 'l ho'o ma'u 'a e (Q311) fakataha mo hono founa pea moha toe fale'l na'ake fiema'u?</i>	COST ..... <input type="text"/> <input type="text"/> <input type="text"/>  FREE ..... 995 DON'T KNOW ..... 998	} → 319A
316	In what facility did the sterilization take place? <i>Na'e fakahoko 'i fe ho'o fakangata?</i>  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL ..... 1 GOVT. HEALTH CENTER ..... 2 FAMILY PLANNING CLINIC ..... 3  PRIVATE MEDICAL SECTOR PRIVATE CLINICS ..... 4  OVERSEAS ..... 5  DON'T KNOW ..... 8	
317	CHECK 311/311A:  CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/>  Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? <i>Na'e fakahoko ki ho mali pe hoa 'e 'ikai ke toe 'l ai ha'ane fanau kimu'a koia ke fakahoko 'a ho'o fakangata?</i>  Before the sterilization operation, was your husband/partner told that he would not be able to have any (more) children because of the operation? <i>Na'e fakahoko atu kiate koe 'e 'ikai ke toe 'l ai ha'o fanau ko hono 'uhinga koe ki'i tafa fakangata 'e fakahoko kiate koe?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
318	How much did you (your husband/partner) pay in total for the sterilization, including any consultation you (he) may have had? <i>Na'e fiha e totongi fakalukufua kihe fakangata fakataha moe talatala?</i>	COST ..... <input type="text"/> <input type="text"/> <input type="text"/>  FREE ..... 995 DON'T KNOW ..... 998	
319	In what month and year was the sterilization performed? <i>Ko fe nai 'a e mahina moe ta'u na'e fakahoko ai 'a e fakangata?</i>	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
319A	Since what month and year have you been using (CURRENT METHOD) without stopping? <i>Ko e fe nai e mahina moe ta'u na'e kamata pea hokohoko mai ai 'a e founa fakavaha 'oku ke lolotonga ngaue'aki?</i>  PROBE: For how long have you been using (CURRENT METHOD) now without stopping? <i>Koe ha nai 'a e fuoloa ho'o ngaue'aki ae founa fakavaha 'oku ke lolotonga faka'aonga'l mai?</i>		
320	CHECK 319/319A, 215 AND 230:  ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A  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).	YES <input type="checkbox"/> NO <input type="checkbox"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	CHECK 319/319A: YEAR IS 2007 OR LATER <input type="checkbox"/> YEAR IS 2006 OR EARLIER <input type="checkbox"/> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.	YEAR IS 2006 OR EARLIER SKIP TO 331	
322	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. <i>I he taimi ni kataki teu 'eke atu ai ha ngaahi fehu'l fekau'aki moe taimi na'a ke faka'aonga'i ai pe ko ho hoa ha fa'ahinga founa ke ta'ota'ofi'aki ha'ane feitama 'I he ngaahi ta'u kuo hili?</i> USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2007. 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. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? <i>Ko fe taimi fakamuimui taha na'ake ngaue'aki ha founa fakavaha? Pea koe ha 'ae founa fakavaha koia?</i> * When did you start using that method? How long after the birth of (NAME)? <i>Na'e kamata 'anefe ho'o ngaue'aki 'ae founa fakavaha koia? Na'e kamata 'anefe, hili hono fanau'l mai (hinga'o 'o e pepe fakamuimitaha)?</i> * How long did you use the method then? <i>Koe ha nai e fuoloa na'a ke ngaue'aki ae founa fakavaha koia?</i>		
323	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED ..... 00 FEMALE STERILIZATION ..... 01 MALE STERILIZATION ..... 02 PILL ..... 03 IUD ..... 04 INJECTABLES ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 LACTATIONAL AMEN. METHOD ... 11 RHYTHM METHOD ..... 12 WITHDRAWAL ..... 13 OTHER METHOD ..... 96	→ 333 → 326 → 335 → 324A → 324A → 335 → 335
324	Where did you obtain (CURRENT METHOD) when you started using it? <i>Na'a ke ma'u mei fe 'a e founa fakavaha 'oku ke lolotonga ngaue'aki pea</i>	PUBLIC SECTOR GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 FAMILY PLANNING CLINIC ..... 13 PRIVATE MEDICAL SECTOR TFHA HEALTH CLINIC ..... 21 PEER TRAINOR ..... 22	
324A	Where did you learn how to use the rhythm/lactational amenorhea method? <i>Na'a ke ako 'I fe hono ngaue'aki 'a e founa fakanatula moe founa fakavaha ko hono fakahuhu 'o e pepe ke ta'ota'ofi'aki 'a e feitama?</i> IF UNABLE TO DETERMINE IF CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	OTHER SOURCE HOTEL/NIGHT CLUB ..... 31 FRIEND/RELATIVE ..... 32 OVERSEAS ..... 41 OTHER _____ 96 (SPECIFY)	
325	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	PILL ..... 03 IUD ..... 04 INJECTABLES ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 LACTATIONAL AMEN. METHOD ... 11 RHYTHM METHOD ..... 12	→ 332 → 329 → 329 → 329 → 335 → 335

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
326	<p>You obtained (CURRENT METHOD FROM 323) from (SOURCE OF METHOD FROM 316 OR 324) in (DATE FROM 319/319A). At that time, were you told about side effects or problems you might have with the method?</p> <p><i>Na'a ke ma'u 'a e founa fakavaha lolotonga ('asi he 323) mei fe ('asi he 316 pe 324) pea na'e kamata 'anehe (mahina moe ta'u)? 'I he taimi koia na'e fakamatala'i atu ai 'a e founa fakavaha ko 'eni na'e fakamatala atu kiate koe 'a e ngaahi palopalema 'e malava ke hoko ko hono 'uhinga koe fakavaha?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 328
327	<p>Were you ever told by a health or family planning worker about side effects or problems you might have with the method?</p> <p><i>Na'e fakaha atu nai 'e he 'ofisa mo'ui pe koe tokotaha 'oku ngaue ki he fakakaukau' 'o e famili ha ngaahi palopalema pe ha me'a 'e kaungakovi kiate koe fekau'aki moe founa fakavaha 'oku ke ngaue'aki?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 329
328	<p>Were you told what to do if you experienced side effects or problems?</p> <p><i>Na'e fakamatala atu kiate koe 'a e me'a ke fai 'oka pau 'e hoko ha palopalema?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
329	<p>CHECK 326:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>CODE '1' CIRCLED</p>  </div> <div style="text-align: center;"> <p>CODE '1' NOT CIRCLED</p>  </div> </div> <p>At that time, were you told about other methods of family planning that you could use? <i>I he taimi koia na'e toe fakamatala atu kiate koe ha toe ngaahi founa kehe ki hono fakakaukau' 'o e famili teke lava 'o ngaue'aki?</i></p> <p>When you obtained (CURRENT METHOD FROM 323) from (SOURCE OF METHOD FROM 316 OR 324) were you told about other methods of family planning that you could use? <i>I he taimi na'ake mau ai 'a e founa fakavaha lolotonga (mei he 323)mei (316 pe 324) na'e fakaha atu nai kia koe ha toe founa kehe fekau'aki moe fakakaukau' oe famili teke lava 'o ngaue'aki?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 331
330	<p>Were you ever told by a health or family planning worker about other methods of family planning that you could use?</p> <p><i>Na'e toe fakaha atu nai 'e he 'ofisa mo'ui pe ko e tokotaha 'oku ngaue I he fakakaukau' 'o e famili fekau'aki moe ngaahi founa kehe 'e malava keke ngaue'aki ki hono fakakaukau' 'o e famili?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
331	<p>CHECK 311/311A:</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>	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>PILL ..... 03</p> <p>IUD ..... 04</p> <p>INJECTABLES ..... 05</p> <p>IMPLANTS ..... 06</p> <p>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 ..... 12</p> <p>WITHDRAWAL ..... 13</p> <p>OTHER METHOD ..... 96</p>	<p>→ 335</p> <p>→ 335</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
332	<p>Where did you obtain (CURRENT METHOD) the last time?  <i>Na'e ma'u mei fe 'a e founga fakavaha fakamuimui taha 'oku ke ngaue'aki?</i></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 CENTER ..... 12</p> <p>FAMILY PLANNING CLINIC ..... 13</p> <p>PRIVATE MEDICAL SECTOR</p> <p>TFHA HEALTH CLINIC ..... 21</p> <p>PEER TRAINOR ..... 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>	→ 335
333	<p>Do you know of a place where you can obtain a method of family planning?  <i>Oku ke toe 'ilo'i nai ha feitu'u teke ma'u mei ai ha ngaahi founga kihe fakakaukau'l 'o e famili?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 335
334	<p>Where is that?  <i>Kataki koe fe feitu'u koia?</i>  Any other place?  <i>Oku toe 'l ai moha feitu'u kehe?</i></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 CENTER ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>PRIVATE MEDICAL SECTOR</p> <p>TUFHA HEALTH CLINIC ..... D</p> <p>HEALTH WORKER PEER TRAINOR ..... 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>	
335	<p>In the last 12 months, were you visited by a peer trainer who talked to you about family planning?  <i>I he ta'u 'e taha kuo maliu atu kuo 'a'ahi atu nai kiate koe ha 'ofisa mo'ui pe ko ha tokotaha kuo 'osi 'ako'l kihe fakakaukau'l 'o e famili fekau'aki moe fakakaukau'l 'o e famili?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
336	<p>In the last 12 months, have you visited a health facility for care for yourself (or your children)?  <i>I he ta'u 'e taha kuo hili kuo ke 'a'ahi nai ki ha falemahaki pe ko ha kiliniki 'o talatala koe pe ko ho fanau?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 401
337	<p>Did any staff member at the health facility speak to you about family planning methods?  <i>Na'e fakamatala atu 'e ha taha 'l he falemahaki pe kiliniki fekau'aki moe ngaahi founga ki hono fakakaukau'l oe famili?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	



SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224:  ONE OR MORE BIRTHS IN 2007 OR LATER <input type="checkbox"/> NO BIRTHS IN 2007 OR LATER <input type="checkbox"/> → 547			
402	CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).  Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.) <i>I he taimi ni kataki teu fehu'i atu leva ha ngaahi fehu'l felave'l moe moui ho'o fanau na'e fa'ele'i (hufanga he fakatapu) 'I he ta'u 'e nima kuo hili. Te ta talanoa taautaha pe fekau'aki mo kinautolu.</i>			
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 want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all? <i>I he taimi koia na'a ke feitama ai moe (fika 'uluaki) ha'o fanau? na'a ke faka'amu keke feitama 'I he taimi koia pe na'a ke loto nai ke toe tatali ho'o feitama ki ha toe taimi 'I he kaha'u, pe na'e 'ikai keke toe loto koe ke toe 'I ai</i>	THEN ..... 1 (SKIP TO 407) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 407) ←	THEN ..... 1 (SKIP TO 426) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 426) ←	THEN ..... 1 (SKIP TO 426) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 426) ←
406	How much longer would you have liked to wait? <i>Ko e ha e fuoloa na'a ke loto ke ke tatali ai?</i>	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? <i>Na'a ke sivi feitama nai pe sio ki ha taha lolotonga ho'o feitama?</i>  IF YES: Whom did you see? <i>KAPAU 'OKU 'IO:Ko hai na'ake sio ki ai?</i>  Anyone else?  PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE B  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . C  OTHER _____ X (SPECIFY)  NO ONE ..... Y (SKIP TO 414) ←		
408	Where did you receive antenatal care for this pregnancy? <i>Na'a ke 'alu ki he 'o fai ai ho'o sivi feitama ko 'eni?</i>  Anywhere else? <i>Na'a ke toe 'alu nai ki ha feitu'u kehe?</i>  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 CENTER ..... D  OVERSEAS ..... E  OTHER _____ X (SPECIFY) W 17		

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? <i>Na'a ke mahina fiha nai 'I he taimi taimi koia na'a ke fuofua sivi feitama ai?</i>	MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
410	How many times did you receive antenatal care during this pregnancy? <i>Na'e tuo fiha nai ho'o sivi feitama lolotonga ho'o feitama ko 'eni?</i>	NUMBER OF TIMES . <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
411	As part of your antenatal care during this pregnancy, were any of the following done at least once? <i>I he lolotonga ho'o sivi feitama na'e fakahoko nai ha taha 'o e ngaahi me'a ni kiate koe?</i> Were you weighed? <i>Na'e fua ho mamafa?</i> Was your blood pressure measured? <i>Na'e sivi ho toto ma'olunga?</i> Did you give a urine sample? <i>Na'e to'o nai ha'o tu'u'ofi hufanga he fakatapu ke sivi?</i> Did you give a blood sample? <i>Na'e to'o nai ha me'i toto ke sivi?</i>	<table border="0"> <tr> <td></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> </tr> <tr> <td>WEIGHT ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BP .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>URINE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BLOOD ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>				YES	NO	WEIGHT ...	1	2	BP .....	1	2	URINE .....	1	2	BLOOD ...	1	2
	YES	NO																	
WEIGHT ...	1	2																	
BP .....	1	2																	
URINE .....	1	2																	
BLOOD ...	1	2																	
412	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications? <i>I he lolotonga koia ho'o ngaahi sivi feitama na'e fakahoko atu kia te koe ha ngaahi fakatamaki moe ngaahi faingata'a 'e ala hoko kiate koe lolotonga ho'o feitama?</i>	<table border="0"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 414) ←</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	(SKIP TO 414) ←		DON'T KNOW .....	8									
YES .....	1																		
NO .....	2																		
(SKIP TO 414) ←																			
DON'T KNOW .....	8																		
413	Were you told where to go if you had any of these complications? <i>Na'e fakahoko atu kiate koe 'a e feitu'u keke 'alu kiai 'okapau 'e hoko atu kiate koe 'ae ngaahi fakatamaki pe faingata'a?</i>	<table border="0"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	DON'T KNOW .....	8											
YES .....	1																		
NO .....	2																		
DON'T KNOW .....	8																		
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? <i>I he lolotonga ho'o feitama ko 'eni, na'e kahoko atu ha'o ki'l huhu malu'i 'I ho'o uma ke malu'l 'a e pepe mei he konahamu hili hono fanau'l mai?</i>	<table border="0"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 417) ←</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	(SKIP TO 417) ←		DON'T KNOW .....	8									
YES .....	1																		
NO .....	2																		
(SKIP TO 417) ←																			
DON'T KNOW .....	8																		
415	During this pregnancy, how many times did you get this tetanus injection? <i>I he lolotonga ho'o feitama ko 'eni koe ha e tu'o lahi hono fakahoko atu kiate koe 'a e huhu kona?</i>	TIMES ..... <input type="text"/> DON'T KNOW ... 8																	
416	CHECK 415:	<table border="0"> <tr> <td>2 OR MORE TIMES <input type="checkbox"/></td> <td>OTHER <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">↓</td> <td style="text-align: center;">↓</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 421)</td> </tr> </table>	2 OR MORE TIMES <input type="checkbox"/>	OTHER <input type="checkbox"/>	↓	↓	(SKIP TO 421)												
2 OR MORE TIMES <input type="checkbox"/>	OTHER <input type="checkbox"/>																		
↓	↓																		
(SKIP TO 421)																			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
417	<p>At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby? <i>Kimu'a 'i ho'o feitama ko 'eni na'e osi fakahoko ha huhu ko ho huhu kona ke malu'l koe pe ko ha'o pepe 'e taha?</i></p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 421) ← DON'T KNOW ..... 8</p>		
418	<p>Before this pregnancy, how many other times did you receive a tetanus injection? <i>I he kimu'a 'l ho'o feitama ko 'eni na'e tu'o fiha hono fakahoko atu kiate koe ha huhu kona?</i></p> <p>IF 7 OR MORE TIMES, RECORD '7'.</p>	<p>TIMES ..... <input type="text"/> DON'T KNOW ... 8</p>		
419	<p>In what month and year did you receive the last tetanus injection before this pregnancy? <i>Ko fe nai mahina moe ta'u na'e huhu kona fakamuimui ai koe kimu'a 'l ho'o feitama ko 'eni?</i></p>	<p>MONTH ... <input type="text"/><input type="text"/> DK MONTH ..... 98 YEAR <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/> (SKIP TO 421) ← DK YEAR ..... 9998</p>		
420	<p>How many years ago did you receive that tetanus injection? <i>Koe ta'u nai eni 'e fiha mei ho'o huhu kona koia?</i></p>	<p>YEARS AGO ..... <input type="text"/><input type="text"/></p>		
421	<p>During this pregnancy, were you given or did you buy any iron tablets? <i>I he lolotonga ho'o feitama ko 'eni na'e 'oatu nai kia koe pe na'a ke fakatau ha fo'l'akau fakatupu toto?</i></p> <p>SHOW IRON TABLETS.</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 423) ← DON'T KNOW ..... 8</p>		
422	<p>During the whole pregnancy, for how many days did you take the tablets? <i>I he lolotonga ho'o feitama koe 'aho nai 'e fiha na'a ke folo al 'a e fo'l'akau fakatupu toto pe 'aione?</i></p> <p>IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.</p>	<p>DAYS . <input type="text"/><input type="text"/><input type="text"/> DON'T KNOW ... 998</p>		
423	<p>During this pregnancy, did you take any drug for intestinal worms? <i>I he lolotonga ho'o feitama na'ake faka'aonga'l nai ha faito'o ponu he ngakau?</i></p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>		
424	<p>During this pregnancy, did you have difficulty with your vision during daylight? <i>I he lolotonga ho'o feitama na'e 'iai nai ha faingata'a pe palopalema ho'o vakai, mamata pe sio lolotonga 'a e 'aho?</i></p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
425	During this pregnancy, did you suffer from night blindness? <i>I he lolotonga ho'o feitama na'ake fokoutua nai pea 'ikai keke lava 'o mamata pe sio he pouli?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		
426	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small? <i>Ihe taimi na'e fanau'i mai ai 'a (hingoa) na'e fu'u lahi, 'avalisi, si'isi'l pe fu'u si'isi'l 'aupito?</i>	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8
427	Was (NAME) weighed at birth? <i>Na'e fua nai 'a (hingoa 'o e pepe) hili hono fanau'i?</i>	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8
428	How much did (NAME) weigh? <i>Ko e ha e mamafa 'o (hingoa pepe)?</i> Na'e kilokalami 'e fiha 'a (hingoa 'o e pepe) 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
429	Who assisted with the delivery of (NAME)? <i>Ko hai na'e tokoni kihe fai fa'ele 'o (hingoa e pepe)?</i> Anyone else? Na'e toe 'i ai moha taha kehe? 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 NURSE AIDE .... C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND . E  OTHER _____ X (SPECIFY) NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B NURSE AIDE .... C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND . E  OTHER _____ X (SPECIFY) NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B NURSE AIDE .... C  OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND . E  OTHER _____ X (SPECIFY) NO ONE ..... Y
430	Where did you give birth to (NAME)? <i>Na'a ke fa'ele 'i fe?</i>  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	HOME YOUR HOME ... 11 (SKIP TO 437) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22  OVERSEAS HOME ..... 31 (SKIP TO 437) ← HEALTH FACILITY 32  OTHER _____ 96 (SPECIFY) (SKIP TO 437) ←	HOME YOUR HOME ... 11 (SKIP TO 438) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22  OVERSEAS HOME ..... 31 (SKIP TO 438) ← HEALTH FACILITY 32  OTHER _____ 96 (SPECIFY) (SKIP TO 438) ←	HOME YOUR HOME ... 11 (SKIP TO 438) ← OTHER HOME ... 12  PUBLIC SECTOR GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22  OVERSEAS HOME ..... 31 (SKIP TO 438) ← HEALTH FACILITY 32  OTHER _____ 96 (SPECIFY) (SKIP TO 438) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____																																				
431	How long after (NAME) was delivered did you stay there? <i>Koe ha 'a e fuoloa ho'o nofo ai hili hono fa'elei 'a e pepe (hingoa pepe)?</i>  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW . . . 998													HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW . . . 998													HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW . . . 998												
432	Was (NAME) delivered by caesarean section? <i>Na'e tafa nai koe 'I ho'o fa'ele 'ia (hingoa pepe)?</i>	YES . . . . . 1 NO . . . . . 2	YES . . . . . 1 NO . . . . . 2	YES . . . . . 1 NO . . . . . 2																																				
433	Before you were discharged after (NAME) was born, did any health care provider check on your health? <i>Kimu'a pea faka'ata koe hili ho'o fanau' 'a (hingoa pepe) na'e fakahoko ha'o ki'I sivi mou' lelei 'e ha taha 'oe kau ngaue ki he mo'ui?</i>	YES . . . . . 1 NO . . . . . 2 (SKIP TO 436) ←	YES . . . . . 1 (SKIP TO 448) ← NO . . . . . 2	YES . . . . . 1 (SKIP TO 448) ← NO . . . . . 2																																				
434	How long after delivery did the first check take place? <i>Koe ha 'a e fuoloa hili ho'o fa'ele pea fakahoko atu kiate koe ha sivi kihe tu'unga ho'o mo'ui?</i>  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW . . . 998																																						
435	Who checked on your health at that time? <i>Ko hai na'a ne sivi koe he taimi koia?</i>  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 1 NURSE/MIDWIFE 2 NURSE AIDE . . . 3 OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . 4  OTHER _____ 6 (SPECIFY) (SKIP TO 447) ←																																						
436	After you were discharged, did any health care provider or a traditional birth attendant check on your health? <i>I he hili ho'o 'ata na'e 'I ai nai ha ofisa mo'ui pe koha ma'uli na'a ne fakahoko atu kiate koe ha ki'I sivi ki he tukunga ho'o mo'ui lelei?</i>	YES . . . . . 1 (SKIP TO 439) ← NO . . . . . 2 (SKIP TO 447) ←	YES . . . . . 1 (SKIP TO 448) ← NO . . . . . 2	YES . . . . . 1 (SKIP TO 448) ← NO . . . . . 2																																				
437	Why didn't you deliver in a health facility? <i>Koe ha nai 'a e 'uhinga na'e 'ikai na'e 'ikai ai keke fa'ele 'I he falemahaki pe koe kiliniki?</i> PROBE: Any other reason? Na'e toe 'I ai nai ha 'uhinga kehe? 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 _____ X (SPECIFY)																																						

