

## CHAPTER 10 CHILDREN'S HEALTH

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This chapter presents the findings on several areas of importance to children's health. Information 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. Vaccination coverage information focuses on children aged 12–23 months. Overall coverage levels for this age group at the time of the survey are shown. Additionally, the source of the vaccination information (whether based on a written vaccination card or on the mother's recall) is shown. Differences in vaccination coverage between population subgroups assist in the planning of infant and child health programmes.

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) help in assessing national programmes aimed at reducing the mortality impact of these illnesses. Information is provided on the prevalence of ARI and its treatment with antibiotics, and the prevalence of fever and its treatment with antibiotics. The treatment of diarrhoeal diseases with oral rehydration therapy (including increased fluids) aids in assessment 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 proper manner of disposing of children's faecal matter.

### 10.1 CHILD'S SIZE AT BIRTH

Birth weight and size at birth are important indicators of a child's vulnerability to the risk of childhood illnesses and their chances of survival. Children whose birth weight is less than 2.5 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 it is subjective, it can be a useful proxy for the weight of the child. Table 10.1 presents information on children's weight and size at birth according to background characteristics.

Just over 8 in 10 children (81.3%) in Solomon Islands are weighed at birth, which is not surprising because the majority of births take place in a healthcare facility. Among children born in the five years before the survey with a reported birth weight, 12.5% weighed less than 2.5 kg at birth. Birth weight is lower among children born to younger women (mother's age at birth less than 20 years), first-born children, and children of women with no education. The data in Table 10.1 indicate that there is no association between lower birth weight babies and wealth quintile. The birth weight of a child has little variation by mother's place of residence: 12.1% of births in urban areas were reported to be less than 2.5 kg compared with 12.6% of births in rural areas. By region, Malaita reported the highest percentage (17.1%) of babies weighing less than 2.5 kg at birth, all other provinces reported less than 13%.

Table 10.1 also includes information on the mother's assessment of the baby's size at birth. In the absence of birth weight, a mother's subjective assessment of the baby's size at birth may be useful. About 4% of births were reported to be very small and almost 10% were reported as smaller than average. Around 20% of births to women under age 20, and around 20% of first-order births were small or smaller than average compared with births to older women and higher-order births. There is not much differences in the proportions of mothers with no education or only a primary education with birth being reported as very small or smaller than average. Mothers in the poorest households are more likely to report their birth as being very small.

**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, Solomon Islands 2007*

Background characteristic	Percent distribution of births with a reported birth weight <sup>1</sup>			Number of births	Percentage of all births with a reported birth weight	Percent 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	Don't know/missing	Total	
<b>Mother's age at birth</b>											
<20	20.5	79.5	100.0	211	83.5	5.6	15.9	75.3	3.3	100.0	253
20–34	10.6	89.4	100.0	1,719	81.6	3.7	8.9	80.5	6.9	100.0	2,107
35–49	19.0	81.0	100.0	240	77.9	5.2	9.9	76.8	8.1	100.0	308
<b>Birth order</b>											
1	18.1	81.9	100.0	500	86.7	5.4	12.3	78.2	4.1	100.0	577
2–3	10.8	89.2	100.0	813	82.2	3.4	9.6	80.1	6.8	100.0	989
4–5	11.4	88.6	100.0	539	79.3	3.2	8.9	80.5	7.4	100.0	680
6+	10.1	89.9	100.0	317	75.2	5.0	7.5	78.6	8.9	100.0	422
<b>Mother's smoking status</b>											
Smokes cigarettes/tobacco	11.9	88.1	100.0	368	80.5	3.5	11.7	77.9	6.9	100.0	457
Does not smoke	12.6	87.4	100.0	1,778	81.6	4.1	9.3	80.1	6.5	100.0	2,180
<b>Residence</b>											
Urban	12.1	87.9	100.0	306	92.9	2.8	8.7	84.5	4.0	100.0	330
Rural	12.6	87.4	100.0	1,863	79.7	4.2	9.9	78.9	7.1	100.0	2,338
<b>Region</b>											
Honiara	11.4	88.6	100.0	227	91.3	1.8	10.4	82.9	5.0	100.0	249
Guadalcanal	12.7	87.3	100.0	316	65.3	7.3	7.6	76.7	8.4	100.0	483
Malaita	17.1	82.9	100.0	481	71.0	2.7	10.1	75.5	11.8	100.0	678
Western	12.6	87.4	100.0	263	91.2	4.7	10.5	81.0	3.7	100.0	289
Other provinces	10.2	89.8	100.0	882	91.0	3.7	10.1	82.6	3.6	100.0	969
<b>Mother's education</b>											
No education	15.0	85.0	100.0	238	63.8	6.9	8.5	71.7	13.0	100.0	373
Primary	12.4	87.6	100.0	1,358	81.7	4.1	10.9	78.9	6.1	100.0	1,662
Secondary	11.6	88.4	100.0	516	90.2	2.3	7.0	86.1	4.6	100.0	571
More than secondary	12.2	87.8	100.0	58	93.7	0.0	10.2	83.5	6.3	100.0	62

**Table 10.1: (continued)**

Background characteristic	Percent distribution of births with a reported birth weight <sup>1</sup>			Number of births	Percentage of all births with a reported birth weight	Percent distribution of all live births by size of child at birth					Total	Number of births
	Less than 2.5 kg	2.5 kg or more	Total			Very small	Smaller than average	Average or larger	Don't know/missing			
<b>Wealth quintile</b>												
Lowest	11.7	88.3	100.0	450	69.6	5.3	10.5	75.5	8.7	100.0	646	
Second	15.5	84.5	100.0	444	80.4	3.3	10.9	79.0	6.9	100.0	552	
Middle	9.8	90.2	100.0	399	82.5	4.1	8.4	82.6	5.0	100.0	484	
Fourth	14.0	86.0	100.0	441	86.0	3.5	10.1	78.4	8.0	100.0	513	
Highest	11.4	88.6	100.0	436	92.2	3.5	8.2	84.0	4.3	100.0	472	
Total	12.5	87.5	100.0	2,169	81.3	4.0	9.7	79.6	6.7	100.0	2,668	

Note: Total includes 30 cases with missing information on mother's smoking status.

<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. Information on vaccination coverage among population subgroups is useful for programme planning and targeting resources to areas most in need. Additionally, information on immunisation coverage is important for the monitoring and evaluation of the Expanded Programme on Immunization (EPI)<sup>4</sup>.

The 2006/2007 SIDHS collected information on vaccination coverage for all living children born in the five years preceding the survey. According to World Health Organization guidelines, children are considered fully vaccinated if they have received BCG vaccinations (for tuberculosis), three doses each of DPT (diphtheria, pertussis and tetanus) and polio vaccines, and a measles vaccination by the age of 12 months. BCG should be given at birth or at first clinical contact, DPT and polio require three vaccinations at approximately 6, 10, and 14 weeks of age, and measles should be given at, or soon after reaching, 9 months of age.

Information on vaccination coverage was collected in two ways during the SIDHS: from vaccination cards shown to the interviewer and from mothers' verbal reports. If cards were available, the interviewer copied the vaccination dates directly onto the questionnaire. If there was no vaccination card for the child or if a vaccine had not been recorded on the card, the respondent was asked to recall the vaccine dates. Table 10.2 shows the percentage of children aged 12–23 months who received various vaccinations by source of information, that is, from a vaccination card or mother's recollection. This is the youngest cohort of children who have reached the age by which they should be fully vaccinated.

**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, Solomon Islands 2007*

Source of information	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations <sup>1</sup>	No vaccinations	Number of children
Vaccinated at any time before survey											
Vaccination card	85.4	84.2	82.6	80.3	83.8	82.1	79.6	78.1	75.2	0.1	457
Mother's report	10.3	9.2	8.6	7.9	10.2	9.0	7.9	9.2	7.5	4.2	78
Either source	95.7	93.4	91.2	88.2	94.0	91.1	87.4	87.3	82.7	4.3	535
Vaccinated by 12 months of age <sup>2</sup>	95.7	93.2	90.8	87.1	93.8	90.7	86.3	80.6	76.6	4.3	535

<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 recollection, 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.

Over 76% of children aged 12–23 months were fully vaccinated by 12 months of age at the time of the survey, about 96% had received the BCG vaccination, and 81% had been vaccinated against measles. Over 90% of children received the first doses of DPT and of polio. About 87% of children received the third dose of DPT and 86% received the third dose of polio.

<sup>4</sup> The Expanded Program on Immunization (EPI) was initiated in 1974 by the World Health Organization (WHO) with the goal to make vaccines available to all children throughout the world.

Table 10.3 shows the vaccination coverage among children aged 12–23 months, according to information from the vaccination card or mother’s report, by background characteristics. A vaccination card was seen for 86% of children aged 12–23 months. This information may give some indication of the success of the immunisation programme in reaching out to all population subgroups. Male babies are more likely to have a higher vaccination coverage rate (90%) for all basic vaccinations compared with female babies (75%).

**Table 10.3: Vaccinations by background characteristics**

*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, Solomon Islands 2007*

Background characteristic	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations <sup>1</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
<b>Sex</b>												
Male	97.4	95.7	94.4	92.3	95.9	94.4	92.1	92.9	90.0	2.6	88.1	275
Female	93.8	90.9	87.9	83.8	92.0	87.7	82.4	81.4	75.0	6.2	82.7	260
<b>Birth order</b>												
1	99.7	96.7	94.3	87.5	98.4	96.2	87.4	90.2	80.5	0.3	80.9	94
2–3	96.3	95.2	93.6	92.8	95.2	93.6	92.4	88.7	87.5	3.7	91.0	202
4–5	93.0	92.6	90.9	87.0	91.2	88.8	84.5	83.6	77.9	7.0	79.5	126
6+	94.4	88.1	84.8	81.9	91.3	85.1	81.9	86.5	81.3	5.6	86.0	113
<b>Residence</b>												
Urban	97.0	94.3	92.3	89.7	95.7	93.2	87.2	93.3	84.4	3.0	77.0	73
Rural	95.5	93.2	91.1	88.0	93.7	90.8	87.4	86.3	82.4	4.5	86.8	462
<b>Region</b>												
Honiara	97.3	93.6	90.8	87.3	95.5	93.6	88.2	92.2	84.3	2.7	80.6	54
Guadalcanal	96.5	91.9	89.5	87.5	94.8	88.3	85.2	81.4	77.9	3.5	84.9	105
Malaita	99.4	95.1	89.9	84.5	95.1	89.9	84.5	82.3	73.8	0.6	97.0	130
Western	(86.2)	(86.2)	(86.2)	(77.2)	(86.2)	(84.5)	(72.7)	(79.4)	(69.9)	(13.8)	(71.1)	51
Other provinces	94.8	94.8	94.5	94.2	94.5	94.5	94.2	94.5	94.2	5.2	83.3	195
<b>Mother’s education</b>												
No education	97.1	88.8	82.4	77.5	88.8	81.1	76.2	79.0	67.2	2.9	95.7	65
Primary	94.5	92.8	90.9	87.8	94.1	91.3	87.6	86.9	84.2	5.5	86.7	335
Secondary	97.8	96.4	95.8	93.5	95.8	94.9	91.9	92.2	86.0	2.2	75.5	119
More than secondary	*	*	*	*	*	*	*	*	*	*	*	16
<b>Wealth quintile</b>												
Lowest	98.6	96.0	93.3	88.5	94.9	92.6	87.4	91.0	84.0	1.4	89.9	161
Second	88.2	80.5	76.8	73.4	86.5	76.8	73.4	75.6	72.2	11.8	74.0	70
Middle	95.5	94.4	92.0	87.9	94.4	92.8	87.9	91.2	86.2	4.5	87.5	87
Fourth	94.2	93.4	93.4	93.0	93.4	93.4	93.0	81.1	80.6	5.8	84.5	112
Highest	98.0	97.0	94.6	92.6	98.0	94.6	90.3	92.6	87.0	2.0	85.8	105
Total	95.7	93.4	91.2	88.2	94.0	91.1	87.4	87.3	82.7	4.3	85.5	535

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

Second and third birth order children are more likely than children of other birth orders to be fully immunised, with 87.5% of all second and third birth order children having received all basic vaccinations. Urban-rural differences in vaccination coverage are minimal, with 84.4% of children in urban areas likely to be fully immunised compared with 82.4% of children in rural areas.

The percentage of children fully immunised varies by mother's education. Only 67% of children whose mothers have no education are fully immunised, compared with 84% of children born to mothers with a primary level education, and 86% born to mothers with a secondary level education. There is no relationship between households in the lowest wealth quintile and the likelihood of being fully immunised.

### 10.2.1 Trends in vaccination coverage

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages covered by the 2006/2007 SIDHS. Table 10.4 shows the percentage of children who have received vaccinations during the first year of life by current age. This type of data can provide information on trends in vaccination coverage over the past four years.

**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, Solomon Islands 2007*

Age in months	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations <sup>1</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
12–23	95.7	93.2	90.8	87.1	93.8	90.7	86.3	80.6	76.6	4.3	85.5	535
24–35	92.8	90.4	85.6	80.0	91.5	86.7	81.2	68.1	64.4	7.0	79.8	533
36–47	90.6	89.0	86.1	80.8	88.7	85.9	79.6	72.0	66.7	9.2	74.6	515
48–59	87.7	85.5	81.9	72.5	86.4	82.8	74.3	62.6	56.7	11.6	70.3	477
Total	91.8	89.7	86.2	80.4	90.3	86.7	80.6	71.4	66.6	7.9	77.8	2,059

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

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

Vaccination coverage improved over the past four years. The percentage of children who have received no vaccinations at all by 12 months of age has declined from 11% among children aged 48–59 months at the time of the survey to 4% among children aged 12–23 months. Over the same period, the percentage fully immunised by age 12 months increased from 57% to 77%.

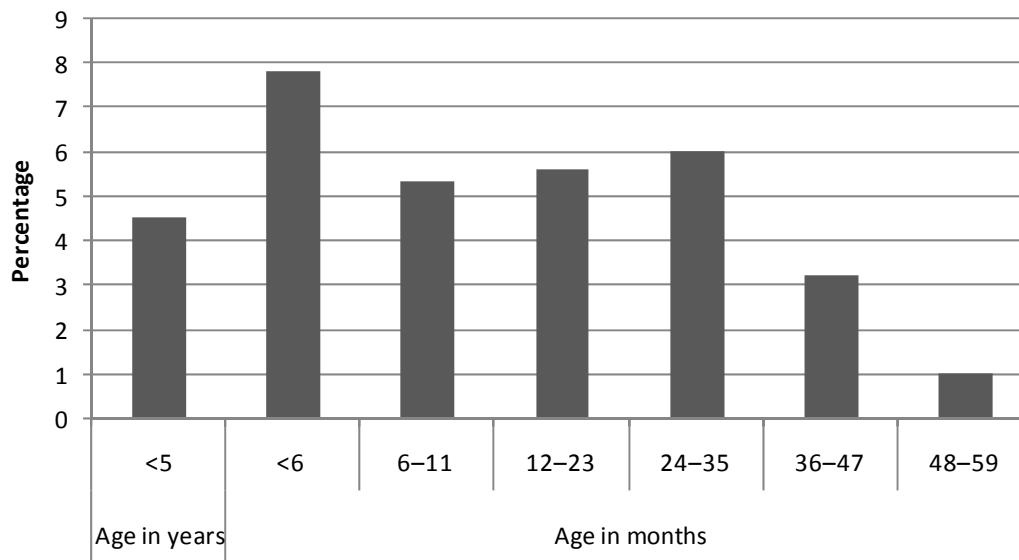
The data generally show that vaccination coverage in Solomon Islands has improved over the past five years. The percentage of children who received each vaccination has also increased in the past five years. As noted above, the percentage who received none of the six basic vaccinations decreased from 12% among children aged 48–59 months before the survey to 4% aged 12–23 months before the survey.

### 10.3 ACUTE RESPIRATORY INFECTION

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. In the 2006/2007 SIDHS, the prevalence of ARI was estimated by asking mothers whether their children under age 5 had been ill in the two weeks preceding the survey, with a cough accompanied by short, rapid breathing which the mother considered to be chest-related. These symptoms are compatible with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on the mother's perception of illness (i.e. without validation by medical personnel).

Figure 10.1 shows that about 5% of children under age 5 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 less than 6 months are more likely to show symptoms of ARI (8%) than children in other age groups.

**Figure 10.1: Prevalence of symptoms of ARI among children under 5, Solomon Islands**



#### 10.4 FEVER

Fever is another symptom of an acute infection in children. Illnesses that cause fever contribute to high levels of malnutrition and mortality. Fevers can occur year-round, therefore factors that cause fevers must be taken into account when interpreting fever prevalence in Solomon Islands.

Table 10.5 shows the percentage of children under age 5 years with fever during the two weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. About 17% of children under age 5 years were reported to have had fever in the two weeks preceding the survey. The prevalence of fever varies by age of child. Children aged 6–11 months (23%) and 12–23 months (23%) are more commonly sick with fever than children of other age groups.

There are no significant variations in the prevalence of fever by sex of the child or between children in urban and rural areas. Malaita and Western provinces have higher proportions (16% and 18%, respectively) of children with fever than Honiara or Guadalcanal. The percentage of children with fever increases as the level of the mother’s education increases. Mothers with more than a secondary level education are a small percentage and the proportion of children in this group with fever is 13%. The proportion of children with fever is highest in the highest and lowest wealth quintiles (19% and 18%, respectively); the quintiles in between show an increasing proportion of children with fever. All of this suggests that there is no relationship between wealth quintiles and fever prevalence in children.

Over 68% of children with fever were taken to a healthcare facility or provider for treatment. Children between 6 and 11 months of age were more likely to be taken to a healthcare facility or provider for treatment of fever than other children. There is no significant difference between the proportion of children in rural and urban areas seeking treatment for fever. There is no significant difference in the proportion of girls or boys being taken for treatment. The lowest percentage of children with fever taken for treatment is in Guadalcanal Province (46%). There is no correlation between a mother’s education level and the proportion of fever children taken for treatment.

Children in lower wealth quintile households are more likely to be taken for treatment than those in the higher wealth quintile households.

Exactly 19% of fever children received antimalarial treatment and over 7% received antibiotics. There is little variation in the use of antibiotic drugs by background characteristics of mothers.

**Table 10.5: Prevalence and treatment of fever**

*Among children under age 5 years, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage 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, Solomon Islands 2007*

Background characteristic	Among children under age 5 years:		Children under age 5 years with fever			
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
<b>Age in months</b>						
<6	11.8	266	(77.0)	(9.7)	(13.0)	32
6–11	23.0	259	78.2	14.4	10.9	60
12–23	23.4	535	65.5	10.6	8.5	125
24–35	16.9	533	63.3	17.5	7.1	90
36–47	15.0	515	64.5	34.0	2.8	77
48–59	9.2	477	(74.5)	(32.7)	(3.0)	44
<b>Sex</b>						
Male	16.4	1,269	68.7	20.0	7.9	208
Female	16.8	1,316	68.2	18.1	6.6	220
<b>Residence</b>						
Urban	16.4	319	69.5	12.2	16.9	52
Rural	16.6	2,266	68.3	20.0	5.9	376
<b>Region</b>						
Honiara	14.0	241	67.2	6.9	17.4	34
Guadalcanal	13.5	476	46.1	38.1	12.3	64
Malaita	16.0	647	69.0	36.1	9.8	103
Western	17.7	276	(54.8)	(13.7)	(4.4)	49
Other provinces	18.9	945	80.0	6.1	2.9	178
<b>Mother's education</b>						
No education	14.1	359	(72.4)	(28.0)	(13.9)	50
Primary	15.9	1,603	66.0	17.3	3.9	254
Secondary	20.5	563	72.7	18.9	9.8	116
More than secondary	13.0	61	*	*	*	8
<b>Wealth quintile</b>						
Lowest	18.3	636	70.7	21.9	3.2	116
Second	12.9	528	82.2	12.7	4.5	68
Middle	15.1	468	63.0	26.4	12.1	71
Fourth	17.0	493	66.1	24.3	2.8	84
Highest	19.4	459	61.2	9.3	15.1	89
<b>Total</b>	<b>16.6</b>	<b>2,585</b>	<b>68.4</b>	<b>19.0</b>	<b>7.3</b>	<b>428</b>

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner.



## 10.5 DIARRHOEA PREVALENCE

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children, although the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhoea-causing agents is frequently related to the use of contaminated water and to unhygienic practices in food preparation and disposal of excreta. In interpreting the findings of the 2006/2007 SIDHS, it should be borne in mind that diarrhoea prevalence varies seasonally.

**Table 10.6: Diarrhoea prevalence**

*Percentage of children under age 5 years who had diarrhoea in the two weeks preceding the survey, by background characteristics, Solomon Islands 2007*

Background characteristic	Diarrhoea in the two weeks preceding the survey		
	All diarrhoea	Diarrhoea with blood	Number of children
<b>Age in months</b>			
<6	0.9	0.0	266
6–11	12.3	0.7	259
12–23	21.1	0.6	535
24–35	8.8	1.5	533
36–47	6.7	0.2	515
48–59	3.1	0.5	477
<b>Sex</b>			
Male	11.1	0.8	1,269
Female	7.8	0.5	1,316
<b>Source of drinking water<sup>1</sup></b>			
Improved	9.3	0.5	2,179
Not improved	10.0	1.1	402
<b>Toilet facility<sup>2</sup></b>			
Improved, not shared	8.4	0.4	390
Non-improved or shared	9.6	0.7	2,180
<b>Residence</b>			
Urban	9.4	0.0	319
Rural	9.4	0.7	2,266
<b>Region</b>			
Honiara	7.6	0.1	241
Guadalcanal	8.8	1.2	476
Malaita	5.8	1.0	647
Western	7.4	1.4	276
Other provinces	13.2	0.0	945
<b>Mother's education</b>			
No education	9.2	1.0	359
Primary	10.0	0.7	1,603
Secondary	8.1	0.3	563
More than secondary	7.1	0.0	61
<b>Wealth quintile</b>			
Lowest	13.8	1.5	636
Second	7.3	0.1	528
Middle	5.0	0.1	468
Fourth	12.5	0.9	493
Highest	6.9	0.4	459
<b>Total</b>	<b>9.4</b>	<b>0.6</b>	<b>2,585</b>

Note: Total includes 5 cases with missing information on source of drinking water and 15 cases with missing information on toilet facility.

<sup>1</sup> See Table 2.7 for definition of categories.

<sup>2</sup> See Table 2.8 for definition of categories.

Table 10.6 shows the percentage of children under age 5 years with diarrhoea in the two weeks preceding the survey according to selected background characteristics. Overall, 9% of all children under age 5 had diarrhoea; less than 1% had diarrhoea with blood.

The occurrence of diarrhoea varies by a child's age: it is least in the less than 6 months age group (less than 1%), rising steeply to a peak in children aged 12–23 months (21%), and then decreasing sharply in children aged 48–59 months (3%). Diarrhoea prevalence is higher in boys (11%) than in girls (8%). 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 improved, unshared facilities and non-improved drinking water source. There is no urban and rural difference in diarrhoea prevalence, and there is no relationship between diarrhoea prevalence and household wealth quintile. Diarrhoea prevalence decreases with an increase in mother's education level.

The prevalence of diarrhoea with blood is minimal and shows no correlation with categories surveyed.

## **10.6 DIARRHOEA TREATMENT**

In the 2006/2007 SIDHS, mothers of children with diarrhoea were asked what was done to treat the illness. Table 10.7 shows the percentage of children with diarrhoea who received specific treatments by background characteristics. Over 56% of children with diarrhoea were taken to a healthcare provider. Children of mothers living in rural households were more likely to be taken to a healthcare provider than other children. There is no significant difference in male or female children who had diarrhoea in the two weeks preceding the survey taken to a healthcare provider.

**Table 10.7: Diarrhoea treatment**

Among children under age 5 years who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by background characteristics, Solomon Islands 2007

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Oral rehydration therapy (ORT)					Other treatments		Missing	No treatment	Number of children with diarrhoea
		ORS packets or pre-packaged liquid	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Home remedy/ other			
<b>Sex</b>											
Male	56.9	43.9	67.9	78.6	32.0	84.5	5.4	39.9	1.4	4.3	141
Female	56.4	29.4	45.4	60.7	35.8	68.2	1.8	39.5	0.0	8.8	103
<b>Residence</b>											
Urban	49.0	39.9	57.4	76.6	57.9	91.3	2.8	17.1	1.0	6.6	30
Rural	57.7	37.4	58.5	70.3	30.2	75.7	4.1	42.9	0.8	6.1	213
Total	56.7	37.7	58.4	71.1	33.6	77.6	3.9	39.7	0.8	6.2	243

Note: ORT includes solution prepared from oral rehydration salt (ORS), pre-packaged ORS packet, and recommended home fluids (RHF).

<sup>1</sup> Excludes pharmacy, shop and traditional practitioner.

More than 77% of children with diarrhoea were treated with some kind of oral rehydration therapy (ORT) or increased fluids. About 38% were treated with ORS prepared from an ORS packet, almost 60% were given recommended home fluids, and 34% were given increased fluids. The percentage of boys receiving ORT was greater than that of girls, except for therapy with increased fluids where the percentage is slightly higher than in boys.

Just under 4% of children with diarrhoea were given antibiotic drugs and 40% were given home remedies or other treatments. Over 6% of children with diarrhoea did not receive any treatment at all.

ORT and other treatments vary by urban and rural residence as observed in Table 10.8. More children in rural areas (58%) sought treatment for diarrhoea than those in urban areas (49%). Home remedies were more likely to be used in rural areas (43%) than in urban areas (17%). More children in urban areas were given ORT or increased fluids (91%) than children in rural areas (76%).

## **10.7 FEEDING PRACTICES**

Mothers are encouraged to continue normal feeding of children with diarrhoea and to increase the amount of fluids. These practices help to reduce dehydration and minimise the adverse consequences of diarrhoea on the child's nutritional status. Mothers were asked whether they gave the child less, the same amount, or more fluids and food than usual when their child had diarrhoea. Table 10.8 shows the percent distribution of children under age 5 years who had diarrhoea in the two weeks prior to the survey by feeding practices, according to background characteristics.

About 41% of children who had diarrhoea were given the same amount of liquid as usual, 34% were given more, 11% were given somewhat less than the usual amount, and 10% were given much less than the usual amount.

Regarding the amount of food offered to children who had diarrhoea, 38% were given the same amount as usual, 12% were given more, 16% were given somewhat less than the usual amount of food, 22% were given much less than the usual amount of food, and 8% of children who usually ate solid foods did not receive food during their illness.

Children who live in urban areas are more likely to receive more than the usual amount of liquid during episodes of diarrhoea than children in rural areas. Regarding the amount of food offered during diarrhoea episodes, children in urban areas are more likely to receive more food during a diarrhoea episode (24%) than children in rural areas (11%).

Table 10.9 also shows that 20% of children were given increased fluids and continued feeding, while 76% of children who continued feeding were given ORT and/or increased fluids, with the largest differentials observed by place of residence.

**Table 10.8: Feeding practices during diarrhoea episodes**

*Percent distribution of children under age 5 years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the diarrhoea episode, by background characteristics, Solomon Islands 2007.*

Background characteristic	Amount of liquids offered						Amount of food offered							Percentage given increased fluids and continued feeding <sup>1,2</sup>	Percentage who continued feeding and were given ORT and/or increased fluids <sup>3</sup>	Number of children with diarrhoea	
	More	Same as usual	Somewhat less	Much less	Don't know/missing	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Don't know/missing				Total
<b>Sex</b>																	
Male	32.0	37.9	16.8	10.9	2.4	100.0	8.2	34.3	15.7	24.4	12.0	3.0	2.4	100.0	20.3	83.3	141
Female	35.8	45.1	3.5	8.7	6.8	100.0	18.1	43.6	15.4	19.6	3.3	0.0	0.0	100.0	20.5	66.9	103
<b>Residence</b>																	
Urban	57.9	27.1	4.3	8.2	2.5	100.0	23.6	51.6	12.1	11.7	0.0	0.0	1.0	100.0	50.4	89.5	30
Rural	30.2	42.9	12.2	10.2	4.5	100.0	10.8	36.4	16.1	23.9	9.5	2.0	1.4	100.0	16.2	74.5	213
Total	33.6	40.9	11.2	10.0	4.3	100.0	12.4	38.2	15.6	22.4	8.3	1.7	1.4	100.0	20.4	76.4	243

<sup>1</sup> Equivalent to the UNICEF/WHO indicator "Home management of diarrhoea." MICS Indicator 34.

<sup>2</sup> Continue feeding practices includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode.

<sup>3</sup> Equivalent to UNICEF MICS Indicator 35.

## 10.8 KNOWLEDGE OF ORS PACKETS

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, including the use of a solution prepared from packets of ORS. To ascertain how widespread the knowledge of ORS is in Solomon Islands, respondents were asked whether they know about ORS packets.

Table 10.9 shows that over three-quarters of women (79%) who gave birth in the five years preceding the survey knew about ORS packets. ORS knowledge is higher among urban women (86%) than among rural women (77%). Knowledge of ORS increases as the age of women increases, from 51% among the youngest age group to 85% in the oldest age group.

Similarly, knowledge of ORS packets increases as a mother's education level increases, from 67% among mothers with no education to 89% among mothers with more than a secondary education.

**Table 10.9: Knowledge of ORS 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 diarrhoea by background characteristics, Solomon Islands 2007*

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
<b>Age</b>		
15–19	50.8	68
20–24	73.6	361
25–34	79.7	963
35–49	84.5	406
<b>Residence</b>		
Urban	85.8	236
Rural	77.3	1,562
<b>Region</b>		
Honiara	84.6	178
Guadalcanal	82.0	323
Malaita	72.0	420
Western	86.7	208
Other provinces	76.6	671
<b>Education</b>		
No education	66.5	243
Primary	79.0	1,104
Secondary	82.8	406
More than secondary	89.1	46
<b>Wealth quintile</b>		
Lowest	78.9	412
Second	72.2	367
Middle	78.6	326
Fourth	80.0	363
Highest	83.0	330
<b>Total</b>	<b>78.5</b>	<b>1,799</b>

ORS = oral rehydration salts

## 10.9 STOOL DISPOSAL

**Table 10.10: Disposal of children's stools**

*Percent distribution of youngest children under age 5 years living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Solomon Islands 2007*

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/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Thrown into sea/river	Other	Missing			
<b>Age in months</b>												
<6	1.9	12.9	7.3	20.7	2.8	0.0	48.5	3.9	2.0	100.0	22.1	262
6-11	2.8	17.3	7.9	15.3	2.2	1.4	51.5	0.0	1.5	100.0	28.1	255
12-23	2.4	14.8	12.5	10.8	6.6	1.1	50.1	0.5	1.3	100.0	29.7	478
24-35	8.5	12.6	14.5	10.9	1.9	1.6	46.1	0.7	3.2	100.0	35.6	352
36-47	7.9	12.0	12.2	5.6	3.5	2.5	48.5	5.3	2.4	100.0	32.1	216
48-59	7.8	12.1	5.3	11.0	2.3	1.6	52.8	1.8	5.3	100.0	25.2	181
<b>Toilet facility</b>												
Improved, not shared <sup>1</sup>	18.1	58.0	4.1	7.7	0.6	1.0	8.8	0.2	1.5	100.0	80.2	267
Non-improved or shared	2.5	5.8	11.9	13.2	4.2	1.3	56.6	2.0	2.5	100.0	20.2	1,466
<b>Residence</b>												
Urban	19.3	58.4	2.9	10.9	0.1	0.0	6.0	0.5	1.8	100.0	80.6	217
Rural	2.8	7.5	11.8	12.5	4.1	1.5	55.5	1.9	2.4	100.0	22.1	1,527
<b>Region</b>												
Honiara	19.2	58.4	0.9	11.6	0.2	0.0	7.2	0.7	1.9	100.0	78.5	162
Guadalcanal	3.5	16.4	25.2	8.9	7.7	5.2	30.0	0.4	2.7	100.0	45.0	318
Malaita	4.1	10.5	9.5	22.1	5.7	0.2	45.3	0.3	2.3	100.0	24.1	415
Western	5.4	16.7	1.1	3.0	0.8	2.5	65.4	0.0	5.1	100.0	23.2	195
Other provinces	2.3	2.8	9.6	10.8	2.0	0.0	67.0	4.0	1.6	100.0	14.7	653
<b>Education</b>												
No education	4.4	12.2	10.6	15.0	9.1	2.2	39.0	2.4	5.2	100.0	27.2	238
Primary	4.2	10.5	10.1	12.4	3.3	1.5	54.7	2.1	1.2	100.0	24.7	1,075
Secondary	6.5	20.4	13.0	11.3	1.0	0.2	43.6	0.3	3.8	100.0	39.9	387
More than secondary	10.3	46.6	4.3	6.5	5.2	0.0	24.3	0.0	2.8	100.0	61.2	44

**Table 10.10 (continued)**

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/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Thrown into sea/river	Other	Missing			
<b>Wealth quintile</b>												
Lowest	2.0	3.4	19.7	11.5	9.1	3.3	47.9	0.9	2.2	100.0	25.1	400
Second	3.7	3.3	11.7	10.5	2.3	0.6	61.8	4.2	2.1	100.0	18.7	362
Middle	1.6	8.5	7.0	14.6	2.7	1.8	63.3	0.6	0.0	100.0	17.1	324
Fourth	3.8	13.5	8.8	11.9	1.6	0.4	52.4	2.2	5.4	100.0	26.1	350
Highest	14.6	45.7	3.7	13.7	1.5	0.0	18.5	0.4	2.0	100.0	63.9	308
<b>Total</b>	<b>4.9</b>	<b>13.8</b>	<b>10.7</b>	<b>12.3</b>	<b>3.6</b>	<b>1.3</b>	<b>49.3</b>	<b>1.7</b>	<b>2.4</b>	<b>100.0</b>	<b>29.4</b>	<b>1,744</b>

Note: Total includes 11 cases with missing information on toilet facility.

<sup>1</sup> Non-shared facilities that are of the types: flush or pour flush into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrine; pit latrine with a slab; and a composting toilet.



If human faeces are left uncontained, disease may spread by direct contact or by animal contact with the faeces. Hence, the proper disposal of children's stools is extremely important in preventing the spread of disease. Table 10.10 presents information on the disposal of the stools of children under age 5 years, by background characteristics.

About 67% of children's stools are left uncontained: over 12% are put or rinsed into a drain or ditch, over 3% are thrown into the garbage, while a massive 49% are thrown into a river or the sea. A little over 29% of children's stools are disposed of hygienically: A little less than 11% are buried, 14% disposed of in a toilet or latrine, and 5% of children under age 5 years use a toilet or latrine. There is some variation in containing children's stools by age, with 22% for children less than 6 months compared with 25% for children aged 48–59 months, the highest containment is observed for children aged 24–35 months.

There are pronounced differences by mother's level of education in the way stools are disposed of. Stools are disposed of hygienically (i.e. child uses a toilet, child's stools are thrown in toilet, or buried in yard) for 61% percent of children whose mothers have more than a secondary level of education, compared with 27% of children whose mothers have no education. Not surprisingly, 80% of children in households with improved toilets that are not shared with other households, have their stools contained compared with 20% of children in households using non-improved or shared toilet facilities. Children's stools are much more likely to be contained in wealthier households (64%) than in middle wealth quintile households (17%).

Children's stools are more likely to be contained in urban areas (81%) than in rural areas (22%). This marked difference could be attributed to the fact that toilet facilities are more available in urban areas.

## 10.10 KEY RESULTS

The main findings related to child health in Solomon Islands are highlighted below.

1. About 13% of live births with a reported birth weight in the five years preceding the survey weighed less than 2.5 kg at birth, indicating a prevalence of children underweight at birth. This is an important indicator of a child's vulnerability to the risk of childhood illnesses and the chances of their survival. Therefore, policies are needed to improve this area of child health.
2. Although vaccination coverage is found to be high in Solomon Islands (about 86%), differences in coverage show that mothers with low educational attainment and women in the lowest wealth quintile have low vaccination coverage for their children.
3. Data show that vaccination coverage in Solomon Islands improved over the past four years from 57% to 77%. However, further improvement in health programme planning is required for targeting subgroups of children who are not receiving immunisations.
4. Only 5% of children under age 5 years have symptoms of ARI, and 73% of these seek advice from a healthcare facility or provider. ARI symptoms in Solomon Islands is more common among children aged less than 6 months, children with mothers smoke cigarettes or tobacco, children whose mothers have no education, and children with mothers in the lowest wealth quintile.
5. Among children under age 5 years, about one in every five (17%) had fever in the two weeks preceding the survey and 68% of these sought treatment from a healthcare facility. Fever is common among children aged 6–23 months, children whose mothers have a secondary level education, and those in the lowest and highest wealth quintiles.
6. Exposure to diarrhoea is related to the use of contaminated water and to hygienic practices in food preparation and the disposal of excreta. More than 9% of children under the age of 5 years had diarrhoea in the two weeks preceding the survey. Diarrhoea is higher among children aged 6–24 months, children drinking unimproved water and using non-improved or shared toilet facilities, those whose mothers have no education or only a primary education. Diarrhoea is also higher among children living in the lowest wealth quintile households. More than 78% of mothers have knowledge of ORS packets for diarrhoea treatment.
7. Disposal of children's stools is extremely important in preventing the spread of diseases. The results show that only 29% of children's stools are disposed of safely.

## CHAPTER 11 NUTRITION

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This chapter examines: 1) the nutritional status of men, women and children by assessing their anthropometric characteristics; 2) infant and child feeding practices; 3) micronutrient intakes of women and children; 4) food consumption patterns of mothers; and 5) the consequences of inadequate nutrition.

The prevalence of anaemia, as determined from haemoglobin testing of women and children, are discussed in this chapter.

Survey participants were invited to have their weight and height measured. These measurements were then used to calculate indicators of nutritional status, including body mass index (BMI)<sup>5</sup>, an indicator of thinness and fatness and short stature. A low BMI ( $<18.5\text{kg/m}^2$ ) can be used as an indicator of chronic energy deficiency (CED), and the degrees of severity are defined as follows:

- mild CED is a BMI 17–18.5  $\text{kg/m}^2$
- moderate CED is a BMI 16.0–16.9  $\text{kg/m}^2$
- severe CED is a BMI  $<16.0\text{ kg/m}^2$

CED is an indicator of chronic malnutrition, which can negatively impact productivity levels among adults, and is a risk factor for childhood morbidity and mortality. Causes of malnutrition include not eating enough nutritious food, poor food choices and feeding practices, parasitic infections, poor sanitation and other socio-cultural factors that influence food choices and feeding practices. Women and children are the most at-risk population groups. Women with CED are more likely to give birth to low weight babies who are more likely to experience poor health outcomes.

Short stature (defined as height  $<145\text{ cm}$ ) can be used to identify women with an increased risk of poor delivery and childbirth outcomes. Short stature is associated with a small pelvic size, which makes delivering a baby difficult. The risk of delivering low birth weight babies is higher for women of short stature.

A high BMI ( $>25.00\text{ kg/m}^2$ ), on the other hand, is an indicator of overweight (BMI 25.0–29.9  $\text{kg/m}^2$ ) and obesity (BMI  $>30\text{ kg/m}^2$ ), which is associated with an increased risk of developing of non-communicable diseases such as diabetes, heart disease and some cancers.

### 11.1 NUTRITIONAL STATUS OF MEN

Table 11.1 presents the percentage of Solomon Islands men with specific BMI levels by background characteristics. Overall, the mean BMI of men was 24.1  $\text{kg/m}^2$ . Although this figure is within the normal BMI range of 18.5–24.9  $\text{kg/m}^2$ , it is near the upper limits of normal. From the survey, 66.5% of men have a BMI within the normal range. Men in the 15–29 age group, from rural areas within Malaita Province, and from low to moderate wealth quintile households are more likely to be in the normal range than other men. Most young men in rural areas are involved in daily physical labour and sports which contributes to reducing body fat and hence result in a lower BMI.

The overall prevalence of a low BMI among men was 2.2%, with less than 1% of men having a BMI of  $<17\text{kg/m}^2$ . This indicates that less than 3% of adult men are mildly to severely malnourished, which is mainly the case among men in rural areas, Guadalcanal Province, less wealthy households and among men aged 15–19. These men are less likely to have access to nutritious foods.

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<sup>5</sup> Is a measure of body fat based on heights and weights that applies to both adult men and women.

**Table 11.1: Nutritional status of men**

Among men aged 15+, the mean body mass index (BMI), and the percentage of men with specific BMI levels, by background characteristics, Solomon Islands 2007

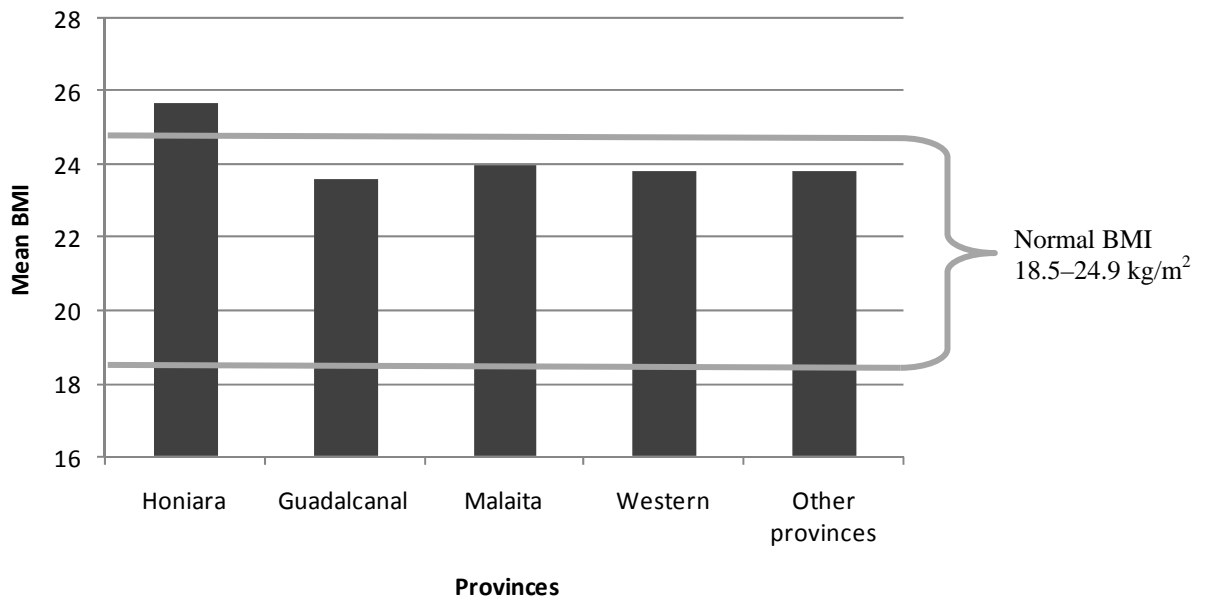
Background characteristic	Mean BMI	BMI						Number of men	
		<17 (Moderately and severely thin)	<18.5 (Total thin)	17.0–18.4 (Mildly thin)	18.5–24.9 (Total normal)	>=25.0 (Total overweight or obese)	25.0–29.9 (Overweight)		>=30.0 (Obese)
<b>Age</b>									
15–19	22.1	3.4	5.5	2.1	81.7	12.8	12.3	0.5	233
20–29	23.3	0.1	0.5	0.4	80.0	19.5	17.0	2.5	465
30–39	25.1	1.0	2.1	1.1	56.0	41.9	33.8	8.1	423
40–49	25.4	0.0	0.1	0.1	56.5	43.4	32.4	11.0	203
<b>Residence</b>									
Urban	25.6	0.0	0.5	0.5	52.8	46.7	30.5	16.2	194
Rural	23.7	1.1	2.1	1.0	71.8	26.1	22.8	3.3	1,129
<b>Region</b>									
Honiara	25.7	0.0	0.6	0.6	53.9	45.5	27.5	18.0	152
Guadalcanal	23.6	2.4	3.8	1.4	67.8	28.4	24.6	3.8	198
Malaita	24.0	0.0	0.7	0.7	75.9	23.4	19.9	3.5	267
Western	23.8	1.4	3.2	1.8	64.3	32.5	28.4	4.1	148
Other provinces	23.8	1.1	1.7	0.6	71.5	26.8	23.4	3.4	559
<b>Education</b>									
No education	23.3	0.0	0.0	0.0	89.1	10.9	8.9	2.0	61
Primary	23.7	1.6	3.0	1.4	69.9	27.1	22.5	4.6	668
Secondary	24.1	0.4	0.9	0.5	69.5	29.6	24.3	5.3	480
More than secondary	25.5	0.0	0.0	0.0	51.4	48.6	38.6	10.0	115
<b>Wealth quintile</b>									
Lowest	23.3	1.5	2.6	1.1	72.3	25.1	24.4	0.7	238
Second	23.8	0.0	1.1	1.1	75.0	23.9	21.0	2.9	274
Middle	23.2	2.0	2.8	0.8	74.4	22.8	21.5	1.3	264
Fourth	24.0	1.0	2.1	1.1	70.0	27.9	22.2	5.6	295
Highest	25.7	0.3	0.6	0.3	52.6	46.8	31.2	15.6	253
Total 15–49	24.0	1.0	1.9	0.9	69.0	29.1	23.9	5.2	1,323
50+	24.3	0.2	3.7	3.4	59.4	36.9	29.0	7.9	369
Total men 15+	24.1	0.8	2.2	1.4	66.9	30.8	25.0	5.8	1,693

Note: BMI is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).

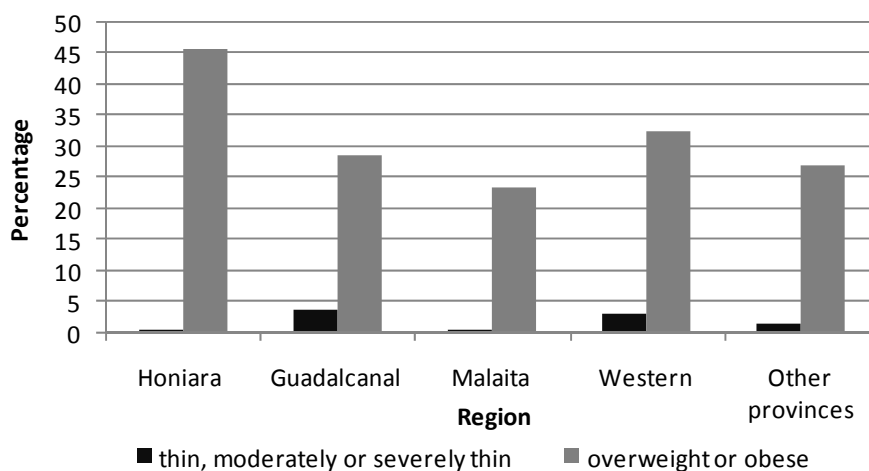
The prevalence of a high BMI ( $> 25 \text{ kg/m}^2$ ) was 30.8%, with the highest BMI levels observed among men in the 40+ age group from urban areas around Honiara, and among better educated men living in wealthier households. Figure 1 shows the differences in the mean BMI among men by region. Men with a high BMI were most likely to be professional men working in offices and so less likely to be engaged in regular physical activity. These men are also more likely to have access to more choices of food.

Figure 11.2 compares the differences between the prevalence of men identified as thin ( $\text{BMI} < 18.5 \text{ kg/m}^2$ ) and those identified as overweight or obese ( $\text{BMI} > 25 \text{ kg/m}^2$ ).

**Figure 11.1: Mean BMI of men aged 15+ in Solomon Islands by region**



**Figure 11.2: Prevalance of thin and overweight men aged 15 years and over by region, Solomon Islands**



Although the mean BMI was within the normal range for men, Figure 11.2 clearly shows that a significant number of men were either overweight or obese in all regions, particularly Honiara.

## 11.2 NUTRITIONAL STATUS OF WOMEN

Table 11.2 presents the nutritional status of Solomon Islands women aged 15–49 who were not pregnant or had given birth over the preceding two months. Overall, only 3% of women are of short stature, observed mostly in younger women (aged 15–19 at 5.5%) from rural areas in Western Province and living in the least wealthy households.

The overall prevalence of low BMI ( $25.4 \text{ kg/m}^2$ ) is less than 2%, seen mostly in younger women (aged 15–19) from rural areas in Guadalcanal and Malaita provinces, and living in less wealthy households. Women in rural areas are less likely than women in urban areas to have access to adequate nutritious foods. The mean BMI for women is  $25.4 \text{ kg/m}^2$ , which is in the overweight category. This is slightly higher than that observed for men ( $24.1 \text{ kg/m}^2$ ).

The overall prevalence of high BMI ( $>25 \text{ kg/m}^2$ ) among women is 44%, with 29.9% being overweight (BMI  $25\text{--}29.9 \text{ kg/m}^2$ ) and 14.5% being obese (BMI  $>30 \text{ kg/m}^2$ ). Higher BMI is observed among older women (aged 30–49) from urban areas in Honiara and among women with a higher education living in wealthy households. Increasing BMI levels appear to be associated with increasing age and levels of maternal education and household wealth. Regional differences in the mean BMI among women is shown in Figure 11.3.

**Table 11.2: Nutritional status of women**

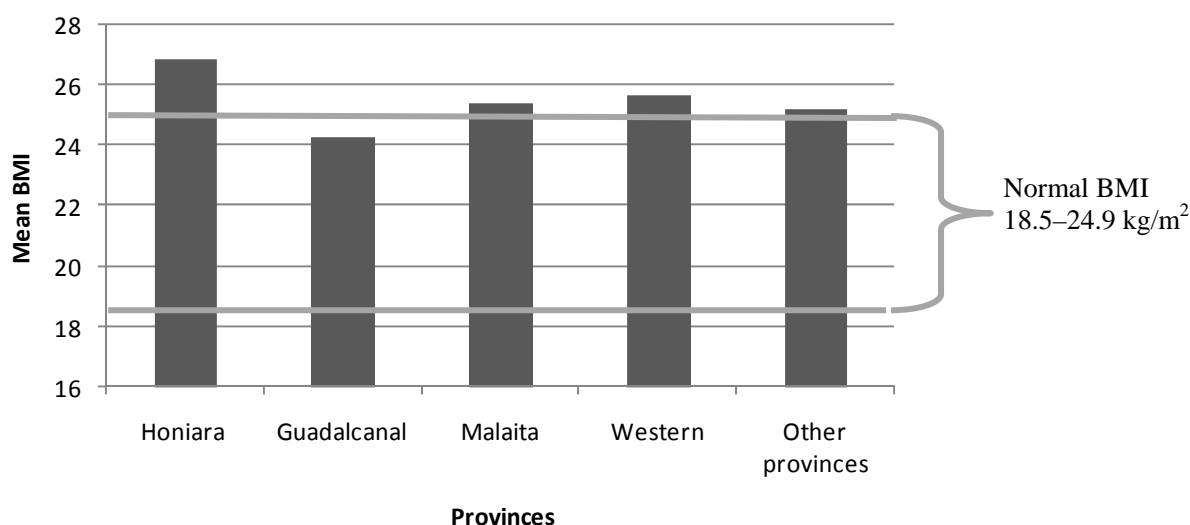
Among women aged 15–49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Solomon Islands 2007

Background characteristic	Height		BMI <sup>1</sup>								Number of women	
	Percentage below 145 cm	Number of women	Mean BMI	<17 (Moderately & severely thin)	17.0–18.4 (Mildly thin)	<18.5 (Total thin)	18.5–24.9 (Total normal)	>=25.0 (Total over-weight or obese)	25.0–29.9 (Over-weight)	>=30.0 (Obese)		
<b>Age</b>												
15–19	5.5	600	23.7	0.5	1.9	2.4	68.7	28.9	26.3	2.6	582	
20–29	2.6	1,324	24.6	0.4	1.7	2.1	59.9	38.0	28.7	9.4	1,176	
30–39	1.8	1,008	26.3	0.1	1.3	1.4	45.4	53.1	32.8	20.3	916	
40–49	3.1	575	27.1	1.0	1.1	2.1	38.7	59.2	31.5	27.7	573	
<b>Residence</b>												
Urban	1.5	526	27.2	0.3	1.3	1.6	41.2	57.2	32.5	24.7	491	
Rural	3.2	2,980	25.0	0.5	1.5	2.0	55.9	42.1	29.5	12.6	2,756	
<b>Region</b>												
Honiara	1.5	396	26.9	0.2	1.4	1.6	40.6	57.8	32.9	24.9	367	
Guadalcanal	3.7	518	24.3	0.6	2.1	2.7	64.4	32.9	21.9	11.0	461	
Malaita	3.5	786	25.4	0.5	1.8	2.3	55.4	42.2	30.3	12.0	727	
Western	6.0	409	25.7	0.6	0.7	1.3	51.1	47.6	28.7	18.9	377	
Other provinces	1.9	1,396	25.2	0.4	1.4	1.7	53.3	44.9	32.0	12.9	1,314	
<b>Education</b>												
No education	2.9	474	24.9	0.7	1.7	2.4	58.4	39.2	26.5	12.7	450	
Primary	3.6	1,988	25.5	0.4	1.4	1.8	53.0	45.2	29.2	16.0	1,837	
Secondary	1.8	935	25.0	0.3	1.8	2.2	55.1	42.7	31.4	11.3	852	
More than secondary	0.5	109	27.9	0.0	0.8	0.8	34.4	64.8	43.7	21.1	108	
<b>Wealth quintile</b>												
Lowest	4.3	661	24.5	0.7	2.0	2.7	61.8	35.5	25.8	9.7	599	
Second	3.2	711	24.7	0.4	1.2	1.6	58.8	39.7	30.7	9.0	672	
Middle	3.4	681	25.3	0.6	2.9	3.4	54.2	42.4	28.0	14.4	638	
Fourth	2.6	710	25.4	0.1	0.5	0.6	54.6	44.8	30.9	13.9	645	
Highest	1.3	742	26.9	0.5	1.1	1.6	40.4	58.0	33.5	24.5	693	
Total	3.0	3,506	25.4	0.4	1.5	1.9	53.7	44.4	29.9	14.5	3,247	

Note: BMI is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).

<sup>1</sup> Excludes pregnant women and women who gave birth in the two months preceding the survey.

**Figure 11.3: Mean BMI among women aged 15–49 in Solomon Islands by region**



**Figure 11.4: Differences in prevalence between thin and overweight or obese women aged 15–49 in Solomon Islands by region**

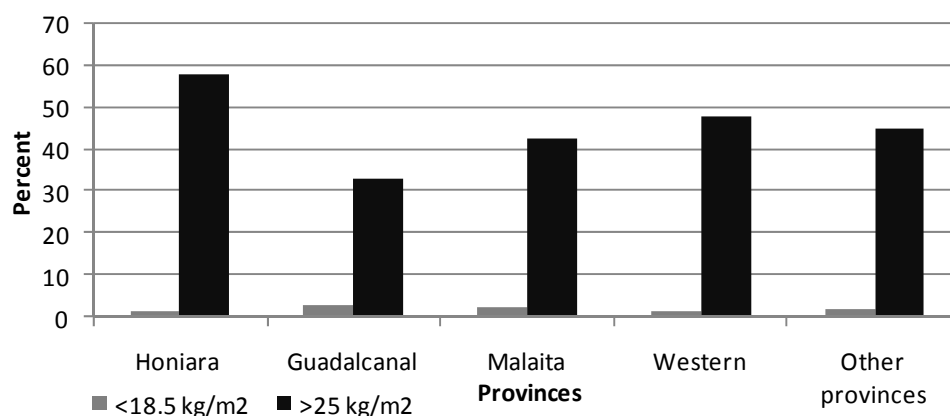


Figure 11.4 shows the distribution of women who are thin (BMI <18.5 kg/m<sup>2</sup>) and overweight or obese (BMI >25 kg/m<sup>2</sup>) by region, and illustrates that in all regions, a significant number of women are either overweight or obese. These results are similar for men (see Fig. 11.2).

### 11.3 NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children is an important indicator of their health and well-being. Poor nutrition in children under age 5 five years is associated with an increased risk of morbidity and mortality. Usually there is a “catch-up” growth in older childhood or adolescent in children who experience growth retardation under age 3 years.

Malnutrition in children leads to short stature in adults, which is associated with reduced productivity and increased obstetrics risks for women.

Poor nutrition in children is related to maternal malnutrition, low birth weight, inadequate breastfeeding and weaning diets, and high levels of infectious disease morbidity. Improvements in

the nutritional status of children will reduce the severity of common childhood illnesses and reduce the risk of death.

In the 2006/2007 SIDHS,, the nutritional status of children was assessed by examining weight and height measurements using standardised methods. Weight was measured using a digital scale accurate to the nearest 100 g, and height was measured using a portable measuring board accurate to the nearest 1 mm. Children under age 2 years were measured lying down, while older children were measured standing upright.

Three anthropometric indicators were calculated using weight and height measurements:

1. **Height-for-age** reflects achieved linear growth and deficits, which indicates long-term cumulative inadequate nutrition and poor health. Low height-for-age or **stunting** is frequently associated with poor overall economic conditions, which result in long-term, inadequate calorie intake and/or repeated exposure to illness, and other adverse conditions. Height-for-age is the recommended indicator that best reflects failure of a child to their reach linear growth potential. This indicator changes slowly over time and does not vary by season.
2. **Weight-for-height** reflects body weight relative to height. 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. Weight loss in children resulting in low weight-for-height is usually due to recent illness and/or insufficient calorie intake (caused by food shortage, weaning practices or other events). This indicator can vary by season depending on the availability of food and the incidence of acute morbidity in the child population.
3. **Weight-for-age** is an indicator of body mass relative to chronological age. Weight-for-age 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 the weight of the child, it is more difficult to interpret. Low weight-for-age or **underweight** can be used as a general indicator of child health and mortality risk.

These indices were calculated by comparing the weight and height measurements, or combinations of these measurements, with WHO international growth references. These references are based on the observation that well-nourished children from different countries and ethnic groups have a similar growth potential at least to age 7 years. Environmental factors such as infectious diseases, inadequate and unsafe diet, poverty and socioeconomic status, rather than genetic predisposition, account for any deviations from the references (WHO 1997).

The anthropometric indicators of the child nutrition status used in this survey are expressed as standard deviations (SD), the deviations of the individual anthropometric measurements from the median value of the WHO growth reference for that child's height or age divided by the SD for the reference population. Children who were more than 2 SD below the reference median of the international growth reference for their age or height (<2 SD) were considered **undernourished** and those more than <3 SD below were graded as **severely undernourished**.

### **Stunting in children**

Low height-for-age, or stunted growth, reflects a failure to reach linear growth potential as a result of suboptimal health and/or nutritional conditions. On a population level, high level of stunting is associated with poor socioeconomic conditions and a high risk of frequent and early exposure to adverse conditions such as illness and/or inappropriate feeding practices. Childhood stunting leads to significant reduction in adult size. One of the main consequences of small adult size is reduced work capacity, which in turn has an impact on economic productivity. Maternal size is associated with specific reproductive outcomes. Short stature in women places an increased risk of delivery complications because of small pelvic size. Small maternal size also increases the risk of giving birth to low weight babies who themselves have an increased risk of becoming small sized adults.

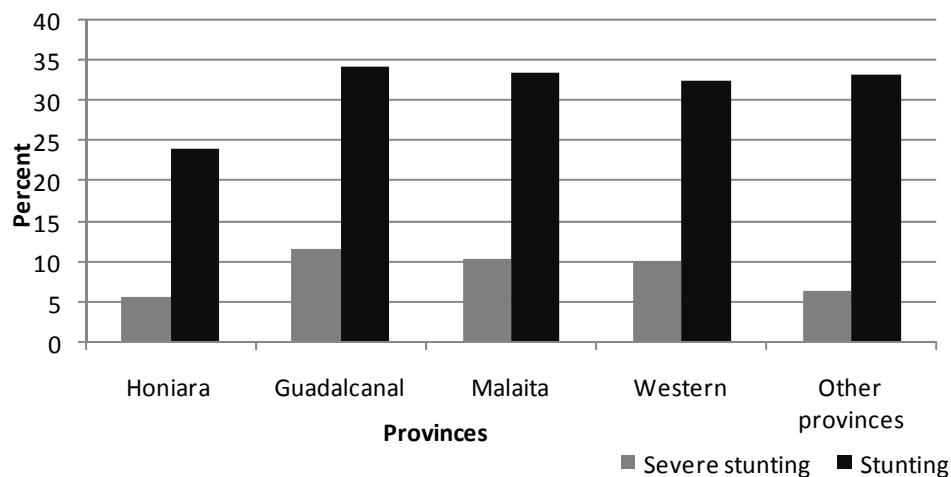


Table 11.3 presents the prevalence of low height-for-age or stunting in children less than 5 years by gender and according to birth size and maternal characteristics. Overall, 32.8% of children under age 5 years are stunted (identified as <-2 SD below the mean), and 8.5% are severely stunted (identified as <-3 SD below the mean). The prevalence of stunting is slightly higher among boys (36.7%) than girls (28.8%), and also appears to be higher in children in rural areas in Guadalcanal, Malaita and Western provinces than in children in Honiara and other provinces (see Fig. 11.3). Stunting is more likely to be observed among children born of mothers with little or no education and living in less wealthy households. Stunting is also more likely to be observed among babies who are born very small or small.

Overall, the mean Z-score for height-for-age is -1.5, indicating a distribution shift below zero, the expected value of the reference distribution. This shows that on average, Solomon Islands children less than 5 years in age fail to achieve linear growth potential when compared with the WHO international growth references. Children are generally not able to achieve linear growth for age.

There are no observed differences between boys and girls. Both are equally shorter than children of similar age in the international reference population.