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____										
438	After (NAME) was born, did any health care provider or a traditional birth attendant check on your health? <i>Hili hono fa'elei mai ho'o pepe na'e iai nai ha neesi pe ha ma'uli na'e ha'u ke vakai'i a'e tukunga ho'o moui?</i>	YES ..... 1 NO ..... 2 (SKIP TO 443) ←	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2										
439	How long after delivery did the first check take place? <i>Koe ha 'a e fuoloa hili ho'o fa'ele na'e fai atu ai kiate koe ho'o 'uluaki sivi?</i>  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></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW ... 998												
440	Who checked on your health at that time? <i>Ko hai na'a ne sivi ho'o mo'ui lelei he taimi koia?</i>  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 NURSE AIDE ... 3  OTHER PERSON TRADITIONAL BIRTH ATTENDANT . 4  OTHER _____ 6 (SPECIFY)												
441	Where did this first check take place? <i>Na'e fakahoko 'I fe a'e 'uluaki sivi ko eni?</i>  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	HOME YOUR HOME ... 1 OTHER HOME ... 2  PUBLIC SECTOR GOVT. HOSPITAL 3 GOVT. HEALTH CENTER ..... 4  OVERSEAS ..... 5  OTHER _____ 6 (SPECIFY)												
442	CHECK 436: VAKAI'I 436:	YES NOT ASKED <input type="checkbox"/> <input type="checkbox"/> (SKIP TO 447)												
443	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health? <i>I he hili 'a e mahina 'e ua mei hono fa'ele'i mai ho'o pepe na'e ha'u nai hatokotaha ngaue he mo'ui pe koha ma'uli 'o vakai'i 'e e tukunga 'ene moui?</i>	YES ..... 1 NO ..... 2 (SKIP TO 447) ← DON'T KNOW ..... 8												

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____				
444	<p>How many hours, days or weeks after the birth of (NAME) did the first check take place? <i>Koe ha 'a e fuoloa lau houa, 'aho pe uike hono fanau'l (hingoa e pepe) pea fakahoko 'a hono 'uluaki sivi?</i></p> <p>IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.</p>	<p>HRS AFTER BIRTH .. 1 <input type="text"/><input type="text"/></p> <p>DAYS AFTER BIRTH .. 2 <input type="text"/><input type="text"/></p> <p>WKS AFTER BIRTH .. 3 <input type="text"/><input type="text"/></p> <p>DON'T KNOW ... 998</p>						
445	<p>Who checked on (NAME)'s health at that time? <i>Ko hai nai na'ane fakahoko 'a e sivi (hingoa 'oe pepe) mo'ui lelei 'l he taimi koia?</i></p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p>HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 NURSE AIDE ... 3 OTHER PERSON TRADITIONAL BIRTH ATTENDANT . 4</p> <p>OTHER _____ 6 (SPECIFY)</p>						
446	<p>Where did this first check of (NAME) take place? <i>Na'e fakahoko nai 'l fe 'a e sivi koia 'o (hingoa pepe)?</i></p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p>	<p>HOME YOUR HOME ... 1 OTHER HOME ... 2</p> <p>PUBLIC SECTOR GOVT. HOSPITAL 3 GOVT. HEALTH CENTER ..... 4</p> <p>OVERSEAS ..... 5</p> <p>OTHER _____ 6 (SPECIFY)</p>						
447	<p>Has your menstrual period returned since the birth of (NAME)? <i>Kuo toe kamata mai nho'o puke fakamahina hili hono fanau'l mai ho'o pepe (hingoa ho'o pepe)?</i></p>	<p>YES ..... 1 (SKIP TO 449) ←</p> <p>NO ..... 2 (SKIP TO 450) ←</p>						
448	<p>Did your period return between the birth of (NAME) and your next pregnancy?</p>		<p>YES ..... 1 NO ..... 2 (SKIP TO 452) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 452) ←</p>				
449	<p>For how many months after the birth of (NAME) did you <u>not</u> have a period? <i>Koe mahina nai 'e fiha hili ho'o fanau'l 'a (hingoa 'oe pepe) n a'e 'ikai keke toe puke fakamahina ai?</i></p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>DON'T KNOW ..... 98</p>				
450	<p>CHECK 226: VAKAI'I 226: IS RESPONDENT PREGNANT? <i>Oku feitama nai a'e tokotaha tali fehu'i?</i></p>	<p>NOT PREG- <input type="checkbox"/> PREGNANT NANT OR <input type="checkbox"/> UNSURE <input type="checkbox"/> (SKIP TO 452) ←</p>						
451	<p>Have you begun to have sexual intercourse again since the birth of (NAME)? <i>Kuo ke 'osi kamata nai keke nofo fakamali hili hono fanau'l 'o (hingoa 'o e pepe)</i></p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 453) ←</p>						

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
452	For how many months after the birth of (NAME) did you <u>not</u> have sexual intercourse? <i>Koe mahina nai 'e fiha hili hono fanau'l mai 'a (hingoa 'o e pepe) na'e te'eki keke nofo fakamali ai?</i>	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
453	Did you ever breastfeed (NAME)? <i>Na'a ke fakahuhu ha'o pepe 'I he kuohili?</i>	YES ..... 1 NO ..... 2 (SKIP TO 460) ←	YES ..... 1 NO ..... 2 (SKIP TO 460) ←	YES ..... 1 NO ..... 2 (SKIP TO 460) ←
454	How long after birth did you first put (NAME) to the breast? <i>Ko e ha nai 'a e fuoloa hili hono fa'ele'i 'a (hingoa 'o e pepe) pea 'omai ki ho huhu?</i>  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"/>		
455	In the first three days after delivery, was (NAME) given anything to drink other than breast milk? <i>I he 'uluaki 'aho 'e tolu hili hono fanau'i mai 'a (hingoa oe pepe) na'e 'oange ha me'akehe kene inu tukukehe ange 'a e hu'akau mei ho huhu?</i>	YES ..... 1 NO ..... 2 (SKIP TO 457) ←		
456	What was (NAME) given to drink? <i>Koe ha e inu na'e fakainu'aki 'a (hingoa e pepe)</i>  Anything else? <i>Na'e toe 'I ai mo ha me'a kehe?</i>  RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . . A PLAIN WATER . . . B SUGAR OR GLUCOSE WATER . . . C SUGAR-SALT-WATER SOLUTION . . . . D FRUIT JUICE . . . . E INFANT FORMULA . . F  OTHER _____ X (SPECIFY)		
457	CHECK 404: VAKAI'I 404: IS CHILD LIVING? OKU MOUI A'E TAMA?	LIVING      DEAD <input type="checkbox"/> <input type="checkbox"/> ↓ (SKIP TO 459) ←		
458	Are you still breastfeeding (NAME)? <i>Oku ke kei fakahuhu pe 'a (hingoa oe pepe)?</i>	YES ..... 1 (SKIP TO 461) ← NO ..... 2		
459	For how many months did you breastfeed (NAME)? <i>Na'e mahina 'e fiha ho'o fkhuhu 'a (hingoa 'oe pepe)?</i>	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



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
460	CHECK 404: VAKAI'I 404:  IS CHILD LIVING? Oku kei moui pe 'a e tamasi'i pe ta'ahine?	LIVING                  DEAD <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO (SKIP TO 463)                  TO 501)	LIVING                  DEAD <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO (SKIP TO 463)                  TO 501)	LIVING                  DEAD <input type="checkbox"/> <input type="checkbox"/> ↓                                  ↓ (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, (SKIP TO 463)                  GO TO 501)
461	How many times did you breastfeed last night between sunset and sunrise? <i>Na'e tu'o fiha nai ho'o fakahuhu            'anepo mei he to 'ae la'aa ki he'ene hopo?</i>  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS . <input type="text"/> <input type="text"/>		
462	How many times did you breastfeed yesterday during the daylight hours? <i>Na'e tu'o fiha nai ho'o fakahuhu            'aneafi lolotonga 'a e 'aho?</i>  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS . <input type="text"/> <input type="text"/>		
463	Did (NAME) drink anything from a bottle with a nipple yesterday or last night? <i>Na'e inu nai 'e (hingoa 'oe tamasi'i)            mei ha hina 'oku 'I ai ha mata'ihuhu            pepe 'aneafi pe 'anepo?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
464		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

**SECTION 5. CHILD IMMUNIZATION 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 2007 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 <input style="width:40px; height:20px;" type="text"/>	LAST BIRTH LINE NUMBER ..... <input style="width:40px; height:20px;" type="text"/>	NEXT-TO-LAST BIRTH LINE NUMBER ..... <input style="width:40px; height:20px;" type="text"/>	SECOND-FROM-LAST BIRTH LINE NUMBER ..... <input style="width:40px; height:20px;" type="text"/>		
503	FROM 212 AND 216	NAME _____ LIVING <input style="width:30px; height:20px;" type="checkbox"/> DEAD <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 544)	NAME _____ LIVING <input style="width:30px; height:20px;" type="checkbox"/> DEAD <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 544)	NAME _____ LIVING <input style="width:30px; height:20px;" type="checkbox"/> DEAD <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 544)		
504	Do you have a card where (NAME'S) vaccinations are written down? Oku 'I ai nai ha kaati 'oku hiki ai e ngaahi huhu 'a e pepe (hingoa 'o e pepe)?  IF YES: KAPAU ;OKU ;IO May I see it please? E lava keu sio ki ai?	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)? Na'e 'osi 'I ai nai ha kaati huhu 'o pepe (hingoa 'o e pepe)?	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 '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.					
	LAST BIRTH DAY MONTH YEAR	NEXT-TO-LAST BIRTH DAY MONTH YEAR	SECOND-FROM-LAST BIRTH DAY MONTH YEAR			
	HEP B1 (AT BIRTH) HEP B2  HEP B 3  BCG 1  OPV 1  OPV 2  OPV 3  DTP1/HIB 1  DTP2/HIB 2  DTP3/HIB 3  DTP 4  MR 1  MR 2  HIB	HB1  HB2  HB3  B1  O1  O2  O3  DH1  DH2  DH3  D4  MR1  MR2  HIB	HB1  HB2  HB3  B1  O1  O2  O3  DH1  DH2  DH3  D4  MR1  MR2  HIB			
506A	CHECK 506: HEP B1 TO MR 2 ALL RECORDED <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 510)	OTHER <input style="width:30px; height:20px;" type="checkbox"/>	HEP B1 TO MR 2 ALL RECORDED <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 510)	OTHER <input style="width:30px; height:20px;" type="checkbox"/>	HEP B1 TO MR 2 ALL RECORDED <input style="width:30px; height:20px;" type="checkbox"/> (GO TO 510)	OTHER <input style="width:30px; height:20px;" type="checkbox"/>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
507	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in the national immunization day campaign? <i>Na'e 'I ai nai ha huhu na'e fakahoko kia (hingoa 'o e pepe) na'e te'eki ke lekooti pe hiki I he kaati huhu. 'Oku kau heni moe huhu malu' 'oku oku fa'a fakahoko lolotonga 'a e tu'uaki moe kemipeini?</i> RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, HEP B 1-3, OPV 1-3, DTP/HIP 1-3, DTP 4-5 AND MR VACCINES.	YES ..... 1 (PROBE FOR ←) VACCINATIONS AND WRITE '66' 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 '66' 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 '66' 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, including vaccinations received in a national immunization campaign? <i>Na'e 'osi fakahoko nai ha huhu malu' kia (hingoa 'o e pepe), kau aipe heni moe huhu malu' lolotonga 'ae polokalama kemipeini huhu malu' 'a e fonua.</i>	YES ..... 1 NO ..... 2 (SKIP TO 511) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 511) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 511) ← DON'T KNOW ..... 8
509	Please tell me if (NAME) received any of the following vaccinations: <i>Kataki fakamolemole ka ke talamai pe na'e fakahoko nai ha taha 'o e ngaahi huhu malu' ko'eni kia (hingoa 'oe pepe)</i>			
509A	A BCG vaccination against tuberculosis, that is, an injection in the arm that usually causes a scar? <i>Koe huhu BCG malu' mei he tipii, TB aia 'oku fa'a fakahoko 'ihe uma pea fa'a hoko ai 'a e ki' 'i he feitu'u na'e huhu?</i>	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 diseases? <i>Koe huhu hepataitisi B 'oku fa'a fakahoko 'ihe alanga pe koe uma ke malu' ia mei he ngaahi fokoutua 'o e ate?</i>	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? <i>Na'e fakahoko 'a e fuofua huhu hepataitisi B 'I hono fanau' mai pe na'e toki fakahoko 'a e huhu ia kimui ange?</i>	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? <i>Na'e fakahoko tu'o fiha nai 'a e huhu malu' hepataitisi B?</i>	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? <i>Ko e huhu malu' 'o e polio 'oku fa'a tulu' pe ki loto he ngutu?</i>	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? <i>Na'e fakahoko 'a e huhu malu' i polio lolotonga 'a e uike 'e ono hono fanau' mai pe na'e toki fakahoko ia ki muiange?</i>	6 WEEKS ..... 1 LATER ..... 2	6 WEEKS ..... 1 LATER ..... 2	6 WEEKS ..... 1 LATER ..... 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
509G	How many times was the polio vaccine received? <i>Na'e tuo fiha nai hono fakahoko kiai e huhu polio?</i>	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? <i>Koe huhu DTP 'a ia 'oku fakahoko 'I he alanga pe koe moluu pea 'I he taimi 'e ni'hi 'oku fa'a fakahoko he taimi tatau moe ki' vai malu' polioo?</i>	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
509I	How many times was a DTP vaccination received? <i>Na'e fakahoko tu'o fiha nai 'a e huhu malu'I DTP?</i>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
509J	A measles injection or an MR injection - that is, a shot in the arm at the age of 12 and 18 months - to prevent him/her from getting measles? <i>Koe huhu malu'I misele pe koia 'oku 'iloa koe huhu MR, 'aia 'oku fakahoko he uma 'I he vaha'a ta'u koe mahina 12 - 18 ke malu'I mei he misele?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
510	Were any of the vaccinations (NAME) received during the last two years given as part of the 2010 immunization campaign?	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	In the last seven days, did (NAME) take iron syrup like this? <i>I he 'aho 'e fitu kuo maliu atu na'e inu e (hingoa 'oe pepe) 'ae kii vai melie iron hange ko 'eni?</i>  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
512	Has (NAME) taken any drug for intestinal worms in the last six months? <i>Na'e ngaue'aki nai 'e (hingoa) ha ha faito'o kihe ponu he ngakau 'I he mahina 'e ono kuo 'osi?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
513	Has (NAME) had diarrhea in the last 2 weeks? <i>Na'e fakalele nai 'a he uike 'e ua kuo 'osi?</i>	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8
514	Was there any blood in the stools? <i>Na'e 'I ai nai ha toto na'e ha mai 'I he'ene tu'u mama'o hufanga he fakatapu?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
515	<p>Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk) <i>Kataki 'I he taimi ni teu fehu'l atu leva pe koeha e lahi e vai na'e inu 'e (hingoa) lolotonga 'ene fakalele 'o kau aipe moe huhua'l huhu?</i></p> <p>Was he/she given less than usual to drink, about the same amount, or more than usual to drink? <i>Na'e si'isi'l ange he inu angamaheni, pe tatau pe moe angamaheni pe lahiange he inu angamaheni?</i></p> <p>IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less? <i>Na'e fu'u si'isi'l ange he anga maheni pe fu'u si'isi'l 'aupito?</i> IF LESS, PROBE: Was he/she</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8</p>
516	<p>When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? <i>I he taimi na'e fakalele ai 'a (hingoa) na'e si'isi'i'ange he angamaheni 'ae lahi e me'akai na'a ne pe tatau pe moe angamaheni pe lahiange he angamaheni pe na'e 'ikai ke 'aveange ah me'a ia ke kai?</i></p> <p>IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less? <i>Na'e fu'u si'isi'l 'aupito 'a e me'a na'e 'aveange kia (hingoa) kene ma'u pe kai?</i></p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>
517	<p>Did you seek advice or treatment for the diarrhea from any source? <i>Na'a ke fekumi nai ha fale'l pe koha faito'o ki he fakalele mei ha feitu'u?</i></p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 522) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 522) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 522) ←</p>
518	<p>Where did you seek advice or treatment? <i>Na'a kumi fale'l pe faito'o?</i></p> <p>Anywhere else? <i>Na'e toe 'iai moha feitu'u kehe?</i></p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>
519	CHECK 518:	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 521) ←</p>	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 521) ←</p>	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 521) ←</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
520	Where did you first seek advice or treatment? <i>Koe fe feitu'u na'ake uluaki kumi tokoni mo faito'o mei ai?</i> USE LETTER CODE FROM 518.	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
521	How many days after the diarrhea began did you first seek advice or treatment for (NAME)? <i>Na'e 'osi 'a e 'aho 'e fiha mei he'ene fakalele pea ke kumi fale'l pe faito'o ai?</i>  IF THE SAME DAY, RECORD '00'.	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>
522	Does (NAME) still have diarrhea? <i>Oku kei fakalele pe 'a (hingoa)?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
523	Was he/she given any of the following to drink at any time since he/she started having the diarrhea: <i>Na'e 'oange nai ha taha 'o e ngaahi inu ko 'eni lolotonga 'ene fakalele?</i>  a) A fluid made from a special packet called ORS or <i>Koe vai 'oku ngaahi mei he peketi makehe 'oku ui koe Oral salt</i>  The hospital-recommended: b) homemade salt and sugar solution? <i>Koe vai masima pe 'oku ngaahi 'l 'api pe koe vai 'oku ngaahi mei he suka masima moe suka?</i> c) coconut juice? <i>pe koe huhu'a niu?</i>	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
524	Was anything (else) given to treat the diarrhea? <i>Na'e toe 'l ai moha me'akehe na'e oange ke faito'o 'e fakalele?</i>	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 526) ← DON'T KNOW ..... 8
525	What (else) was given to treat the diarrhea? <i>Na'e 'l ai ha toe me'a kehe na'e oange ke faito'o 'aki e fakalele?</i>  Anything else? <i>Na'e toe 'l ai ha me'a kehe?</i>  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)

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
526	Has (NAME) been ill with a fever at any time in the last 2 weeks? <i>Na'e mofi nai 'a (hingoa e tamasi' l pe ta'ahine) I ha fa'ahinga taimi pe lolotonga e uike 'e ua kuo hili?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks? <i>I he uike 'e ua kuo 'osi na'e puke nai 'a (hingoa) he tale pe taletale?</i>	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	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing? <i>I he taimi na'e tale ai 'a (hingoa) na'e vavevave ange 'ene manava I he anga maheni pea nounou mo vavevave 'aupito pe na'e si' l faingata'a'ia 'ene manava?</i>	YES ..... 1 NO ..... 2 (SKIP TO 531) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 531) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 531) ← DON'T KNOW ..... 8
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? <i>Na'e fakatupunga e vavevave 'ene manava mei ha palopalema I loto hono fatafata pe koe ma'ama'a pe ko ha me'a pe na'a ne fakafaingata'a'ia' l ae halanga manava 'I hono ihu?</i>	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 531) ←	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 531) ←	CHEST ONLY ... 1 NOSE ONLY ..... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 531) ←
530	CHECK 526:  HAD FEVER?	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544)	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 544)
531	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? <i>I he taimi ni 'oku ou fie 'ilo ki he lahi 'o e inu na'e 'oange ke inu e (hingoa) lolotonga koia 'ene mofi pe puke he tale Na'e si'isi' l, tatau pe, pe na'e lahiange 'ae vai na'a ne inu he angamaheni?</i>  IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less? <i>Okapau na'e si'isi' l. Na'e si'isi' l pe na'e fu'u si'isi' l 'aupito 'a e vai na'e 'oange kene inu he angamaheni?</i>	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8	MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 NOTHING TO DRINK 5 DON'T KNOW ..... 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
532	<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? <i>I he taimi na'e mofi pe tale ai 'a (hingoa) na'e si'isi'i'ange he angamaheni pe tatau pe,pe na'e 'ikai pe ke 'aveange ha me'akai ia kene ma'u pe kai?</i></p> <p>IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less? <i>Na'e fu'u si'isi'l pe si'isi'l 'aupito e me'akai na'e 'oange kia (hingoa) kene kai pe ma'u?</i></p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>	<p>MUCH LESS ..... 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE ..... 4 STOPPED FOOD . 5 NEVER GAVE FOOD 6 DON'T KNOW ..... 8</p>
533	<p>Did you seek advice or treatment for the illness from any source? <i>Na'a ke kumi nai ki ha faito'o kihe fokoutua mei ha feitu'u pe koha taha?</i></p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 538) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 538) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 538) ←</p>
534	<p>Where did you seek advice or treatment? <i>Koe fe feitu'u na'a ke kumi fale'l pe tokoni mei ai?</i></p> <p>Anywhere else? <i>Na'e toe 'l ai moha feitu'u kehe na'a ke fekumi kai?</i></p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>	<p>PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER ..... B</p> <p>OTHER SOURCE PRIVATE CLINICS. C TRADITIONAL HEALER ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X (SPECIFY)</p>
535	CHECK 534:	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 537) ←</p>	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 537) ←</p>	<p>TWO OR ONLY <input type="checkbox"/> MORE ONE <input type="checkbox"/> CODES CODE CIRCLED CIRCLED</p> <p>(SKIP TO 537) ←</p>
536	<p>Where did you first seek advice or treatment? <i>Koe fe feitu'u na'a ke 'uluaki pe fuofua kumi fale'l pe faito'o mei ai?</i></p> <p>USE LETTER CODE FROM 534.</p>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
537	<p>How many days after the illness began did you first seek advice or treatment for (NAME)? <i>Koe 'aho nai 'e fiha hili 'ene puke pea kamata ho'o fekumi ki ha fale'l pe koha faito'o?</i></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"/>
538	<p>Is (NAME) still sick with a (fever/cough)? <i>Oku ne kei puke pe 'a (hingoa) he mofi pe koe tale?</i></p>	<p>FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8</p>	<p>FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8</p>	<p>FEVER ONLY ..... 1 COUGH ONLY ... 2 BOTH FEVER AND COUGH ..... 3 NO, NEITHER ..... 4 DON'T KNOW ... 8</p>



NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
539	<p>At any time during the illness, did (NAME) take any drugs for the illness? <i>I he lolotonga 'a e puke 'a (hingoa) na'a ne folo ha fo'l'akau pe inu ha vaii pe ko ha faito'o?</i></p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544) DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544) DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 544) DON'T KNOW ..... 8</p>
540	<p>What drugs did (NAME) take? <i>Koe ha e fo'l'akau, vai pe faito'o na'a ne ma'u pe faka'aonga'i?</i></p> <p>Any other drugs? <i>Na'e toe 'iai nai moha toe faito'o kehe na'a ne ma'u?</i> RECORD ALL MENTIONED.</p>	<p>ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B</p> <p>OTHER DRUGS PARACETAMOL/ PANADOL ... C</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	<p>ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B</p> <p>OTHER DRUGS PARACETAMOL/ PANADOL ... C</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	<p>ANTIBIOTIC DRUGS PILL/SYRUP ... A INJECTION ... B</p> <p>OTHER DRUGS PARACETAMOL/ PANADOL ... C</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>
541	CHECK 540: CODE A CIRCLED?	<p>YES                  NO</p> <p><input type="checkbox"/>                  <input type="checkbox"/></p> <p>↓                          ↓</p> <p>(GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544)</p>	<p>YES                  NO</p> <p><input type="checkbox"/>                  <input type="checkbox"/></p> <p>↓                          ↓</p> <p>(GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544)</p>	<p>YES                  NO</p> <p><input type="checkbox"/>                  <input type="checkbox"/></p> <p>↓                          ↓</p> <p>(GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 544)</p>
542	<p>Did you already have the antibiotic pill/syrup at home when the child became ill? <i>Na'a ke 'osi ma'u pe nai a'e fo'l'akau pe koe ki'l vai ('oku ne fakafepaki'l 'a e pekitelia) 'l 'api he taimi na'e puke ai?</i></p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>
543		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 544.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 544.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
544	CHECK 215 AND 218, ALL ROWS:  NUMBER OF CHILDREN BORN IN 2007 OR LATER LIVING WITH THE RESPONDENT  ONE OR MORE <input type="checkbox"/> NONE <input type="checkbox"/>		547
545	The last time (NAME OF YOUNGEST CHILD) passed stools, what was done to dispose of the stools? <i>I he taimi na'e tu'umamao 'a (hingoa 'o e ki'i tamasi'l pe ta'ahine si'isi'l taha) na'e anga fefe hono faka'auha 'a 'ene tu'u mama'o (hufanga he fakatapu)?</i>	CHILD USED TOILET OR LATRINE ... 1 PUT/RINSED INTO TOILET OR LATRINE ..... 2 PUT/RINSED INTO DRAIN OR DITCH ..... 3 THROWN INTO GARBAGE ..... 4 BURIED ..... 5 LEFT IN THE OPEN ..... 6 OTHER ..... 9 (SPECIFY)	
546	CHECK 523(a), ALL COLUMNS:  NO CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/> ANY CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/>		548
547	Have you ever heard of a special product called ORS or vai masima you can get for the treatment of diarrhea? <i>Kuo ke 'osi fanongo nai he me'a makehe 'oku ui koe ORS pe vai masima teke 'alama'u koe faito'o kihe fklele?</i>	YES ..... 1 NO ..... 2	
548	CHECK 215 AND 218, ALL ROWS:  HAS AT LEAST ONE CHILD BORN IN 2009 OR LATER AND LIVING WITH HER <input type="checkbox"/> DOES NOT HAVE ANY CHILDREN BORN IN 2009 OR LATER AND LIVING WITH HER <input type="checkbox"/>  RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 549)  _____ (NAME)		601
549	Now I would like to ask you about liquids or foods (NAME FROM 548) had yesterday during the day or at night. <i>I he taimi ni teu 'eke atu leva ha ngaahi fehu'l fekau u'aki moe vai pe me'akai na'e ma'u mo inu 'e (hingoa mei he fehu'i 548) 'aneafi lolotonga 'a e 'aho pe po'uli?</i> Did (NAME FROM 548) (drink/eat): <i>Koe HINGOA MEI HE 548 ('inu/me'akai)</i>  Plain water?    Vai 'ata'ata pe? Commercially produced infant formula such as SMA, S-26?  Any commercially fortified baby food or cereal like Cerelac, Gerber, etc? <i>Na'e 'I ai nai ha me'akai pepe na'e fakatau mai hange koe Cerelac (cereal) pe Gerber pe koha me'akai pepe?</i> Any (other) porridge or gruel? <i>Pe ko ha polisi pe kuele (ha me'akai pe na'e ngaohi mei ha mahoa'a pe uite fakataha moe hu'akau)?</i>	YES    NO    DK PLAIN WATER ..... 1    2    8 FORMULA ..... 1    2    8 BABY CEREAL ..... 1    2    8 OTHER PORRIDGE/GRUEL.. 1    2    8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES						SKIP																																																																																																																																																										
550	<p>Now I would like to ask you about (other) liquids or foods that (NAME FROM 548) 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.  <i>I he taimi ni kataki teu fehu'i atu leva fekau'aki moe vai pe me'akai na'e ma'u 'e (hingoa mei he 548) 'aneafi lolotonga a e 'aho pe koe po'uli. 'Oku ou fiema'u keu 'ilo pe na'e ma'u 'e (hingoa) 'ae ngaahi me'akai ko 'eni neongo na'e ma'u fakataha mo ha me'akai kehe?</i></p> <p>Did (NAME FROM 548)/you drink (eat):  <i>Na'e kai pe inu nai 'e (hingoa mei he 548) 'ae ngaahi me'a ni?</i></p> <p>a) Milk such as tinned, powdered, or fresh animal milk?  <i>Ha hu'akau mei ha kapa huakau, efuefu pe pauta hu'akau, pe hu'akau fo'ou mei ha pulu pe kosi?</i></p> <p>b) Tea or coffee?  <i>Ti pe kofi?</i></p> <p>c) Soft drinks?  <i>Kapa 'inu melie?</i></p> <p>d) Any other liquids?  <i>Na'e toe 'I ai ha fa'ahinga 'inu kehe?</i></p> <p>e) Bread, rice, noodles, or other foods made from grains?  <i>Ma, laise, nutolo pe ko ha fa'ahinga me'akai pe na'e ngaohi</i></p> <p>f) Pumpkin, carrots, squash, breadfruit or sweet potatoes that are yellow or orange inside?  <i>Hina, kaloti, mei pe kumala 'aia 'oku lanu engeenga mo lanu moli 'a loto?</i></p> <p>g) White potatoes, yam, taro, cassava, or any other foods made from roots?  <i>Pateta hinehina, 'ufi, talo, manioke pe ko ha fa'ahinga me'akai foha pe?</i></p> <p>h) pele leaves and any other dark green, leafy vegetables?  <i>Lau'l lu, lau'l pele pe koha toe lau'l'akau 'oku lanumata ka koe fa'ahinga pe ko ha lau'l'akau vesitapolo?</i></p> <p>i) Paw-paw, orange, banana, pineapple, or any Viatmin A-rich fruits  <i>Lesi, moli pe staine?</i></p> <p>j) Any other fruits or vegetables such as apple, pear, coconut etc?  <i>Ko ha toe fa'ahinga fo'l'akau pe vesitapolo hange koe 'apele, pea, felo niu pe ko ha ngaahi me'a pehe?</i></p> <p>k) Liver, kidney, heart or other organ meats?  <i>Ate, kofuua, mafu pe koha toe 'okani pe mei he kakano'l manu (hufanga he fakatapu)?</i></p> <p>l) Any fresh meat, such as beef, pork, lamb, chicken, or duck?  <i>Ha fa'ahinga kakano'l manu fo'ou hange koe pulu, puaka, lami, moa pe pato?</i></p> <p>m) Any canned or frozen meat or poultry?  <i>Ha fa'ahinga kapa kakano'l manu pe tuku'aisi pe kakano'l moa?</i></p> <p>n) Eggs?  <i>Fefe tua'lmoa?</i></p> <p>o) Fresh, canned, smoked or dried fish or shellfish?  <i>Fefe ika fo'ou, kapaika, ika momoa pe ko ha fa'ahinga fingingota pe?</i></p> <p>p) Any foods made from beans, peas, lentils, or nuts?  <i>Ha fa'ahinga me'akai pe na'e ngaohi mei he piini, piisi, lenitila pe pinati?</i></p> <p>q) Cheese, yogurt or other milk products?  <i>Siisi, ioketi, pe ko ha fa'ahinga me'akai pe 'oku ngaohi mei he hu'akau?</i></p> <p>r) Any oil, fats, or butter, or foods made with any of these such as coconut cream?  <i>Fa'ahinga lolo pe ngako, pata pe ha fa'ahinga me'akai pe na'e ngaohi mei he ngaahi me'a ni 'o kau aipe moe kilimi mei he niu pe koe loloni?</i></p> <p>s) Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?  <i>Ha fa'ahinga me'akai pe 'oku ngaohi mei he suka hange koe sokoleti, lole, me'amellie, keke moe pisikete?</i></p> <p>t) Any other solid or semi-solid food?  <i>Na'e 'I ai moha toe me'akai fefeka pe me'akai vaivai kehe?</i></p>	<table border="1"> <thead> <tr> <th></th> <th colspan="3">CHILD</th> <th colspan="3">MOTHER</th> </tr> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>b</td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> 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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
551	<p>CHECK 549 (LAST 2 CATEGORIES: BABY CEREAL OR OTHER PORRIDGE/GRUEL) AND 550 CATEGORIES e THROUGH t FOR CHILD):</p> <p>AT LEAST ONE "YES" <input type="checkbox"/></p>	<p>NOT A SINGLE "YES" <input type="checkbox"/></p>	<p>601</p>
552	<p>How many times did (NAME FROM 548) eat solid, semisolid, or soft foods yesterday during the day or at night?</p> <p><i>Na'e tu'o fiha nai ha ma'u me'atokoni 'a (hingoa mei he 548) mei ha me'akai fefeka, me'akai vaivai pe me'akai huhu'a 'aneafi lolotonga 'ae 'aho pe koe po'uli?</i></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. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married? <i>Oku ke lolotonga mali nai pe nofo fakamali pe moha siana 'o hange pe 'oku mo mali?</i>	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A MAN ..... 2 NO, NOT IN UNION ..... 3	→ 604
602	Have you ever been married or lived together with a man as if married? <i>Kuo ke 'osi mali pe nofo fakamali moha siana hange pe na'a mo mali kimu'a?</i>	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A MAN ..... 2 NO ..... 3	→ 609
603	What is your marital status now: are you widowed, divorced, or separated? <i>Kataki koe ha ho tu'unga fakamali he taimi ni? 'oku ke uitou pe kuo ke vete pe mavae mo ho mali?</i>	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED ..... 3	→ 606
604	Is your husband/partner living with you now or is he staying elsewhere? <i>Oku lolotonga nofo ho mali pe siana 'oku mo nofo fakamali mo koe pe 'oku nofo kehe ia?</i>	LIVING WITH HER ..... 1 STAYING ELSEWHERE ..... 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____  LINE NUMBER ..... <input type="text"/> <input type="text"/>	
606	Have you been married or lived with a man only once or more than once? <i>Kuo ke 'osi mali pe nofo kamali fmoha siana tu'o taha pe tu'o lahi hake?</i>	ONLY ONCE ..... 1 MORE THAN ONCE ..... 2	
607	CHECK 606:  MARRIED/ LIVED WITH A MAN <input type="checkbox"/> ONLY ONCE ↓  In what month and year did you start living with your husband/partner? <i>Kataki ko e fe nai 'a e mahina moe ta'u na'a ke kamata nofo ai mo ho mali pe ko ho hoa fakamali?</i>  MARRIED/ LIVED WITH A MAN <input type="checkbox"/> MORE THAN ONCE ↓  Now I would like to ask about when you started living with your first husband/partner. In what month and year was that? <i>Kataki 'I he taimi ni teu fehu'I atu leva pe ko fe taimi na'ake fuofua nofo fakamali ai mo ho 'uluaki mali pe hoa fakamali. Ko mahina moe ta'u fee nai ia?</i>	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	→ 609
608	How old were you when you first started living with him? <i>Na'a ke ta'u fiha nai he taimi na'a ke 'uluaki nofo fakamali ai mo ia?</i>	AGE ..... <input type="text"/> <input type="text"/>	
609	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
610	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some important life issues. <i>Kataki fakamolemole teu fehu'I atu leva he taim ni ha ngaahi fehu'I fekau'aki moe nofo fakamali ko hono 'uhinga ke ma'u ha ngaahi fakamatala 'oku toe mahino ange fekau'aki moe ngaahi me'a mahu'inga felave'I mo 'etau mo'ui.</i> FOR NEVER MARRIED, FIRST ASK: Have you ever had sexual intercourse? IF YES: <i>OKAPAU 'OKU TE'EKI MALI, 'ULUAKI 'EKE 'ENI: Kuo ke 'osi nofo fakamali nai? KAPAU 'OKU 'IO:</i> <i>Kuo ke 'osi nofo fakamali nai? KAPAU 'OKU 'IO:</i> How old were you when you had sexual intercourse for the very first time? <i>Na'a ke ta'u fiha nai he fuofua taimi na'a ke nofo fakamali ai?</i>	NEVER HAD SEXUAL INTERCOURSE ..... 00  AGE IN YEARS ..... <input type="text"/> <input type="text"/>  FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER ..... 95	→ 613   → 613