**Figure 11.5: Prevalence of severe stunting among Solomon Islands children less than 5 years**



### Wasting in children

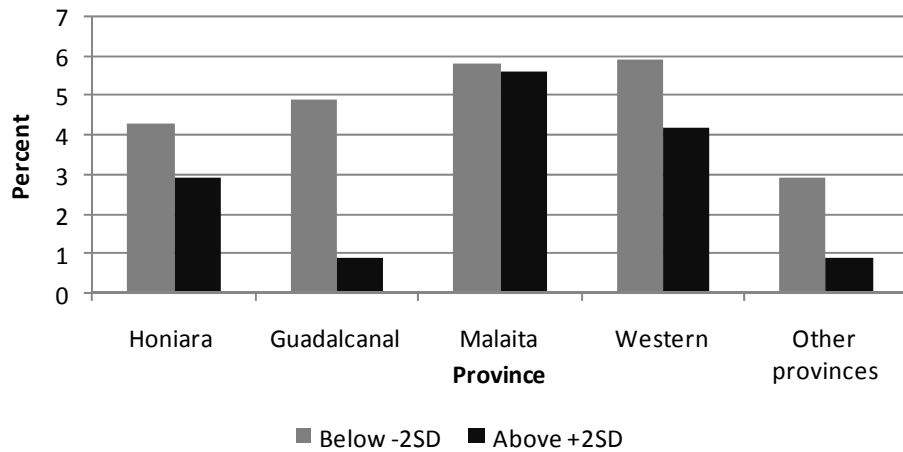
Low weight-for-height or wasting or thinness indicates in most cases a recent or severe process of weight loss that is often associated with acute starvation and/or a severe disease. Wasting may also be the result of chronic unfavourable living conditions. Overall, the prevalence of wasting in Solomon Islands children is low, with 4.3% below -2SD and less than 1.4% severely wasted (below -3SD). The mean Z-score for weight-for-height is -0.1, which is slightly below zero, the expected reference value.

There is an observed peak in the prevalence of wasting in children between ages 9 and 17 months, which corresponds to the time of weaning and an age when acute infectious diseases are common. The prevalence of wasting is slightly higher among girls (5.7%) than boys (3.0%). It is also higher in rural areas in Guadalcanal and Western provinces. Children of educated mothers are less likely to be wasted. There does not seem to be any relationship between household wealth and wasting in children. Babies who are born small are more likely to be wasted (5.1% below -2SD) than children who are born of an average or larger size (4.1% below -2SD).

High weight-for-height can be considered an adequate indicator of obesity because the majority of individuals with high weight-for-height are obese. The overall prevalence of childhood obesity (>2SD) is 2.5%. The prevalence of high weight-for-height peaks in less than 17-month-old babies, which reflects the high breastfeeding rates in these age groups (see Table 11.14.1), indicating that babies receive adequate nutrition from breast milk.

Figure 11.6 shows the prevalence of wasting and obesity by region. More children in Guadalcanal Province are wasted than children in Malaita Province where an equal proportion of children are wasted and obese.

**Figure 11.6: Prevalence of wasting and obesity among Solomon Islands children under age 5 by region**



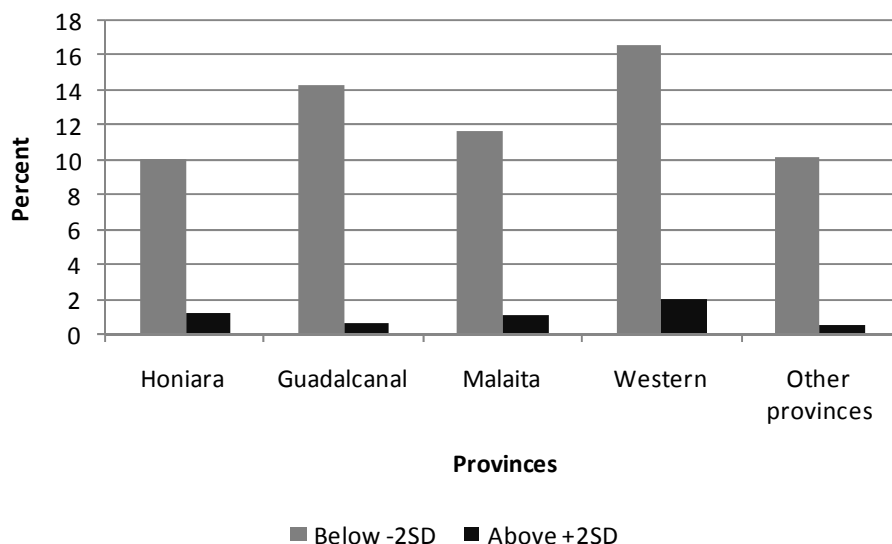
### Underweight in children

Table 11.3 shows the prevalence of low weight-for-age or underweight or being undernourished in children. Overall, 11.8% of children are underweight (below -2SD) and 2.4% are severely underweight (below -3SD). The mean Z score for weight-for-age is -0.9, which is less than zero, the expected value of the reference distribution. Solomon Islands children under age 5 years are slightly underweight when compared with the WHO growth reference.

Children in rural areas, in less wealthy households and born to less educated mothers are more likely to be underweight. The prevalence of underweight children is higher in children in Western Province than in other regions. Children of an average or large birth size are less likely to be underweight than children of a small birth size. Apathy, whether induced by inadequate nutrition intake or infection, places children at risk of developmental retardation.

Figure 11.7 shows that more children are underweight and undernourished than are overweight in all provinces.

**Figure 11.7: Underweight prevalence among children under age 5 by province in Solomon Islands**



**Table 11.3 Nutritional status of children**

*Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Solomon Islands 2007*

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	
<b>Age in months</b>												
<6	3.7	10.0	-0.4	2.7	7.9	9.0	0.2	1.7	5.5	3.9	-0.2	159
6-8	4.6	13.0	-0.8	0.8	5.5	7.8	-0.1	1.0	7.7	3.7	-0.6	118
9-11	4.1	24.5	-1.1	3.5	9.4	5.0	-0.4	3.6	20.9	1.8	-0.9	85
12-17	9.7	31.5	-1.4	3.3	9.2	0.5	-0.4	3.5	15.6	0.1	-1.0	185
18-23	9.2	47.3	-1.7	0.0	2.9	1.1	-0.2	0.7	10.8	0.4	-1.0	243
24-35	11.1	33.6	-1.6	0.5	1.9	2.1	0.0	2.3	12.2	0.7	-0.9	430
36-47	12.4	43.7	-1.7	2.3	4.4	1.1	-0.2	5.0	16.4	0.0	-1.1	427
48-59	4.6	28.5	-1.5	0.4	2.5	1.5	-0.1	0.7	7.0	0.1	-1.0	382
<b>Sex</b>												
Male	9.4	36.7	-1.5	0.6	3.0	2.2	-0.0	1.8	10.4	0.5	-0.9	1,035
Female	7.6	28.8	-1.4	2.2	5.7	2.8	-0.3	3.1	13.4	1.2	-1.0	994
<b>Birth interval in months<sup>2</sup></b>												
First birth <sup>3</sup>	9.7	35.5	-1.5	0.8	2.7	3.6	0.0	2.6	14.3	0.3	-0.9	370
<24	9.4	37.2	-1.6	2.3	5.9	2.7	-0.1	3.2	11.9	0.7	-1.0	325
24-47	6.8	30.9	-1.4	1.3	4.2	2.7	-0.2	2.2	12.0	1.7	-1.0	751
48+	8.9	28.1	-1.4	1.6	6.1	1.6	-0.2	2.2	10.5	0.1	-0.9	384
<b>Size at birth<sup>2</sup></b>												
Very small	7.2	45.2	-1.8	0.0	5.1	1.4	-0.3	1.0	20.7	0.0	-1.2	60
Small	17.2	46.1	-1.8	0.7	5.8	3.3	-0.2	5.2	19.5	0.9	-1.2	187
Average or larger	6.8	29.5	-1.4	1.5	4.1	2.5	-0.1	2.0	10.4	0.9	-0.9	1,490
<b>Mother's interview status</b>												
Interviewed	8.3	32.3	-1.5	1.4	4.6	2.7	-0.1	2.5	12.2	0.9	-0.9	1,829
Not interviewed but in household	4.1	16.2	-1.0	2.0	3.1	4.3	-0.2	2.0	7.4	0.5	-0.7	50
Not interviewed, and not in the household <sup>4</sup>	12.9	43.8	-1.7	0.4	1.7	0.0	0.1	2.1	9.3	0.0	-0.9	149

**Table 11.3 (continued)**

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>1</sup>	Percentage above +2 SD	Mean Z-score (SD)	
<b>Mother's nutritional status</b>												
Thin (BMI<18.5)	(6.6)	(45.1)	(-1.9)	(2.0)	(10.6)	(6.4)	(-0.5)	(7.7)	(32.3)	(3.2)	(-1.4)	31
Normal (BMI 18.5-24.9)	8.3	32.8	-1.5	1.9	5.0	2.8	-0.2	3.3	13.2	0.6	-1.0	1,077
Overweight/obese (BMI >= 25)	8.4	30.7	-1.4	0.8	3.6	2.5	0.0	1.1	9.4	1.2	-0.8	724
<b>Residence</b>												
Urban	6.9	23.0	-1.1	0.5	3.4	2.4	-0.1	0.6	8.2	2.0	-0.7	209
Rural	8.7	33.9	-1.5	1.5	4.4	2.5	-0.1	2.6	12.2	0.7	-0.9	1,819
<b>Region</b>												
Honiara	5.7	24.1	-1.1	0.3	4.3	2.9	-0.1	0.4	10.0	1.2	-0.7	153
Guadalcanal	11.7	34.3	-1.4	1.8	4.9	0.9	-0.3	3.0	14.3	0.6	-1.0	322
Malaita	10.4	33.5	-1.5	2.9	5.8	5.6	0.0	3.3	11.7	1.0	-0.8	486
Western	10.1	32.6	-1.5	2.7	5.9	4.2	-0.3	4.1	16.6	2.0	-1.0	206
Other provinces	6.4	33.4	-1.5	0.2	2.9	0.9	-0.1	1.7	10.2	0.5	-0.9	861
<b>Mother's education<sup>5</sup></b>												
No education	9.8	37.7	-1.4	2.4	4.7	3.4	-0.1	2.7	11.7	1.6	-0.9	277
Primary	8.6	32.8	-1.5	1.0	4.0	2.4	-0.2	2.3	11.7	0.5	-1.0	1,169
Secondary	5.2	25.4	-1.3	2.1	6.3	3.1	-0.1	2.5	13.4	1.3	-0.8	393
More than secondary	13.1	29.9	-1.1	0.9	2.6	1.0	-0.1	4.8	11.1	2.7	-0.7	40
<b>Wealth quintile</b>												
Lowest	11.3	34.2	-1.6	1.2	4.6	3.2	-0.0	3.6	13.7	1.1	-0.9	493
Second	13.1	39.4	-1.7	1.4	3.7	1.7	-0.1	2.7	12.3	0.0	-1.0	436
Middle	5.8	31.6	-1.3	1.9	5.1	4.1	-0.2	2.0	13.4	1.7	-0.9	383
Fourth	5.1	33.7	-1.5	1.2	3.7	1.5	-0.2	2.6	9.1	0.2	-1.0	396
Highest	5.5	22.0	-1.2	1.3	4.6	1.9	-0.2	0.6	9.8	1.1	-0.8	321
Total	8.5	32.8	-1.5	1.4	4.3	2.5	-0.1	2.4	11.8	0.8	-0.9	2,029

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards.

Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

Totals include 82 cases with missing information on size at birth, 44 cases with missing information on mother's nutritional status, and 1 case with missing information on mother's education.

<sup>1</sup> Includes children who are below -3 standard deviations (SD) from the International Reference Population median

<sup>2</sup> Excludes children whose mothers were not interviewed

<sup>3</sup> First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

<sup>4</sup> Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10

<sup>5</sup> Includes children whose mothers are deceased

## 11.4 INFANT AND YOUNG CHILD FEEDING PRACTICES

The survival, growth, development, health and nutritional status of children are closely linked to infant and young child feeding practices. The mother's nutritional status during pregnancy and lactation also has an important impact on the child's health and nutritional status. Exclusive breastfeeding until six months of age is the recommended and most appropriate way to feed newborn babies until age 6 months. It 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 a child reaches 6 months of age, and that breastfeeding should continue into the second year of life. Prolonged breastfeeding also increases duration of postpartum infertility, thus breastfeeding acts as a natural contraceptive, impacting on the mother's fertility health and length of birth intervals.

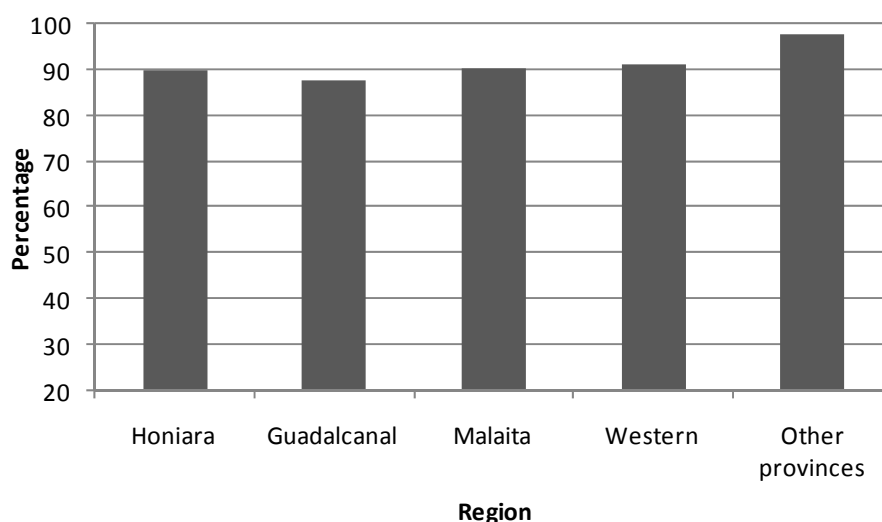
### 11.4.1 Initial breastfeeding

Both the mother and child benefit from early initiation of breastfeeding. The suckling actions of the baby on the breast release the hormone oxytocin, which increases uterine contractions and improves the expulsion of the placenta and reduces the risk of haemorrhage following delivery. The infant benefits from the first breast milk called colostrums, which is rich in nutrients and immunoglobulin that help protect against infections.

Table 11.4 presents the prevalence of children born in the five years preceding the survey who were ever breastfed and the time of initiation of breastfeeding. Overall, the prevalence of children who are ever breastfed is 92.6%, with 75% of these beginning breastfeeding within one hour of birth; this figure increased to 96% within one day of birth. An overall 6.5% of children receive something other than breast milk.

The prevalence of breastfeeding is slightly higher in rural areas (93.2%) than in urban areas (88.5%). Overall, the results show that the prevalence of breastfed babies increases with a mother's level of educational attainment, but decreases with an increasing level of household wealth.

**Figure 11.8: Prevalence of breastfeeding children by province**



**Table 11.4: 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, Solomon Islands 2007

Background characteristic	Breastfeeding among children born in last five years		Among last-born children ever breastfed:			
	Percentage ever breastfed	Number of children born in last five years	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>	Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	91.9	1,317	72.7	95.8	7.3	848
Female	93.3	1,351	77.2	96.3	5.7	859
<b>Residence</b>						
Urban	88.5	330	78.0	94.8	4.5	218
Rural	93.2	2,338	74.5	96.2	6.8	1,490
<b>Region</b>						
Honiara	89.8	249	76.6	93.1	5.5	165
Guadalcanal	87.9	483	69.9	95.3	2.8	297
Malaita	90.2	678	47.2	95.0	1.6	391
Western	91.0	289	80.0	97.4	7.2	189
Other provinces	98.0	969	91.7	97.3	11.1	665
<b>Mother's education</b>						
No education	91.7	373	64.8	97.2	2.6	227
Primary	93.3	1,662	74.8	95.7	7.8	1,056
Secondary	90.9	571	81.0	96.6	5.7	380
More than secondary	96.6	62	79.9	93.0	5.2	44
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	93.2	2,280	76.9	96.5	6.3	1,492
Traditional birth attendant	90.4	194	66.2	95.8	12.3	120
Other	88.3	110	60.2	94.7	4.4	63
No one	*	*	*	*	*	18
<b>Place of delivery</b>						
Health facility	93.2	2,255	77.0	96.5	6.3	1,481
At home	89.0	379	64.4	96.5	8.1	217
Other	*	*	*	*	*	2
<b>Wealth quintile</b>						
Lowest	95.8	646	71.9	97.0	8.9	402
Second	94.3	552	79.1	97.0	6.8	352
Middle	92.1	484	76.1	95.5	6.1	311
Fourth	91.2	513	75.1	94.7	5.4	337
Highest	88.5	472	72.8	95.7	4.8	306
<b>Total</b>	<b>92.6</b>	<b>2,668</b>	<b>75.0</b>	<b>96.0</b>	<b>6.5</b>	<b>1,708</b>

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

Table is based on births in the last five years whether the children are living or dead at the time of interview.

Total includes 15 cases with missing information on assistance at delivery and 8 cases with missing information on place of delivery.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth.

<sup>2</sup> Children given something other than breast milk during the first three days of life.

<sup>3</sup> Doctor, nurse/midwife, or auxiliary midwife.

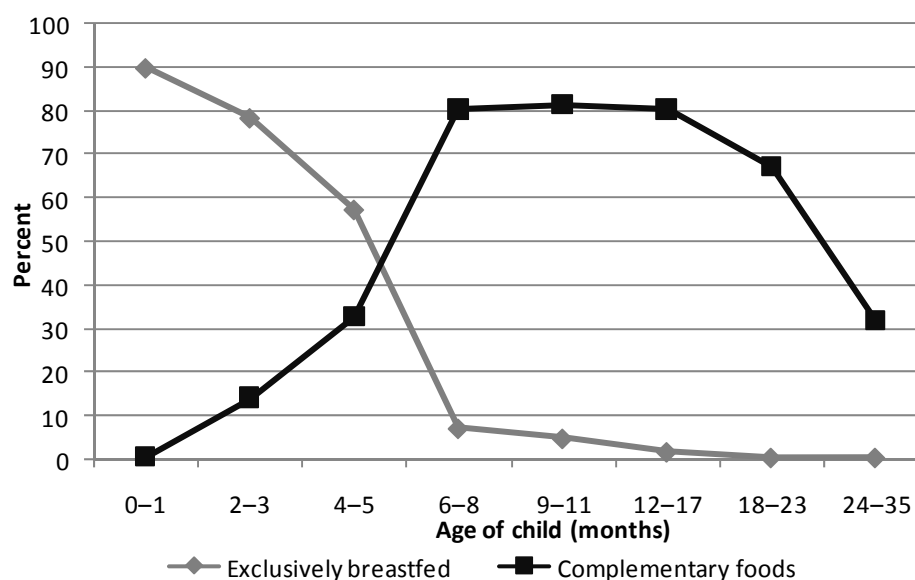
### 11.4.2 Age of breastfeeding

One indicator of breastfed children is the percentage of children less than 6 months old who are exclusively breastfed.

Table 11.5 presents the prevalence of children less than age 3 years who are currently breastfed and/or receiving complementary foods at the time of the survey. The prevalence of exclusive breastfeeding declines rapidly between 4 and 8 months while the prevalence of consumption of complementary foods increases. This corresponds to the early introduction of complementary feed. Figure 11.8 shows this relationship very clearly. The practice of introducing complementary foods from 4 months onwards is common in Solomon Islands.

Plain water is given to children mostly during the weaning period. Non-milk liquids or juice are given mainly to children less than 4 months of age. Milk other than breast milk is not commonly given to babies because the cost of formula and powdered milk is very expensive. The use of a bottle with a nipple peaks between ages 6 and 12 months.

**Figure 11.9: Relationship between exclusive breastfeeding and complementary feeding among Solomon Islands children less than 3 years old**



**Table 11.5: 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 three years using a bottle with a nipple, according to age in months, Solomon Islands 2007*

Age in months	Not breast-feeding	Exclusively breastfed	Plain water only	Non-milk liquids/ juice	Other milk	Complementary foods	Total	Percentage currently breast-feeding	Number of youngest child under three years	Percentage using a bottle with a nipple <sup>1</sup>	Number of children
0-1	3.5	90.0	0.0	3.1	2.7	0.7	100.0	96.5	53	3.4	55
2-3	1.0	78.5	3.0	3.1	0.3	14.1	100.0	99.0	121	1.8	121
4-5	0.8	57.4	2.5	6.6	0.0	32.6	100.0	99.2	89	8.1	90
6-8	3.2	7.0	3.3	6.2	0.0	80.3	100.0	96.8	153	12.4	154
9-11	10.8	4.7	0.8	1.9	0.6	81.3	100.0	89.2	101	27.0	106
12-17	18.2	1.6	0.0	0.0	0.0	80.2	100.0	81.8	227	10.3	245
18-23	31.5	0.3	1.1	0.0	0.0	67.2	100.0	68.5	251	11.2	290
24-35	68.0	0.3	0.0	0.0	0.0	31.7	100.0	32.0	352	5.1	533
0-3	1.7	82.0	2.1	3.1	1.0	10.1	100.0	98.3	174	2.3	176
0-5	1.4	73.7	2.2	4.3	0.7	17.7	100.0	98.6	262	4.3	266
6-9	3.7	5.8	3.2	6.0	0.0	81.4	100.0	96.3	186	15.6	187
12-15	15.7	1.1	0.0	0.0	0.0	83.2	100.0	84.3	150	10.4	165
12-23	25.2	0.9	0.6	0.0	0.0	73.4	100.0	74.8	478	10.8	535
20-23	32.6	0.0	0.0	0.0	0.0	67.4	100.0	67.4	141	7.2	167

Note: Breastfeeding status refers to a 24-hour period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add up to 100%. 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 child who receives complementary foods is classified in that category as long as they are breastfeeding as well.

<sup>1</sup> Based on all children under age 3 years.



### 11.4.3 Duration and frequency of breastfeeding

Table 11.6 presents the median duration of any breastfeeding, exclusive breastfeeding and predominantly breastfeeding among children born in the three years preceding the survey, and the mean number of feeds per day/night by background characteristics.

WHO and UNICEF recommend exclusively breastfeeding babies for the first 6 months and continued breastfeeding for at least 24 months. The median duration of any breastfeeding among Solomon Islands children born in the three years preceding the survey is 22.6 months. The mean duration for exclusive breastfeeding is 5.1 months and is 5.8 months for predominantly breastfeeding.

Children in rural areas are most likely to be breastfed more frequently than those in urban areas. There are no significant differences in the mean duration of exclusive breastfeed children (both 4.2%) by region, mother's educational attainment or residence.

**Table 11.6: 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 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, Solomon Islands 2007*

Background characteristic	Median duration (months) of breastfeeding among children born in the last three years <sup>1</sup>			Frequency of breastfeeding among children under 6 months <sup>2</sup>			
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding <sup>3</sup>	Percentage breastfed 6+ times in last 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
<b>Sex</b>							
Male	23.2	4.8	5.4	95.8	7.7	5.4	129
Female	22.1	3.7	4.4	98.0	8.0	4.8	121
<b>Residence</b>							
Urban	18.3	4.2	6.1	88.1	5.8	4.3	31
Rural	23.0	4.2	4.8	98.1	8.1	5.2	219
<b>Region</b>							
Honiara	18.4	3.3	5.2	93.9	6.1	4.5	24
Guadalcanal	24.4	3.9	4.6	100.0	9.1	8.3	48
Malaita	(19.2)	(3.5)	(3.7)	(90.8)	(6.5)	(4.5)	55
Western	*	*	*	*	*	*	23
Other provinces	25.1	4.9	5.5	98.7	8.3	4.2	100
<b>Mother's education</b>							
No education	(22.2)	(3.8)	(4.7)	(91.3)	(6.3)	(5.1)	32
Primary	23.3	4.5	5.1	98.7	8.5	5.2	142
Secondary	21.7	3.7	4.5	98.8	7.4	5.1	70
More than secondary	*	*	*	*	*	*	6
Total	22.6	4.2	4.9	96.9	7.8	5.1	250
Mean for all children	21.7	5.1	5.8	na	na	na	na

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey.

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

na = not applicable

<sup>1</sup> 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.

No categorisation by wealth due to low numbers.

#### **11.4.4 Types of complementary foods consumed by children**

UNICEF and WHO recommend introducing solid food to infants from the age of 6 months because the nutritional requirements of the child will not 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 semi-solid 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 is 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 11.7.

##### **Liquids**

Non-breastfed children are more likely to consume all other types of liquids and milks than breastfed children. The most commonly consumed liquid is 'other liquids', which does not include water. Coconut water was one of the selection items in the questionnaire as this was commonly given to very young children. Infant formula and other milks were not commonly consumed by all children but were slightly more consumed by non-breastfed children.

##### **Solids or semi-solid foods**

The introduction of semi-solid and solid foods increased rapidly between 4 and 9 months among all children. Vitamin A-rich foods such as pawpaw, sweet potatoes and pumpkin are the most common foods introduced to young children. These are very soft when cooked and thus easily mashed to the right consistency.

Other commonly consumed foods include those made from grains followed by foods made from tubers, roots crops and other vegetables.

Only 21% of breastfed children and 38.5% of non-breastfed children consume protein-rich foods, such as meat, fish, poultry and eggs. These foods are very expensive and not everyone can afford them.

The percentage of non-breastfed children consuming any solid or semi-solids foods is higher (95.2%) than those who are breastfed (73.7%).

A high percentage of non-breastfed children consume high fat foods (62.4%) as well as sugary foods (26.0%), while only 37.2% of breastfed children consume high fat foods and 12.6% sugary foods.

**Table 11.7: Foods and liquids consumed by children in the day or night preceding the interview**

*Percentage of youngest children under age 3 years 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, Solomon Islands 2007*

Age in months	Liquids				Solid or semi-solid foods											Number of children
	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Fortified baby foods	Food made from grains <sup>3</sup>	Fruits and vegetables rich in vitamin A <sup>4</sup>	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry, and eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Food made with oil, fat and butter	Sugary foods		
<b>BREASTFEEDING CHILDREN</b>																
0-1	2.8	1.8	4.1	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	51
2-3	3.1	3.4	16.1	0.3	3.3	10.5	4.0	4.0	1.7	2.5	1.2	14.3	2.9	0.7	120	
4-5	1.8	2.0	21.8	2.0	2.7	29.5	5.7	13.5	1.6	3.3	4.5	32.9	4.4	2.6	88	
6-8	4.6	6.7	56.2	2.4	11.4	75.6	25.7	49.1	3.0	14.2	2.7	82.9	24.5	4.4	149	
9-11	7.4	10.3	67.7	2.5	38.1	85.4	46.4	67.5	6.8	23.3	10.7	91.1	40.8	9.2	90	
12-17	3.4	5.7	81.3	2.8	57.7	88.0	44.2	73.0	12.2	30.9	6.9	98.1	56.2	21.1	186	
18-23	3.0	6.8	69.2	1.7	55.0	87.1	37.9	76.1	24.3	32.3	4.9	97.3	68.1	20.7	172	
24-35	4.5	7.4	83.6	3.2	75.0	92.5	44.2	86.9	20.9	37.1	10.9	98.9	51.8	25.6	113	
6-23	4.2	6.9	69.5	2.3	42.4	84.3	38.1	67.1	12.6	26.0	5.9	93.0	49.4	15.0	597	
Total	3.8	5.8	56.8	2.0	35.6	66.7	29.7	53.2	10.5	21.0	5.4	73.7	37.2	12.6	968	
<b>NON-BREASTFEEDING CHILDREN<sup>5</sup></b>																
6-23	12.1	18.1	81.0	3.9	49.4	87.5	43.0	67.1	22.0	39.1	6.8	90.8	62.0	35.9	136	
Total	6.8	12.4	79.3	2.8	60.9	91.4	46.1	76.2	21.9	38.5	8.6	95.2	62.4	26.0	379	

Note: Breastfeeding status and food consumed refer to a 24-hour period (yesterday and last night).

<sup>1</sup> Other milk includes fresh, tinned and powdered cow or other animal milk.

<sup>2</sup> Doesn't include plain water.

<sup>3</sup> Includes fortified baby food.

<sup>4</sup> Includes pumpkin, carrots, squash, sweet potatoes, dark green leafy vegetables, ripe mangoes, and pawpaw.

<sup>5</sup> There are too few non-breastfeeding children less than 12 months of age to show results by age in months.

#### 11.4.5 Feeding practices according to the IYCF recommendations

The WHO Global Strategy on Infant and Young Child Feeding – IYCF (WHO 2005) recommends the timely introduction of solid and/or semi-solid 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.

Mothers with children aged 6–23 months living with them were asked about the kinds of foods and drinks they fed their children and how often children ate the food in the previous day or night. The list of foods in the questionnaire was categorised into seven groups. The 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 the child was fed), as well the consumption of breast milk or other milks or milk products. Breastfed children aged 6–8 months were considered to have met the minimum nutritional requirements if they consumed foods from at least three food groups<sup>6</sup> as well as breast milk at least twice a day and at least three times per day for children aged 9–23 months. Non-breastfed children were considered to have met the minimum nutritional requirements if they consumed milk or milk products plus foods from at least four food groups (including milk products), and were fed at least four times per day.

Table 11.8 shows the percentage of children who are fed according to the IYCF practices. Overall, among all children aged 6–23 months, 85.1% consume breast milk or other milk products, while 56.2% consume a varied diet from the three to four main food groups a day, and only 36.9% meet all three IYCF practices.

Among non-breastfed children, only 2.7% meet the minimum IYCF requirements and these children are mainly from Honiara and among educated women and women living in wealthy households. Children in urban areas, born to educated mothers and living in wealthy households are more likely to meet the minimum IYCF.

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<sup>6</sup> Food groups used in the assessment of minimum standard of feeding practices include: infant formula, milk other than breast milk, cheese or yogurt or other milk products; foods made from grains, roots and tubers, including porridge and fortified baby food from grains; fruits and vegetables rich in vitamin A; other fruits and vegetables; eggs; meat, poultry, fish and shellfish (and organ meats); beans, peas and nuts; and foods made with oil, fat or butter.