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	CHECK 109: AGE <input type="checkbox"/> 15-24 AGE <input type="checkbox"/> 25-49		→ 633
612	Do you intend to wait until you get married to have sexual intercourse for the first time? <i>Oku ke palani nai keke tatali pe keke toki mali pea ke toki fuofua mohe mo nofo fakamali ai?</i>	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE ..... 8	→ 633
613	CHECK 109: AGE <input type="checkbox"/> 15-24 AGE <input type="checkbox"/> 25-49		→ 618
614	The <u>first</u> time you had sexual intercourse, was a condom used? <i>I he fuofua taimi na'a ke nofo pe mohe fakamali ai na'ake ngaue'aki nai ha konitomu?</i>	YES ..... 1 NO ..... 2 DON'T KNOW/DON'T REMEMBER . 8	
615	How old was the person you first had sexual intercourse with? <i>Na'e ta'u fiha nai 'a e tokotaha na'a ke fuofua nofo pe mohe fakamali mo ia?</i>	AGE OF PARTNER ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	→ 618
616	Was this person older than you, younger than you, or about the same age as you? <i>Na'e ta'u motua ange, si'isi'l ange pe ta'u tatau 'a e tokotaha koia mo koe?</i>	OLDER ..... 1 YOUNGER ..... 2 ABOUT THE SAME AGE ..... 3 DON'T KNOW/DON'T REMEMBER . 8	→ 618
617	Would you say this person was ten or more years older than you or less than ten years older than you? <i>Teke pehe nai koe tokotaha ko 'eni na'e motua ange iate koe 'aki ha ta'u 'e hongofulu pe si'isi'l ange he ta'u 'e hongofulu 'iate koe?</i>	TEN OR MORE YEARS OLDER ... 1 LESS THAN TEN YEARS OLDER ... 2 OLDER, UNSURE HOW MUCH ... 3	
618	When was the <u>last</u> time you had sexual intercourse? <i>Kataki ko fe taimi fakamuimui na'a ke nofo pe mohe fakamali ai?</i>  IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO ..... 1 WEEKS AGO ..... 2 MONTHS AGO ..... 3 YEARS AGO ..... 4	→ 632

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER																																				
618A	<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> <p><i>Kataki fakamolemole 'i he taimi ni teu fehu'i atu leva ha ngaahi fehu'l felave'l mo ho'o nofo pe mohe fakamali ki mui ni mai. Kataki ko ho'o ngaahi tali 'oku matu'aki uhi tmalu 'aupito pea 'oku fakapulipuli ia pea 'e 'ikai ke 'ave ia kiha taha. 'Okapau leva 'e 'iai ha fehu'l 'oku ke 'ongo'l 'oku 'ikai teke fietali pea ke fakahoko maipe pe pea teta hoko atu leva kihe fehu'i hono hoko. mahu'inga ange foki kapau teke loto lelei keke tali kotoa e ngaahi fehu'i, malo.</i></p>																																							
619	<p>When was the last time you had sexual intercourse with this person? Kataki ko e fe taimi fakamuimui taha na'a ke nofo pe mohe fakamali al moe tokotaha koia?</p>		<p>DAYS . 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>WEEKS 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>MONTHS 3 <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>DAYS . 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>WEEKS 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>MONTHS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p>																								
620	<p>The last time you had sexual intercourse (with this second/third person), was a condom used? Kataki, 'I he taimi na'a ke nofo fakamali fakamuimui taha ai (moe tokotaha fiha ua mo tolu) na'e ngaue'aki ha konitomu?</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 622) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 622) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 622) ←</p>																																				
621	<p>Did you use a condom every time you had sexual intercourse with this person in the last 12 months? Kataki na'a ke ngaue'aki nai ha konitomu I he taimi kotoa pe lolotonga ho'o nofo fakamali moe tokotaha koia he ta'u 'e taha kuo hili pe maliu atu?</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>	<p>YES ..... 1 NO ..... 2</p>																																				
622	<p>What was your relationship to this (second/third) person with whom you had sexual intercourse? Koe ha nai ho'o felave'l moe siana hono ua mo tolu na'a ke nofo fakamali moia?</p> <p>IF BOYFRIEND: KAPAU KOE KAUME'A ACQUAINTANCE ... 4 Were you living together as if married? Kataki na'a mo nofo fakamali 'I fe?</p> <p>IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.</p>	<p>HUSBAND ..... 1 (SKIP TO 628) ←</p> <p>LIVE-IN PARTNER .... 2</p> <p>BOYFRIEND NOT LIVING WITH RESPONDENT .... 3</p> <p>CASUAL ACQUAINTANCE ... 4</p> <p>PROSTITUTE ..... 5</p> <p>OTHER _____ 6 (SPECIFY)</p>	<p>HUSBAND ..... 1 (SKIP TO 628) ←</p> <p>LIVE-IN PARTNER .... 2</p> <p>BOYFRIEND NOT LIVING WITH RESPONDENT .... 3</p> <p>CASUAL ACQUAINTANCE ... 4</p> <p>PROSTITUTE ..... 5</p> <p>OTHER _____ 6 (SPECIFY)</p>	<p>HUSBAND ..... 1 (SKIP TO 628) ←</p> <p>LIVE-IN PARTNER .... 2</p> <p>BOYFRIEND NOT LIVING WITH RESPONDENT .... 3</p> <p>CASUAL ACQUAINTANCE ... 4</p> <p>PROSTITUTE ..... 5</p> <p>OTHER _____ 6 (SPECIFY)</p>																																				
623	<p>For how long (have you had/did you have) a sexual relationship with this person? Kataki koe ha nai e fuoloa ho'o nofo fakamali moe tokotaha koia?</p> <p>IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS.</p>	<p>DAYS . 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>MONTHS 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>YEARS 3 <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>DAYS . 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>MONTHS 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>YEARS 3 <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>DAYS . 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>MONTHS 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>YEARS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table></p>												
624	CHECK 109:	<p>AGE 15-24 <input type="checkbox"/> AGE 25-49 <input type="checkbox"/></p> <p>(SKIP TO 628) ←</p>	<p>AGE 15-24 <input type="checkbox"/> AGE 25-49 <input type="checkbox"/></p> <p>(SKIP TO 628) ←</p>	<p>AGE 15-24 <input type="checkbox"/> AGE 25-49 <input type="checkbox"/></p> <p>(SKIP TO 628) ←</p>																																				
625	<p>How old is this person? Koe ha nai e ta'u motua o'e tokotaha koia?</p>	<p>AGE OF PARTNER <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>(SKIP TO 628) ←</p> <p>DON'T KNOW ..... 98</p>					<p>AGE OF PARTNER <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>(SKIP TO 628) ←</p> <p>DON'T KNOW ..... 98</p>					<p>AGE OF PARTNER <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>(SKIP TO 628) ←</p> <p>DON'T KNOW ..... 98</p>																												

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
626	Is this person older than you, younger than you, or about the same age? <i>Kataki koe tokotaha ko 'eni 'oku ta'u lahiange pe si'isi'lange pe ta'u tatau pe mo koe?</i>	OLDER ..... 1 YOUNGER ..... 2 SAME AGE ..... 3 DON'T KNOW ... 8 (SKIP TO 628) ←	OLDER ..... 1 YOUNGER ..... 2 SAME AGE ..... 3 DON'T KNOW ... 8 (SKIP TO 628) ←	OLDER ..... 1 YOUNGER ..... 2 SAME AGE ..... 3 DON'T KNOW ... 8 (SKIP TO 628) ←
627	Would you say this person is ten or more years older than you or less than ten years older than you? <i>Teke lava nai 'o pehe koe tokotaha ko ia oku ta'u ne motu'aange he ta'u 'e 10 pe si'isi'lange he ta'u 'e hongofulu 'iate koe?</i>	TEN OR MORE YEARS OLDER . 1 LESS THAN TEN YEARS OLDER . 2 OLDER, UNSURE HOW MUCH ... 3	TEN OR MORE YEARS OLDER . 1 LESS THAN TEN YEARS OLDER . 2 OLDER, UNSURE HOW MUCH ... 3	TEN OR MORE YEARS OLDER . 1 LESS THAN TEN YEARS OLDER . 2 OLDER, UNSURE HOW MUCH ... 3
628	The last time you had sexual intercourse with this person, did you or this person drink alcohol? <i>I he taimi koia na'a ke nofo fakamali fakamuimui taha ai na'a ke ma'u ha kavamalohi pe na'e ma'u kavamalohi 'a ho'o hoa pe siana?</i>	YES ..... 1 NO ..... 2 (SKIP TO 630) ←	YES ..... 1 NO ..... 2 (SKIP TO 630) ←	YES ..... 1 NO ..... 2 (SKIP TO 631) ←
629	Were you or your partner drunk at that time? <i>Na'a ke kona pe na'e kona 'a ho'o hoa he taimi koia?</i>  IF YES: Who was drunk? <i>Ko hai na'e kona?</i>	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4	RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER ..... 4
630	Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months? <i>Tukukehe ange 'a e tokotaha pe ongoua ko 'eni na'e toe 'I ai nai ha toe tokotaha kehe na'a ke nofo fakamali mo ia 'I he mahina ta'u 'e taha kuo 'osi?</i>	YES ..... 1 (GO BACK TO 619 ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 632) ←	YES ..... 1 (GO BACK TO 619 ← IN NEXT COLUMN) NO ..... 2 (SKIP TO 632) ←	
631	In total, with how many different people have you had sexual intercourse in the last 12 months? <i>I he fakakatoa koe kakai kehekehe 'e toko fiha na'a ke nofo fakamali mo ia 'I he ta'u 'e taha kuo hili?</i>  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.  IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'			NUMBER OF PARTNERS LAST 12 MONTHS ... <input type="text"/> <input type="text"/>  DON'T KNOW ... 98



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
632	<p>In total, with how many different people have you had sexual intercourse in your lifetime?</p> <p><i>Kataki koe kakai kehekehe 'e toko fiha nai na'a ke 'osi nofo fakamali mo ia 'o a'u mai kihe 'aho ni?</i></p> <p>IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p> <p>IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.'</p>	<p>NUMBER OF PARTNERS IN LIFETIME ..... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	
633	<p>Do you know of a place where a person can get condoms?</p> <p><i>Oku ke 'iloi nai ha feitu'u 'e malava ke 'alu ki a'l ha taha ke ma'u mei ai h</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 701
634	<p>Where is that?</p> <p>Ko fe nai 'a e feitu'u koia?</p> <p>Any other place?</p> <p>Oku toe 'l ai mo ha feitu'u kehe?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</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(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>PRIVATE MEDICAL SECTOR</p> <p>TFHA HEALTH CLINIC ..... D</p> <p>PEER TRAINOR ..... 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>	
635	<p>If you wanted to, could you yourself get a condom?</p> <p><i>Oka pau 'oku ke fiema'u, teke malava 'o 'alu 'o ma'u mai ha konitomu mei ha feitu'u?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>	
636	<p>Do you know of a place where a person can get female condoms?</p> <p><i>Oku ke 'iloi nai ha feitu'u 'e malava ha taha ke ma'u mei al 'a e konitomu koe ma'ae hou'eiki fafine (kakai fefine)?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 701
637	<p>Where is that?</p> <p>Ko fe 'a e feitu'u koia?</p> <p>Any other place?</p> <p>Oku toe 'l ai moha feitu'u kehe?</p> <p>PROBE TO IDENTIFY EACH 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(S))</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>PRIVATE MEDICAL SECTOR</p> <p>TFHA HEALTH CLINIC ..... D</p> <p>PEER TRAINOR ..... 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>	
638	<p>If you wanted to, could you yourself get a female condom?</p> <p><i>Okapau 'oku ke fiema'u teke malava nai 'o ma'u ha konitomu ma'ae kakai fefine?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
701	<p>CHECK 311/311A:</p> <p>NEITHER <input type="checkbox"/> HE OR SHE STERILIZED                      STERILIZED <input type="checkbox"/></p>		→ 713								
702	<p>CHECK 226:</p> <p>NOT PREGNANT <input type="checkbox"/> PREGNANT <input type="checkbox"/> OR UNSURE</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? <i>Kataki 'ihe taimi ni teu 'eke atu ha ngaahi fehu'l fekau'aki moe kaha'u. 'Oku ke fiema'u ha'o fanau pe teke toe fiema'u nai ha'o fanau pe 'oku 'ikai keke loto ke toe 'I ai ha'o fanau?</i></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? <i>I he hili koia hono fanau'l mai 'a e pepe ko 'ena, teke toe fiema'u nai ha fanau pe 'ikai?</i></p>	<p>HAVE (A/ANOTHER) CHILD ..... 1</p> <p>NO MORE/NONE ..... 2 → 704</p> <p>SAYS SHE CAN'T GET PREGNANT . 3 → 713</p> <p>UNDECIDED/DON'T KNOW AND PREGNANT ..... 4 → 709</p> <p>UNDECIDED/DON'T KNOW AND NOT PREGNANT OR UNSURE ..... 5 → 708</p>									
703	<p>CHECK 226:</p> <p>NOT PREGNANT <input type="checkbox"/> PREGNANT <input type="checkbox"/> OR UNSURE</p> <p>How long would you like to wait from now before the birth of (a/another) child? <i>Koe ha nai 'a e fuoloa teke tatali ai he taimi ni pea toki fanau'l mai e pepe hoko?</i></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? <i>I he hili koia hono fanau'l mai e pepe ko'eni 'oku teuteu ke fanau'l mai koe ha e fuoloa pea ke fiema'u ke fanau'l mai e pepe hoko? pepe hoko?</i></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 → 708</p> <p>SAYS SHE CAN'T GET PREGNANT AFTER MARRIAGE ..... 994 → 713</p> <p>OTHER _____ 996 → 708 (SPECIFY)</p> <p>DON'T KNOW ..... 998</p>									
704	<p>CHECK 226:</p> <p>NOT PREGNANT <input type="checkbox"/> PREGNANT <input type="checkbox"/> OR UNSURE</p>		→ 709								
705	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/> NOT CURRENTLY USING <input type="checkbox"/> CURRENTLY USING <input type="checkbox"/></p>		→ 713								
706	<p>CHECK 703:</p> <p>NOT ASKED <input type="checkbox"/> 24 OR MORE MONTHS OR 02 OR MORE YEARS <input type="checkbox"/> 00-23 MONTHS OR 00-01 YEAR <input type="checkbox"/></p>		→ 709								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
707	<p>CHECK 702:</p> <p>WANTS TO HAVE A/ANOTHER CHILD <input type="checkbox"/></p> <p>WANTS NO MORE/NONE <input type="checkbox"/></p> <p>You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. <i>Na'a ke pehe 'oku 'ikai teke toe fiema'u ha fanau pe ha fanau 'e taha, ka 'oku 'ikai teke ngaue'aki ha me'a ke malu'l 'aki koe mei ha'o toe feitama?</i></p> <p>Can you tell me why you are not using a method? <i>Teke lava 'o talamai 'a e 'uhinga oku 'ikai keke ngaue'aki ai ha founga fakavaha?</i></p> <p>Any other reason? <i>Oku toe 'l ai moha 'uhinga kehe?</i></p> <p>RECORD ALL REASONS MENTIONED.</p> <p>You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. <i>Na'ake pehe 'oku 'ikai teke toe fiema'u ha fanau ka 'oku 'ikai teke ngaue'aki ha me'a ke malu'aki koe mei ha'o toe feitama?</i></p> <p>Can you tell me why you are not using a method? <i>Teke lava 'o fakamatala 'a e 'uhinga 'oku 'ikai teke lava ai 'o ngaue'aki ha founga fakavaha?</i></p> <p>Any other reason? <i>Oku toe 'l ai moha toe 'uhinga kehe?</i></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/INFECOND ..... 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>DON'T KNOW ..... Z</p>	
708	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/></p> <p>NO, NOT CURRENTLY USING <input type="checkbox"/></p> <p>YES, CURRENTLY USING <input type="checkbox"/></p>		<p>→ 713</p>
709	<p>Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? <i>Oku ke pehe teke ngaue'aki ha founga fakavaha fanau he kaha'u ke fakatuai'l pe ta'ofi 'aki ha'o feitama 'l he kaha'u?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	<p>→ 711</p> <p>→ 713</p>
710	<p>Which contraceptive method would you prefer to use? <i>Koe ha e founga fakavaha fanau 'oku ke pehe teke fie ngaue'aki?</i></p>	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>PILL ..... 03</p> <p>IUD ..... 04</p> <p>INJECTABLES ..... 05</p> <p>IMPLANTS ..... 06</p> <p>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 ..... 12</p> <p>WITHDRAWAL ..... 13</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>UNSURE ..... 98</p>	<p>→ 713</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	<p>What is the main reason that you think you will not use a contraceptive method at any time in the future?</p> <p><i>Koe ha 'a e 'uhinga mahu'inga taha pe makatu'unga 'oku ke fakakaukau ai 'e 'ikai ai teke ngaue'aki ha founa fakavaha fanau 'I he kahau?</i></p>	<p>NOT MARRIED ..... 11</p> <p>FERTILITY-RELATED REASONS</p> <p>INFREQUENT SEX/NO SEX .... 22</p> <p>MENOPAUSAL/HYSTERECTOMY 23</p> <p>SUBFECUND/INFECUND ..... 24</p> <p>WANTS AS MANY CHILDREN AS POSSIBLE ..... 26</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED ..... 31</p> <p>HUSBAND/PARTNER OPPOSED 32</p> <p>OTHERS OPPOSED ..... 33</p> <p>RELIGIOUS PROHIBITION ..... 34</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD ..... 41</p> <p>KNOWS NO SOURCE ..... 42</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNS ..... 51</p> <p>FEAR OF SIDE EFFECTS ..... 52</p> <p>LACK OF ACCESS/TOO FAR ... 53</p> <p>COSTS TOO MUCH ..... 54</p> <p>INCONVENIENT TO USE ..... 55</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES ..... 56</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 98</p>	→ 713
712	<p>Would you ever use a contraceptive method if you were married?</p> <p><i>Teke fie ngaue'aki nai ha founa fakavaha fanau kapau 'oku ke mali?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
713	<p>CHECK 216:</p> <p>HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/></p> <p>If you could go back to the time when 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><i>Kapau teke foki kihe taimi na'e te'eki keke ma'u fanau ai pea ke fili 'a e tokolahi a ho'o fanau. Koe ha nai 'a e tokolahi 'a e fanau teke fiema'u?</i></p> <p>PROBE FOR A NUMERIC RESPONSE.</p> <p>If you could choose exactly the number of children to have in your whole life, how many would that be?</p> <p><i>Kapau teke fili a'e tokolahi ho'o fanau, e toko fiha nai?</i></p>	<p>NONE ..... 00</p> <p>NUMBER ..... <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	→ 715
714	<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><i>I he fanau koia koe ha e tokolahi 'oku ke loto koe fanau tangata pe fanau fefine pea koe toko fiha 'oku 'ikai teke tokanga koe pe 'e tamasi'I pe 'e ta'ahine?</i></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</p> <p>(SPECIFY)</p>	
715	<p>In the last few months have you:</p> <p><i>I he ngaahi mahina s'I kuo hili kuo ke:</i></p> <p>Heard about family planning on the radio?</p> <p><i>Fanongo nai he letio fakau'aki moe fakakaukau' o e famili?</i></p> <p>Seen about family planning on the television?</p> <p><i>Mamata nai he televisione fekau'aki moe fakakaukau' o'e famili?</i></p> <p>Read about family planning in a newspaper or magazine?</p> <p><i>Lau he nusipepa pe makasini fekau'aki moe fakakaukau' o'e famili?</i></p>	<p>YES NO</p> <p>RADIO ..... 1 2</p> <p>TELEVISION ..... 1 2</p> <p>NEWSPAPER OR MAGAZINE ... 1 2</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP										
716	Have you heard about the following family planning messages: <i>Kuo ke fanongo nai he ngaahi fakamatala ko 'eni fekau'aki moe fakakaukau'i o'e famili?</i> Healthy Mother, Healthy Baby? <i>Fa'e Mou'I lelei, Pepe Mou'I lelei?</i> Plan your Family by choice, Not by chance"? <i>Fili ke palani'i ho famili, 'oua e tuku pe ke toki hoko?</i> A Baby, Having a Baby"? <i>Koe pepepe, ko 'ete pepe?</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right; padding-right: 10px;"><u>YES</u> <u>NO</u></td> <td></td> </tr> <tr> <td>HEALTHY MOTHER .....</td> <td style="text-align: right;">1 2</td> </tr> <tr> <td>PLAN YOUR FAMILY .....</td> <td style="text-align: right;">1 2</td> </tr> <tr> <td>A BABY HAVING A BABY .....</td> <td style="text-align: right;">1 2</td> </tr> </table>	<u>YES</u> <u>NO</u>		HEALTHY MOTHER .....	1 2	PLAN YOUR FAMILY .....	1 2	A BABY HAVING A BABY .....	1 2			
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HEALTHY MOTHER .....	1 2												
PLAN YOUR FAMILY .....	1 2												
A BABY HAVING A BABY .....	1 2												
717	CHECK 601:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 33%;">               YES, CURRENTLY MARRIED <input type="checkbox"/> </td> <td style="text-align: center; width: 33%;">               YES, LIVING WITH A MAN <input type="checkbox"/> </td> <td style="text-align: center; width: 33%;">               NO, NOT IN UNION <input type="checkbox"/> </td> </tr> </table>	YES, CURRENTLY MARRIED <input type="checkbox"/>	YES, LIVING WITH A MAN <input type="checkbox"/>	NO, NOT IN UNION <input type="checkbox"/>		→ 801							
YES, CURRENTLY MARRIED <input type="checkbox"/>	YES, LIVING WITH A MAN <input type="checkbox"/>	NO, NOT IN UNION <input type="checkbox"/>											
718	CHECK 311/311A:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">CODE B, G, OR M CIRCLED</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 60%;"></td> </tr> <tr> <td>NO CODE CIRCLED</td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td>OTHER</td> <td><input type="checkbox"/></td> <td></td> </tr> </table>	CODE B, G, OR M CIRCLED	<input type="checkbox"/>		NO CODE CIRCLED	<input type="checkbox"/>		OTHER	<input type="checkbox"/>			→ 720 → 722	
CODE B, G, OR M CIRCLED	<input type="checkbox"/>												
NO CODE CIRCLED	<input type="checkbox"/>												
OTHER	<input type="checkbox"/>												
719	Does your husband/partner know that you are using a method of family planning? <i>Oku 'iloi nai 'e ho'o mali pe tangata 'oku mo nofo fakamali 'oku ke ngaue'aki ha founda fakavaha fanau ki hono palani'i 'o e famili?</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: right;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: right;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: right;">8</td> </tr> </table>	YES .....	1	NO .....	2	DON'T KNOW .....	8					
YES .....	1												
NO .....	2												
DON'T KNOW .....	8												
720	Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together? <i>Oku ke pehe nai ko e tu'utu'uni koia ki hono ngaue'aki 'o e fakavaha fanau koe tu'utu'uni tafataha pe ia 'a koe, pe ko e mali pe tangata 'oku mo nofo fakamali pe koe tu'utu'uni ia 'a moua fakatou'osi kemo talanoa kiai?</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>MAINLY RESPONDENT .....</td> <td style="text-align: right;">1</td> </tr> <tr> <td>MAINLY HUSBAND/PARTNER .....</td> <td style="text-align: right;">2</td> </tr> <tr> <td>JOINT DECISION .....</td> <td style="text-align: right;">3</td> </tr> <tr> <td>OTHER _____</td> <td style="text-align: right;">6</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SPECIFY)</td> </tr> </table>	MAINLY RESPONDENT .....	1	MAINLY HUSBAND/PARTNER .....	2	JOINT DECISION .....	3	OTHER _____	6	(SPECIFY)		
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MAINLY HUSBAND/PARTNER .....	2												
JOINT DECISION .....	3												
OTHER _____	6												
(SPECIFY)													
721	CHECK 311/311A:  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 33%;">               NEITHER STERILIZED <input type="checkbox"/> </td> <td style="text-align: center; width: 33%;">               HE OR SHE STERILIZED <input type="checkbox"/> </td> <td style="width: 33%;"></td> </tr> </table>	NEITHER STERILIZED <input type="checkbox"/>	HE OR SHE STERILIZED <input type="checkbox"/>			→ 801							
NEITHER STERILIZED <input type="checkbox"/>	HE OR SHE STERILIZED <input type="checkbox"/>												
722	Does your husband/partner want the same number of children that you want, or does he want more or fewer than you want? <i>Oku tatau 'a ho'o fiema'u moe fiema'u 'a ho mali pe tangata 'oku mo nofo fakamali ki he tokolahi 'a ho'omo fanau pe 'oku ne fiema'u 'e ia ke toe tokolahi ange pe toe tokosi'l ange 'a ho'omo fanau?</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>SAME NUMBER .....</td> <td style="text-align: right;">1</td> </tr> <tr> <td>MORE CHILDREN .....</td> <td style="text-align: right;">2</td> </tr> <tr> <td>FEWER CHILDREN .....</td> <td style="text-align: right;">3</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: right;">8</td> </tr> </table>	SAME NUMBER .....	1	MORE CHILDREN .....	2	FEWER CHILDREN .....	3	DON'T KNOW .....	8			
SAME NUMBER .....	1												
MORE CHILDREN .....	2												
FEWER CHILDREN .....	3												
DON'T KNOW .....	8												