**Table 11.8: Infant and young child feeding (IYCF) practices**

Percentage of youngest children aged 6–23 months living with their mother who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Solomon Islands 2007

Background characteristic	Among breastfed children 6–23 months, percentage fed:				Among non-breastfed children 6–23 months, percentage fed:					Among all children 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 5–23 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 in months</b>														
6–8	32.8	68.0	23.3	149	22.3	13.5	0.0	0.0	5	97.5	32.2	65.8	22.5	153
9–11	62.3	57.8	37.7	90	33.0	21.1	21.3	4.8	11	92.8	57.9	53.8	34.2	101
12–17	68.5	68.0	51.8	186	14.7	56.4	48.6	4.1	41	84.5	66.3	64.5	43.2	227
18–23	74.9	67.3	59.0	172	20.6	59.0	25.7	1.9	79	75.0	69.9	54.2	41.0	251
<b>Sex</b>														
Male	61.4	62.5	44.8	273	23.5	52.9	38.1	1.8	73	83.8	59.6	57.4	35.7	347
Female	59.7	69.4	44.5	324	15.7	54.3	23.6	3.9	63	86.3	58.9	62.0	37.9	386
<b>Residence</b>														
Urban	71.7	71.8	55.5	71	53.1	67.5	43.7	14.0	20	89.5	70.7	65.5	46.2	92
Rural	59.0	65.5	43.2	526	14.0	51.1	29.2	0.7	116	84.5	57.6	59.0	35.5	641
<b>Region</b>														
Honiara	66.0	71.6	52.3	52	58.9	64.0	37.5	15.5	18	89.3	65.5	62.7	42.7	71
Guadalcanal	56.6	67.1	43.1	120	17.6	63.7	33.1	6.8	13	92.2	57.3	63.9	39.6	133
Malaita	65.1	64.1	46.9	151	0.9	64.3	33.1	0.0	43	78.1	65.0	57.2	36.5	195
Western	63.8	64.2	39.8	57	33.8	73.6	23.3	0.0	17	84.7	66.1	54.7	30.6	75
Other provinces	57.2	66.6	43.4	216	17.3	28.3	29.9	0.0	45	85.8	52.3	60.3	36.0	261
<b>Mother's education</b>														
No education	58.1	50.9	33.0	82	2.8	16.0	20.6	2.8	13	86.6	52.3	46.7	28.8	95
Primary	60.6	65.8	45.4	358	19.1	59.0	27.4	0.7	89	83.8	60.3	58.1	36.5	447
Secondary	60.1	77.2	48.8	139	29.5	55.5	49.1	8.7	31	87.0	59.2	72.0	41.5	170
More than secondary	(71.7)	(61.0)	(50.2)	(19)	(17.0)	(31.6)	(11.7)	(0.0)	(3)	(90.2)	(67.0)	(55.2)	(44.3)	22

**Table 11.8 (continued)**

Background characteristic	Among breastfed children 6–23 months, percentage fed:				Among non-breastfed children 6–23 months, percentage fed:					Among all children 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 5–23 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>Wealth quintile</b>														
Lowest	69.4	67.6	47.6	165	10.4	46.6	40.4	0.0	32	85.4	65.7	63.2	39.8	197
Second	52.2	56.1	37.8	108	3.4	59.9	9.2	0.0	19	85.5	53.4	49.1	32.1	127
Middle	59.7	64.4	43.9	100	14.1	44.2	23.1	3.1	27	81.6	56.3	55.5	35.2	128
Fourth	45.7	68.4	36.5	101	27.3	56.9	30.7	0.0	35	81.5	48.6	58.8	27.2	135
Highest	68.8	73.0	54.0	122	42.7	64.0	48.4	12.5	23	91.0	68.0	69.2	47.5	145
Total	60.5	66.2	44.7	597	19.9	53.5	31.4	2.7	136	85.1	59.2	59.8	36.9	733

Note: Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> 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; h) foods made with oil, fat butter.

<sup>2</sup> At least twice a day for breastfed infants aged 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 foods at least twice a day for infants aged 6–8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children.

## 11.5 FOOD CONSUMPTION PATTERNS OF WOMEN

The nutritional status of a mother during pregnancy and lactation has an important impact on the health and nutritional status of her child.

Table 11.9 presents the types of foods consumed by mothers with young children in the day or night preceding the interview by background characteristics.

The most commonly consumed liquid mothers consume is tea and coffee followed by other liquids. The consumption of milk is very low because of its high cost.

The most commonly consumed solid or semi-solid food items are vitamin A-rich foods such as pawpaw, sweet potato, pumpkin and green leafy vegetables (consumed by 88% of women), followed by food made from root vegetables (78.5%), grains and cereals (61.7%) and other fruits and vegetables (47.0%).

The results show that 67.4% of women also consume foods high in fat, and 18.6% consume high sugar foods. Both of these have contribute to increasing obesity

Less than 50% of women consume protein-rich foods such as meat, fish and eggs. These foods are also good sources of iron, which is needed to prevent anaemia

Cheese and yogurt are the least commonly consumed foods, as not many people can afford to buy milk.

Mothers who were more likely to consume a more varied and healthy diet are those who live in urban areas in Honiara and Western Province and in more wealthy households.

**Table 11.9: 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, Solomon Islands 2007*

Background characteristic	Liquids			Solid or semi-solid foods								Foods made with oil/ fat/ butter	Sugary foods	Number of mothers
	Milk	Tea/ coffee	Other liquids	Foods made from grains	Foods made from roots/ tubers	Foods made from legumes	Meat/ fish/ shellfish/ poultry/ eggs	Cheese/ yogurt	Vitamin A-rich fruits/ vegetables <sup>1</sup>	Other fruits/ vegetables	Other solid or semi- solid food			
<b>Age</b>														
15–19	7.3	48.0	32.1	46.9	63.5	11.4	20.8	5.6	83.5	39.9	30.7	66.9	8.1	64
20–29	8.7	41.5	37.0	65.2	77.7	21.0	39.2	11.0	86.3	46.4	37.1	64.7	21.4	721
30–39	11.0	39.1	31.3	59.9	83.3	22.5	42.1	12.6	91.1	49.9	38.6	71.6	16.8	491
40–49	9.0	41.3	34.5	52.8	67.5	18.0	41.8	6.7	88.3	40.6	37.2	65.8	12.0	71
<b>Residence</b>														
Urban	30.8	74.9	54.0	88.9	76.2	27.7	62.4	28.9	85.9	62.7	61.8	63.6	45.6	169
Rural	6.4	36.1	31.8	57.9	78.9	20.0	36.2	8.6	88.3	44.8	33.9	67.9	14.7	1,179
<b>Region</b>														
Honiara	33.2	70.4	51.4	87.6	73.1	24.4	56.8	27.2	84.3	57.0	56.1	57.8	36.3	129
Guadalcanal	8.4	43.8	38.7	65.6	78.0	28.7	34.0	19.1	87.6	50.4	49.0	56.9	19.9	256
Malaita	3.2	39.8	26.4	67.4	81.5	22.3	46.9	5.6	89.7	59.2	47.4	75.4	14.6	335
Western	30.6	67.2	51.9	80.8	76.2	48.0	59.2	26.9	86.1	61.0	46.9	80.3	41.9	139
Other provinces	2.0	25.0	28.6	43.5	78.9	7.4	27.2	1.9	88.6	30.3	16.7	66.2	9.2	488
<b>Education</b>														
No education	4.7	26.5	31.1	51.5	76.7	19.0	38.2	9.4	86.5	49.6	40.1	62.7	10.5	191
Primary	8.0	40.1	34.7	60.4	79.0	21.0	35.1	8.9	89.3	44.1	36.8	69.1	17.3	812
Secondary	13.2	47.5	35.1	67.9	78.9	20.9	49.0	15.2	85.7	50.8	35.6	65.3	22.9	309
More than secondary	35.8	81.5	44.6	95.5	73.7	32.0	66.8	33.7	88.1	69.1	50.3	70.9	54.6	35
<b>Wealth quintile</b>														
Lowest	4.6	23.6	28.5	38.2	87.6	19.7	34.8	8.2	92.9	39.0	32.2	70.1	8.4	338
Second	5.3	30.7	28.7	55.9	78.5	14.2	29.7	8.0	88.7	47.9	30.7	61.9	9.0	277
Middle	7.1	39.2	36.9	69.2	85.2	21.9	41.3	8.4	89.1	49.3	38.3	72.5	17.4	259
Fourth	9.3	50.2	35.9	71.5	65.2	22.8	35.3	9.9	80.7	48.5	36.5	63.8	22.6	234
Highest	23.8	70.3	46.1	84.1	71.6	27.8	59.7	22.9	86.3	53.6	52.2	67.7	41.4	239
<b>Total</b>	<b>9.5</b>	<b>41.0</b>	<b>34.6</b>	<b>61.7</b>	<b>78.5</b>	<b>21.0</b>	<b>39.5</b>	<b>11.1</b>	<b>88.0</b>	<b>47.0</b>	<b>37.4</b>	<b>67.4</b>	<b>18.6</b>	<b>1,347</b>

Note: Foods consumed in the last "24-hour" period (yesterday and last night).

<sup>1</sup> Includes [list fruits and vegetables included in the questionnaire such as 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].



## **11.6 MICRONUTRIENT INTAKE**

### **11.6.1 Micronutrient intake among children**

Micronutrient deficiencies are a consequence of malnutrition. Malnutrition is a key indicator for 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 also consequences of malnutrition. Vitamin A and iron status were the key micronutrients that were selected as indicators for this survey.

Vitamin A is an essential vitamin for keeping tissues cells in a healthy condition and protecting the body against infections, and is important for healthy eyes and eyesight. It has 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 has to be converted into vitamin A by the liver before it can be used. Carotene is found in green leafy vegetables, and red and yellow fruits such as papaya, pandanus and pumpkin. Iron is a key mineral essential for proper brain function. Low iron intake can contribute to iron deficiency anaemia. Young children are at the highest risk for iron deficiency anaemia because they have very high requirements due to their rapid growth.

Mothers were asked whether they fed their children with vitamin A-rich and iron-rich foods the day or night before the survey. They were also asked whether their children had received vitamin A or iron supplements in the six months before the survey. The results are presented in Table 11.10

Overall, 90.6% of children consumed vitamin A-rich foods, but only 31.6% consumed iron-rich foods in the 24 hours preceding the survey. Children in urban areas in Honiara and Western Province were more likely to consume vitamin A-rich and iron-rich foods than children from other provinces.

The results suggest a very low uptake of the supplementation programme for vitamin A and iron, with only 7.4% of all children receiving vitamin A supplements and 4.2% receiving iron supplements. Children aged 24-59 months, children aged 6-59 months not breastfed, living in rural areas, residing in Malaita and Western province, children with mothers having no education and children with young mothers are least likely to be given vitamin A supplementary in the last 6 months.

Micronutrient deficiency problems among young children less than age 2 years is a serious concern that needs to be addressed. Some strategies for consideration may include dietary diversification through the promotion of locally grown foods, micronutrient supplements, food fortification and prevention and control of parasitic infections. It is unlikely that any one strategy will address this problem; an integrated approach is needed.

**Table 11.10: Micronutrient intake among children**

Among youngest children aged 6–35 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children aged 6–59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the last seven days, and who were given de-worming 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, Solomon Islands 2007

Background characteristic	Among youngest children aged 6–35 months living with the mother:			Among all children aged 6–59 months:			
	Percentage who consumed vitamin A-rich foods in last 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in last 24 hours <sup>2</sup>	Number of children	Percentage given vitamin A supplements in last 6 months <sup>3</sup>	Percentage given iron supplements in last 7 days	Percentage given de-worming medication in last 6 months	Number of children
<b>Age in months</b>							
6–8	75.1	14.2	153	6.2	7.6	5.9	154
9–11	89.1	23.5	101	12.4	2.0	14.1	106
12–17	93.6	31.6	227	13.1	3.2	13.7	245
18–23	90.0	36.4	251	11.3	5.3	21.7	290
24–35	96.2	38.1	352	4.9	3.6	24.7	533
36–47	na	na	na	7.6	4.7	26.6	515
48–59	na	na	na	4.1	3.8	24.0	477
<b>Sex</b>							
Male	90.9	34.1	523	7.0	5.0	23.7	1,135
Female	90.3	29.2	562	7.8	3.5	19.8	1,183
<b>Breastfeeding status</b>							
Breastfeeding	89.2	27.8	710	10.1	4.5	16.0	742
Not breastfeeding	93.2	37.9	356	6.2	4.1	25.2	1,387
<b>Residence</b>							
Urban	88.9	59.4	135	11.8	2.4	17.6	285
Rural	90.8	27.6	950	6.8	4.5	22.3	2,034
<b>Region</b>							
Honiara	86.2	52.9	102	9.6	3.2	16.0	214
Guadalcanal	90.0	30.1	202	20.7	1.7	14.2	422
Malaita	93.3	35.7	277	1.8	1.6	18.1	587
Western	92.0	52.8	117	4.2	6.2	30.4	253
Other provinces	89.7	17.3	386	5.0	7.1	26.8	843

**Chapter 11.10 (continued)**

Background characteristic	Among youngest children aged 6–35 months living with the mother:			Among all children aged 6–59 months:			
	Percentage who consumed vitamin A-rich foods in last 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in last 24 hours <sup>2</sup>	Number of children	Percentage given vitamin A supplements in last 6 months <sup>3</sup>	Percentage given iron supplements in last 7 days	Percentage given de-worming medication in last 6 months	Number of children
<b>Mother's education</b>							
No education	86.3	33.4	157	5.8	2.7	19.4	324
Primary	90.5	27.3	664	7.1	4.9	21.8	1,453
Secondary	94.0	39.2	236	9.5	3.5	22.9	488
More than secondary	(88.4)	(57.1)	29	7.0	1.2	22.0	54
<b>Mother's age at birth</b>							
15–19	90.7	29.4	86	4.7	6.0	20.9	216
20–29	90.2	31.8	616	6.9	3.6	22.8	1,363
30–39	91.7	32.9	340	9.3	4.7	19.1	659
40–49	(87.5)	( 22.9)	44	8.0	7.3	26.2	81
<b>Wealth quintile</b>							
Lowest	92.8	29.6	286	8.4	6.3	22.5	585
Second	91.1	24.4	223	7.4	4.9	22.8	472
Middle	93.1	27.0	196	6.6	2.4	20.1	405
Fourth	83.7	30.3	186	5.6	4.1	23.7	443
Highest	90.7	48.7	193	8.8	2.4	18.8	413
<b>Total</b>	90.6	31.6	1,085	7.4	4.2	21.7	2,319

Note: Figures in parentheses are based on 25–49 unweighted cases.

Information on vitamin A and iron supplements and de-worming medication is based on mother's recall.

Totals include 189 children aged 6–59 months with missing information on breastfeeding status.

na = not applicable

<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> De-worming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

### 11.6.2 Micronutrient intake of mothers

Table 11.11 presents the micronutrient intake patterns of mothers with young children.

Overall, 92% of women consume vitamin A-rich foods. Women living in rural areas and in Malaita and Western provinces are more likely to eat large amounts of vitamin A-rich foods. Vitamin A supplements are also provided to 15.9% of postpartum women as a matter of protocol. Given the very low percentage of women who have suffered from night blindness during their last pregnancy, and the very high consumption of vitamin A-rich foods, it is unlikely that vitamin A deficiency is a problem. Further studies are required to adequately determine the extent of the problem. It could be that although the consumption of vitamin A-rich foods is high, other factors such as infections may be limiting the absorption of the vitamin.

Mothers in Guadalcanal Province are more likely to be given a dose of vitamin A after childbirth. Women with a higher education level and those living in wealthy households are also more likely to be given a dose of vitamin A after childbirth.

Only 39.5% of women consumed iron-rich foods the day before the interview. Women in urban areas in Honiara and Western Province consumed iron-rich foods in the day before the interview.

The percentage of women who received iron supplements for <60 days is 26.2%, decreasing to 19.4% for those who received iron tablets for >90days. Iron tablets are provided as a matter of routine for all pregnant women, although a high percentage of women don't know or are unable to remember whether they had taken their iron tablet.

Vitamin A and iron supplements are given to women who are identified and diagnosed as being underweight and those with recurrent diarrhoea and respiratory health issues.

**Table 11.11: Micronutrient intake among mothers**

Among women age 15-49 with a child under age three years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among women age 15-49 with a child born in the last five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child; among mothers age 15-49 who during the pregnancy of the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets or syrup for specific numbers of days, and the percentage who took de-worming medication; and among women age 15-49 with a child born in the last five years, who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Solomon Islands 2007

Background characteristic	Among women with a child under three years living with her			Among women with a child born in the last five years										
	Percentage consumed Vitamin A rich foods <sup>1</sup>	Percentage consumed iron-rich foods <sup>2</sup>	Number of women	Percentage who received vitamin A dose postpartum <sup>3</sup>	Percentage who suffered night blindness during pregnancy of last birth		Number of days women took iron tablets or syrup during pregnancy of last birth					Percentage of women who took de-worming medication during pregnancy of last birth <sup>5</sup>	Number of women	
					Reported	Adjusted <sup>4</sup>	None	<60	60-89	90+	Don't know/missing			
<b>Age</b>														
15-19	87.2	20.8	64	14.5	4.2	0.3	5.0	31.5	2.1	16.6	44.8	54.0	68	
20-29	90.7	39.2	721	15.4	7.2	1.1	6.9	28.7	3.8	17.9	42.6	38.5	894	
30-39	94.5	42.1	491	16.4	9.8	1.2	7.2	24.5	5.0	21.8	41.6	42.7	718	
40-49	92.5	41.8	71	17.4	11.6	1.4	9.7	15.2	7.6	17.7	49.8	56.4	119	
<b>Residence</b>														
Urban	89.5	62.4	169	18.0	10.8	2.0	9.3	30.5	4.1	14.6	41.5	30.0	236	
Rural	92.4	36.2	1,179	15.6	8.1	1.0	6.8	25.6	4.5	20.1	43.0	43.8	1,562	
<b>Region</b>														
Honiara	88.4	56.8	129	19.3	7.3	1.4	11.1	25.2	5.4	15.3	43.0	27.9	178	
Guadalcanal	87.6	34.0	256	32.0	7.3	0.3	8.0	36.4	4.9	13.0	37.8	50.9	323	
Malaita	96.6	46.9	335	12.0	8.7	1.7	5.3	23.9	4.5	18.4	47.9	20.0	420	
Western	93.2	59.2	139	11.5	10.5	2.0	6.8	19.7	2.7	17.8	53.0	63.6	208	
Other provinces	91.8	27.2	488	11.0	8.4	0.9	6.9	25.1	4.5	24.7	38.8	48.4	671	
<b>Education</b>														
No education	90.9	38.2	191	14.4	8.8	1.0	8.6	26.6	1.9	15.2	47.6	27.0	243	
Primary	92.3	35.1	812	15.1	9.0	1.0	6.6	26.6	3.8	20.0	43.1	45.8	1,104	
Secondary	91.8	49.0	309	18.2	6.3	1.7	7.0	24.1	8.3	21.2	39.4	41.1	406	
More than secondary	93.8	66.8	35	23.5	11.3	2.0	12.1	33.6	1.9	12.1	40.4	37.1	46	

**Table 11.11 (continued)**

Background characteristic	Among women with a child under three years living with her			Among women with a child born in the last five years										
	Percentage consumed Vitamin A rich foods <sup>1</sup>	Percentage consumed iron-rich foods <sup>2</sup>	Number of women	Percentage who received vitamin A dose postpartum <sup>3</sup>	Percentage who suffered night blindness during pregnancy of last birth		Number of days women took iron tablets or syrup during pregnancy of last birth					Percentage of women who took de-worming medication during pregnancy of last birth <sup>5</sup>	Number of women	
					Reported	Adjusted <sup>4</sup>	None	<60	60-89	90+	Don't know/missing			
<b>Wealth quintile</b>														
Lowest	93.9	34.8	338	15.8	10.2	0.6	7.0	29.1	4.1	21.4	38.4	37.3	412	
Second	93.7	29.7	277	14.7	5.4	0.5	8.7	32.3	4.7	15.7	38.6	50.1	367	
Middle	97.1	41.3	259	18.2	10.0	1.6	7.4	28.2	1.1	19.5	43.8	40.1	326	
Fourth	84.4	35.3	234	11.2	5.5	0.8	5.7	16.9	6.4	23.2	47.8	42.8	363	
Highest	89.5	59.7	239	20.2	11.2	2.6	6.6	24.3	5.8	16.8	46.4	39.7	330	
Total	92.0	39.5	1,347	15.9	8.4	1.2	7.1	26.2	4.5	19.4	42.8	42.0	1,799	

<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> In the first two months after delivery

<sup>4</sup> Women who reported night blindness but did not report difficulty with vision during the day

<sup>5</sup> Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis

## 11.7 ANAEMIA

Iron deficiency anaemia is a global problem and is the most common form of micronutrient malnutrition in the world. Anaemia in the developing world is mainly due to inadequate absorption of dietary iron. The resulting iron deficiency leads to reduced production of haemoglobin and anaemia. In pregnant women, folate deficiency also plays a role in causing anaemia but to a lesser extent than iron deficiency. Iron deficiency anaemia is more common in young children and women of reproductive age, especially pregnant and breastfeeding mothers. These population subgroups are more susceptible to anaemia because of their increased iron needs due to growth, pregnancy and lactation. Women of reproductive age also have increased iron losses from menstrual blood flow.

The 2006/2007 SIDHS directly measured haemoglobin levels of all ever-married women aged 15–49 and their children aged 5 years and below. Hemocue instruments, which are portable haemoglobinometers, were used to measure the haemoglobin level of consenting survey participants in their homes. Those identified with severe anaemia were referred to their local health centre for treatment.

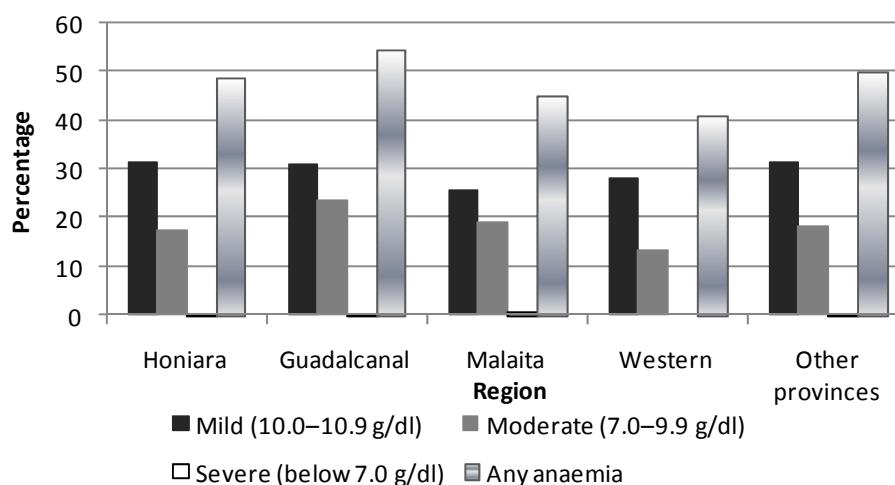
### 11.7.1 Prevalence of anaemia in children

Iron anaemia in children impairs mental capacity, motor development and behaviour in children. Iron deficiency predisposes people to diseases through reduced immune functions. The apathy associated with anaemia in young children adversely affects their cognitive and social development. Children born to mothers who are iron deficient have reduced iron stores that may not be corrected by breastfeeding, which then leads to early onset of anaemia. Low birth weight babies are born with reduced iron stores and have additional requirements for catch up growth. These additional iron requirements cannot be met by breast milk and if iron supplements are not provided, these babies will also have an increased risk of early onset of anaemia.

Table 11.12 presents the prevalence of anaemia in children aged 6–59 months by background characteristics. Overall, 48.0% of children aged 6–9 months are anaemic: 29.0% of children have mild iron deficiency anaemia, 18.6% have moderate anaemia, and 0.5% have severe anaemia. The highest prevalence for any anaemia is in children aged 12–17 months. The prevalence is slightly higher among girls. Prevalence decreases with increasing wealth level.

Figure 9 presents the differences in the prevalence of anaemia by region. The prevalence of any anaemia is high in all regions but is particularly high in Guadalcanal and other provinces. The prevalence of any anaemia is also high throughout the Solomon Islands.

**Figure 11.10: Prevalence of anaemia among children aged 6–59 months by haemoglobin level and by province**



**Table 11.12: Prevalence of anaemia in children**

Percentage of children aged 6–59 months classified as having anaemia, by background characteristics, Solomon Islands 2007

Background characteristic	Anaemia status by haemoglobin level			Any anaemia	Number of children
	Mild (10.0–10.9 g/dl)	Moderate (7.0–9.9 g/dl)	Severe (below 7.0 g/dl)		
<b>Age in months</b>					
6–8	32.3	30.1	4.6	67.0	115
9–11	31.2	37.7	2.3	71.1	85
12–17	38.5	37.2	0.3	75.9	206
18–23	25.3	26.5	0.1	51.9	258
24–35	36.3	13.2	0.1	49.6	456
36–47	25.6	11.6	0.1	37.3	453
48–59	22.3	10.4	0.0	32.7	386
<b>Sex</b>					
Male	29.2	18.2	0.4	47.9	987
Female	29.6	19.0	0.5	49.1	973
<b>Mother's interview status</b>					
Interviewed	28.3	19.4	0.5	48.3	1,720
Not interviewed but in household	26.7	28.1	0.0	54.8	51
Not interviewed, and not in the household <sup>1</sup>	39.8	8.5	0.0	48.3	189
<b>Residence</b>					
Urban	29.2	20.4	0.3	49.9	193
Rural	29.4	18.4	0.5	48.3	1,767
<b>Region</b>					
Honiara	31.4	17.2	0.4	49.0	142
Guadalcanal	30.8	23.3	0.5	54.6	317
Malaita	25.4	19.0	0.9	45.2	513
Western	28.1	13.1	0.0	41.2	203
Other provinces	31.4	18.2	0.3	49.9	784
<b>Mother's education<sup>2</sup></b>					
No education	24.5	23.2	0.7	48.4	274
Primary	28.1	20.3	0.2	48.5	1,094
Secondary	31.7	15.9	1.5	49.1	365
More than secondary	28.3	14.1	0.0	42.3	37
<b>Wealth quintile</b>					
Lowest	30.9	21.8	0.6	53.3	480
Second	32.6	18.9	0.3	51.8	423
Middle	25.9	18.1	0.9	44.9	372
Fourth	30.4	15.1	0.3	45.8	392
Highest	25.4	18.4	0.1	43.9	293
<b>Total</b>	<b>29.4</b>	<b>18.6</b>	<b>0.5</b>	<b>48.5</b>	<b>1,960</b>

Note: Table is based on children who slept in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Haemoglobin in grams per deciliter (g/dl).

Total includes one case with missing information on mother's education.

<sup>1</sup> Includes children whose mothers are deceased.

<sup>2</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.



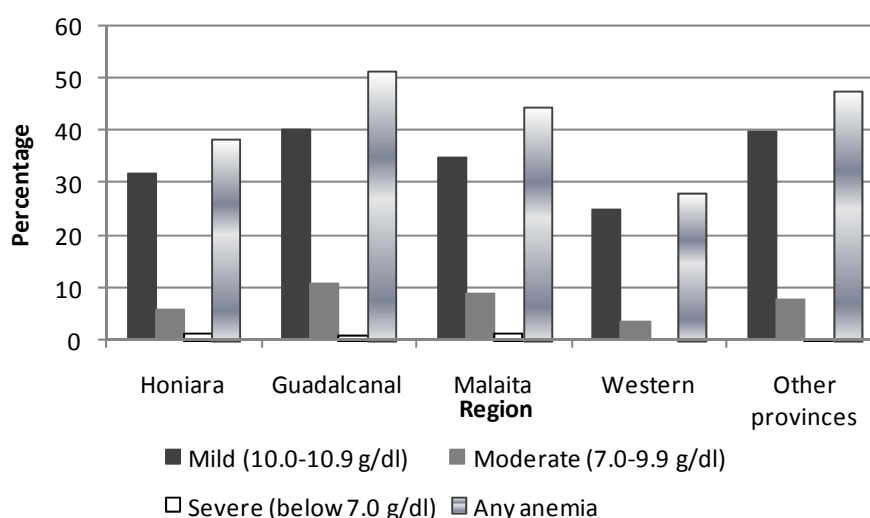
### 11.7.2 Prevalence of anaemia among women

The fatigue that results from anaemia impairs work performance and endurance even for tasks that require only moderate levels of activity. Thus, anaemia can result in reduced household productivity, especially where tasks require a high level of effort.

Severe anaemia in pregnancy has been shown to increase the risk of maternal mortality, low birth weight, preterm and low birth weight, and subsequent risk of anaemia in the infant.

Table 11.13 and Figure 11.11 present the prevalence of anaemia in women. Overall, 44.3% of women have anaemia, 36.0% have mild anaemia, 7.6% have moderate to severe anaemia, and 0.6% have severe anaemia. Table 11.13 also shows that the prevalence of anaemia is highest among pregnant women at 60.1%.

**Figure 11.11: Prevalence of anaemia among women aged 15–49 by province, Solomon Islands**



**Table 11.13: Prevalence of anaemia in women***Percentage of women aged 15–49 with anaemia, by background characteristics, Solomon Islands 2007*

Background characteristic	Anaemia status by haemoglobin level					Number of women
		Mild anaemia	Moderate anaemia	Severe anaemia	Any anaemia	
	Not pregnant	10.0–11.9 g/dl	7.0–9.9 g/dl	<7.0 g/dl	<12.0 g/dl	
Pregnant	10.0–10.9 g/dl	7.0–9.9 g/dl	<7.0 g/dl	<11.0 g/dl		
<b>Age</b>						
15–19		32.3	3.1	0.1	35.5	576
20–29		37.9	8.0	0.6	46.5	1,299
30–39		33.3	9.2	0.3	42.8	997
40–49		40.5	8.6	1.8	51.0	559
<b>Number of children ever born</b>						
0		30.1	2.9	0.4	33.4	1,024
1		40.0	7.0	0.5	47.5	422
2–3		38.0	9.0	0.4	47.4	790
4–5		40.2	9.4	0.5	50.2	699
6+		35.8	13.1	1.7	50.7	497
<b>Maternity status</b>						
Pregnant		34.4	23.6	2.1	60.1	217
Breastfeeding		42.2	8.9	0.3	51.3	922
Neither		33.7	5.6	0.6	40.0	2,292
<b>Using IUD</b>						
Yes		(46.3)	(6.4)	(0.0)	(52.7)	48
No		35.9	7.6	0.6	44.2	3,383
<b>Smoking status</b>						
Smokes cigarettes/tobacco		38.6	9.4	1.1	49.1	663
Does not smoke		35.3	7.3	0.5	43.1	2,743
<b>Residence</b>						
Urban		31.8	4.9	0.9	37.6	503
Rural		36.8	8.1	0.6	45.4	2,928
<b>Region</b>						
Honiara		31.6	5.6	1.2	38.3	393
Guadalcanal		40.1	10.6	0.8	51.5	489
Malaita		34.9	8.6	1.2	44.7	779
Western		24.8	3.3	0.0	28.1	387
Other provinces		39.7	7.8	0.2	47.7	1,383
<b>Education</b>						
No education		40.0	6.9	1.5	48.4	480
Primary		37.0	9.3	0.5	46.8	1,949
Secondary		32.1	4.9	0.3	37.3	898
More than secondary		34.6	3.0	0.6	38.2	105
<b>Wealth quintile</b>						
Lowest		41.4	7.7	1.9	51.0	657
Second		42.6	8.2	0.1	50.9	705
Middle		32.3	8.7	0.6	41.5	672
Fourth		34.7	9.5	0.0	44.2	674
Highest		29.4	4.2	0.5	34.1	723
Total		36.0	7.6	0.6	44.3	3,431

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC 1998. [Be sure to include this in the reference list]

Total includes 25 cases with missing information on smoking status.