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	<p>CHECK 601 AND 602:</p> <p>CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/></p> <p>FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/></p>	<p>NEVER MARRIED AND NEVER LIVED WITH A MAN <input type="checkbox"/></p>	<p>→ 803</p> <p>→ 807</p>
802	<p>How old was your husband/partner on his last birthday? <i>Koe ha e ta'u motu'a 'a ho mali pe tangata 'oku mo nofo fakamali 'I hono 'aho fa'ele'i fakamuimui taha?</i></p>	<p>AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/></p>	
803	<p>Did your (last) husband/partner ever attend school? <i>Na'e ako nai ho mali pe tangata 'oku mo nofo fakamali 'I ha 'apiako?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>→ 806</p>
804	<p>What was the highest level of school he attended: primary, secondary, or higher? <i>Koe ha e tu'unga fakaako mau'olunga taha na'e ne a'usia? lautohi pule'anga, kolisi pe ko ha ako 'oku toe mau'olunga ange?</i></p>	<p>PRE-SCHOOL ..... 0 PRIMARY ..... 1 SECONDARY ..... 2 TERTIARY ..... 3 VOCATIONAL ..... 4 OTHER ..... 5 DONT KNOW ..... 8</p>	<p>→ 806</p>
805	<p>What was the highest year he completed at that level? <i>Koe ha 'a e ta'u mau'olunga taha na'a ne lava'I he levolo koia?</i></p>	<p>YEAR ..... <input type="text"/> <input type="text"/> DONT KNOW ..... 98</p>	
806	<p>CHECK 801:</p> <p>CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/></p> <p>FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/></p> <p>What is your husband's/ partner's occupation? That is, what kind of work does he mainly do? <i>Koe ha a'e ngaue 'a ho'o hoa pe tangata 'oku mo nofo fakamali? Koe ha 'a e tefito'I ngaue 'oku ne fakahoko pe fai?</i></p>	<p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	
807	<p>Aside from your own housework, have you done any work in the last seven days? <i>Tuku kehe ange ho'o ngaue faka'api na'ake toe fai nai ha ngaue kehe he 'aho ko 'eni 'e fitu pe uike 'e taha kuo 'osi?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>→ 811</p>
808	<p>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? <i>Hange koia 'oku ke 'iloi 'oku 'i ai e hou'eiki fafine 'oku nau ngaue pea totongi pa'anga pe koe ngaue 'ofa pe. 'Oku 'i ai foki e fa'ahinga 'oku nau fakatau atu ha ngaahi koloa, pea fa'ahinga oku 'i ai 'enau ki'I pisinisi pe ngaue ha faama 'a e famili pe 'i he pisinisi 'a e famili. 'I he 'aho 'e fitu pe uike e taha kuo 'osi na'a ke fai nai ha ngaue he taha 'o e ngaahi ngaue ko 'eni pe koha toe ngaue kehe pe?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>→ 811</p>
809	<p>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? <i>Neongo na'e 'ikai teke ngaue he 'aho 'e fitu kuo maliu atu na'e 'iai nai ha'o livi malolo mei ha'o ngaue pe pisinisi 'aia na'a ke mavahe mei ai koe'uhi ko ha'o livi malolo, puke, malolo 'eve'eva pe malolo livi fa'ele pe koha toe 'uhinga kehe?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>→ 811</p>
810	<p>Have you done any work in the last 12 months? <i>Na'a ke fai nai ha fa'ahinga ngaue he mahina 'e tahaua pe ta'u e taha kuo maliu atu?</i></p>	<p>YES ..... 1 NO ..... 2</p>	<p>→ 818</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
811	What is your occupation, that is, what kind of work do you mainly do? <i>Koe ha h'o'o ngaue, koe ha ho'o tefito'l ngaue 'oku fai?</i>	<table border="1" style="display: inline-table; vertical-align: top;"><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> _____ _____ _____					
812	CHECK 811:  WORKS IN AGRICULTURE <input type="checkbox"/> DOES NOT WORK IN AGRICULTURE <input type="checkbox"/>		→ 814				
813	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? <i>Oku ke ngaue fakatefito pe 'l he kelekele pe 'o'ou pe koe kelekele 'o e famili pe koe kelekele na'a ke lisi mei ha taha kehe, pe 'oku ke ngaue 'l ha kelekele 'a ha taha kehe?</i>	OWN LAND ..... 1 FAMILY LAND ..... 2 RENTED LAND ..... 3 SOMEONE ELSE'S LAND ..... 4					
814	Do you do this work for a member of your family, for someone else, or are you self-employed? <i>Oku ke fai 'a e ngaue ko 'eni ki ha taha 'o e memipa ' ho'o famili pe kiha tahakehe pe ko ho'o ngaue pe ma'au?</i>	FOR FAMILY MEMBER ..... 1 FOR SOMEONE ELSE ..... 2 SELF-EMPLOYED ..... 3					
815	Do you usually work at home or away from home? <i>Oku ke fa'a ngaue pe 'l 'api pe 'oku ke fa'a ngaue mei ha feitu'u ke?</i>	HOME ..... 1 AWAY ..... 2					
816	Do you usually work throughout the year, or do you work seasonally, or only once in a while? <i>Oku ke ngaue he lolotonga 'a e ta'u kakato pe 'oku ke ngaue fakafa'ahi ta'u pe pe 'oku ke gaue fakataimi pe mo tataitaha?</i>	THROUGHOUT THE YEAR ..... 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE ..... 3					
817	Are you paid in cash or kind for this work or are you not paid at all? <i>Oku totongi pa'anga nai koe pe koe ngaue 'ofa pe 'oku 'ikai pe ke totongi koe ia?</i>	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID ..... 4					
818	CHECK 601:  CURRENTLY MARRIED/LIVING WITH A MAN <input type="checkbox"/> NOT IN UNION <input type="checkbox"/>		→ 827				
819	CHECK 817:  CODE 1 OR 2 CIRCLED <input type="checkbox"/> OTHER <input type="checkbox"/>		→ 822				
820	Who usually decides how the money that you earn will be used: you, your husband/partner, or you and your husband/partner jointly? <i>Ko hai 'oku fa'a fai tu'utu'uni fekau'aki moe pa'anga 'oku ma'u mai mei ho'o ngaue, ko koe pe, pe koe husepaniti pe koe tangata 'oku ke nofo fakamali moia pe ko kimoua fakatou'osi?</i>	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . 3 OTHER ..... 6 (SPECIFY)					
821	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? <i>Oku ke pehe nai 'oku lahiange 'a e pa'anga 'oku ke ma'u mei ho'o ngaue 'l ho husepaniti pe tangata 'oku mo nofo fakamali mo ia pe si'isi'l ange he me'a 'oku ne ma'u pe 'oku tatau pe 'a e pa'anga 'oku ke ma'u moia?</i>	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	→ 823				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
822	Who usually decides how your husband's/partner's earnings will be used: you, your husband/partner, or you and your husband/partner jointly? <i>Ko hai 'oku ne fa'a fakahoko e tu'utu'uni ki he anga hono faka'aonga'i a'e pa'anga 'oku ma'u he ngaue ho husepaniti pe tangata 'oku mo nofo fakamali. Ko koe ko hohusepaniti pe tangata 'oku mo nofo fakamali pe ko kimoua fakatou'osi pe?</i>	RESPONDENT ..... 1 HUSBAND/PARTNER ..... 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . 3 HUSBAND/PARTNER HAS NO EARNINGS ..... 4 OTHER ..... 6 (SPECIFY)	
823	Who usually makes decisions about health care for yourself: you, your husband/partner, you and your husband/partner jointly, or someone else? <i>Ko hai 'oku ne fa'a fakahioko e fai tu'utu'uni fekau'aki mo ho'o mo'ui lelei. Ko koe pe koe husepaniti pe tangata 'oku mo nofo fakamali moia, ko kimoua fakatou'osi pe koha taha kehe?</i>	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 OTHER = 6 1      2      3      4      6	
824	Who usually makes decisions about making major household purchases? <i>Ko hai 'oku ne fa'a fakahoko e fai tu'utu'uni fekau'aki moe ngaahi fakatau lalahi ki ho'omou ngaahi naunau faka'api?</i>	1      2      3      4      6	
825	Who usually makes decisions about making purchases for daily household needs? <i>Ko hai 'oku ne fa'a fakahoko e fai tu'utu'uni fekau'aki moe ngaahi fakatau faka'aho 'i ho'omou 'api?</i>	1      2      3      4      6	
826	Who usually makes decisions about visits to your family or relatives? <i>Ko hai 'oku ne fa'a fakahoko e fai tu'utu'uni fekau'aki mo ho'o mou 'a'ahi ki ho famili pe ko ho kainga?</i>	1      2      3      4      6	
827	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	
828	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: <i>I he taimi 'e ni'ihi 'oku fa'a lotomamahi pe 'ita 'a e husepaniti ha ngaahi na'e fakahoko 'e hono uaifi. 'Oku ke fakakaukau nai 'oku totonu kihe husepaniti kene ta mo tuki hono uaifi 'i he ngaahi me'a ko 'eni 'oka hoko:</i> If she goes out without telling him? <i>Oka pau 'e 'alu kiha feitu'u na'e te'eki kene fakahoko kiai?</i> If she neglects the children? <i>Oka pau tene li'aki pe 'ikai kene tauhi lelei 'a e fanau?</i> If she argues with him? <i>Oka pau 'e fakafekiki mo ia?</i> If she refuses to have sex with him? <i>Oka pau tene fakafisinga'i ke nofo pe mohe fakamali mo ia?</i> If she burns the food? <i>Oka pau 'e paku 'ene feime'atokoni pe haka?</i> If she comes home late from work or community function? <i>Okapau 'e ha'u tuai mei he ngaue pe meia fakataha'anga 'ae kolo?</i>	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	



## SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
901	<p>Now I would like to talk about something else.</p> <p><i>I he taimi ni teu talanoa leva ki ha me'akehe.</i></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><i>Oku malava ke mafola 'a e vailasi HIV mei ha tokotaha kiha tokotaha. 'Okapau 'e ma'u 'e ha tokotaha 'a e vailasi HIV malava pe ke puke. Pea koe puke lea koia 'oku 'iloa ia koe 'eitisi.</i></p> <p>Prior to this interview, have you ever heard of HIV or the disease called AIDS?</p> <p><i>Kuo ke fanongo nai he vailasi HIV pe koe fokoutua ko 'eni koe 'ETISI?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 952																								
902	<p>CHECK Q. 114 and 115:</p> <p>CODE '2', '3', or '4' CIRCLED IN <input type="checkbox"/> IN 114 OR 115 OR NO ANSWER</p> <p>CODE '1' CIRCLED IN 114 AND 115 <input type="checkbox"/> OR CODE '5' CIRCLED IN 114 AND 115</p>		→ 904																								
903	<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><i>Teu fakahoko atu 'a e ngaahi feitu'u ma'u'anga fakamatala fekau'aki moe faka'ehi'ehi mei ha'ate ma'u 'a e vailasi HIV 'a ia 'oku ne fakatupunga 'a e 'ETISI. Kuo ke</i></p> <p>a. Read messages about HIV or AIDS in newspapers or magazines?</p> <p><i>Osi lau nai ha ngaahi fakamatala fekau'aki moe vailasi HIV pe koe 'ETISI 'I ha nusipepa pe makasini?</i></p> <p>b. Seen leaflets, brochures, or booklets on HIV or AIDS?</p> <p><i>Mamata pe sio 'I ha ngaahi tohi fakahinohino, tohi pe lauu' l pepa fakamatala fekau'aki moe vailasi HIV pe koe 'ETISI?</i></p> <p>c. Gotten information on HIV or AIDS from the internet?</p> <p><i>Ma'u ha ngaahi fakamatala fekau'aki moe vailasi HIV pe koe 'ETISI mei he 'initaneti?</i></p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE</td> <td>1</td> <td>2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS</td> <td>1</td> <td>2</td> </tr> <tr> <td>INTERNET</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	NEWSPAPER/MAGAZINE	1	2	LEAFLETS/BOOKLETS	1	2	INTERNET	1	2													
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LEAFLETS/BOOKLETS	1	2																									
INTERNET	1	2																									
904	<p>READ INTRODUCTORY STATEMENT ONLY IF Q903 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><i>Koe ngaahi ma'u'anga fakamatala eni fekau'aki mo e faka'ehi'ehi mei he vailasi HIV 'a ia 'oku ne fakatupunga 'a e 'ETISI.</i></p> <p>Have you ever <i>Kuo ke</i></p> <p>a. Seen messages about HIV or AIDS on billboards, signs or posters?</p> <p><i>Mamata pe sio nai ha ngaahi fakamatala fekau'aki moe vailasi HIV pe 'ETISI 'I ha ngaahi papa, faka'ilonga pe koha poster?</i></p> <p>b. Seen messages about HIV or AIDS on TV?</p> <p><i>Mamata pe sio nai ha ngaahi fakamatala fekau'aki moe vailasi HIV pe 'ETISI he Televisione?</i></p> <p>c. Heard messages about HIV or AIDS on radio?</p> <p><i>Fanonga ha ngaahi fakamatala fekau'aki moe vailasi HIV pe 'ETISI he letioo?</i></p> <p>d. Seen the "Mr Right Guy" film or CD?</p> <p><i>Mamata pe sio nai he filimi pe CD koe "Mr Right Guy" pe Koe siana pe tokotaha totonu?</i></p> <p>e. Seen the "One Night Stand" film or CD?</p> <p><i>Mamata pe sio he filimi pe koe CD koe "One Night Stand pe koe "Po taha pe"?</i></p> <p>f. Attended a community event about HIV or AIDS?</p> <p><i>Kau atu nai kiha fa'ahinga fakataha'anga 'I he kolo fekau'aki moe vailasi HIV pe koe 'ETISI?</i></p> <p>g. 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><i>Ma'u ha ngaahi fakamatala fekau'aki moe 'ETISI pe koe vailasi HIV 'a ia 'oku ne fakatupunga 'a e 'ETISI mei ha taha ngaue ki he ngaahi kolo he ngaahi polokalama 'oku fakataumu'a ke a'u ki he ngaahi kolo. Koe tokotaha foki eni 'oku ha'u kihe nagahi kolo 'o talanoa moe kakai fekau'aki moe vailasi HIV pea moe 'ETISI?</i></p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS</td> <td>1</td> <td>2</td> </tr> <tr> <td>TV</td> <td>1</td> <td>2</td> </tr> <tr> <td>RADIO</td> <td>1</td> <td>2</td> </tr> <tr> <td>"MR RIGHT GUY"</td> <td>1</td> <td>2</td> </tr> <tr> <td>"ONE NIGHT STAND"</td> <td>1</td> <td>2</td> </tr> <tr> <td>COMMUNITY EVENT</td> <td>1</td> <td>2</td> </tr> <tr> <td>OUTREACH WORKER</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	SIGNS/POSTERS	1	2	TV	1	2	RADIO	1	2	"MR RIGHT GUY"	1	2	"ONE NIGHT STAND"	1	2	COMMUNITY EVENT	1	2	OUTREACH WORKER	1	2	
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
		YES	NO		
	<p>h. Participated in an HIV or AIDS peer education program? <i>Kau atu kiha fa'ahinga polokalama ako fakataha pea mo ho to'u (meimei ta'u tatau) fekau'aki moe vailasi HIV pe 'ETISI'?</i></p> <p>i. Participated in another type of HIV or AIDS education program such as a wokshop or school program? <i>Kau atu kiha toe fa'ahinga polokalama ako fekau'aki moe vailasi HIV pe 'ETISI' 'I ha polokalama pe 'a e ako (school) pe ko ha workshop (polokalama ako lolotonga 'a e ngaue)?</i></p> <p>j. Discussed AIDS OR HIV, the virus that causes AIDS, with other persons such as friend, family members, or work colleagues? <i>Potalanoa pe talanoa mo ha tokotaha hange ko ho kaungame'a, ha tokotaha he familii, pe kaungangaue fekau'aki moe 'ETISI' pe vailasi HIV 'a ia 'oku ne fakatupunga 'a e 'ETISI'?</i></p>	PEER EDUCATION . . . . .	1	2	
		OTHER EDUCATION . . . . .	1	2	
		FAMILY/FRIENDS . . . . .	1	2	
905	Can people reduce their chance of getting HIV, the virus that causes AIDS, by having just one, uninfected, faithful sex partner? <i>E malava nai ke fakasi'isi'i 'e he kakai 'a e faingamalie kenau mou'a he vailasi HIV 'a ia 'oku ne fakatupunga 'ae 'Eitisi 'I ha'anau nofo taha pe kiha hoa pe 'e taha, 'oku 'ikai ke uesia 'e he vailasi HIV pea 'oku fai totonu foki?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
906	Can people get HIV from mosquito bites? <i>E malava nai ke uesia ha taha 'e he vailasi HIV mei he u'u 'a e namu?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
907	Can people reduce their chance of getting HIV by using a condom every time they have sex? <i>E malava ke fakasi'isi'i 'e he kakai 'enau faingamalie kenau ma'u 'a e vailasi HIV 'I ha'anau ngaue'aki 'ae konitomu he taimi kotoa pe 'oku nau mohe pe nofo fakamali ai?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
908	Can people get HIV by sharing food with a person who has HIV or AIDS? <i>E malava ke ma'u 'e he kakai 'a e vailasi HIV 'I ha'anau vahevahe ha me'akai mo ha taha 'oku uesia 'e he vailasi HIV pe koe 'eitisi?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
909	Can people reduce their chance of getting HIV by not having sexual intercourse at all? <i>E malava ke fakasi'isi'i 'e he kakai 'enau faingamalie kenau ma'u 'a e vailasi HIV 'I ha 'ikai pe kenau mohe pe nofo fakamali?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
910	Can people get HIV from the saliva of someone who has HIV or AIDS? <i>E malava ke ma'u 'e he kakai 'ae vailasi HIV mei he favai 'o ha taha 'oku ma'u 'ae vailasi HIV pe 'oku mo'ua he 'eitisi?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
911	Can people get HIV by having injections with a needle or syringe that has already been used by someone else? <i>E malava ke ma'u 'e he kakai 'ae vailasi HIV 'I ha'anau ngau'eki ha me'a huhu na'e 'osi ngaue'aki 'e ha taha kehe?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
912	Can only gay men get HIV? <i>Oku ke pehe koe kakai tangata pe 'oku nonofo fakamali moe kakai tangata pe 'e malava kenau ma'u 'a e vailasi HIV?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
913	Is it possible for a healthy-looking person to have HIV? <i>Oku malava nai ke uesia ha tokotaha 'oku ha mo'ui lelei maipe ki tu'a 'e he vailasi HIV?</i>	YES . . . . . NO . . . . . DONT KNOW . . . . .	. . . . . 1 . . . . . 2 . . . . . 8		
914	Can HIV, the virus that causes AIDS, be transmitted from a mother to her baby: <i>Oku malava nai ke uesia ha tokotaha 'oku ha mo'ui lelei maipe ki tu'a 'e he vailasi HIV?</i>		YES	NO	DK
	During pregnancy? <i>Lolotonga e feitama</i>	DURING PREG. . . . .	1	2	8
	During delivery? <i>Lolotonga 'a e fa'ele</i>	DURING DELIVERY . . . . .	1	2	8
	By breastfeeding? <i>Lolotonga hono fakahuu</i>	BREASTFEEDING . . . . .	1	2	8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
915	CHECK 915: AT LEAST <input type="checkbox"/> ONE 'YES' ↓	OTHER <input type="checkbox"/>	→ 919
916	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? <i>Oku 'I ai nai ha faito'o pe fo'll'akau 'e malava ke 'aveange 'e he toketaa pe koe neesi kihe fa'e 'oku uesia 'e he vailasi HIV ke fakasi'isi' ai e faingamalie ke mafola 'a e vailasi HIV ki he pepe'e?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
917	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? <i>Kuo ke 'osi fanongo he fo'll'akau koe antiretroviral 'oku malava ke folo pe ma'u 'e he kakai 'oku uesia 'e he vailasi HIV mei he toketaa pe neesi ke tokoni kiate kinautolu kenau toe mo'ui fuoloa ange?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
918	CHECK 208 AND 215:  LAST BIRTH SINCE <input type="checkbox"/> JANUARY 2007 ↓	NO BIRTHS <input type="checkbox"/>  LAST BIRTH BEFORE <input type="checkbox"/> JANUARY 2007	→ 928  → 928
919	CHECK 407 FOR LAST BIRTH: HAD <input type="checkbox"/> ANTENATAL CARE ↓	NO <input type="checkbox"/> ANTENATAL CARE	→ 928
920	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
921	During any of the antenatal visits for your last birth, did anyone talk to you about: <i>I he lolotonga koia ho'o sivi feitama ki ho'o fa'ele fakamuimui taha, na'e 'I ai ha taha na'e taha na'e talanoa atu kiate koe fekau'aki mo e ngaahi me'a ni:</i> Babies getting HIV from their mother? <i>Oku ma'u 'e he pepe'e 'a e vailasi HIV mei he fa'ee?</i> Things that you can do to prevent getting HIV? <i>Ngaahi me'a ke fakahoko mo fai ke faka'ehi'ehi ai mei ha'ate ma'u pe uesia 'e he vailasi HIV?</i> Getting tested for the HIV? <i>Sivi pe 'oku ke uesia he vailasi HIV?</i>	YES NO DK AIDS FROM MOTHER . 1 2 8 THINGS TO DO . 1 2 8 TESTED FOR AIDS . 1 2 8	
922	Were you offered a test for HIV as part of your antenatal care? <i>Na'e fakaafe'l koe keke sivi fekau'aki moe vailasi HIV pe koe kongia pe ia 'a ho'o sivi feitama?</i>	YES ..... 1 NO ..... 2	
923	I don't want to know the results, but were you tested for the HIV as part of your antenatal care? <i>Oku 'ikai keu fie 'ilo au kihe ola. Na'e sivi koe fekau'aki moe vailasi HIV koe kongia pe ia ho'o sivi feitama?</i>	YES ..... 1 NO ..... 2	→ 928
924	I don't want to know the results, but did you get the results of the test? <i>Oku 'ikai keu fie'ilo kihe ola, ka na'a ke ma'u nai e ola ho'o sivi?</i>	YES ..... 1 NO ..... 2	
925	Where was the test done? <i>Na'e fakahoko 'I fe 'a e sivi koia?</i>	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1  OVERSEAS ..... 2 OTHER ..... 6 (SPECIFY)	
926	Have you been tested for HIV since that time you were tested during your pregnancy? <i>Kuo ke toe sivi nai fekau'aki moe vailasi HIV hili ho'o sivi koia lolotonga ho'o feitama?</i>	YES ..... 1 NO ..... 2	→ 929