Note: Figures in parentheses are based on 25–49 unweighted cases.

## 11.8 KEY RESULTS

Breastfeeding is nearly universal in Solomon Islands, with 93% of children born in the five years preceding the survey having been breastfed at some time. There is very little difference in whether children are ever breastfed by most background characteristics, except place of residence and wealth status. Differences in the proportion of children who were ever breastfed can be also seen between children living in urban and rural areas as 93% of children in rural areas have been breastfed as compared to only 89% of children in urban areas. Similarly, the proportions of children being breastfed are likely to be higher among mothers in lower wealth quintile households compared with mothers in wealthier households.

The median duration of breastfeeding is 22.6 months, while the median duration for exclusive breastfeeding is 4.2 months, and the median duration for predominant breastfeeding is 4.9 months. The mean duration is shorter, with the overall mean duration of breastfeeding is 21.7 months, the mean duration for exclusive breastfeeding is 5.1 months, and the mean duration for predominant breastfeeding is 5.8 months. There is little difference in the duration of breastfeeding by sex of the child. Rural children are breastfed for slightly longer (23.0 months) than urban children (18.3 months). Mothers with a secondary education breastfeed their children for a shorter duration than mothers with less education.

Between the ages of 6 and 23 months, children consume fruits and vegetables rich in vitamin A more often than any other food group. More than 84% of breastfeeding children and 86% of non-breastfeeding children in this age group ate fruits and vegetables in the day and night preceding the interview. The next most commonly consumed food group is food made from roots and tubers. Around 67% of breastfeeding and non-breastfeeding children ate food made from roots and tubers in the day and night preceding the survey. The third common food group is food made from grains, consumed by 42.4% of breastfeeding children and by 49.4% of non-breastfeeding children.

About 85% of children aged 6–23 months living with their mother received breast milk or other milk or milk products during the 24-hour period before the survey: 59% of these had a minimally diverse diet (i.e. they had been fed foods from the minimum number of food groups depending on their age and breastfeeding status), and about 60% had been fed the minimum number of times appropriate for their age. In summary, only 37% of children aged 6–23 months in Solomon Islands meet the minimum standard with respect to all three IYCF practices

Over 90% of children aged 6–35 months living with their mother consumed foods rich in vitamin A in the 24-hour period before the survey. Consumption of foods rich in vitamin A increases from 75% among children aged 6–8 months to 93% in children aged 12–35 months.

The staple diet of mothers of young Solomon Islands children consists of foods rich in vitamin A (88.0% and food made from roots and tubers (78.5%). and food made from grains (61.7%). Almost three in five women (61.7%) consume food made from grains, whereas 47.0% percent of women consume other fruits and vegetables. Among mothers aged 15–49 with a child under age 3 years living with them, about 10% drink milk, 41% drink tea and coffee, and 35% drink other liquids.

The results of observation made during the SI 2006/2007 SIDHS shows that 11.8% of children aged 0-5 years are considered underweight while 2.4% are considered to be severely underweight. Underweight children are more common among children aged 9–11 months, with mothers having no education or only a primary education and with children living in the lowest household wealth quintile households.

About 33% of children aged 0–5 years are stunted (have low height-for-age). This is particularly common among children aged 18–23 months, rural children whose mothers have no education or only a primary education, and children living in the second lowest wealth quintile households. Only 4.3% of children aged 0–5 years in Solomon Islands have a low weight-for-height.

## CHAPTER 12 MALARIA

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### 12.1 INTRODUCTION

Malaria continues to be a major public health concern in Solomon Islands, especially among pregnant women and children under age 5. Malaria is a leading cause of morbidity and mortality in Solomon Islands in both outpatient attendance and inpatient admissions. Most parts of the country report malaria transmission throughout the year, although it increases during and soon after the rainy season.

Malaria is caused by four species of parasites that are transmitted by *Anopheles* mosquitoes. *Plasmodium falciparum* is the most common of these parasites. It causes the most severe form of malaria, which often leads to death if not properly managed. However, the most severe cases are typically limited to patients who have an impaired immune function or who have developed little or no immunity to malaria through previous exposure. Children under age 5 are most at risk. Also at particular risk are pregnant women who are vulnerable because of their reduced natural immunity. Malaria is also perceived as another cause of pregnancy loss, low birth weight, and neonatal mortality.

Malaria continues to pose a high burden in both societal and economic terms in Solomon Islands, ranging from school absenteeism to low productivity at workplaces. This affects agricultural production and outputs from other economic sectors.

The Solomon Islands Government is committed to the control and prevention of malaria. A considerable amount of its limited health budget is allocated to addressing malaria and malaria-related disabilities. The Solomon Islands Government, through its Vector-Borne Disease Control Programme, endeavours to employ strategies that will:

- provide reliable and quality diagnosis and treatment, which is accessible for the total population;
- provide an increased and sustainable bed-net distribution system to achieve and maintain 100% bed-net coverage;
- reduce the transmission by reducing the survival of malaria vectors entering houses or sleeping units through an expanded indoor residual spraying (IRS) response;
- adopt malaria prevention measures and treatment for pregnant women; and
- eliminate malaria in at least one province by 2016.

The expenditure related to malaria is high and is expected to rise enormously after the introduction of artemisinin-based combination therapy (ACT) in conjunction with rapid diagnostic tests (RDTs) to assist in the diagnosis of malaria by detecting evidence of malaria parasites in human blood. ACT is a response to the emerging resistance of malarial parasites to monotherapy that uses antimalarials such as chloroquine, and was the first line treatment drug in Solomon Islands, at the time of the survey. RDTs supplement diagnostic services where microscopy is not feasible.

The 2006/2007 SIDHS collected basic information on malaria, which is summarised and presented in the following sections.

## 12.2 MOSQUITO NETS

The use of an insecticide-treated mosquito net (ITN) is a primary health intervention to reduce malaria transmission in Solomon Islands. Nets provide a protective physical barrier, reducing the number of bites from infective vectors. It is anticipated that the widespread use of ITNs reduces mosquito density and biting intensities.

This section presents the 2006/2007 SIDHS findings on household possession of mosquito nets and use, and the treatment of bed-nets by household members. Although the 2006 Household Income and Expenditure Survey (HIES) included questions about household mosquito net possession and usage, the questions were formulated differently, so comparison between the two surveys (i.e. DHS and HIES) is difficult and will not be discussed in this chapter.

### 12.2.1 Ownership of mosquito nets

All households at the time of the 2006/2007 SIDHS were asked whether they owned a mosquito net, and if so, how many. Table 12.1 shows household ownership of nets by degree of protection offered by the net and by selected background characteristics of respondents. It shows that three-quarters (75.4%) of all households own at least one mosquito net. However, ownership of ITNs is lower, with 48.5% having at least one ITN. Although ownership of mosquito nets is as high as 75.3% for urban households and 75.4% for rural households, only 50.3% of urban households and 48.3% of rural households own at least one ITN.

Ownership of ITNs is highest in Guadalcanal Province with 92.6% of households owning at least one mosquito net. Malaita Province has the lowest ITN ownership. Reasons for these variations include differences in mosquito density and biting intensity by provinces, and preferences in malaria control strategies by major donor partners in the province.

Households in the highest wealth quintile are the most likely to own a mosquito net. More than half (51.7%) of the households in the highest wealth quintile have at least one ITN as compared with 41.9% in the lowest wealth quintile.

A net that has been treated with insecticide repels and kills mosquitoes with somewhat greater effectiveness than a net that has never been treated, but not as effectively as a net that was treated within the last 12 months or was made with long-lasting insecticide. Table 12.1 also shows ownership of ever-treated nets separately. A greater proportion of households own at least one ever-treated net (74.6%) as compared with an ITN (48.5%). This indicates that some households do not re-treat their nets as often as recommended. The percentage of households that reported having at least one ever-treated net is higher than the percentage of households that own an ITN across all provinces. The differences are particularly large in Guadalcanal and Western provinces.

**Table 12.1: Household possession of mosquito nets**

Percentage of households with at least one and more than one mosquito net (treated or untreated), ever treated mosquito net and insecticide treated net (ITN), and the average number of nets per household, by background characteristics, Solomon Islands 2007

Background characteristic	Any type of mosquito net			Ever treated mosquito net <sup>1</sup>			Insecticide treated mosquito nets (ITNs) <sup>2</sup>			Number of households
	Percentage with at least one	Percentage with more than one	Average number of nets per household	Percentage with at least one	Percentage with more than one	Average number of ever treated nets per household	Percentage with at least one	Percentage with more than one	Average number of ITNs per household	
<b>Residence</b>										
Urban	75.3	60.5	1.9	73.8	58.4	1.8	50.3	38.9	1.2	387
Rural	75.4	56.7	1.8	74.7	55.1	1.7	48.3	32.0	1.0	2,872
<b>Region</b>										
Honiara	72.9	56.4	1.8	71.1	54.6	1.7	50.2	36.9	1.2	268
Guadalcanal	92.6	74.7	2.3	92.0	72.2	2.2	55.6	41.3	1.3	546
Malaita	61.9	48.8	1.4	60.3	46.3	1.4	33.3	23.9	0.7	727
Western	77.2	54.7	1.8	75.9	51.9	1.7	44.4	30.7	1.0	406
Other provinces	75.7	55.4	1.8	75.5	54.9	1.7	55.0	34.1	1.1	1,312
<b>Wealth quintile</b>										
Lowest	69.4	44.1	1.4	68.9	43.1	1.4	41.9	21.3	0.7	718
Second	72.9	55.3	1.6	72.3	53.6	1.6	47.9	31.2	1.0	683
Middle	78.3	62.5	1.9	77.0	60.5	1.8	50.8	37.2	1.1	653
Fourth	82.1	65.9	2.1	81.5	64.1	2.0	51.4	37.1	1.2	638
Highest	75.2	59.8	2.0	73.9	57.9	1.9	51.7	39.6	1.3	567
Total	75.4	57.1	1.8	74.6	55.5	1.7	48.5	32.8	1.0	3,259

<sup>1</sup> An ever-treated net is a pre-treated net or a nonpre-treated net that has subsequently been soaked with insecticide at any time.

<sup>2</sup> An insecticide treated net (ITN) is: 1) a factory treated net that does not require any further treatment, 2) a pre-treated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months.

### 12.2.2 Use of mosquito nets

The 2006/2007 SIDHS asked about the use of mosquito nets by household members during the night before the survey. The Solomon Islands National Health policy recognises that children under age 5 and pregnant women are high-risk groups that should sleep under ITNs.

Because the prevalence of malaria-carrying mosquitoes varies seasonally, with a peak during and immediately following periods of rain, use of mosquito nets may be expected to follow a similar seasonal pattern. Despite the geographical variation in altitude, seasonality and humidity, malaria is endemic to all major islands in Solomon Islands.

Tables 12.2 and 12.3 show the percentage of children under age 5 and women who slept under a mosquito net on the night before the survey. Roughly two-thirds of children under age 5 slept under a mosquito net the night before the survey, and less than half (40.4%) of these slept under an ITN. Use of any mosquito net or ITN is associated with the age of the child. Younger children are more likely to have slept under a mosquito net than those closer to their fifth birthday. There is no gender preference between male and female children under five pertaining to net use.

A greater proportion of children under age 5 slept under a mosquito net compared with women (Table 12.3). Just under 35% of all women and 36.5% of pregnant women slept under an ITN the night before the survey.

**Table 12.2: Use of mosquito nets by children**

*Percentage of children under age 5 who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticide treated net (ITN) the night before the survey, by background characteristics, Solomon Islands 2007*

Background characteristic	Percentage who slept under any net last night	Percentage who slept under an ever treated net last night <sup>1</sup>	Percentage who slept under an ITN last night <sup>2</sup>	Number of children
<b>Age in months</b>				
<1	73.5	73.1	48.8	528
1	67.7	65.1	38.5	545
2	63.3	63.0	38.4	566
3	64.9	63.7	37.9	556
4	61.9	61.1	38.5	480
<b>Sex</b>				
Male	64.1	63.3	37.5	1,357
Female	68.6	67.1	43.4	1,317
<b>Residence</b>				
Urban	62.8	62.0	43.7	323
Rural	66.8	65.6	39.9	2,351
<b>Region</b>				
Honiara	59.2	58.0	42.0	235
Guadalcanal	80.5	80.2	47.6	476
Malaita	58.7	56.2	33.3	665
Western	64.3	63.7	35.5	303
Other provinces	66.8	66.2	42.8	996
<b>Wealth quintile</b>				
Lowest	62.9	62.3	34.8	628
Second	70.0	68.4	43.2	560
Middle	67.1	65.1	37.5	514
Fourth	68.6	67.7	42.5	515
Highest	62.9	62.4	45.5	457
Total	66.3	65.2	40.4	2,674

<sup>1</sup> An ever-treated net is a pre-treated net or a nonpre-treated which has subsequently been soaked with insecticide at any time.

<sup>2</sup> An insecticide treated net (ITN) is a 1) factory treated net that does not require any further treatment, 2) a pre-treated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months.

Higher rates of net use are reported in rural households than in urban household for both children and women. Approximately two in three children in rural areas slept under a mosquito net compared with less than 65% of children in urban areas. By provinces, the highest rate of net use by children was in Guadalcanal, with 80.5%. However, only 47.6% reported to having slept under an ITN the night before the survey.

**Table 12.3: Use of mosquito nets by women**

*Percentage of all women aged 15–49 and pregnant women aged 15–49 who slept under a mosquito net (treated or untreated), an ever treated mosquito net, and an insecticide treated net (ITN) the night before the survey, by background characteristics, Solomon Islands 2007*

Background characteristic	Percentage of all women aged 15–49 who:				Percentage of pregnant women aged 15–49 who:			
	Slept under any net last night	Slept under an ever treated net last night <sup>1</sup>	Slept under an ITN last night <sup>2</sup>	Number of women	Slept under any net last night	Slept under an ever treated net last night <sup>1</sup>	Slept under ITN last night <sup>2</sup>	Number of women
<b>Residence</b>								
Urban	44.8	43.8	29.0	658	61.6	61.6	47.0	27
Rural	58.3	57.5	36.1	3,190	59.4	58.4	34.9	182
<b>Region</b>								
Honiara	39.3	38.1	27.2	490	48.4	48.4	37.9	20
Guadalcanal	75.0	74.6	44.5	648	88.6	87.4	54.2	49
Malaita	47.7	46.3	27.6	848	(45.8)	(45.8)	(20.3)	44
Western	55.3	54.5	30.9	451	(74.4)	(70.2)	(47.1)	28
Other provinces	58.1	57.7	38.7	1,411	(45.0)	(45.0)	(29.3)	68
<b>Education</b>								
No education	52.6	51.4	30.5	512	(47.2)	(47.2)	(28.3)	28
Primary	57.2	56.6	35.8	2,157	63.1	61.8	37.3	131
Secondary	56.1	55.1	35.0	1,080	65.9	65.9	43.7	43
More than secondary	44.7	44.7	34.6	100	*	*	*	7
<b>Wealth quintile</b>								
Lowest	53.7	53.3	30.3	690	(43.7)	(42.7)	(19.1)	56
Second	63.0	61.6	38.6	748	(61.8)	(61.8)	(35.7)	27
Middle	56.7	55.9	34.9	735	(43.5)	(43.5)	(27.5)	35
Fourth	62.4	61.8	38.4	777	77.6	75.5	44.4	59
Highest	45.7	44.9	32.2	899	70.0	70.0	61.6	33
<b>Total</b>	<b>56.0</b>	<b>55.2</b>	<b>34.9</b>	<b>3,849</b>	<b>59.7</b>	<b>58.8</b>	<b>36.5</b>	<b>209</b>

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> An ever-treated net is a pre-treated net or a nonpre-treated, which has subsequently been soaked with insecticide at any time.

<sup>2</sup> An insecticide treated net (ITN) is (1) a factory treated net that does not require any further treatment, (2) a pre-treated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months.



### 12.3.1 Treatment of women during pregnancy

Table 12.4 show the percentage of women who took any antimalarial drugs, received SP/Fansidar and given IPT during pregnancy for their last live birth in the two years preceding the survey by background characteristics. The results show that the most common treatment for malaria prevention was antimalarial drug which was taken by the majority of women (93%). The use of SP/Fansidar and IPT were very low presenting of less than 2% of women receiving this treatment. This could indicate that the IPT is not common in the country.

**Table 12.4: Prophylactic use of antimalarial drugs and use of Intermittent Preventive Treatment (IPT) by women during pregnancy**

*Percentages of women who took any antimalarial drugs for prevention, who took SP/Fansidar, and percentage who received Intermittent Preventive Treatment (IPT) during the pregnancy for their last live birth in the two years preceding the survey, by background characteristics, Solomon Islands 2007*

Background characteristic	SP/Fansidar <sup>1</sup>			Intermittent Preventive Treatment <sup>2</sup>		Number of women
	Percentage who took any antimalarial drug	Took SP/Fansidar	Took more than one dose	Received SP/Fansidar during ANC	Received more than one dose SP/Fansidar during ANC	
<b>Residence</b>						
Urban	91.1	4.1	2.3	4.0	2.3	138
Rural	93.1	1.2	1.0	1.0	0.8	900
<b>Region</b>						
Honiara	92.3	1.3	0.9	1.1	0.9	105
Guadalcanal	92.1	1.9	0.0	1.9	0.0	190
Malaita	90.5	3.3	3.3	2.7	2.7	257
Western	94.2	0.0	0.0	0.0	0.0	108
Other provinces	94.6	0.8	0.8	0.7	0.7	378
<b>Education</b>						
No education	91.9	0.3	0.3	0.3	0.3	134
Primary	95.1	2.1	1.5	1.8	1.2	615
Secondary	90.2	1.1	1.0	1.0	1.0	261
More than secondary	(74.2)	(1.0)	(0.0)	(1.0)	(0.0)	29
<b>Wealth quintile</b>						
Lowest	90.6	1.8	1.6	1.1	1.0	254
Second	94.7	1.6	1.6	1.5	1.5	186
Middle	94.1	0.0	0.0	0.0	0.0	192
Fourth	93.3	1.9	1.3	1.9	1.3	202
Highest	92.4	2.6	1.3	2.5	1.3	204
Total	92.9	1.6	1.2	1.4	1.0	1,038

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

<sup>1</sup> SP = sulphadoxine pyrimethamine

<sup>2</sup> IPT: Intermittent Preventive Treatment is preventive intermittent treatment with SP/Fansidar during an antenatal care (ANC) visit.

### 12.3.2 Treatment of children with fever

Because fever is the major manifestation of malaria, mothers were asked whether their children under age 5 had had an episode of fever in the two weeks preceding the survey. If a fever was reported, the mother was asked whether treatment was sought and what medication the child was given, if any.

Table 12.5 shows the percentage of children under age 5 who had an episode of fever in the two weeks preceding the survey, the percentage who received antimalarial drugs among those sick with fever, and the percentage who received treatment soon after the onset of illness, by selected background characteristics.

Over 16% of children under age 5 had a fever in the two weeks preceding the survey. Among those sick with fever, 19% received antimalarial drugs, and 10.8% received drugs the same day or the day after the fever started.

**Table 12.5: Prevalence and prompt treatment of fever**

*Percentage of children under age 5 with fever in the two weeks preceding the survey, and among children with fever, the percentage who took antimalarial drugs and the percentage who took drugs the same or next day following the onset of fever, by background characteristics, Solomon Islands 2007*

Background characteristic	Among children under age 5:		Among children under age 5 with fever:		
	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage who took antimalarial drugs	Percentage who took antimalarial drugs same or next day	Number of children
<b>Age (in months)</b>					
<12	17.4	526	12.8	3.0	91
12–23	23.4	535	10.6	6.7	125
24–35	16.9	533	17.5	12.7	90
36–47	15.0	515	34.0	16.9	77
48–59	9.2	477	(32.7)	(24.4)	44
<b>Residence</b>					
Urban	16.4	319	12.2	5.6	52
Rural	16.6	2,266	20.0	11.6	376
<b>Region</b>					
Honiara	14.0	241	6.9	2.7	34
Guadalcanal	13.5	476	38.1	20.0	64
Malaïta	16.0	647	36.1	22.5	103
Western	17.7	276	(13.7)	(5.8)	49
Other provinces	18.9	945	6.1	3.7	178
<b>Mother's education</b>					
No education	14.1	359	28.0	11.7	50
Primary	15.9	1,603	17.3	10.9	254
Secondary	20.5	563	18.9	10.0	116
More than secondary	13.0	61	*	*	8
<b>Wealth quintile</b>					
Lowest	18.3	636	21.9	13.2	116
Second	12.9	528	(12.7)	(8.7)	68
Middle	15.1	468	26.4	11.9	71
Fourth	17.0	493	24.3	14.8	84
Highest	19.4	459	9.3	4.8	89
<b>Total</b>	<b>16.6</b>	<b>2,585</b>	<b>19.0</b>	<b>10.8</b>	<b>428</b>

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

The proportion of children under age 5 who had an episode of fever in the two weeks preceding the survey in those living in urban areas is similar to that of those living in rural areas. However, children living in urban areas are less likely to receive antimalarial drugs for fever than those living in rural areas. Children with fever in rural areas are more likely to receive antimalarial drugs as presumptive treatment of malaria than urban children. This can be attributed to the lower coverage for microscopy services for diagnosis in rural areas.

#### **12.4 TYPE AND TIMING OF ANTIMALARIAL DRUGS**

Table 12.6 shows the different antimalarial drugs that were received by children under age 5 with fever in the two weeks preceding the survey. Chloroquine, a component of the first line combination therapy in Solomon Islands, was the most frequently used antimalarial, and was received by 18.1% of children with fever. Fansidar, the partner drug for first line combination therapy, was received by 5.8% of children with fever. Less than 1% of children with fever received quinine, the second line treatment, or artemether. Solomon Islands will be introducing ACTs into its treatment guidelines, beginning in 2008.

#### **12.5 KEY RESULTS**

Malaria continues to be a major public health concern in the Solomon Islands, especially among pregnant women and children under age 5. Malaria is also a leading cause of morbidity and mortality in Solomon Islands. The use of an insecticide-treated mosquito net (ITN) is a primary health intervention to reduce malaria transmission in the country. The 2006/2007 SIDHS show findings on household possession of mosquito nets and use, and the treatment of bed-nets. The results show that three quarter (75.4%) of all households own at least one mosquito net with less than half of these households (48.5%) have at least one ITN mosquito net. Among children under age 5, 66% were reported to sleep under any net the night before the survey while only 40.4 percent used an ITN mosquito net. About 37% of pregnant women slept under ITN the night before the survey.

Because fever is the major manifestation of malaria, mothers of children with fever in the last two weeks were asked about the treatment they took for their children. This is important to identify children receiving appropriate treatment to prevent and eliminate malaria. Among 16% of children under age 5 who had fever in the two weeks preceding the survey, 19% received antimalarial drugs and 11% received drugs the same day or the day after the fever started. Similar proportions of children with fever are noted in both urban and rural areas. However, children in rural areas are more likely to receive antimalarial drugs than those children in urban areas.

The results also shows that about 18% of children with fever in the two weeks preceding the survey received a chloroquine antimalaria drug, about 6% were given fansidar while less than 1% received quinine.

**Table 12.6: Type and timing of antimalarial drugs**

Among children under age 5 with fever in the two weeks preceding the survey, percentage who took specific antimalarial drugs and the percentage who took each type of drug the same or next day after developing the fever, by background characteristics, Solomon Islands 2007

Background characteristic	Percentage of children who took drug:							Percentage of children who took drug the same or next day:			Number of children with fever
	SP/ Fansidar	Chloroquine	Primaquine	Quinine	Artametar	CBD anti-malarial	Other anti-malarial	SP/Fansidar	Chloroquine	Quinine	
<b>Age (in months)</b>											
<12	3.7	12.3	0.0	0.0	0.0	0.0	0.5	0.0	3.0	0.0	91
12–23	3.2	9.7	0.5	0.0	0.6	0.4	0.0	2.1	6.7	0.0	125
24–35	5.9	16.4	0.0	0.0	0.0	0.0	0.9	3.8	12.5	0.0	90
36–47	8.5	34.0	0.0	0.0	0.0	0.0	0.0	4.7	16.9	0.0	77
48–59	(12.7)	(29.6)	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(10.1)	(21.3)	(3.2)	44
<b>Residence</b>											
Urban	0.4	9.6	0.0	0.0	1.4	0.0	0.8	0.4	5.2	0.0	52
Rural	6.6	19.3	0.2	0.4	0.0	0.1	0.2	3.7	11.2	0.4	376
<b>Region</b>											
Honiara	0.6	3.0	0.0	0.0	2.1	0.0	1.3	0.6	2.1	0.0	34
Guadalcanal	14.4	36.1	1.0	0.0	0.0	0.8	1.2	5.8	20.0	0.0	64
Malaita	12.8	34.7	0.0	1.3	0.0	0.0	0.0	7.8	21.2	1.3	103
Western	(0.0)	(13.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(5.8)	(0.0)	49
Other provinces	1.2	6.1	0.0	0.0	0.0	0.0	0.0	1.2	3.7	0.0	178
<b>Mother's education</b>											
No education	(4.0)	(28.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(2.8)	(11.7)	(0.0)	50
Primary	5.2	16.7	0.0	0.0	0.0	0.2	0.3	3.2	10.8	0.0	254
Secondary	8.3	17.0	0.5	1.2	0.3	0.0	0.4	4.1	8.8	1.2	116
More than secondary	*	*	*	*	*	*	*	*	*	*	8
<b>Wealth quintile</b>											
Lowest	7.9	21.2	0.0	0.0	0.0	0.0	0.7	4.6	13.2	0.0	116
Second	(4.1)	(12.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.1)	(8.7)	(0.0)	68
Middle	6.8	26.4	0.0	0.0	0.0	0.0	0.0	3.2	11.9	0.0	71
Fourth	5.6	23.7	0.7	0.0	0.0	0.6	0.0	5.0	14.8	0.0	84
Highest	3.7	6.2	0.0	1.6	0.8	0.0	0.5	1.8	3.1	1.6	89
<b>Total</b>	<b>5.8</b>	<b>18.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.3</b>	<b>3.3</b>	<b>10.5</b>	<b>0.3</b>	<b>428</b>

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**13.1 INTRODUCTION**

Acquired immune deficiency syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other opportunistic diseases that lead to death through these secondary infections. The predominant mode of HIV transmission is through heterosexual contact, followed in magnitude by perinatal transmission in which a mother passes the virus to her child during pregnancy, delivery or breastfeeding. Other modes of transmission are through infected blood and unsafe injections<sup>7</sup>.

This chapter presents current levels of HIV and AIDS knowledge, attitudes and related behaviours for the general adult Solomon Islands population. It then focuses on HIV and AIDS knowledge and patterns of sexual activity among young people, because young adults are the main target of many HIV prevention efforts. Findings in this chapter will assist the HIV and STI control programme in Solomon Islands to identify particular groups of people who are most in need of information and services and who are most vulnerable to the risk of HIV infection. Overall, 3,823 women and 1,614 men aged 15–49 completed the HIV and AIDS related knowledge, attitudes and behaviours section of the 2006/2007 SIDHS. For men, an additional 442 people aged 50 years and older also participated.

**13.2 KNOWLEDGE OF AIDS**

The 2006/2007 SIDHS collected information on Solomon Islanders' knowledge of and behaviour related to AIDS and other diseases that are transmitted through sexual contact. All eligible respondents were asked whether they had heard about AIDS. Table 13.1 presents the proportions of women and men who have heard of AIDS according to their background characteristics.

Findings for the 2006/2007 SIDHS reveal that knowledge about AIDS in Solomon Islands is widespread but not universal: 94% of women aged 15–49 and 98% of men aged 15–49 have heard of AIDS (Table 13.1). For men, this finding is consistent across all other background characteristics, while knowledge of HIV is slightly lower for women with no education (84%), women who are divorced/separated/widowed (88.0%), and women in the lowest wealth quintile (89.7%). There is no substantial difference among women and men in their knowledge about AIDS.

Table 13.1 also shows that about 26% of women aged 15–49 and 37% of men in the corresponding age group knows where to get an HIV test. Knowledge of where to get an HIV test is lower among married women, women in rural areas and with women in lower educational background.

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<sup>7</sup> <http://www.who.int/features/qa/71/en/index.html>

**Table 13.1: Knowledge of AIDS**

*Percentage of women age 15-49 and men age 15+ who have heard of AIDS, by background characteristics, Solomon Islands 2007*

Background characteristic	Women			Men		
	Has heard of AIDS	Knows where to get an HIV test	Number of respondents	Has heard of AIDS	Knows where to get an HIV test	Number of respondents
<b>Age</b>						
15-24	94.7	27.6	1,404	98.4	33.2	596
..15-19	93.4	22.3	687	96.8	31.4	292
..20-24	95.9	32.6	716	99.9	35.0	304
25-29	93.7	28.8	729	98.0	47.5	266
30-39	94.1	24.3	1,082	97.4	44.1	505
40-49	94.2	22.3	609	98.8	32.4	247
<b>Marital status</b>						
Never married	95.0	28.1	1,125	97.3	35.5	660
..Ever had sex	95.6	28.0	655	99.1	38.7	495
..Never had sex	94.2	28.2	470	91.7	26.1	165
Married/Living together	94.2	24.8	2,560	98.6	41.2	939
Divorced/Separated/Widowed	88.2	31.9	138	*	*	14
<b>Residence</b>						
Urban	99.1	41.3	636	99.2	61.7	301
Rural	93.3	23.0	3,187	97.8	33.6	1,313
<b>Region</b>						
Honiara	99.0	37.3	481	99.6	64.8	240
Guadalcanal	95.7	24.1	637	99.9	29.5	249
Malaita	92.7	22.3	840	97.8	24.9	345
Western	93.9	35.0	458	98.8	36.9	181
Other provinces	93.0	22.3	1,407	96.7	41.0	599
<b>Education</b>						
No education	84.4	10.6	520	92.4	5.3	88
Primary	94.0	19.3	2,114	97.7	27.5	794
Secondary	98.8	42.0	1,067	99.0	51.2	593
More than secondary	100.0	69.9	122	100.0	72.6	138
<b>Wealth quintile</b>						
Lowest	89.7	14.6	696	98.7	23.2	281
Second	92.7	22.4	755	99.2	33.9	291
Middle	94.7	22.2	738	97.5	38.0	323
Fourth	94.4	25.9	769	96.3	38.0	353
Highest	98.8	41.7	864	98.9	56.6	366
Total 15-49	94.2	26.0	3,823	98.1	38.9	1,614
50+	na	na	na	83.4	16.8	442
Total men 15+	na	na	na	94.9	34.1	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
na = Not applicable

### 13.3 KNOWLEDGE OF HIV PREVENTION METHODS

HIV among adults is mainly transmitted through heterosexual contacts between an infected partner and a non-infected partner. Consequently<sup>8</sup>, the HIV prevention programme in Solomon Islands has mainly sought to reduce further sexual transmission through three programmatically important ways: 1) the promotion of sexual abstinence, 2) mutually faithful monogamy among uninfected couples, and 3) condom use by those that cannot abstain from sexual intercourse.

HIV and AIDS prevention programmes focus their messages and efforts on three important aspects of behaviour, often referred to as “ABC” messages: a) delaying sexual debut (i.e. **abstinence**), b) limiting the number of sexual partners, and **being faithful** to one uninfected partner, and c) using **condoms**. To ascertain whether programmes have effectively communicated these messages, respondents were asked specific questions about whether it is possible to reduce the chances of getting the AIDS virus by 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.

Table 13.2 and Figure 13.2 present the proportion of women and men aged 15–49 who were aware about the various HIV and AIDS prevention methods by background characteristics. Findings of the 2006/2007 SIDHS indicate that, in general, more men are aware about various preventive methods to reduce HIV transmission compared with women, with a similar pattern observed for each preventative method.

Findings of the 2006/2007 SIDHS reveal that knowledge is highest for awareness that HIV can be prevented by limiting sexual intercourse to one uninfected partner (95% men, 80% women), followed by abstaining from sexual intercourse (89% men, 77% women), while using a condom is the least known way to prevent HIV from spreading (69% men, 61% women). Table 13.2 also shows that there is no substantial difference in the level of knowledge of prevention methods by age group. Lower proportions of never-married men and women who report that they have never had sex were found to have knowledge of prevention methods compared with those who have had sex, or are married/living together or divorced/separated/widowed.

Differences were noted among women from urban and rural areas regarding the level of knowledge about ways to prevent HIV from spreading. A higher proportion of women from urban areas have knowledge of the four methods of preventing HIV transmission than women from rural areas. Knowledge about ways to prevent HIV from spreading were similar for men in both settings.

Table 13.2 shows some differences in knowledge on the basis of region. The 2006/2007 SIDHS findings also show that less than 50% of men in Western Province are aware that using condoms and limiting sexual intercourse reduce the chances of getting HIV. Only 52% of women from Malaita Province know that using condoms can prevent transmission of the HIV virus.

The proportion of respondents who have knowledge about ways to prevent HIV from spreading increases with educational attainment. This pattern is evident among both men and women, and is most evident for women who have not attended any schooling. A similar pattern is also shown for wealth quintiles. The proportion of women who know methods of reducing the risk of HIV transmission is lowest for women from the lowest quintile, and increases with the level of relative wealth.

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<sup>8</sup> [http://www.who.int/features/2004/hiv\\_aids/en/index.html](http://www.who.int/features/2004/hiv_aids/en/index.html)

**Table 13.2: Knowledge of HIV prevention methods**

Percentage of women age 15-49 and men age 15+ 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, Solomon Islands 2007

Background characteristic	Women Percentage who say HIV can be prevented by					Men Percentage who say HIV can be prevented by				
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of women	Using condoms	Limiting sexual intercourse to one uninfected partner	Using condoms and limiting sexual intercourse to one uninfected partner	Abstaining from sexual intercourse	Number of men
<b>Age</b>										
15-24	61.4	81.2	57.4	79.4	1,404	67.9	94.4	65.9	89.0	596
..15-19	57.4	79.1	52.9	77.0	687	64.2	92.6	62.5	87.1	292
..20-24	65.3	83.2	61.8	81.8	716	71.5	96.2	69.1	90.7	304
25-29	58.4	79.3	54.7	75.3	729	64.0	94.3	62.3	88.9	266
30-39	61.6	79.6	57.5	75.4	1,082	70.9	95.3	69.9	88.1	505
40-49	59.7	78.1	54.0	73.5	609	74.2	95.7	72.5	90.3	247
<b>Marital status</b>										
Never married	60.8	80.4	56.4	77.2	1,125	67.1	92.7	64.7	87.4	660
..Ever had sex	65.5	83.2	60.5	78.8	655	68.8	94.7	66.7	88.3	495
..Never had sex	54.4	76.7	50.8	75.0	470	61.7	86.8	58.7	84.6	165
Married/Living together	60.6	79.7	56.3	76.2	2,560	70.5	96.4	69.4	89.9	939
Divorced/Separated/Widowed	59.2	79.1	58.1	77.8	138	*	*	*	*	14
<b>Residence</b>										
Urban	65.5	88.8	62.8	82.9	636	70.3	96.2	68.1	85.7	301
Rural	59.7	78.1	55.1	75.3	3,187	68.9	94.5	67.4	89.6	1,313
<b>Region</b>										
Honiara	63.8	86.5	61.2	79.6	481	72.7	97.4	70.9	90.8	240
Guadalcanal	55.2	90.8	54.1	78.7	637	77.8	98.2	77.1	89.5	249
Malaita	52.2	71.4	48.7	65.5	840	75.9	94.7	73.8	92.0	345
Western	63.9	77.6	61.6	74.5	458	47.2	85.4	43.1	74.1	181
Other provinces	66.0	78.5	58.7	81.9	1,407	66.9	95.4	66.1	90.5	599
<b>Education</b>										
No education	45.6	66.3	43.2	60.2	520	78.0	87.3	74.7	87.6	88
Primary	58.6	78.6	53.5	76.5	2,114	67.1	94.0	65.3	87.9	794
Secondary	70.5	87.5	66.9	83.5	1,067	70.4	96.2	69.1	89.5	593
More than secondary	73.0	93.3	70.3	87.0	122	70.2	98.8	69.0	92.7	138



**Table 13.2 (continued)**

Background characteristic	Women					Men				
	Percentage who say HIV can be prevented by					Percentage who say HIV can be prevented by				
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	Number of women	Using condoms	Limiting sexual intercourse to one uninfected partner	Using condoms and limiting sexual intercourse to one uninfected partner	Abstaining from sexual intercourse	Number of men
Wealth quintile										
Lowest	55.7	73.3	49.5	70.2	696	80.9	95.8	79.6	94.1	281
Second	57.9	76.7	54.2	73.6	755	61.0	95.0	59.7	91.5	291
Middle	58.6	76.7	53.4	76.5	738	67.7	95.1	66.2	90.4	323
Fourth	59.8	82.5	56.1	79.1	769	65.7	92.8	63.8	86.4	353
Highest	69.5	88.3	66.7	82.2	864	71.2	95.9	69.4	83.7	366
Total 15-49	60.6	79.9	56.4	76.6	3,823	69.2	94.9	67.6	88.9	1,614
50+	na	na	na	na	na	53.8	79.0	51.9	69.7	442
Total men 15+	na	na	na	na	na	65.8	91.4	64.2	84.7	2,056

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

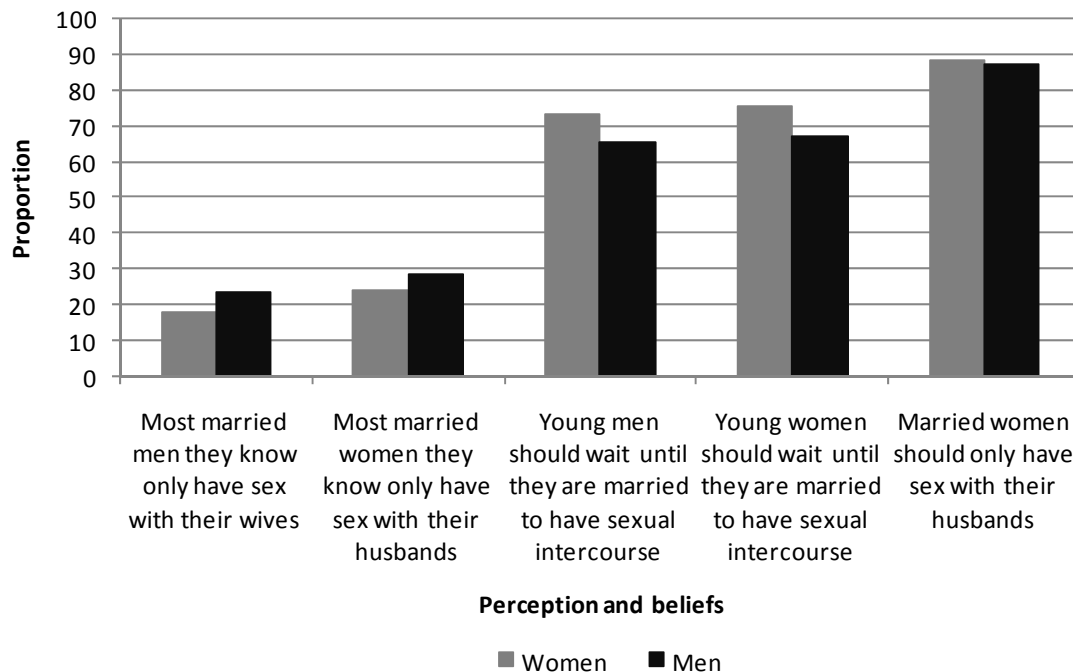
na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

Findings of the 2006/2007 SIDHS also indicate that there is a strong belief by women and men that both a husband and wife must be faithful to one another, yet only a small proportion of women and men aged 15–49 reported that most married men and women they know have sex only with their spouse (Fig. 13.1).

**Figure 13.1: Proportion of all women and men aged 15–49 who believe in abstinence and faithfulness**



### 13.4 REJECTION OF MISCONCEPTIONS ABOUT HIV AND AIDS

In addition to knowing about effective ways to avoid contracting HIV, the 2006/2007 SIDHS also included questions to assess the prevalence of common misconceptions about AIDS transmission and prevention, and knowledge about AIDS. Table 13.3.1 and Table 13.3.2 presents the percentage of women and 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.

The results show that 71% of women and 83% of men are aware that a healthy-looking person can have the AIDS virus, and approximately two-thirds of women (63%) and men (67%) know that the AIDS virus cannot be contracted by mosquito bites or transmitted by supernatural means (66% women, 68% men). Nearly three-quarters of women (71%) and men (70%) are aware that the AIDS virus cannot be transmitted by sharing food with an infected person.

Tables 13.3.1 and 13.3.2 also show the proportions of respondents who reject common misconceptions about contracting HIV and AIDS. For both sexes, knowledge is highest for knowing that a healthy person can have the HIV virus (71% women, 80% men) and a person cannot become infected with the HIV virus by sharing food with a person who has the virus (71% women, 70% men). Approximately two-thirds of both sexes know that HIV cannot be transmitted by mosquito bites (63% women, 67% women).

While there are no definite trends for misconceptions on the basis of age group, there are some differences in areas of residence. Lower proportions of men and women from rural areas correctly responded to misconceptions about HIV transmission. In addition, lower proportions of women

from Malaita and 'other provinces', and men from Western and 'other provinces' correctly responded to misconceptions about HIV transmission than women and men from Honiara and Guadalcanal Province.

As might be expected, lower proportions of women and men with no education, correctly responded to misconceptions than did those who completed some schooling. Also, fewer people from the lowest wealth quintile correctly answered these questions than those from higher wealth quintiles.

### **13.5 COMPREHENSIVE KNOWLEDGE ABOUT HIV AND AIDS**

As HIV epidemic changes with time, it is necessary for people to have more comprehensive knowledge of HIV and AIDS. An indicator of comprehensive knowledge about HIV and AIDS combines several individual indicators previously discussed. It is the percentage of respondents aged 15–49 who know that:

- (a) people can reduce the chances of getting the AIDS virus by using a condom every time they have sex;
- (b) people can reduce the chances of getting the AIDS virus by having sex with just one uninfected partner who has no other partners;
- (c) people cannot get the AIDS virus by sharing food with a person who has AIDS;
- (d) that a healthy-looking person can have the AIDS virus; and who
- (e) reject the two most common local misconceptions about AIDS transmission or prevention.

Tables 13.3.1 and 13.3.2 also show the proportions of women and men who have a comprehensive knowledge about HIV and AIDS. The 2006/2007 SIDHS reveals that very few people in Solomon Islands have a comprehensive knowledge about HIV and AIDS. This is clearly reflected in the small proportion of women (29%) and men (35%) who have a comprehensive knowledge about the ways in which HIV and AIDS can be contracted and or transmitted.

Although there is no substantial variation in the knowledge about HIV and AIDS among women by age group or marital status, the 2006/2007 SIDHS found that women with little and or no education and those from the lowest wealth quintile have a lower comprehensive knowledge level about the disease and how it can be prevented compared with those with higher levels of education and relative wealth.

Lower proportions of women and men from rural areas have a comprehensive knowledge than women and men from urban areas. In addition, lower proportions of women from Malaita and 'other provinces' and men from Western and 'other provinces' have a comprehensive knowledge than those from Honiara and Guadalcanal This finding strongly suggests that if an awareness programme had been conducted prior to the survey then it was not as effective as it could have been. There is a need to increase HIV awareness programmes that target women in rural areas so that there is a widespread and universal understanding and knowledge in Solomon Islands about HIV.

**Table 13.3.1: Comprehensive knowledge about AIDS: Women**

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Solomon Islands 2007

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	70.7	68.3	68.4	74.3	42.7	29.3	1,404
..15-19	67.7	66.4	68.0	73.6	41.8	28.6	687
..20-24	73.7	70.2	68.8	75.0	43.5	30.0	716
25-29	68.5	61.7	65.0	70.1	39.8	26.9	729
30-39	72.2	60.5	66.7	68.5	42.6	31.2	1,082
40-49	70.2	55.3	62.0	68.0	36.5	27.1	609
<b>Marital status</b>							
Never married	68.6	68.3	67.9	75.5	41.9	30.2	1,125
..Ever had sex	70.8	69.5	68.9	79.3	41.6	31.2	655
..Never had sex	65.5	66.5	66.4	70.4	42.2	28.7	470
Married/Living together	71.3	60.8	66.3	68.9	41.2	28.6	2,560
Divorced/Separated/Widowed	75.8	54.8	53.3	68.5	34.3	28.1	138
<b>Residence</b>							
Urban	85.8	77.4	75.2	79.1	55.6	38.1	636
Rural	67.6	59.9	64.5	69.2	38.2	27.2	3,187
<b>Region</b>							
Honiara	83.2	75.8	72.1	77.8	50.5	33.7	481
Guadalcanal	85.6	72.7	83.1	76.5	62.3	37.8	637
Malaita	64.0	49.1	56.7	57.2	30.8	22.5	840
Western	73.7	69.9	74.7	70.8	54.7	45.1	458
Other provinces	62.6	59.7	59.6	74.1	30.1	22.1	1,407
<b>Education</b>							
No education	57.6	41.1	49.9	47.3	24.8	16.2	520
Primary	69.2	57.2	65.8	68.0	37.9	26.0	2,114
Secondary	78.1	81.3	73.1	85.6	52.6	39.3	1,067
More than secondary	86.1	90.6	85.6	91.2	67.0	47.3	122

**Chapter 13.3.1 (continued)**

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Wealth quintile</b>							
Lowest	62.6	51.6	61.7	63.7	30.0	19.5	696
Second	63.4	60.0	61.3	69.4	36.8	27.6	755
Middle	70.4	57.9	65.2	67.9	40.0	28.9	738
Fourth	73.4	65.9	67.1	71.8	43.1	28.1	769
Highest	81.3	75.6	74.5	79.5	53.1	38.9	864
Total 15-49	70.7	62.8	66.3	70.9	41.1	29.0	3,823

<sup>1</sup> Two most common local misconceptions: AIDS cannot be transmitted by mosquito bites and AIDS cannot be transmitted by supernatural means.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

**Table 13.3.2: Comprehensive knowledge about AIDS: Men**

*Percentage of men age 15+ 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, Solomon Islands 2007*

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	82.8	67.5	73.3	74.3	47.3	35.1	596
..15-19	77.7	63.2	65.5	70.1	39.5	26.4	292
..20-24	87.6	71.6	80.7	78.4	54.7	43.5	304
25-29	82.3	77.8	70.4	73.6	54.5	37.5	266
30-39	84.3	76.4	70.9	73.1	56.2	42.6	505
40-49	84.6	69.7	68.5	71.2	50.6	40.4	247
<b>Marital status</b>							
Never married	82.7	69.6	71.7	76.1	49.1	35.3	660
..Ever had sex	84.8	74.8	75.6	79.0	53.2	38.1	495
..Never had sex	76.3	54.0	60.3	67.5	36.7	27.1	165
Married/Living together	84.3	74.1	70.8	71.7	53.7	40.9	939
Divorced/Separated/Widowed	*	*	*	*	*	*	14
<b>Residence</b>							
Urban	92.4	88.6	90.5	86.8	78.3	56.6	301
Rural	81.4	68.6	66.9	70.3	45.7	34.5	1,313
<b>Region</b>							
Honiara	93.8	91.2	92.0	86.2	82.8	60.1	240
Guadalcanal	94.1	86.3	92.9	75.7	79.6	62.4	249
Malaita	91.1	66.3	72.6	73.5	53.5	42.0	345
Western	77.6	67.7	56.9	67.8	33.6	21.0	181
Other provinces	72.2	63.8	57.7	68.8	32.3	23.6	599
<b>Education</b>							
No education	83.6	55.8	69.7	64.8	47.9	44.4	88
Primary	81.9	62.6	60.8	65.7	39.0	29.5	794
Secondary	84.7	82.6	83.4	81.4	64.5	46.5	593
More than secondary	86.8	94.3	80.6	87.7	73.0	53.5	138

**Chapter 13.3.2 (continued)**

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
<b>Wealth quintile</b>							
Lowest	76.3	67.2	66.0	66.3	43.2	36.6	281
Second	77.8	67.5	54.8	68.5	31.8	24.6	291
Middle	86.4	67.4	69.9	75.1	48.1	34.6	323
Fourth	82.2	68.4	75.1	73.2	52.9	37.8	353
Highest	92.0	88.1	86.1	81.1	76.2	55.8	366
Total 15-49	83.4	72.3	71.3	73.3	51.8	38.6	1,614
50+	65.9	46.3	55.8	56.7	33.1	23.5	442
Total men 15+	79.7	66.7	68.0	69.8	47.7	35.4	2,056

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

<sup>1</sup> Two most common local misconceptions: AIDS cannot be transmitted by mosquito bites and AIDS cannot be transmitted by supernatural means.

<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.

### **13.6 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV**

Some preconditions for reducing mother-to-child transmission (MTCT) are knowing that HIV can be transmitted from mother to child, and knowing that the use of antiretroviral drugs by the mother can reduce the risk of transmission (WHO). The 2006/2007 DHS asked respondents about their knowledge of whether a mother who has AIDS can pass the disease on to her baby in any of three ways: 1) while she is pregnant with the baby, 2) during delivery of the baby, or 3) while she is breastfeeding the baby. This is an important indicator of respondents' knowledge of MTCT, and measures respondents' knowledge about whether MTCT can be prevented through antiretroviral therapy and by avoiding breastfeeding.

In the 2006/2007 SIDHS survey, respondents were asked if the AIDS virus can be transmitted from mother to child. If the answer was 'Yes', respondents were further asked about whether the virus could be transmitted during pregnancy, during delivery, and/or during breastfeeding. They were also asked if there are any special drugs that a doctor or nurse can give to an HIV-infected pregnant woman to reduce the risk of transmission to the baby. Table 13.4 presents the proportions of women and men who know that HIV can be transmitted from mother to child during breastfeeding, and that the risk of MTCT of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics.

In Solomon Islands, over two-thirds of women (69%) and just of over one-half of men (53%) are aware that HIV can be transmitted from a mother to her child through breastfeeding, while only 8% of women and 9% of men are aware that MTCT can be reduced by the mother taking special drugs during pregnancy. Very few women and men are aware that HIV can be transmitted by breastfeeding, and that the risk of transmission can be reduced by infected mothers taking special drugs.

The proportions of men who know that HIV can be transmitted by breastfeeding is particularly low among men from Malaita Province (27%) and among men with no education (29%).



**Table 13.4: Knowledge of prevention of mother to child transmission of HIV**

*Percentage of women and men who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, Solomon Islands 2007*

Background characteristic	Women				Men			
	Percentage who know that:			Number of women	Percentage who know that:			Number of 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	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		
<b>Age</b>								
15-24	70.6	6.4	5.4	1,404	50.4	9.0	7.2	596
..15-19	70.7	5.2	3.6	687	44.6	7.9	5.5	292
..20-24	70.6	7.6	7.2	716	55.9	10.0	8.8	304
25-29	68.8	12.0	9.7	729	56.6	12.9	8.2	266
30-39	68.8	6.8	5.9	1,082	54.6	7.5	6.0	505
40-49	65.4	8.8	7.3	609	52.8	9.0	5.5	247
<b>Marital status</b>								
Never married	68.7	8.1	6.9	1,125	51.2	9.0	6.6	660
..Ever had sex	67.5	8.5	6.8	655	56.7	11.1	8.1	495
..Never had sex	70.3	7.6	7.1	470	34.5	2.5	2.1	165
Married/Living together	69.4	8.3	6.9	2,560	54.6	9.1	6.6	939
Divorced/Separated/Widowed	62.4	1.5	1.3	138	*	*	*	14
<b>Currently pregnant</b>								
Pregnant	64.8	5.5	4.9	228	na	na	na	na
Not pregnant or not sure	69.2	8.1	6.8	3,595	na	na	na	na
<b>Residence</b>								
Urban	78.5	12.0	10.5	636	62.0	11.1	7.8	301
Rural	67.0	7.2	5.9	3,187	51.0	8.7	6.5	1,313
<b>Region</b>								
Honiara	79.0	11.5	10.2	481	61.0	10.6	7.6	240
Guadalcanal	75.3	8.9	8.0	637	81.8	13.7	12.4	249
Malaita	67.8	2.4	2.4	840	27.1	0.4	0.4	345
Western	56.6	4.5	3.0	458	63.4	18.8	15.1	181
Other provinces	67.3	10.8	8.6	1,407	49.8	8.8	5.1	599

**Table 13.4 (continued)**

Background characteristic	Women				Men			
	Percentage who know that:			Number of women	Percentage who know that:			Number of 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	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		
<b>Education</b>								
No education	59.4	4.9	4.5	520	28.7	0.8	0.5	88
Primary	68.4	6.1	5.4	2,114	51.6	7.7	6.3	794
Secondary	74.1	11.7	9.0	1,067	58.1	10.9	7.2	593
More than secondary	74.2	21.0	18.7	122	56.0	15.7	10.8	138
<b>Wealth quintile</b>								
Lowest	68.7	6.6	6.2	696	41.5	4.3	2.6	281
Second	64.4	7.3	6.6	755	47.8	7.6	4.5	291
Middle	69.6	6.4	5.6	738	49.2	12.3	9.2	323
Fourth	64.7	9.0	5.7	769	60.4	7.9	6.9	353
Highest	76.4	10.3	9.0	864	62.5	12.5	9.3	366
Total 15-49	68.9	8.0	6.7	3,823	53.1	9.2	6.7	1,614
50+	na	na	na	na	40.5	6.5	4.2	442
Total men 15+	na	na	na	na	50.4	8.6	6.2	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
na = Not applicable

### **13.7 STIGMA ASSOCIATED WITH AIDS, AND ATTITUDES TOWARD HIV AND AIDS**

Knowledge about AIDS can affect people's opinions and attitude toward people with AIDS (UNAIDS 2008). To measure attitudes toward people with AIDS, a number of questions were asked about people's willingness to care for a family member with AIDS, perceived stigma associated with a family member being diagnosed with HIV and AIDS, and attitudes toward casual contact with someone who has AIDS. Respondents were also asked about their opinion on whether a female teacher who has AIDS but who is not sick should be allowed to continue teaching. Tables 13.5.1 and 13.5.2 show the proportions of women and men who expressed positive attitudes toward people with AIDS according to their background characteristics.

Overall, a higher proportion of men than women reported accepting attitudes. Accepting attitudes are highest for not wanting to keep it a secret about a family member being infected with AIDS (66% women, 72% men). About 57% of men report that they would be willing to care for a family member with AIDS in their own home compared with 36% of women. About 54% of men report that they would buy fresh vegetables from a shopkeeper with AIDS compared with only 30% of women. Only 20% of men and 16% of women agree that a female teacher infected with the AIDS virus should be allowed to continue teaching. Very few respondents (10% men, 5% women) expressed acceptance about all four indicators.

This finding clearly indicates that intervention strategies are needed to reduce the stigma associated with HIV and AIDS. Lower proportions of never married men who have never had sex reported that they would not be willing to accept a family member infected with the HIV and AIDS virus than other men. A similar trend was also observed among never married women who have never had sex.

Despite the low percentage of accepting attitudes toward people with HIV and AIDS, urban residents, and higher proportions of people in Honiara, have accepting attitudes toward people with AIDS than do rural residents and people from other provinces. Tables 13.5.1 and 13.5.2 also show that accepting attitudes increase with educational attainment and wealth quintile.

**Table 13.5.1: Accepting attitudes toward those living with HIV/AIDS: Women**

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Solomon Islands 2007

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	36.2	31.6	17.5	66.7	4.4	1,329
..15-19	34.8	31.7	16.7	66.4	3.8	642
..20-24	37.5	31.4	18.2	67.0	5.0	687
25-29	31.1	26.6	16.7	66.1	4.7	683
30-39	33.8	30.3	13.2	65.6	4.7	1,018
40-49	42.6	27.6	15.4	65.9	5.2	573
<b>Marital status</b>						
Never married	37.7	35.4	19.4	65.1	5.3	1,069
..Ever had sex	43.7	38.8	21.4	64.0	5.6	626
..Never had sex	29.4	30.7	16.5	66.7	4.9	443
Married/Living together	34.6	27.5	14.2	66.9	4.5	2,412
Divorced/Separated/Widowed	36.4	21.8	14.7	61.2	3.9	122
<b>Residence</b>						
Urban	46.4	42.9	24.5	59.5	6.5	630
Rural	33.3	26.8	13.9	67.6	4.3	2,973
<b>Region</b>						
Honiara	49.6	44.4	28.6	58.3	7.3	476
Guadalcanal	26.6	30.8	13.4	67.7	4.8	609
Malaita	22.5	15.9	8.8	75.3	1.6	778
Western	32.6	27.1	15.5	67.9	8.1	430
Other provinces	43.5	32.8	16.5	62.3	4.4	1,309
<b>Education</b>						
No education	22.8	18.0	11.7	69.8	2.6	439
Primary	32.7	25.0	11.9	66.7	3.4	1,987
Secondary	43.6	40.5	22.8	64.3	7.5	1,055
More than secondary	58.9	54.3	33.2	61.1	9.2	122
<b>Wealth quintile</b>						
Lowest	27.1	23.3	13.6	64.5	0.8	624
Second	34.1	27.7	13.4	64.1	2.8	700
Middle	29.3	23.2	12.1	71.6	3.3	699
Fourth	38.3	31.0	14.2	65.6	6.7	726
Highest	45.9	40.1	23.7	65.1	8.4	853
Total 15-49	35.6	29.7	15.8	66.2	4.7	3,603

**Table 13.5.2: Accepting attitudes toward those living with HIV/AIDS: Men**

Among men age 15+ who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Solomon Islands 2007

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	51.0	51.2	22.3	71.3	8.3	586
..15-19	39.8	46.3	18.0	75.3	7.9	282
..20-24	61.4	55.7	26.2	67.7	8.6	304
25-29	65.8	58.6	25.1	73.6	13.7	261
30-39	56.8	58.5	16.4	70.8	8.2	492
40-49	54.5	52.0	19.1	74.2	10.2	244
<b>Marital status</b>						
Never married	53.2	53.4	23.9	72.4	10.7	642
..Ever had sex	57.6	57.1	26.1	68.7	11.0	490
..Never had sex	39.1	41.7	16.8	84.6	9.7	152
Married/Living together	57.4	56.1	18.0	71.7	8.7	926
Divorced/Separated/Widowed	*	*	*	*	*	14
<b>Residence</b>						
Urban	72.5	61.4	40.9	75.3	18.8	298
Rural	51.9	53.3	15.7	71.2	7.3	1,284
<b>Region</b>						
Honiara	70.0	58.4	39.7	78.0	17.1	239
Guadalcanal	69.9	72.3	34.4	65.3	17.0	248
Malaita	54.4	38.4	9.4	94.3	5.4	337
Western	62.7	55.9	26.5	69.6	13.8	179
Other provinces	42.5	55.1	11.0	60.1	4.1	579
<b>Education</b>						
No education	44.2	32.3	4.0	85.6	2.4	82
Primary	50.3	47.6	13.9	73.7	6.9	775
Secondary	62.0	63.3	29.1	72.2	12.4	588
More than secondary	66.7	72.5	30.0	53.4	15.9	138
<b>Wealth quintile</b>						
Lowest	42.3	49.4	7.9	64.0	2.2	278
Second	54.1	54.0	13.0	62.7	2.7	289
Middle	57.1	56.7	21.5	76.5	13.7	315
Fourth	51.2	56.7	19.0	79.2	10.3	340
Highest	70.6	56.3	36.4	74.8	16.0	362
Total 15-49	55.8	54.8	20.4	72.0	9.5	1,583
50+	61.3	48.2	16.7	70.3	7.5	369
Total men 15+	56.8	53.6	19.7	71.7	9.1	1,951

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

### **13.8 ATTITUDES TOWARD NEGOTIATING SAFER SEX**

Knowledge about preventing HIV and AIDS transmission is of limited value if women are unable to negotiate a safe sexual relationship with a husband or partner. The 2006/2007 SIDHS asked respondents whether it is justifiable for a wife to refuse sexual intercourse with her husband, or to request him to use a condom if she knows that he has an STI. Table 13.6 presents the percentage of women aged 15–49 and men aged 15 and older who believe that a woman is justified in refusing sexual intercourse or in negotiating for safer sex, by background characteristics.

The 2006/2007 SIDHS found that 83% of women and 86% of men believe that a woman is justified in refusing sexual intercourse or negotiating for safer sex with a husband or partner who has an STI.

Table 13.6 also shows that while there are no substantial differences in the proportion of men and women who believe that a woman is justified in negotiating for safer sex, less than 50% of men in Western Province agree with this statement. Additionally, a lower proportion of men aged 15–19 believe that a wife is justified in refusing sexual intercourse with an infected husband or negotiating for condom use during sexual intercourse compared with all other age groups. Never married and never had sex were least likely to believe that a woman is justified in refusing sexual intercourse or negotiating for safer sex with a husband or partner who has an STI.