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
927	When was the last time you were tested for HIV? <i>Na'a ke sivi fakamuimui taha 'ane'fe?</i>	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	→ 935
928	I don't want to know the results, but have you ever been tested to see if you have HIV? <i>Oku 'ikai keu fie'ilo kihe ola, ka kuo 'osi sivi nai koe fekau'aki moe vailasi HIV?</i>	YES ..... 1 NO ..... 2	→ 933
929	When was the last time you were tested? <i>Na'a ke sivi fakamuimui taha 'ane fe?</i>	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	
930	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? <i>I he taimi na'a ke sivi fakamuimui taha ai, na'a ke kole ke sivi koe pe na'e fakaafe'i koe kiai pea ke tali pe na'e fiema'u pe ia ke sivi koe?</i>	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
931	I don't want to know the results, but did you get the results of the test? <i>Oku 'ikai keu fiema'u 'a e ola 'o e sivi, ka na'a ke ma'u e ola ho'o sivi?</i>	YES ..... 1 NO ..... 2	
932	Where was the test done? <i>Na'e fakahoko 'I fe 'a e sivi?</i>  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1  OVERSEAS ..... 2 OTHER ..... 6 (SPECIFY)	→ 935
933	Do you know of a place where people can go to get tested for HIV? <i>Oku ke 'ilo'i nai ha feitu'u e malava ke 'alu kiai e kakai 'o sivi fekau'aki moe</i>	YES ..... 1 NO ..... 2	→ 935
934	Where is that? Ko e feitu'u koia? Any other place?  Oku toe 'I ai mo ha feitu'u kehe?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER ..... B  PRIVATE MEDICAL SECTOR TFHA HEALTH CLINIC ..... C OVERSEAS ..... D OTHER ..... X (SPECIFY)	
935	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? <i>Teke fakatau nai ha vesitapolo fo'ou mei ha tokotaha 'oku ke 'ilo'i 'oku uesia he vailasi HIV?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
936	Would you share a meal with a person if you knew that this person had HIV? <i>Teke malava ke vahevahe ha me'akai fakataha moha taha 'oku uesia he HIV?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
937	If a member of your family got infected with HIV, would you want it to remain a secret or not? <i>Oka pau 'e usesia 'e ha tokotaha 'I ho'o famili 'e he vailasi HIV teke loto ke 'ilo kiai ha taha pe 'ikai?</i>	YES, REMAIN A SECRET ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
938	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household? <i>Oka pau 'e puke ha taha 'I ho famili he 'eitisi, teke loto keke tauhi mo tokangaekina ia 'I homou 'api pe?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
939	In your opinion, if a female teacher has HIV but is not sick, should she be allowed to continue teaching in the school? <i>Oku ke fakakaukau nai 'oku totonu ke kei faiako 'I ha 'apiako ha tokotaha 'oku mo'ua he vailasi HIV neongo 'oku 'ikai ke puke?</i>	SHOULD BE ALLOWED ..... 1 SHOULD NOT BE ALLOWED ..... 2 DK/NOT SURE/DEPENDS ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
940	Should the names of all persons with HIV be displayed in a public place for everyone to see? <i>Oku totonu nai ke tohi kotoa e hingoa 'o e kakai 'oku nau ma'u pe uesia he vailasi HIV ha papa 'I he feitu'u faka-pule'anga ke mamata kiai e taha kotoa?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
941	Should all persons with HIV live apart from the general community? <i>Oku totonu ke nofo makehe 'ae kakai 'oku nau ma'u pe uesia 'ehe vailasi HIV mei he toenga 'o e kakai 'o e kolo?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
942	Should it be a criminal offence to knowingly pass HIV onto someone else? <i>Oku totonu nai ke hoko koe hia 'I he lao ha taha 'oku ne 'ilo' pe oku uesia 'e he vailasi HIV ia ka 'oku ne kei fakamafola atu pe 'a e vailasi ki ha taha kehe?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
943	Should all newcomers to Tonga be required to take a test for HIV? <i>Oku totonu ke sivi 'ae kakai fo'ou kotoa pe 'oku ha'u ki Tonga fekau'aki moe vailasi HIV?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
944	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? <i>Oku ke 'ilo' nai ha taha na'e fakasitua' mei he ngaahi gaue 'a e Potungae mo'ui 'I he ta'u 'e taha kuo hili ko hono 'uhinga pe 'oku mahalo'i 'oku uesia ia 'e he vailasi HIV?</i>	YES ..... 1 NO ..... 2 DK ANYONE WITH HIV ..... 3	→ 940
945	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? <i>Oku ke 'ilo' nai ha tokotaha kuo fakasitua' mei ha'ane kau atu kiha polokalama fakasosiale pe fakafeohi, pe koha polokalama fakalotu, pe polokalama 'ae kolo 'I he ta'u 'e taha kuo hili ko hoko 'uhinga pe 'oku mahalo' 'oku uesia ia 'ehe vailasi HIV?</i>	YES ..... 1 NO ..... 2	
946	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? <i>Oku ke 'ilo' nai ha taha kuo tafulu' mamahi pea fakamatalili' 'I he ta'u 'e taha kuo hili ko hono 'uhinga pe 'oku mahalo' 'oku uesia 'e he vailasi HIV?</i>	YES ..... 1 NO ..... 2	
947	CHECK 945, 946, AND 947: NOT A SINGLE <input type="checkbox"/> YES' ↓	AT LEAST ONE 'YES' <input type="checkbox"/>	→ 940
948	Do you personally know someone who has or is suspected to have HIV or AIDS? <i>Oku ke 'ilo' nai ha taha 'oku uesia pe mahalo' 'oku uesia 'ehe vailasi HIV pe koe 'eitisi?</i>	YES ..... 1 NO ..... 2	
949	Do you agree or disagree with the following statement: People with HIV or AIDS should be ashamed of themselves. <i>Oku ke lotu pe ta'eloto kihe ngaahi fakamatala ko 'eni?</i> <i>Oku totonu ke ma 'a e kakai 'oku uesia kinautolu 'e he vailasi HIV pe 'eitisi?</i>	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	
950	Do you agree or disagree with the following statement: People with HIV or AIDS should be blamed for bringing the disease into the community. <i>Oku ke lotu pe ta'eloto kihe ngaahi fakamatala ko 'eni?</i> <i>Oku totonu ke tukuaki' 'a e kakai 'oku nau uesia 'e he vailasi HIV pea moe 'eitisi ki hono 'omai 'e vailasi moe fokoutua koia kihe kolo?</i>	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
951	<p>CHECK Q. 901.</p> <p>HEARD ABOUT HIV OR AIDS <input type="checkbox"/></p> <p>NOT HEARD ABOUT HIV OR AIDS <input type="checkbox"/></p> <p>Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? <i>Tukukehe ange 'ae 'eitisi, kuo ke fanongo nai ha fokoutua kehe 'oku malava ke ma'u pe mafola he nofo pe mohe fakamali?</i></p> <p>Have you heard about infections that can be transmitted through sexual contact? <i>Kuo ke fanongo ha fokoutua e malava ke mafola he nofo pe mohe fakamali?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	
952	<p>CHECK 610:</p> <p>HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p>HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/></p>		→ 960
953	<p>CHECK 952: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p>		→ 955
954	<p>Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? <i>Teu fehu'l atu leva ha ngaahi fehu'l fekau'aki mo ho'o mo'ui he ta'u e taha kuo hili. 'I he lolotonga e ta'u 'e taha kuo hili na'a ke ma'u ha fokoutua koe fakatupunga 'e he nofo pe mohe fakamali?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
955	<p>Sometimes women experience a bad smelling abnormal genital discharge. <i>I he taimi 'e ni'ih'i 'oku malava ke ha'u mei he fakafefine 'o e kakai fefine ha I fefine ha huhu'a 'oku 'ikai ke sai hono nanamu.</i></p> <p>During the last 12 months, have you had a bad smelling abnormal genital discharge? <i>I he ta'u 'e taha kuo hili kuo ha'u meiate koe ha huhu'a 'oku 'ikai sai hono nanamu?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
956	<p>Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer? <i>Taimi 'e ni'ih'i 'oku 'I ai e ki'l lavea pe pala he fakafefine 'o e fefine Tonga? 'I he ta'u e taha kuo hili na'e 'I ai ha lavea pe pala 'I ho'o fakafefine?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
957	<p>CHECK 955, 956, AND 957:</p> <p>HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/></p> <p>HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/></p>		→ 960
958	<p>The last time you had (PROBLEM FROM 955/956/957), did you seek any kind of advice or treatment? <i>I he taimi koia na'e hoko ai e palopalema koia (he 955-957) na'a ke kumi fale'l pe ha faito'o?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 960

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
959	<p>Where did you go?            Na'a ke 'alu ki fe?            Any other place?            Na'e toe 'I ai ha feitu'u kehe?            PROBE TO IDENTIFY EACH TYPE OF SOURCE AND            CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL OR CLINIC            IS PUBLIC OR PRIVATE MEDICAL FACILITY, WRITE THE            NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p>PUBLIC SECTOR            GOVT. HOSPITAL ..... A</p> <p>PRIVATE MEDICAL SECTOR            TFHA HEALTH CLINIC ..... B</p> <p>OTHER SOURCE            TRADITIONAL HEALER ..... C            FRIEND/RELATIVE ..... D</p> <p>OVERSEAS ..... E</p> <p>OTHER _____ X            (SPECIFY)</p>	
960	<p>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?  <i>Oku 'ikai ke fa'a lotu taha 'ae husepaniti moe uaifi he me'a kotoa pe.            Okapau 'oku 'ilo' 'ehe uaifi 'oku uesia 'a hono husepaniti ha            fokoutua 'e malava kene ma'u 'okapau tena mohe fakamali, 'oku            totonu nai 'ene ta'eloto ke mohe fakamali mo hono husepaniti?</i></p>	<p>YES ..... 1            NO ..... 2            DONT KNOW ..... 8</p>	
961	<p>Is a wife justified in refusing to have sex with her husband            when she is tired or not in the mood?  <i>Oku totonu nai ke fakafisinga' 'e he uaifi 'a hono husepaniti he            mohe pe nofo fakamali 'okapau 'oku hela'ia pe 'ikai ke lotu ia kiai?</i></p>	<p>YES ..... 1            NO ..... 2            DONT KNOW ..... 8</p>	
962	<p>Is a wife justified in refusing to have sex with her husband            when she knows her husband has sex with other women?  <i>Oku totonu pe nai ke fakafisinga' 'ehe uaifi hono husepaniti            'okapau 'oku ne 'ilo' 'oku toe nofo fakamali ia mo ha fefine kehe?</i></p>	<p>YES ..... 1            NO ..... 2            DONT KNOW ..... 8</p>	
963	<p>Do you believe that young men should wait until they are            married to have sexual intercourse?  <i>Oku ke tui nai 'oku totonu ke nofo pe 'ae hou'eiki tangata kei            tamasi' 'pe talavou 'o tatali kenau toki mali pea nau toki nofo            pe mohe fakamali moha taha?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	
964	<p>Do you think that most young men you know wait            until they are married to have sexual intercourse?  <i>Oku ke fakakaukau nai koe tokolahi taha 'oe talavou tangata 'oku            ke 'ilo' 'oku nau tali pe kenau toki mali pea nau toki nofo pe mohe            fakamali moha tokotaha?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	
965	<p>Do you believe that men who are not married and            are having sex should only have sex with one partner?  <i>Oku ke tui nai 'oku totonu ke tokotaha pe 'a e hoa pe fefine            'oku nofo fakamali moe hou'eiki tangata 'oku 'ikai kenau mali?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	
966	<p>Do you think that most men you know who are not married            and are having sex, have sex with only one partner?  <i>Oku ke tui nai koe tokolahi 'o e hou'eiki tangata 'oku ke 'ilo' 'oku            'ikai kenau mali 'oku nau nofo fakamali pe moe fefine pe 'e taha?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	
967	<p>Do you believe that married men should only have sex with            their wives?  <i>Oku ke tui nai koe hou'eiki tangata koe 'oku nau 'osi mali 'oku            totonu pe kenau nofo fakamali pe mo honau uaifi pe 'e taha?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	
968	<p>Do you think that most married men you know            have sex only with their wives?  <i>Oku ke tui nai koe tokolahi 'o e hou'eiki tangata 'oku ke 'ilo' 'oku            nau nofo fakamali pe mo honau uaifi pe 'e taha?</i></p>	<p>YES ..... 1            NO ..... 2            DK/NOT SURE/DEPENDS ..... 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
969	Do you believe that young women should wait until they are married to have sexual intercourse? <i>Oku ke tui nai 'oku totonu ke nofo pe 'a e hou'eiki fafine kenau toki mali pea nau toki nofo fakamali?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
970	Do you think that most young women you know wait until they are married to have sexual intercourse? <i>Oku ke tui nai koe tokolahi 'o e hou'eiki fafine 'oku ke 'ilo' 'oku nau nofo pe kenau toki mali pea nau toki nofo fakamali?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
971	Do you believe that women who are not married and are having sex should only have sex with one partner? <i>Oku ke tui nai koe hou'eiki fafine koe 'oku 'ikai kenau mali kae nofo fakamali pe 'oku totonu kenau nofo fakamali pe moe tokotaha?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
972	Do you think that most women you know who are not married and are having sex have sex with only one partner? <i>Oku ke tui nai koe tokolahi 'o e hou'eiki fafine 'oku ke 'ilo' 'oku 'ikai kenau mali ka 'oku nau nofo fakamali 'oku nau nofo fakamali moe tokotaha pe?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
973	Do you believe that married women should only have sex with their husbands? <i>Oku ke tui nai 'oku totonu ke nofo fakamali pe 'a e fefine mali mo hono husepaniti pe 'e taha?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
974	Do you think that most married women you know have sex only with their husbands? <i>Oku ke tui nai koe tokolahi taha 'o e hou'eiki fafine mali 'oku ke 'ilo' 'oku nau nofo fakamali pe mo honau husepaniti pe 'e taha?</i>	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	



## SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
1001	Have you ever heard of an illness called tuberculosis or TB? <i>Kuo ke fanongo nai he fokoutua 'a ia 'oku 'iloa koe tipii?</i>	YES ..... 1 NO ..... 2	→ 1008																											
1002	CHECK Q. 114 and 115:  CODE '2', '3', or '4' CIRCLED IN <input type="checkbox"/> 114 OR 115 OR <input type="checkbox"/> NO ANSWER ↓	CODE '1' CIRCLED IN 114 & 115 <input type="checkbox"/> OR CODE '5' CIRCLED IN 114	→ 1004																											
1003	The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following? <i>Kuo ke fakahoko e ngaahi me'a ni?</i> a. Read messages about TB in newspapers or magazines? <i>Lau he nusipepa pe makasini fekau'aki moe tipii?</i> b. Seen leaflets, brochures, or booklets on TB? <i>Mamata he pepa fakamatala pe tohi fakamatala f'kau'aki moe tipii?</i> c. Gotten information on TB from the internet? <i>Ma'u ha fakamatala fekau'aki moe tipii mei he initaneti?</i>	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>NEWSPAPER/MAGAZINE . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>LEAFLETS/BOOKLETS . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>INTERNET . . . . .</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	NEWSPAPER/MAGAZINE . . . . .	1	2	LEAFLETS/BOOKLETS . . . . .	1	2	INTERNET . . . . .	1	2																
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LEAFLETS/BOOKLETS . . . . .	1	2																												
INTERNET . . . . .	1	2																												
1004	READ INTRODUCTORY STATEMENT ONLY IF Q1003 WAS NOT ASKED: The following is a list of sources of information on tuberculosis or TB. Have you ever done any of the following? <i>Kuo ke fakahoko 'ae ngaahi me'a ni?</i> a. Seen messages about TB on billboards, signs or posters? <i>Mamata ha ngaahi papa faka'ilonga pe pepa poster fekau'aki moe tipii?</i> b. Seen messages about TB on TV? <i>Mamata he televisione ha ngaahi fakamatala fekau'aki moe tipii?</i> c. Heard messages about TB on the radio? <i>Fanongo ha ngaahi fakamatala malohi mo mahu'inga fekau'aki moe tipii mei he letioo?</i> d. Participated in an TB peer education program? <i>Kau atu ki ha ako fakataha mo ho to'u fekau'aki moe tipii?</i> e. Participated in another type of TB education program such as a wokshop or school program? <i>Kau atu kiha polokalama ako pe polokalama he ako'anga pe ngaue'anga fekau'aki moe tipii?</i> f. Attended a community event about TB such as the women community workshop on World TB Day? <i>Kau atu kihe ngaahi polokalama 'ae kolo fekau'aki moe tipii hange koia koe polokalama ako ngaue 'ae hou'eiki fafine he 'aho fakamamani lahi 'oku fakamanatua ai e tipii?</i> g. Received information about TB from an outreach work, that is someone who came to your community and talked about TB? <i>Ma'u ha fakamatala fekau'aki moe tipii mei ha polokalama ngaue kihe kolo 'oku 'alu atu ai 'a e tokotaha ki he kolo 'o talanoa fekau'aki moe tipii?</i> h. Discussed TB with other persons such as friends, family members, or work colleagues? <i>Talanoa nai moha taha hange ko ho ngaahi kaungame'a, famii moe kaunga ngaue fekau'aki moe tipii?</i>	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>SIGNS/POSTERS . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>TV . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>RADIO . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>PEER EDUCATION . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>OTHER EDUCATION . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>COMMUNITY EVENT . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>OUTREACH WORKER . . . . .</td> <td>1</td> <td>2</td> </tr> <tr> <td>FAMILY/FRIENDS . . . . .</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	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	
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1005	How does tuberculosis spread from one person to another? <i>Oku anga fefe mafola 'a e tipii mei he taha kihe taha?</i>  PROBE: Any other ways? <i>Oku toe 'l ai moha founda kehe?</i>  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																												

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1006	Can tuberculosis be cured? <i>Oku malava nai ke faito'o 'ae tipii?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
1007	If a member of your family got tuberculosis, would you want it to remain a secret or not? <i>Okapau 'e uesia ha tokotaha 'I he tipii 'I ho'o famili teke loto ke 'ilo kiai ha taha pe 'e fakapulipuli pe ia?</i>	YES, REMAIN A SECRET ..... 1 NO ..... 2 DON'T KNOW/NOT SURE/ DEPENDS ..... 8	
1008	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? <i>Teu fehu'atu leva ha ngaahi fehu'I fekau'aki mo ha ngaahi me'a kehe. Na'e fakahoko ha huhu kiate ko ha fa'ahinga 'uhinga pe he ta'u 'e taha kuo hili?</i> IF YES: How many injections have you had? Na'a ke huhu tu'o fiha?  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 → 1012	
1009	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <i>Mei he ngaahi huhu koia, koe huhu 'e fiha na'e fakahoko 'e ha toketa, neesi, tokotaha mei he hu'ivai, toketa nifo pe ko ha tokotaha mei he potungaue mo'ui?</i> 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 → 1012	
1010	The last time you had an injection given to you by a health worker, where did you go to get the injection? <i>Na'e fakahoko 'I fe 'a ho'o huhu fakamuimui taha na'e fakahoko 'ehe tokotaha mei he potungaue mo'ui?</i>	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTER ..... 2  OVERSEAS ..... 3 OTHER ..... 6 (SPECIFY)	
1011	Did the person who gave you that injection take the syringe and needle from a new, unopened package? <i>Na'e to'o 'e he tokotaha na'a ne fakahoko 'a ho huhu 'a e me'a huhu moe hui mei ha peketi fo'ou na'e te'eki fakaava?</i>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
1012	Do you currently smoke cigarettes? <i>Oku ke lolotonga ma'u pe ifi tapaka?</i>	YES ..... 1 NO ..... 2 → 1014	
1013	In the last 24 hours, how many cigarettes did you smoke? <i>Koe fo'I sikaleti nai 'e fiha na'a ke ifi he houa 'e uafa kuo hili?</i>	CIGARETTES ..... <input type="text"/> <input type="text"/>	
1014	Do you currently smoke or use any other type of tobacco? <i>Oku ke lolotonga ma'u tapaka pe ma'u pe ifi pe ha fa'ahinga kalasi pe 'o e tapaka?</i>	YES ..... 1 NO ..... 2 → 1017	
1015	What (other) type of tobacco do you currently smoke or use? <i>Koe ha ha toe tapaka kehe 'oku ke ma'u pe ifi?</i>  RECORD ALL MENTIONED.	PIPE ..... A TABAKA TONGA ..... B  OTHER ..... X (SPECIFY)	
1016	At the time you first start smoking, what was the main reason that make you want to smoke? (NEW QUESTION SUGGESTED FROM HEALTH PROMOTION)	NOTHING TO DO ..... 1 PLEASURE ..... 2 PEER PRESSURE ..... 3 PARENTS/FAMILY SMOKE ..... 4 CUSTOMARY BEHAVIOUR ..... 5 Others ..... 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
1017	<p>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?</p> <p><i>Oku lahi 'ae ngaahi 'uhinga pe fekitoa 'oku ne mata'ota'ofi 'ae hou'eiki fafine mei ha'anau kumi kiha fale'! fekau'aki moe mo'ui kiate kinautolu. 'I he taimi koia 'oku ke puke ai pea ke loto keke kumi fale'! mei ha taha mei ha taha mei he mo'ui pe faito'o, 'oku hoko nai e ngaahi me'a ni koe makatukia'anga pe palopalema lahi kiate koe pe 'ikai?</i></p> <p>Getting permission to go? <i>Ma'u e ngofua ke 'alu?</i></p> <p>Getting money needed for treatment? <i>Pa'anga fe'unga ki he faito'o?</i></p> <p>The distance to the health facility? <i>Mama'o ki he falemahaki pe kiliniki?</i></p> <p>Having to take transport? <i>Koe me'alele pe vaka ke heka ai kihe falemahki pe kiliniki?</i></p> <p>Not wanting to go alone? <i>Ikai ke loto ke 'alu tokotaha?</i></p> <p>Concern that there may not be a female health provider? <i>Tailili na'a 'oku 'ikai ke 'I ai ha fefine 'I he kau ngaue kihe mo'ui?</i></p> <p>Concern that there may not be any health provider? <i>Tailili na'a 'ikai ke 'I ai hatokotaha ngaue ia mei he potungae mo'ui?</i></p> <p>Concern that there may be no drugs available? <i>Tailili na'a 'ikai ke ma'u ha faito'o ia?</i></p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">BIG PROB- LEM</th> <th style="width: 10%; text-align: center;">NOT A BIG PROB- LEM</th> </tr> </thead> <tbody> <tr> <td>PERMISSION TO GO ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GETTING MONEY .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DISTANCE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>TAKING TRANSPORT . . .</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>GO ALONE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO FEMALE PROVIDER</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO PROVIDER ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO DRUGS ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		BIG PROB- LEM	NOT A BIG PROB- LEM	PERMISSION TO GO ...	1	2	GETTING MONEY .....	1	2	DISTANCE .....	1	2	TAKING TRANSPORT . . .	1	2	GO ALONE .....	1	2	NO FEMALE PROVIDER	1	2	NO PROVIDER ...	1	2	NO DRUGS ...	1	2	
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1018	<p>Are you covered by any health insurance? <i>Oku 'I ai ha'o malu' mo'ui?</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 1020																											
1019	<p>What type of health insurance? <i>Koe ha e fa'ahinga malu' mo'ui 'oku ke kau kiai?</i></p> <p>RECORD ALL MENTIONED.</p>	<p>HEALTH INSURANCE THROUGH</p> <p>EMPLOYER ..... A</p> <p>SOCIAL SECURITY ..... B</p> <p>OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE. C</p> <p>OTHER _____ X</p> <p style="text-align: center;">(SPECIFY)</p>																												
1020	<p>Now I would like to ask you about alcohol and drug use. Remember that your responses are completely anonymous and confidential and will not be released to anyone. During the last 12 months, how often did you have drinks containing alcohol, such as beer, wine, liquor, spirits, homebrew and yeast? Would you say?</p> <p><i>I he taimi ni teu fehu'! atu fekau'aki moe 'alokaholo pea moe ngaahi faito'o konatapu? Manatu' 'e 'ikai 'ilo 'eha taha ho'o ngaahi tali moe fakamatala pea 'e tauhi fakapulipuli. Koe ha e lahi ho'o ma'u e ngaahi me'a ni he ta'u e taha kuo hili? 'alokaholo, pia, uaine, kavamalohi, sipiliti, hopi? teke pehe nai?</i></p> <p>a. Never</p> <p>b. 2 per Monthly or less?</p> <p>c. 2 to 4 times a month?</p> <p>d. 2 to 3 times a week?</p> <p>e. 4 or more times a week?</p> <p>f. No answer / refused</p> <p>g. Don't know</p>	<p>NEVER ..... 0</p> <p>&lt; 2 PER MONTH ..... 1</p> <p>2-4 PER MONTH ..... 2</p> <p>2-3 PER WEEK ..... 3</p> <p>4+ PER WEEK ..... 4</p> <p>NO ANSWER/REFUSED ..... 7</p> <p>DON'T KNOW ..... 8</p>	→ 1024																											

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																	
1021	<p>During the last 12 months, how many standard drinks containing alcohol did you have on a typical day when drinking? A standard drink is a can of beer, a glass of wine, a shot of liquor, etc.?</p> <p><i>I he ta'u 'e taha kuo hili koe ha e lahi 'o e inu fe'unga (standard) na'a ke ma'u 'I he 'aho? Koe inu fe'unga koe kapa pia e taha, inu uaine e taha, koe soti kavamalohi 'e taha 'o anga pehe?</i></p> <p>a. 1 or 2? b. 3 or 4? c. 5 or 6? d. 7, 8 or 9? e. 10 to 19? f. 20 or more? g. No answer / refused h. Don't know</p>	<p>NUMBER OF STANDARD DRINKS</p> <p>1 OR 2 ..... 1 3 OR 4 ..... 2 5 OR 6 ..... 3 7, 8 OR 9 ..... 4 10 TO 19 ..... 5 20 OR MORE ..... 6 NO ANSWER/REFUSED ..... 7 DON'T KNOW ..... 8</p>																																																																		
1022	<p>During the last 12 months, how often did you have five or more standard drinks at one time?</p> <p>A standard drink is a can of beer, a glass of wine, a shot of liquor, 1 upi kao, etc.</p> <p><i>I he ta'u 'e taha kuo hili koe ha e lahi ho'o ma'u e inu fe'unga 'e nima lolotonga ha'o inu 'e taha?</i></p> <p>a. Never? b. Less than monthly? c. Monthly? d. Weekly? e. Daily or almost daily? f. No answer / refused g. Don't know</p>	<p>NEVER ..... 0 LESS THAN MONTHLY ..... 1 MONTHLY ..... 2 WEEKLY ..... 3 DAILY OR ALMOST DAILY ..... 4 NO ANSWER/REFUSED ..... 7 DON'T KNOW ..... 8</p>																																																																		
1023	<p>At the time you first drink alcohol, what was the main reason that make you drink alcohol?</p> <p>(NEW QUESTION SUGGESTED FROM HEALTH PROMOTION)</p> <p><i>Koe ha e makatu'unga pe 'uhinga na'a ke fuofua ma'u ai e kava malohi?</i></p>	<p>NOTHING TO DO ..... 1 PLEASURE ..... 2 PEER PRESSURE ..... 3 PARENTS/FAMILY DRINK ..... 4 CUSTOMARY BEHAVIOUR ..... 5 Others ..... 6 (SPECIFY)</p>																																																																		
1024	<p>Next I would like to ask you about use of the following items.</p> <p><i>Teu fehu'l atu leva he taimi ni fekau'aki mo hono ngaue'aki 'o e ngaahi me'a ni?</i></p> <p>Have you ever tried...? <i>Kuo ke 'ahi'ahi'I nai eni?</i></p> <p>IF YES, ASK:</p> <p>Did you use it in the last 30 days? <i>Ne fakaaoga ne koe i te 30 aso ko teka atu?</i></p> <p>a. Betel nut? <i>pitolo nati</i> b. Kava? <i>kava</i> c. Marijuana/Cannabis <i>maliuana moe kanipasi</i> d. Ecstasy/Ecscies? <i>faito'o konatapu 'oku ne fakatupu pe faka'ai'ai 'a e ongo fiefia makehe kau ai moe nofo fakamali?</i> e. Inhalants including gas? <i>kasa manava</i> f. Speed/Base/Other amphetamines? <i>faito'o konatapu 'oku ne fe</i> g. Ice/Crystal meth? <i>aisi moe kilisitala koe faito'o konatapu 'oku ne ngaue ke faka'a mo faka'ai'ai ha taha ke ngauengaue (stimulants)?</i> h. Cocaine/Crack/Freebasing? <i>kokeini</i> i. Heroin? <i>heloini</i> j. LSD/Acid/Hallucinogens? <i>faito'o konatapu 'oku ne uesia 'ae ngaue 'a e 'atamai pea malava ai ke fu'u ma'u hala 'ae vakai 'ae tokotaha koia 'oku ne ma'u ki hono 'ataakai?</i> k. Steroids (non-medical use)? <i>faito'o 'oku ne fakatupu e lahiange (pe muscular) ha ngaahi konga 'o e sino?</i> l. Viagra/Cialis/Sex enhancers? <i>vaiekala moe ngaahi faito'o 'oku ne faka'ai'ai e fiema'u moe holi ke mohe fakamali?</i></p>	<table border="1"> <thead> <tr> <th></th> <th>NEVER TRIED</th> <th>EVER TRIED</th> <th>USED IN LAST 30 DAYS</th> <th>NO ANSWER, REFUSED</th> </tr> </thead> <tbody> <tr><td>a.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>b.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>c.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>d.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>e.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>f.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>g.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>h.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>i.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>j.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>k.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> <tr><td>l.</td><td>1</td><td>2</td><td>3</td><td>7</td></tr> </tbody> </table>		NEVER TRIED	EVER TRIED	USED IN LAST 30 DAYS	NO ANSWER, REFUSED	a.	1	2	3	7	b.	1	2	3	7	c.	1	2	3	7	d.	1	2	3	7	e.	1	2	3	7	f.	1	2	3	7	g.	1	2	3	7	h.	1	2	3	7	i.	1	2	3	7	j.	1	2	3	7	k.	1	2	3	7	l.	1	2	3	7	
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1025	<p>Some people have tried injecting drugs using a syringe. In the last 12 months, have you injected drugs (not including injections for medical reasons or treatment of an illness)?</p> <p><i>Oku 'I ai e kakai na'a nau feinga he ta'u 'e taha kuo hili kenau huhu ha ngaahi faito'o konatapu 'o ngaue'aki 'a e me'ahuhu. I he ta'u 'e taha kuo hili na'a ke 'osi huhu nai ha faito'o tukukehe ange 'ae faito'o koe tu'utu'uni fakafaito'o pe ia ki ha'o puke?</i></p>	<p>YES ..... 1 NO ..... 2 NO ANSWER, REFUSED ..... 7</p>																																																																		
1026	<p>RECORD THE TIME.</p> <p>W-60</p>	<p>HOUR ..... <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> MINUTES ..... <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></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 PILL
- 4 IUD
- 5 INJECTABLES
- 6 IMPLANTS
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM 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
2	05	MAY	08		2
	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
1	05	MAY	20		1
	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
0	05	MAY	32		0
	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
0	06	JUN	43		0
9	05	MAY	44		9
	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
0	06	JUN	55		0
8	05	MAY	56		8
	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
7	05	MAY	68		7
	04	APR	69		
	03	MAR	70		
	02	FEB	71		
	01	JAN	72		

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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NAME OF SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

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NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_

**MAN'S QUESTIONNAIRE**

**TONGA**

STATISTICS DEPARTMENT/MINISTRY OF HEALTH

IDENTIFICATION								
VILLAGE NAME _____	<table border="1" style="display: inline-table; border-collapse: collapse;"> <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>							
CENSUS BLOCK .....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>							
NAME OF HOUSEHOLD HEAD _____								
HOUSEHOLD NUMBER .....	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>							
URBAN/RURAL .....								
(URBAN=1, RURAL=2)								
NAME AND LINE NUMBER OF MAN _____	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>							
INTERVIEWER VISITS								
	1	2	3	FINAL VISIT				
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				
INTERVIEWER'S NAME	_____	_____	_____	MONTH <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				
RESULT*	_____	_____	_____	YEAR <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				
NEXT VISIT: DATE	_____	_____		INT. NUMBER <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>				
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*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 TONGAN	3 OTHER	_____				
LANGUAGE OF RESPONDENT	1 ENGLISH	2 TONGAN	3 OTHER	_____				
TRANSLATOR USED?	1 YES	2 NO		(SPECIFY)				
SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY					
NAME _____	NAME _____	_____	_____					
DATE _____	DATE _____	_____	_____					



*Image: Niuatoputapu Island taken following the 2009 Tsunami.*