**Table 13.6: Attitudes toward negotiating safer sexual relations with husband**

Percentage of women age 15-49 and men age 15+ 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, Solomon Islands 2007

Background characteristic	Women Woman is justified in:			Men Man 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	82.9	82.9	1,404	81.2	81.2	596
..15-19	80.5	80.5	687	76.8	76.8	292
..20-24	85.3	85.3	716	85.4	85.4	304
25-29	83.9	83.9	729	87.4	87.4	266
30-39	83.2	83.2	1,082	89.9	89.9	505
40-49	82.8	82.8	609	84.6	84.6	247
<b>Marital status</b>						
Never married	79.4	79.4	1,125	80.6	80.6	660
..Ever had sex	79.2	79.2	655	81.9	81.9	495
..Never had sex	79.6	79.6	470	76.6	76.6	165
Married/Living together	84.7	84.7	2,560	89.0	89.0	939
Divorced/Separated/Widowed	86.0	86.0	138	*	*	14
<b>Residence</b>						
Urban	92.6	92.6	636	85.0	85.0	301
Rural	81.3	81.3	3,187	85.6	85.6	1,313
<b>Region</b>						
Honiara	91.3	91.3	481	87.5	87.5	240
Guadalcanal	89.2	89.2	637	96.4	96.4	249
Malaita	82.1	82.1	840	94.0	94.0	345
Western	78.2	78.2	458	49.1	49.1	181
Other provinces	79.9	79.9	1,407	86.2	86.2	599
<b>Education</b>						
No education	82.1	82.1	520	91.5	91.5	88
Primary	81.3	81.3	2,114	81.1	81.1	794
Secondary	86.8	86.8	1,067	88.8	88.8	593
More than secondary	89.0	89.0	122	92.2	92.2	138
Total 15-49	83.2	83.2	3,823	85.5	85.5	1,614
50+	na	na	na	83.2	83.2	442
Total men 15+	na	na	na	85.0	85.0	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
na = Not applicable

### **13.9 MULTIPLE SEXUAL PARTNERS AND HIGHER RISK SEXUAL INTERCOURSE IN THE PAST 12 MONTHS**

Higher risk sex is defined as having sex with a person who is neither a spouse nor a cohabiting partner (UNGASS 2005). In order to assess indicators of multiple sexual partners and higher risk sex, the 2006/2007 SIDHS asked respondents who had sexual intercourse in the 12 months preceding the survey about the number of partners they had, and asked those who had higher risk sexual intercourse about whether a condom was used.

Tables 13.7.1 and 13.7.2 present the percentage of those who reported having sexual intercourse with more than one partner and who used a condom during their last sexual intercourse, and the percentage of who reported having higher risk sexual intercourse and used a condom during their last higher risk sexual intercourse. These tables also present the mean number of lifetime sex partners by background characteristics.

The result of the 2006/2007 SIDHS shows that 4% of women and 9% of men reported having sexual intercourse with more than one partner in the 12 months preceding the survey, and that 15% of women and 32% of men reported to have had higher risk intercourse in the 12 months preceding the survey.

Tables 13.7.1 and 13.7.2 further reveal that 16% of women aged 15–19 have had sexual intercourse with more than one partner, and 68% of women in the same age group have had higher risk sexual intercourse in the 12 months preceding survey. One-quarter of men (24%) aged 20–24 had sexual intercourse with more than one partner in the 12 months prior to the survey, and almost 100% of men aged 15–19 have had sexual intercourse with a partner who neither had a spouse nor lived with respondents (higher risk).

Looking at the marital relationship of respondents, the 2006/2007 SIDHS findings show that higher proportions of never married respondents had two or more partners in the 12 months prior to the survey compared with fewer partners for other groups. About 1 in every 4 never married men had sexual intercourse with more than one partner in the 12 months prior to the survey. About 19% of never married women have had sexual intercourse with more than one partner.

The prevalence of higher risk behaviours for both men and women was higher for urban areas than for rural areas. Women from Western Province have the highest prevalence of having had sexual intercourse with more than one partner (6%) as well as having had higher risk intercourse (25%) in the 12 months preceding the survey. About 17% of men from Honiara had sexual intercourse with multiple partners in the 12 months prior to the survey, and 41% had higher risk intercourse. Men from Western Province also have the second highest proportion (40%) of higher risk intercourse in the 12 months preceding the survey.

Tables 13.7.1 and 13.7.2 also show that men with a secondary level education had sexual intercourse with more than one partner as well as had higher risk intercourse, with a similar pattern observed for women with a secondary level education.



**Table 13.7.1: Multiple sexual partners and higher-risk sexual intercourse in the 12 months preceding the survey: Women**

Among women age 15-49 who had sexual intercourse in the 12 months preceding the survey, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months; and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse; and the mean number of sexual partners during her lifetime for women who ever had sexual intercourse, by background characteristics, Solomon Islands 2007

Background characteristic	Among women who had sexual intercourse in the past 12 months:			Among women who had 2+ partners in the past 12 months:		Among women who had higher risk intercourse in the past 12 months:		Among women who ever had sexual intercourse	
	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months <sup>1</sup>	Number	Percentage who reported using a condom during last sexual intercourse	Number	Percentage who reported using a condom at last higher-risk intercourse	Number	Mean number of sexual partners in lifetime	Number
<b>Age</b>									
15-24	11.0	43.4	769	(18.0)	84	16.8	335	3.8	934
..15-19	15.6	68.3	272	(15.3)	42	12.7	186	3.1	349
..20-24	8.4	29.8	497	*	42	22.0	149	4.3	585
25-29	1.0	8.3	585	*	6	(12.6)	49	3.5	634
30-39	0.3	2.5	911	*	3	(44.3)	23	3.7	981
40-49	0.3	1.2	463	*	1	*	6	2.7	553
<b>Marital status</b>									
Never married	19.3	96.1	384	(20.5)	74	18.7	371	4.2	597
Married or living together	0.9	1.3	2,308	*	20	*	30	3.4	2,374
Divorced/separated/widowed	(0.0)	(33.3)	37	*	0	*	12	2.6	130
<b>Residence</b>									
Urban	3.1	19.6	412	*	13	9.6	82	2.8	473
Rural	3.5	14.3	2,317	(17.3)	81	20.1	331	3.6	2,628
<b>Region</b>									
Honiara	2.2	17.6	300	*	7	13.2	54	2.3	344
Guadalcanal	0.9	13.9	469	*	4	10.4	65	2.6	544
Malaita	1.2	6.5	585	*	7	(12.5)	38	2.0	651
Western	5.5	25.0	331	*	18	21.9	83	7.2	363
Other provinces	5.6	16.5	1,043	*	59	21.7	172	4.0	1,200
<b>Education</b>									
No education	0.8	5.4	365	*	3	*	20	2.1	420
Primary	3.2	11.5	1,636	*	52	9.8	188	3.8	1,817
Secondary	6.0	28.7	647	(22.5)	39	24.0	187	3.8	773
More than secondary	0.5	22.4	81	*	0	*	18	3.4	92

**Table 13.7.1 (continued)**

Background characteristic	Among women who had sexual intercourse in the past 12 months:			Among women who had 2+ partners in the past 12 months:		Among women who had higher risk intercourse in the past 12 months:		Among women who ever had sexual intercourse	
	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months <sup>1</sup>		Percentage who reported using a condom during last sexual intercourse	Number	Percentage who reported using a condom at last higher-risk intercourse	Number	Mean number of sexual partners in lifetime	Number
<b>Wealth quintile</b>									
Lowest	3.9	13.9	539	*	21	(25.6)	75	3.7	612
Second	5.3	16.3	538	*	29	12.3	88	3.4	608
Middle	3.4	14.8	513	*	18	(29.9)	76	3.6	586
Fourth	1.2	10.6	568	*	7	16.4	60	3.8	633
Highest	3.5	19.7	571	*	20	10.3	114	3.1	662
Total	3.5	15.1	2,729	16.1	94	18.0	413	3.5	3,102

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

<sup>1</sup> Sexual intercourse with a partner who neither was a spouse nor who lived with the respondent

**Table 13.7.2: Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men**

*Among men age 15+ who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months; and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse; and the mean number of sexual partners during his lifetime for men who ever had sexual intercourse, by background characteristics, Solomon Islands 2007*

Background characteristic	Among men who had sexual intercourse in the past 12 months:			Among men who had 2+ partners in the past 12 months:		Among men who had higher risk intercourse in the past 12 months:		Among men who ever had sexual intercourse	
	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months <sup>1</sup>	Number	Percentage who reported using a condom during last sexual intercourse	Number	Percentage who reported using a condom at last higher-risk intercourse	Number	Mean number of sexual partners in lifetime	Number
<b>Age</b>									
15-24	21.6	78.9	360	39.1	78	25.6	283	8.2	420
..15-19	17.4	98.8	123	(54.2)	21	30.2	121	6.1	153
..20-24	23.8	68.5	237	33.3	56	22.0	162	9.3	266
25-29	7.6	32.9	224	*	17	32.8	74	11.0	251
30-39	3.2	8.3	454	(7.3)	15	17.0	38	11.9	455
40-49	1.3	2.3	214	*	3	*	5	10.3	212
<b>Marital status</b>									
Never married	24.8	97.9	373	42.3	93	26.1	365	9.3	469
Married or living together	1.7	3.1	869	(13.1)	15	27.8	27	10.7	858
Divorced/separated/widowed	*	*	10	*	5	*	9	*	11
<b>Residence</b>									
Urban	15.1	39.1	225	27.8	34	31.1	88	9.3	256
Rural	7.6	30.4	1,027	40.8	78	24.5	312	10.5	1,082
<b>Region</b>									
Honiara	16.5	40.7	172	23.4	28	28.2	70	9.6	200
Guadalcanal	4.2	22.0	219	*	9	(19.3)	48	8.2	232
Malaita	10.9	23.2	267	*	29	(33.4)	62	8.6	281
Western	8.3	40.0	140	*	12	(11.8)	56	17.8	140
Other provinces	7.5	36.1	454	(54.4)	34	29.1	164	10.5	484
<b>Education</b>									
No education	7.3	18.9	70	*	5	*	13	5.9	70
Primary	6.1	24.3	595	(17.7)	36	14.7	144	10.2	641
Secondary	13.5	46.4	457	48.5	62	31.5	212	10.9	501
More than secondary	7.2	23.5	131	*	9	(44.2)	31	10.7	126

**Table 13.7.2 (continued)**

Background characteristic	Among men who had sexual intercourse in the past 12 months:			Among men who had 2+ partners in the past 12 months:		Among men who had higher risk intercourse in the past 12 months:		Among men who ever had sexual intercourse	
	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months <sup>1</sup>	Number	Percentage who reported using a condom during last sexual intercourse	Number	Percentage who reported using a condom at last higher-risk intercourse	Number	Mean number of sexual partners in lifetime	Number
<b>Wealth quintile</b>									
Lowest	6.6	22.8	210	*	14	(10.1)	48	8.7	224
Second	2.9	31.2	238	*	7	21.5	74	8.5	258
Middle	9.4	31.4	238	*	22	(34.2)	75	9.6	247
Fourth	11.4	34.2	293	(53.0)	33	29.7	100	12.3	316
Highest	13.0	37.8	273	26.2	36	27.0	103	11.5	293
Total 15-49	9.0	32.0	1,252	36.9	112	26.0	400	10.3	1,338
50+	0.6	1.1	236	*	1	*	3	6.2	395
Total men 15+	7.6	27.1	1,488	36.4	114	25.8	403	9.4	1,733

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

<sup>1</sup> Sexual intercourse with a partner who neither was a spouse nor who lived with the respondent

### 13.10 PAYMENTS FOR SEXUAL INTERCOURSE

The 2006/2007 SIDHS asked male respondents about whether they had paid money in exchange for sexual intercourse in the 12 months preceding the survey. Table 13.8 presents the percentage of men aged 15 and over who paid someone for sexual intercourse. These questions are important for determining the prevalence of commercial sex in Solomon Islands, which is considered to be a higher risk sexual behaviour.

Table 13.8 shows that overall, about 2% of men aged 15–49 paid money in exchange for sexual intercourse in the 12 months preceding the survey. Men aged 15–19 and in the second lowest wealth quintile are more likely to engage in commercial sex than men in other groups. There is also evidence that men in the fourth wealthiest quintile, men who have never married, men with only a primary level education, and men in urban areas (especially Honiara) and even Malaita Province are also involved in commercial sexual activities. Caution is emphasized when interpreting these results due to small number of cases.

**Table 13.8: Payment for sexual intercourse: Men**

*Percentage of men age 15+ reporting payment for sexual intercourse in the 12 months preceding the survey, by background characteristics, Solomon Islands 2007*

Background characteristic	Payment for sexual intercourse in 12 months preceding the survey	
	Percentage who paid for sexual intercourse	Number of men
<b>Age</b>		
15-24	2.8	596
..15-19	3.5	292
..20-24	2.1	304
25-29	2.2	266
30-39	1.0	505
40-49	0.4	247
<b>Marital status</b>		
Never married	2.5	660
Married or living together	1.3	939
Divorced/separated/widowed	0.9	14
<b>Residence</b>		
Urban	2.1	301
Rural	1.7	1,313
<b>Region</b>		
Honiara	2.3	240
Guadalcanal	1.0	249
Malaita	2.2	345
Western	0.4	181
Other provinces	2.1	599
<b>Education</b>		
No education	0.0	88
Primary	2.4	794
Secondary	1.4	593
More than secondary	0.6	138

## Chapter 13.8 (continued)

Background characteristic	Payment for sexual intercourse in 12 months preceding the survey	
	Percentage who paid for sexual intercourse	Number of men
Wealth quintile		
Lowest	0.8	281
Second	3.3	291
Middle	1.2	323
Fourth	2.5	353
Highest	1.1	366
Total 15-49	1.8	1,614
50+	0.1	442
Total men 15+	1.4	2,056

### 13.11 MALE CIRCUMSION

Given that the risk for HIV and AIDS transmission is higher among men who have not been circumcised, the 2006/2007 SIDHS asked male respondents about their circumcision status<sup>9</sup>. This question is important for assessing the risk in which AIDS can be acquired and or transmitted in Solomon Islands. Table 13.9 presents the percentage of male respondents who are circumcised.

Overall, only 4.4% of men are circumcised. About 45% of Polynesian men are circumcised while only 3% of other Melanesian men are circumcised. This finding clearly indicates that the risk for acquiring HIV and AIDS is higher among Melanesian men than men from other ethnic groups.

There is also evidence that while there is a relatively high proportion of circumcised men in Honiara, the lowest proportion is observed among men with no education, among men from Guadalcanal and Malaita provinces, men in rural areas, and young men aged 15–19. However caution is emphasized in interpreting these results by background characteristics due to very small number of cases.

<sup>9</sup> <http://www.cdc.gov/hiv/resources/factsheets/PDF/circumcision.pdf>

**Table 13.9: Male circumcision**

*Percentage of men age 15-49 who report having been circumcised, by background characteristics, Solomon Islands 2007*

Background characteristic	Percentage circumcised	Number of men
<b>Age</b>		
15-24	4.3	596
..15-19	3.7	292
..20-24	4.8	304
25-29	4.2	266
30-39	3.9	505
40-49	6.3	247
<b>Residence</b>		
Urban	6.1	301
Rural	4.0	1,313
<b>Region</b>		
Honiara	7.7	240
Guadalcanal	1.4	249
Malaita	1.4	345
Western	3.0	181
Other provinces	6.5	599
<b>Ethnicity</b>		
Melanesian	2.9	1,566
Polynesian	44.5	26
Micronesian	(70.9)	17
Other	*	3
<b>Education</b>		
No education	0.8	88
Primary	3.0	794
Secondary	6.3	593
More than secondary	6.8	138
Total 15-49	4.4	1,614
50+	0.0	442
Total men 15+	3.5	2,056

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

### **13.12 SEXUALLY TRANSMITTED INFECTIONS (STI) PREVALENCE AND SYMPTOMS**

Sexually transmitted infections (STIs) are a global cause of acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for millions of men, women and infants. The impact of this disease is magnified by its potential to facilitate the spread of HIV.

The 2006/2007 SIDHS included questions to measure the extent to which STIs have been diagnosed among women and men who had sexual intercourse in the 12 months preceding the survey. All respondents who had ever had sex were asked if they had had an STI or symptoms of an STI (including a bad-smelling/abnormal genital discharge and a genital sore or ulcer) in the 12 months preceding the survey. Table 13.10 presents the percentage of women aged 15–49 and men aged 15 and over who have been diagnosed with an STI or have symptoms of an STI in the 12 months prior to the survey by background characteristics.

Overall, 1.3% of women and 2.5% of men had an STI in the 12 months preceding the survey. A further 1.7% of women and 2.4% of men reported a bad smelling and/or abnormal genital discharge in the 12 months prior to the survey, and a very small percentage of women (0.7%) and men (1.5%) reported a genital sore or ulcer in the 12 months preceding the survey.

Women aged 15–19 have the highest prevalence of STIs, followed by women aged 20–24. For men, STI prevalence is highest among those aged 15–25. This result clearly indicates that STIs are more likely to be prevalent among younger women and men than older age groups. STIs prevalence is more common among rural women and among urban men. Western men are more likely to report higher prevalence of STIs than men from other provinces. STIs and STIs symptoms are slightly higher among women and men with lower educational background.



**Table 13.10: Self-reported prevalence of sexually-transmitted infections (STIs) and STIs symptoms**

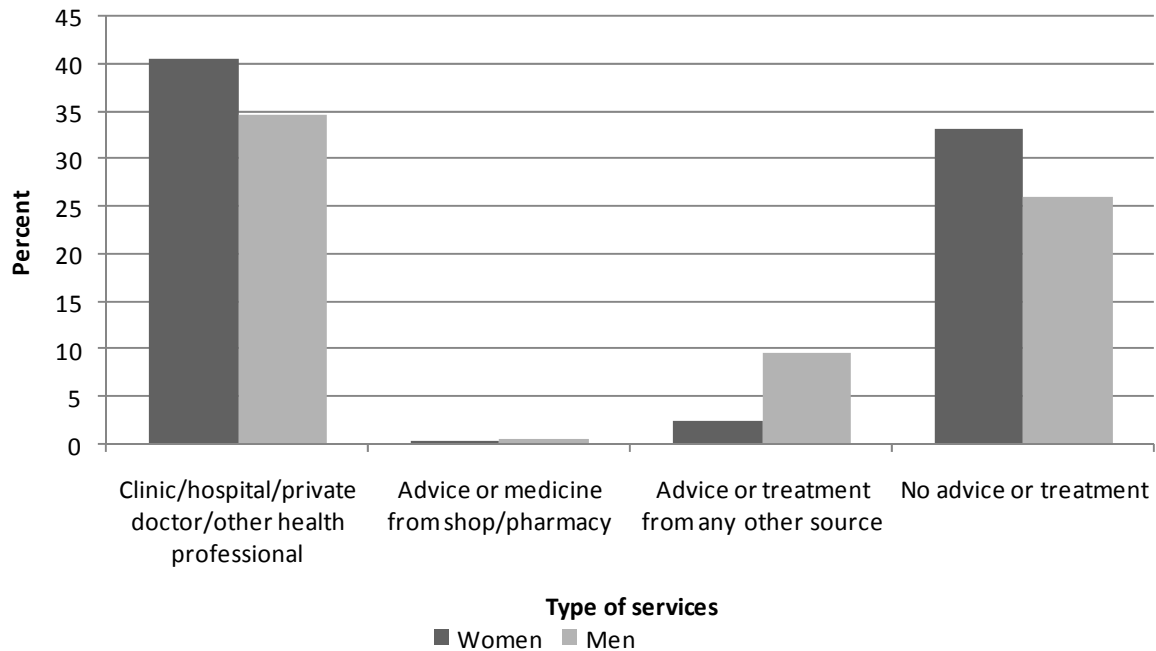
*Among women age 15-49 and men age 15+ who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Solomon Islands 2007*

Background characteristic	Women					Men				
	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/sore or ulcer	Number of respondents who ever had sexual intercourse	STI	Bad smelling/ 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	2.0	3.3	1.6	4.5	986	4.5	4.0	2.3	5.3	439
..15-19	3.3	5.1	0.3	5.5	365	2.5	3.3	3.6	3.8	155
..20-24	1.2	2.2	2.4	4.0	621	5.6	4.4	1.5	6.1	284
25-29	1.5	1.6	0.4	2.7	698	3.7	3.8	2.2	5.1	261
30-39	0.9	0.9	0.3	1.5	1,065	1.2	1.1	1.3	2.1	502
40-49	0.5	0.9	0.2	1.3	604	0.4	0.7	0.0	1.1	246
<b>Marital status</b>										
Never married	2.4	2.8	0.2	3.7	655	5.1	4.6	2.5	6.0	495
Married or living together	1.0	1.2	0.7	2.1	2,560	1.1	1.0	0.9	2.0	939
Divorced/separated/widowed	0.6	6.6	1.9	6.6	138	*	*	*	*	14
<b>Male circumcision</b>										
Circumcised	na	na	na	na	0	1.7	3.4	2.8	4.0	70
<b>Residence</b>										
Urban	0.8	0.5	0.4	1.2	527	3.6	2.8	2.3	4.4	272
Rural	1.3	2.0	0.7	2.9	2,825	2.3	2.3	1.4	3.2	1,177
<b>Region</b>										
Honiara	1.1	0.7	0.6	1.6	390	2.7	1.6	1.0	3.6	215
Guadalcanal	1.5	1.4	0.1	2.3	555	1.6	1.6	1.6	1.6	238
Malaita	1.2	1.3	0.6	2.0	715	2.3	2.1	2.0	4.9	296
Western	1.4	0.0	0.0	1.4	417	5.1	5.7	4.8	6.9	170
Other provinces	1.2	3.0	1.3	3.8	1,276	2.2	2.2	0.4	2.3	529
<b>Education</b>										
No education	1.0	0.1	0.1	1.0	461	3.9	3.6	2.8	7.2	75
Primary	1.3	2.4	1.0	3.5	1,934	1.9	2.0	1.5	2.6	709
Secondary	1.3	1.2	0.5	1.5	849	3.2	3.2	1.7	4.2	529
More than secondary	0.7	1.0	0.3	1.0	108	2.5	0.4	0.2	2.9	135
Total 15-49	1.3	1.7	0.7	2.6	3,353	2.5	2.4	1.5	3.5	1,448
50+	na	na	na	na	0	0.5	0.0	0.0	0.5	440
Total men 15+	na	na	na	na	0	2.1	1.8	1.2	2.8	1,888

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed  
na = Not applicable

Figure 13.2 shows the proportion of women and men who had a diagnosed STI or STI symptoms in the 12 months preceding the survey, and who also sought advice and or medical treatment. As shown, about 40% of women and 35% of men who had an STI or STI symptoms sought medical advice or treatment at a clinic/hospital/private doctor or some other healthcare facility, while 33% of women and 26% of men who also had an STI or STI symptoms did not seek medical advice or treatment.

**Figure 13.2: Proportion of women and men aged 15–49 reporting an STI or STI symptoms who sought medical advice or treatment**



### 13.13 PREVALENCE OF MEDICAL INJECTIONS

The 2006/2007 SIDHS asked all respondents of women aged 15–49 and men aged 15 and older 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 or unopened package by background characteristics. The results are shown in Table 13.11. About 26% of men and 12% of women received at least one medical injection, with an average of about 1.1 and 0.5 medical injections received by men and women, respectively, in the 12 months preceding the survey.

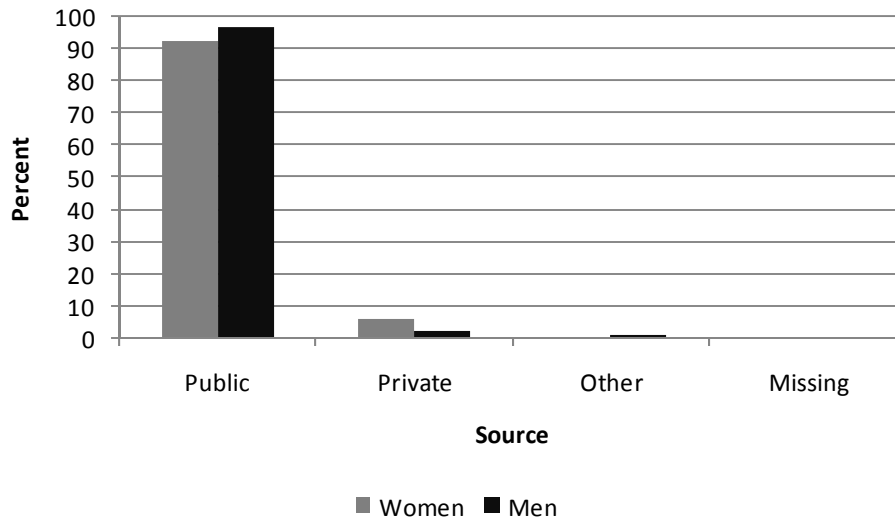
Table 13.11 shows that the prevalence of medical injections varies the most among men across all provinces. For instance, among men in Malaita who had an STI in the 12 months preceding the survey, only 9% received at least one injection, whereas 24% of men in Guadalcanal and Western provinces (equally) received at least one injection. Among women, prevalence is lowest in Honiara, followed by Western Province.

Rural residents are more likely than urban residents to have received at least one injection in the 12 months preceding the survey. Among the various age groups, there is no significant differences in the percentage of women and men receiving an injection, and there is no consistent pattern observed across the wealth quintiles.

Table 13.11 also shows that almost 100% of the needles used in all medical injections were taken from a new, unopened package, indicating that Solomon Islands continues to provide safe STI healthcare practices.

The majority of medical injections received by both women and men with an STI or STI symptoms in the 12 months preceding the survey were given at public healthcare facilities, most probably at a rural health centre (see Fig. 13.3).

**Figure 13.3: Source of last medical injection**



**Table 13.11: Prevalence of medical injections**

Percentage of women age 15-49 and men age 15+ who received at least one medical injection in the 12 months prior the survey, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Solomon Islands 2007

Background characteristic	Women					Men				
	Percentage who received a medical injection in the 12 months prior the survey	Average number of medical injections per person in the 12 months prior the survey	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the 12 months prior the survey	Percentage who received a medical injection in the 12 months prior the survey	Average number of medical injections per person in the 12 months prior the survey	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the 12 months prior the survey
<b>Age</b>										
15-24	10.9	0.5	1,404	96.4	154	23.4	0.9	596	99.4	139
..15-19	11.9	0.6	687	98.6	82	20.8	0.7	292	(100.0)	61
..20-24	10.0	0.4	716	94.0	72	25.8	1.0	304	98.9	79
25-29	11.1	0.5	729	93.5	81	23.8	1.0	266	99.8	63
30-39	13.6	0.5	1,082	96.8	147	27.5	1.1	505	97.7	139
40-49	10.1	0.5	609	100.0	61	33.1	1.5	247	99.6	82
<b>Residence</b>										
Urban	10.2	0.5	636	95.1	65	13.8	0.6	301	95.7	41
Rural	11.9	0.5	3,187	96.8	378	29.1	1.2	1,313	99.3	382
<b>Region</b>										
Honiara	8.3	0.4	481	92.1	40	16.3	0.7	240	95.4	39
Guadalcanal	11.7	0.6	637	97.5	74	24.0	1.1	249	100.0	60
Malaita	11.2	0.5	840	97.6	94	8.7	0.5	345	*	30
Western	9.5	0.3	458	(88.4)	44	24.1	1.0	181	(94.9)	44
Other provinces	13.5	0.6	1,407	98.4	191	41.9	1.5	599	99.8	251
<b>Education</b>										
No education	11.5	0.6	520	(100.0)	60	16.8	1.1	88	*	15
Primary	11.3	0.5	2,114	97.9	240	27.8	1.1	794	99.5	221
Secondary	12.2	0.6	1,067	92.3	131	26.8	1.1	593	98.2	159
More than secondary	10.3	0.4	122	*	13	20.5	0.7	138	(99.5)	28

**Table 13.11 (continued)**

Background characteristic	Women					Men				
	Percentage who received a medical injection in the 12 months prior the survey	Average number of medical injections per person in the 12 months prior the survey	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the 12 months prior the survey	Percentage who received a medical injection in the 12 months prior the survey	Average number of medical injections per person in the 12 months prior the survey	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the 12 months prior the survey
<b>Wealth quintile</b>										
Lowest	12.2	0.5	696	98.6	85	28.0	1.1	281	(100.0)	79
Second	15.4	0.7	755	97.2	116	31.8	1.3	291	100.0	93
Middle	9.0	0.4	738	99.3	66	24.9	0.9	323	99.2	80
Fourth	12.1	0.6	769	99.3	93	27.3	1.1	353	98.7	96
Highest	9.4	0.4	864	87.9	82	20.5	0.9	366	96.5	75
Total 15-49	11.6	0.5	3,823	96.5	442	26.2	1.1	1,614	98.9	423
Total men 15+	na	na	na	na	0	26.4	1.1	2,056	98.9	542

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist or other health worker.

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

na = Not applicable

## **13.14 COMPREHENSIVE KNOWLEDGE ABOUT AIDS AND SOURCES OF CONDOMS AMONG YOUTH**

Comprehensive knowledge about AIDS is defined as knowing that: 1) people can reduce the chances of getting AIDS if condoms are used consistently during sexual intercourse or having just one uninfected faithful partner; 2) a healthy-looking person can have AIDS; and 3) HIV cannot be transmitted by mosquito bites, supernatural means or by sharing food with a person infected with the virus.

This section addresses HIV- and AIDS-related knowledge and behaviour among young adults aged 15–24. Special attention is paid to this group because of the high percentage of young people in Solomon Islands' population. In addition to knowledge about HIV transmission, data are presented on age at first sexual intercourse, condom use, age differences between sexual partners, forced sex, sex related to alcohol use, and voluntary counselling and testing for HIV.

Young respondents were asked the same set of questions as other respondents on facts and beliefs about HIV transmission. Information on the overall level of knowledge about major methods of avoiding HIV and rejection of major misconceptions are shown in earlier tables in this chapter. Table 13.12 presents the percentage of young adults aged 15–24 with a comprehensive knowledge about AIDS as well as knowledge about where to get condoms, by background characteristics.

Table 13.12 shows that overall, the proportion of young people who have a comprehensive knowledge of AIDS is higher for young men (35%) than for young women (29%). Overall, 81% of men stated that they knew of a source for condoms compared with only 46% of women. This suggests a need to increase awareness among young women on sources of condoms within the community.

Although there is no substantial difference in the level of knowledge about HIV by age characteristics, the level of knowledge among both young men and women increases with age, such that the proportion of comprehensive knowledge is higher among older youth than among younger youth.

Men in urban areas have the most comprehensive knowledge about AIDS whereas men in rural areas are more likely to know where to get condoms. Less than 50% of women in rural areas and about 2 in every 5 women in urban areas know where to get condoms. About 34% of women in urban areas and 28% of women in rural areas have a comprehensive knowledge about AIDS.

The level of knowledge for women does not vary although in Western Province, 49% of women are knowledgeable about AIDS and preventative measures compared with only 23% of women in Malaita Province. Men in Guadalcanal province are more aware about AIDS and how it can be prevented compared to only 14% of men in Western province.

As Table 13.12 shows, the level of knowledge about HIV and AIDS among women increases with educational attainment. Knowledge about HIV and AIDS is lowest among women with no education at all compared with women who have more than a secondary education.

### **13.14.1 Knowledge of condom source among young adults**

Condom use among young adults plays an important role in preventing the transmission of HIV and other STIs, as well as unwanted pregnancies. Knowledge about where to go for condoms helps young adults to obtain and use condoms. Table 13.12 shows that 46% of young women and 81% of young men reported that they knew where to get condoms.

**Table 13.12: Comprehensive knowledge about AIDS and sources of condoms among youth**

*Percentage of young women and young men aged 15–24 with a comprehensive knowledge about AIDS, and the percentage with knowledge of where to get condoms, by background characteristics, Solomon Islands 2007*

Background characteristic	Women aged 15–24			Men aged 15–24		
	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of women	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of men
<b>Age</b>						
15–19	28.6	38.8	687	26.4	74.5	292
..15–17	29.2	36.5	429	25.0	69.0	181
..18–19	27.7	42.5	258	28.7	83.6	111
20–24	30.0	53.0	716	43.5	87.2	304
..20–22	28.6	51.1	415	44.6	86.0	194
..23–24	31.9	55.6	301	41.6	89.5	110
<b>Marital status</b>						
Never married	30.1	44.5	928	33.5	79.8	518
..Ever had sex	30.4	54.8	510	35.9	88.1	361
..Never had sex	29.9	31.9	418	28.1	60.5	156
Ever married	27.7	49.0	476	45.8	89.2	78
<b>Residence</b>						
Urban	34.3	37.3	281	52.4	76.1	114
Rural	28.1	48.2	1,123	31.0	82.2	482
<b>Region</b>						
Honiara	33.2	30.5	211	56.9	74.4	98
Guadalcanal	35.0	38.1	234	59.9	80.1	68
Malaita	22.7	42.5	286	38.9	79.8	130
Western	49.0	69.4	170	14.5	80.0	68
Other provinces	22.1	50.4	502	22.5	85.1	231
<b>Education</b>						
No education	16.1	17.0	103	(56.8)	(80.4)	29
Primary	22.3	39.8	604	24.1	73.0	241
Secondary	37.3	55.4	663	39.6	86.9	306
More than secondary	37.0	62.8	33	*	*	19
<b>Wealth quintile</b>						
Lowest	17.3	45.5	208	34.7	74.7	104
Second	29.1	46.9	268	18.9	88.9	102
Middle	31.3	45.5	280	33.2	83.4	130
Fourth	27.1	49.6	284	33.9	81.8	123
Highest	36.5	43.3	364	50.4	77.0	137
Total 15–24	29.3	46.0	1,404	35.1	81.0	596

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Comprehensive knowledge means knowing that consistently using condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1 and 13.3.2.

<sup>2</sup> For this table, the following responses are not considered sources for condoms: friends, family members and home.

### **13.15 AGE AT FIRST SEXUAL INTERCOURSE AMONG YOUTH**

Early engagement in sexual behaviour exposes young women to the risk of early pregnancy and exposes both young women and men to the risk of STIs, and HIV infection and transmission. Early pregnancy contributes to high fertility levels as well as maternal, infant and child deaths, while early age HIV infection contributes to high levels of mortality. Since HIV transmission occurs predominantly through heterosexual intercourse between an infected and non-infected person, age at first intercourse marks the time when most individuals are first exposed to the risk of acquiring HIV.

Table 13.13 shows the percentages of young women and men who had sexual intercourse before reaching age 15 and age 18, by background characteristics. Equal proportions of young women and men aged 15–24 (12%) reported that their first sexual intercourse occurred before they turned 15; 51% of young women and 55% of young men reported that their first sexual intercourse occurred before they turned 18.

Young women and men aged 15–19 (15% and 16%, respectively) were more likely to have had their first sexual intercourse before they turned 15 than women and men aged 20–24 (10% and 8%, respectively). The proportions of those who had their first sexual intercourse before age 18 were also higher in the lowest age group as compared with the upper age group. For example, 57% of women between the ages of 18 and 19 had their first sexual intercourse before age 18, compared with 49% of women aged 20–24. About 59% of young men aged 18–19 had their first sexual intercourse before age 18 compared with 53% of men aged 20–24. The findings clearly indicates a need for sex education for younger women and men aged 15-19 to enable them to protect themselves from sexual transmission infections including AIDS, given that a large proportion of young adults have been exposed to sexual behaviours before age 15 years.

Findings of the 2006/2007 SIDHS show that ever-married women are more likely to have had their first sexual intercourse before age 15 (17%) and before age 18 (63%) than never-married women. Men on the other hand demonstrated the opposite trend.

Table 13.13 shows a higher proportion of rural women reported sex before 15 years and 18 years compared with urban women and also indicates the low proportion of women from Honiara reported sex before age 15 compared to other areas.

Findings of the 2006/2007 SIDHS also reveal that the proportion of women who had their first sexual intercourse before age 15 and age 18 decreases as the wealth quintile increases, suggesting that young women from low wealth quintile households are more likely to engage in early sexual behaviours than young women from upper (and the highest) wealth quintile households. For men, the proportion who had their first sexual intercourse before age 15 and age 18 increases with wealth quintile, which may indicate that men in upper or higher wealth quintile households are more likely to engage early in sexual behaviour than men from lower wealth quintile households.



**Table 13.13: Age at first sexual intercourse among youth**

*Percentage of young women and of young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and of young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Solomon Islands 2007*

Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (age 15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (age 18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (age 15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (age 18-24)
<b>Age</b>								
15-19	14.9	687	na	na	16.0	292	na	na
..15-17	15.5	429	na	na	14.4	181	na	na
..18-19	13.9	258	56.8	258	18.7	111	59.1	111
20-24	9.9	716	49.0	716	8.1	304	53.3	304
..20-22	10.1	415	46.2	415	5.2	194	49.9	194
..23-24	9.5	301	53.0	301	13.3	110	59.3	110
<b>Marital status</b>								
Never married	10.1	928	40.5	522	12.8	518	56.2	337
Ever married	16.6	476	63.3	453	6.3	78	48.9	78
<b>Knows condom source<sup>1</sup></b>								
Yes	12.5	646	54.8	489	13.3	483	56.3	358
No	12.2	758	47.3	485	6.5	113	45.3	57
<b>Residence</b>								
Urban	6.5	281	38.5	199	12.0	114	55.1	79
Rural	13.8	1,123	54.3	776	12.0	482	54.8	335
<b>Region</b>								
Honiara	4.7	211	33.0	150	12.0	98	56.5	72
Guadalcanal	12.8	234	59.0	160	22.2	68	59.1	46
Malaita	8.9	286	47.2	211	5.0	130	38.8	95
Western	14.2	170	64.7	100	11.6	68	(64.6)	50
Other provinces	16.6	502	53.7	353	13.0	231	59.6	151
<b>Education</b>								
No education	7.5	103	37.7	75	(0.0)	29	*	23
Primary	20.0	604	62.9	406	10.0	241	53.6	136
Secondary	6.7	663	43.7	461	15.5	306	58.8	237
More than secondary	0.0	33	39.6	32	*	19	*	19

**Table 13.3 (continued)**

Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (age 15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (age 18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (age 15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (age 18-24)
Wealth quintile								
Lowest	16.8	208	61.8	143	8.5	104	(50.6)	69
Second	16.8	268	51.3	167	7.8	102	58.4	82
Middle	14.3	280	49.8	205	14.2	130	52.5	80
Fourth	8.4	284	55.6	204	13.7	123	57.7	89
Highest	8.0	364	42.4	256	14.1	137	54.2	95
Total	12.3	1,404	51.1	975	12.0	596	54.8	415

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

na = Not available

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

### **13.16 CONDOM USE AT FIRST SEXUAL INTERCOURSE AMONG YOUTH**

In order to measure the extent to which condoms are used at first sexual intercourse among youth, the 2006/2007 SIDHS included questions that asked young women and men aged 15–24 about whether they used a condom the first time they had sexual intercourse. Results for this question are presented in Table 13.14.

Overall, only 14% of women and 15% of men aged 15–24 used a condom the first time they had sexual intercourse. Young women and men aged 15–19 are more likely to use a condom at first sex than those aged 20–24.

The prevalence of condom use at first sex was higher for never married women compared with ever married women. Data show that about 18% of never married women reported using condom at first sex as compared to about 11% of those ever married women.

Findings also show that condom use is lower among women (8%) and men (10%) aged 15–24 who do not know where to get condoms, and higher among women (20%) and men (15%) who do know where to get condoms. This clearly indicates that there is a need to increase the availability and accessibility of condoms to young adults.

Table 13.14 shows that the proportion of young adults aged 15–24 who used a condom at first sex intercourse increases with educational attainment, indicating that the higher the education level, the greater is the knowledge about ways to reduce the risk of getting HIV and AIDS.

**Table 13.14: Condom use at first sexual intercourse among youth**

*Among young women and young men age 15-24 who have ever had sexual intercourse, percentage who used a condom the first time they had sexual intercourse, by background characteristics, Solomon Islands 2007*

Background characteristic	Women age 15-24		Men age 15-24	
	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	19.0	365	21.7	155
..15-17	7.7	178	22.7	79
..18-19	29.7	187	20.8	76
20-24	11.3	621	11.1	284
..20-22	11.0	346	10.0	177
..23-24	11.7	276	12.9	107
<b>Marital status</b>				
Never married	17.5	510	17.0	361
Ever married	10.5	476	4.7	78
<b>Knows condom source<sup>1</sup></b>				
Yes	19.5	513	15.4	388
No	8.3	473	10.3	51
<b>Residence</b>				
Urban	7.5	180	13.5	87
Rural	15.6	805	15.2	352
<b>Region</b>				
Honiara	10.6	128	13.0	76
Guadalcanal	15.1	156	8.9	58
Malaita	6.7	180	16.1	82
Western	9.8	130	(2.0)	57
Other provinces	19.7	391	21.5	167
<b>Education</b>				
No education	11.0	57	*	22
Primary	12.5	450	7.8	158
Secondary	16.2	454	19.6	243
More than secondary	(12.3)	25	*	17
<b>Wealth quintile</b>				
Lowest	25.2	164	(2.7)	69
Second	11.8	184	31.0	90
Middle	14.0	187	12.4	78
Fourth	12.2	213	10.6	100
Highest	10.2	238	14.9	103
Total	14.1	986	14.8	439

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

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

### **13.17 PREMARITAL SEXUAL INTERCOURSE AND CONDOM USE**

Premarital sexual intercourse in this section refers to a sexual relationship that occurs among never married women and men. Table 13.15 shows the proportion of never-married women and men aged 15–24 who have never had sexual intercourse, and the proportion of never-married women and men who had sexual intercourse in the 12 months preceding the survey (premarital sexual intercourse). The table also presents the proportion of those who had premarital sexual intercourse but used a condom at their last sexual intercourse.

Overall, 45% of never-married women and 30% of never-married men had never had sexual intercourse, and about 36% of never-married women and 55% of never-married men had sexual intercourse in the 12 months preceding the survey. Of the never married women and men who had sexual intercourse in the 12 months preceding the survey, 17% of women used a condom at their last sexual contact while more than one-quarter of never-married men used a condom at their last sexual contact.

The proportion of never-married women who had sexual intercourse in the 12 months preceding the survey decreases as the wealth quintile increases, with more than 50% of never-married women in the lowest wealth quintile having had sexual intercourse compared with one-third of never-married women from the highest wealth quintile. Men in the corresponding marital status did not show any association with their wealth quintiles.

Condom use at last sexual intercourse is very low across all other groups, with the lowest proportion being among women and men aged 18–19, among men aged 23–24, and among men with more than a secondary education.

**Table 13.15: Premarital sexual intercourse and condom use during premarital sexual intercourse among youth**

*Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Solomon Islands 2007*

Background characteristic	Never-married women age 15-24					Never-married men age 15-24				
	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married women	Among women who had sexual intercourse in the past 12 months		Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Among men who had sexual intercourse in the past 12 months	
				Percentage who used condom at last sexual intercourse	Number of women				Percentage who used condom at last sexual intercourse	Number of men
<b>Age</b>										
15-19	53.6	32.5	601	11.9	195	47.0	41.9	291	30.1	122
..15-17	61.9	27.8	406	15.5	113	56.5	35.7	181	43.0	65
..18-19	36.4	42.2	196	7.1	83	31.2	52.3	109	15.6	57
20-24	29.2	41.1	326	23.9	134	8.8	72.3	227	22.0	164
..20-22	30.7	44.3	227	24.4	101	11.4	65.6	152	25.1	100
..23-24	25.7	34.0	99	(22.1)	34	3.3	85.9	75	17.1	64
<b>Knows condom source<sup>1</sup></b>										
Yes	32.3	44.8	413	19.3	185	22.9	63.0	413	26.5	260
No	55.2	28.1	515	13.5	145	59.0	24.5	105	(15.4)	26
<b>Residence</b>										
Urban	48.8	30.2	205	10.3	62	26.1	54.2	102	29.9	55
Rural	44.0	37.0	722	18.3	268	31.2	55.5	416	24.4	231
<b>Region</b>										
Honiara	53.4	25.6	155	14.2	40	25.9	52.6	87	26.9	46
Guadalcanal	53.3	33.3	146	(10.5)	49	18.9	66.5	53	(25.3)	35
Malaita	66.5	19.2	160	*	31	46.4	41.2	105	*	43
Western	30.9	52.4	128	21.2	67	18.1	67.6	62	(11.9)	42
Other provinces	32.9	42.4	338	18.8	143	30.3	56.8	211	27.8	120
<b>Education</b>										
No education	71.3	18.8	65	*	12	39.1	*	20	*	10
Primary	46.1	41.0	334	11.3	137	40.1	44.4	207	9.3	92
Secondary	41.4	33.1	504	23.3	167	23.2	62.2	272	31.1	169
More than secondary	(35.5)	(54.8)	25	*	14	13.1	*	19	*	15

**Table 13.5 (continued)**

Background characteristic	Never-married women age 15-24					Never-married men age 15-24				
	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married women	Among women who had sexual intercourse in the past 12 months		Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Among men who had sexual intercourse in the past 12 months	
				Percentage who used condom at last sexual intercourse	Number of women				Percentage who used condom at last sexual intercourse	Number of men
<b>Wealth quintile</b>										
Lowest	36.4	51.1	120	(26.5)	62	38.0	(44.5)	90	*	40
Second	41.7	36.8	202	14.5	74	13.9	67.0	91	(24.5)	61
Middle	54.0	31.5	173	(24.8)	54	48.9	37.5	107	(29.4)	40
Fourth	44.5	30.5	159	10.6	48	22.3	71.9	102	32.6	74
Highest	46.0	33.2	274	10.6	91	26.9	56.0	127	26.0	71
Total	45.0	35.5	928	16.8	330	30.2	55.2	518	25.5	286

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

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

### **13.18 HIGHER-RISK SEX AMONG YOUTH**

HIV is commonly transmitted through higher-risk sex, which involves sexual relationships with partners who are neither a spouse nor a cohabiting partner. Youth are more likely to engage in temporary sexual relationships than are older adults, which expose them to STIs and HIV infection. Condom use among young adults plays an important role in preventing the transmission of HIV and other STIs, as well as unwanted pregnancies. Knowing where to get condoms helps young adults obtain and use them.

Table 13.16.1 shows the percentage of young women aged 15–24 who either had sexual intercourse or higher-risk sexual intercourse in the 12 months preceding the survey, and among them, the percentage who used a condom at last high-risk intercourse, by background characteristics.

More than 40% of young women aged 15–24 who had sexual intercourse in the 12 months preceding the survey had higher-risk sexual intercourse, and only 17% of these women used a condom during their last higher-risk intercourse. Table 13.16.1 shows that 38% of women aged 15–24 who had sexual intercourse in the 12 months preceding the survey did not know where to get a condom.

Table 13.16.1 also shows that condom use among young women aged 15–24 who have been involved in higher-risk intercourse in the 12 months preceding the survey is generally very low, with the lowest proportion of condom use at last higher-risk sex being among women aged 18–19. Overall, higher proportions of young men aged 15–24 had higher-risk sex compared with young women.

Table 13.16.2 shows that nearly 80% of young men aged 15–24 who had sexual intercourse in the 12 months preceding the survey had higher-risk intercourse. Of those young men who were involved in higher-risk behaviour, only 26% used a condom during their last higher-risk intercourse. Higher-risk sexual behaviour is widespread among young men aged 15–24 but is universal among young teenage men aged 15–17.



**Table 13.16.1: Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months: Women**

*Among young women age 15-24 who had sexual intercourse in the 12 months preceding the survey, the percentage who had higher-risk sexual intercourse in the past 12 months, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Solomon Islands 2007*

Background characteristic	Among women age 15-24 who had sexual intercourse in the 12 months preceding the survey:		Among women age 15-24 who had higher risk intercourse in the 12 months preceding the survey:	
	Percentage who had higher-risk intercourse in the 12 months preceding the survey <sup>1</sup>	Number of women	Percentage who reported using a condom at last higher-risk intercourse <sup>1</sup>	Number of women
<b>Age</b>				
15-19	68.3	272	12.6	186
..15-17	87.2	129	15.5	113
..18-19	51.1	143	8.0	73
20-24	29.8	497	21.4	148
..20-22	38.7	276	23.0	107
..23-24	18.6	221	(17.5)	41
<b>Marital status</b>				
Never married	96.0	330	17.4	317
Ever married	3.9	440	*	17
<b>Knows condom source<sup>2</sup></b>				
Yes	47.9	403	18.5	193
No	38.4	366	13.7	141
<b>Residence</b>				
Urban	47.6	129	9.9	61
Rural	42.5	640	18.0	272
<b>Region</b>				
Honiara	44.4	90	13.5	40
Guadalcanal	38.1	129	(10.5)	49
Malaita	19.8	155	*	31
Western	65.3	104	21.1	68
Other provinces	50.1	292	18.4	146
<b>Education</b>				
No education	(17.4)	48	*	8
Primary	37.9	386	10.6	146
Secondary	52.9	315	23.4	166
More than secondary	(60.4)	21	*	13
<b>Wealth quintile</b>				
Lowest	42.1	143	(27.0)	60
Second	53.1	136	(14.9)	72
Middle	38.6	152	(23.1)	58
Fourth	30.5	163	10.3	50
Highest	53.0	175	10.1	93
Total 15-24	43.4	769	16.5	334

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

<sup>1</sup> Sexual intercourse with a partner who neither was 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

**Table 13.16.2: Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months: Men**

*Among young men age 15-24 who had sexual intercourse in the 12 months preceding the survey, the percentage who had higher-risk sexual intercourse in the past 12 months, 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, Solomon Islands 2007*

Background characteristic	Among men age 15-24 who had sexual intercourse in the 12 months preceding the survey:		Among men age 15-24 who had higher risk intercourse in the 12 months preceding the survey:	
	Percentage who had higher-risk intercourse in the 12 months <sup>1</sup>	Number of men	Percentage who reported using a condom at last higher-risk intercourse <sup>1</sup>	Number of men
<b>Age</b>				
15-19	98.8	123	30.2	121
..15-17	100.0	65	43.0	65
..18-19	97.4	58	15.7	57
20-24	68.5	237	22.0	162
..20-22	68.8	138	25.0	95
..23-24	68.1	98	17.8	67
<b>Marital status</b>				
Never married	97.6	286	25.5	279
Ever married	5.9	73	*	4
<b>Knows condom source<sup>2</sup></b>				
Yes	79.1	326	26.4	258
No	(76.1)	34	(16.6)	26
<b>Residence</b>				
Urban	85.7	66	30.4	57
Rural	77.3	293	24.3	227
<b>Region</b>				
Honiara	83.1	56	28.0	47
Guadalcanal	63.3	50	(22.7)	32
Malaita	(62.8)	69	*	43
Western	(87.2)	48	(11.9)	42
Other provinces	88.0	137	28.3	120
<b>Education</b>				
No education	*	20	*	10
Primary	74.9	124	9.8	93
Secondary	82.7	200	31.2	166
More than secondary	*	15	*	15
<b>Wealth quintile</b>				
Lowest	(74.5)	53	*	40
Second	(87.6)	70	(24.8)	61
Middle	(61.9)	63	(30.4)	39
Fourth	76.9	93	31.5	72
Highest	89.7	80	26.7	72
Total 15-24	78.9	360	25.6	283

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

<sup>1</sup> Sexual intercourse with a partner who neither was 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

### 13.19 AGE-MIXING IN SEXUAL RELATIONSHIPS

To examine age differences between sexual partners — the so-called cross-generational sexual partners — women aged 15–19 who had high-risk sex in the 12 months preceding the survey were asked about their partner’s age. In the event that they did not know a partner’s exact age, they were asked if the partner was older or younger than they were, and if older, whether the partner was 10 or more years older. Table 13.17 presents the age-mixing in sexual relationships among women aged 15–19.

Overall, 6% of teenage women aged 15–19 who had high-risk intercourse in the 12 months prior to the survey stated that their partner was a man who 10 years older than them.

**Table 13.17: Age-mixing in sexual relationships among women age 15-19**

*Percentage of women age 15-19 who had higher-risk sexual intercourse in the last 12 months with a man who was 10 or more years older than themselves, by background characteristics, Solomon Islands 2007*

Background characteristic	Percentage of women who had higher-risk intercourse with a man 10+ years older <sup>1</sup>	Number of women who had higher-risk intercourse in the last 12 months <sup>1</sup>
<b>Age</b>		
15-17	5.3	113
18-19	7.6	73
<b>Marital status</b>		
Never married	6.3	185
Ever married	*	1
<b>Knows condom source<sup>2</sup></b>		
Yes	5.8	98
No	6.7	88
<b>Residence</b>		
Urban	3.6	31
Rural	6.8	155
Total 15-19	6.2	186

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

<sup>1</sup> Sexual intercourse with a partner who neither was 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

### **13.20 DRUNKENNESS DURING SEXUAL INTERCOURSE AMONG YOUTH**

Engaging in sex under the influence of alcohol can impair judgment, compromise power relations, and increase risky sexual behaviour. Respondents who had sex in the 12 months preceding the survey were asked if they or their partner drank alcohol the last time they had sex with that partner, and whether they or their partner was drunk. Table 13.18 presents the percentage of young women and men aged 15–24 who had sexual intercourse in the 12 months preceding the survey while they were drunk or with a partner who was drunk, by background characteristics.

Overall a very small proportion (0.6%) of young women aged 15–24 were drunk during their last sexual intercourse while 5% of young men aged 15–24 were drunk during their last sexual intercourse in the 12 months preceding the survey. Approximately 5% of both young women and men aged 15–24 had sexual intercourse while drunk or with a partner who was drunk in the 12 months prior to the survey.

Table 13.18 also shows that women in urban areas, as well as women from the wealthiest quintile were more likely to have sexual intercourse under the influence of alcohol than other women. Although there is no substantial variation across all other groups, having sex under the influence of alcohol or with a partner who is also drunk is highest among young women from the lowest wealth quintile (10%), young women from Western Province (7.3%), young women with only a primary education (6.5%), and young women who know where to get condoms (6.2%).

The proportion of men having sexual intercourse under the influence of alcohol or with a partner who is also drunk is more common among young men in Honiara (12%), young men from the wealthiest quintile and from urban areas (equally account for 11%), and young men aged 20–24 (8%). Furthermore, the proportion of young adults having sexual intercourse under the influence of alcohol is also common among young women (7.1%) and men (5.4%) who know where to get condoms.

**Table 13.18: Drunkenness during sexual intercourse among youth**

*Among all young women and young men age 15-24, the percentage who had sexual intercourse in the past 12 months while being drunk and percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk, by background characteristics, Solomon Islands 2007*

Background characteristic	Women age 15-24			Men age 15-24		
	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents
<b>Age</b>						
15-19	0.3	5.4	687	1.8	2.1	292
..15-17	0.1	3.8	429	1.5	1.5	181
..18-19	0.6	8.0	258	2.3	3.0	111
20-24	1.0	5.2	716	8.1	8.1	304
..20-22	1.2	7.0	415	7.9	7.9	194
..23-24	0.7	2.6	301	8.4	8.4	110
<b>Marital status</b>						
Never married	0.8	6.2	928	4.6	4.7	518
Ever married	0.4	3.6	476	7.9	7.9	78
<b>Knows condom source<sup>1</sup></b>						
Yes	1.2	7.1	646	5.2	5.4	483
No	0.2	3.7	758	4.1	4.1	113
<b>Residence</b>						
Urban	2.2	5.3	281	10.0	10.7	114
Rural	0.2	5.3	1,123	3.8	3.8	482
<b>Region</b>						
Honiara	2.0	3.8	211	11.6	11.6	98
Guadalcanal	0.9	4.5	234	4.1	4.1	68
Malaita	0.0	3.5	286	5.1	5.1	130
Western	1.4	7.3	170	2.1	3.4	68
Other provinces	0.0	6.6	502	3.3	3.3	231
<b>Education</b>						
No education	0.0	1.4	103	(2.1)	(2.1)	29
Primary	0.4	6.5	604	5.2	5.2	241
Secondary	1.0	4.9	663	3.7	4.0	306
More than secondary	0.0	2.2	33	*	*	19

**Table 13.18 (continued)**

Background characteristic	Women age 15-24			Men age 15-24		
	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents
<b>Wealth quintile</b>						
Lowest	0.0	9.5	208	0.0	0.0	104
Second	0.0	8.0	268	1.1	1.1	102
Middle	0.0	1.5	280	3.7	3.7	130
Fourth	0.6	3.3	284	8.1	8.1	123
Highest	1.9	5.3	364	10.2	10.8	137
Total 15-24	0.6	5.3	1,404	5.0	5.2	596

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

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

## 13.21 KEY RESULTS

Knowledge about AIDS is nearly universal among adult Solomon Islanders. A very high proportion of both women and men have heard of the disease; however, men are more knowledgeable about it than women (98% and 94%, respectively). The results show that the level of knowledge is quite high for both women and men at different ages and marital status, place of residence, education levels and household wealth quintiles.

Men and women were specifically asked if it is possible to reduce the risk of acquiring HIV through consistently using condoms, limiting sexual intercourse to one uninfected partner, and abstaining from sexual intercourse. The results show that 61% of women and 69% of men agree that using a condom at every sexual intercourse can reduce the risk of getting the AIDS virus, while 80% of women and 95% of men agree that limiting sexual intercourse to one uninfected partner is a way to avoid contracting HIV and AIDS. Generally, most women and men know that abstaining from sex (77% women, 89% men) and using condoms (56% women, 68% men) are other ways to avoid contracting HIV and AIDS.

About 71% of women and 83% of men know that a healthy-looking person can have the AIDS virus. Knowledge that people cannot get the AIDS virus by mosquito bites is higher among men (72%) than women (63%), and knowledge that people cannot get AIDS by supernatural means is higher for men (71%) than for women (66%).

Women in urban areas are more likely to have a comprehensive knowledge about HIV and AIDS (38%) than women in rural areas (27%). Women who have ever had sex, have more than a secondary education, who live in Western Province, and who live in the wealthiest quintile households are more likely to have a comprehensive knowledge about HIV and AIDS than other women. Comprehensive knowledge is more common among men in urban areas who are currently married, who have more than a secondary education, who live in higher wealth quintile households, and who live in Guadalcanal Province than other men.

About 69% of women and 53% of men know that HIV can be transmitted from a mother to her child by breastfeeding. A very low proportion of women and men (each 6.7%) know that HIV can be transmitted through breastfeeding and that the risk of transmission can be reduced by special drugs. Less than one in ten women and men (8% and 9%, respectively) aged 15–49 know that there are special drugs that a doctor or nurse can give to an HIV-infected pregnant woman to reduce the risk of transmitting the virus to the baby.

Less women than men expressed positive attitudes and opinions toward a family member with AIDS. For example, 66% of women and 72% of men would not want to keep it a secret that a family member has AIDS while only 36% of women and over half of men (56%) are willing to care for an HIV-infected family member. Meanwhile, only 30% of women and 55% of men reported that they would buy vegetables from a shopkeeper who has the AIDS virus.

Almost the same proportion of women and men (more than 80%) in the 15–49 age group agree that a wife is justified in refusing to have sexual intercourse with her husband if she knows that he has an STI. Nearly the same proportion of women and men also agree that a wife is justified in refusing sexual intercourse or asking her husband to use a condom.

## **CHAPTER 14      WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES**

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The 2006/2007 SIDHS Women's Questionnaire collected data on the general background characteristics (e.g. age, education, wealth quintile and employment status) of female respondents, and also data that are more specific to women's empowerment, such as receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband or partner, and control over the use of her own earnings and those of her husband or partner.

The Women's Questionnaire also collected data on women's participation in household decision-making, on 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 participates, her opinion on the number of circumstances for which a woman is justified in refusing to have sexual intercourse with her husband or partner, and her opinion on the reasons that justify wife beating. The ranking of women on these three indices is then related to selected demographic and health outcomes, including contraceptive use; ideal family size and unmet need for contraception; the receipt of healthcare services during pregnancy, childbirth and the postnatal period; and survivorship of children.

### **14.1    EMPLOYMENT AND FORM OF EARNINGS**

Like education, employment can also 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 14.1 shows that 42.1% of currently married women aged 15–49 were employed during the last 12 months. In comparison, 87.1% of currently married men in the same age group were employed in the last 12 months. This indicates that there is still significant gender disparity in the employment sector. Women's vulnerable economic position is exacerbated by the fact that more than half (56.1%) of employed women are not paid for their work. On the other hand, only 21.7% of employed men aged 15–49 are not paid for their work. Men are much more likely than women to be paid in cash and in-kind. The high proportion of women who are not paid for their work is particularly concerning because domestic work — including caring for children, cooking and cleaning — is unpaid work. This creates a double burden for women.



**Table 14.1: Employment and cash earnings of currently married women and men**

Percentage of currently married women aged 15–49 and men aged 15+ who were employed at any time in the last 12 months, and the percent distribution of currently married women and men employed in the last 12 months by type of earnings, according to age, Solomon Islands 2007

Age	Currently married respondents:		Percent distribution of currently married respondents employed in the last 12 months, by type of earnings					Total	Number of respondents
	Percentage employed	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Missing		
<b>WOMEN</b>									
15–19	26.2	86	*	*	*	*	*	100.0	22
20–24	33.7	383	37.3	11.3	1.7	49.6	0.0	100.0	129
25–29	36.9	588	34.6	10.4	1.4	53.3	0.4	100.0	217
30–34	48.6	533	36.6	5.7	0.5	57.1	0.0	100.0	259
35–39	45.8	433	30.6	13.4	1.2	54.5	0.3	100.0	198
40–44	51.6	311	31.0	6.1	3.1	59.8	0.0	100.0	161
45–49	40.0	226	27.7	1.4	1.8	69.2	0.0	100.0	90
Total 15–49	42.1	2,560	33.4	8.9	1.4	56.1	0.1	100.0	1,077
<b>MEN</b>									
15–19	*	1	*	*	*	*	*	100.0	1
20–24	70.8	75	65.9	7.1	3.8	23.2	0.0	100.0	53
25–29	84.7	171	62.9	23.6	0.7	11.2	1.5	100.0	145
30–34	91.1	226	52.7	23.4	0.9	23.0	0.0	100.0	206
35–39	88.9	230	49.6	29.5	1.0	19.2	0.7	100.0	205
40–44	90.3	129	50.7	17.9	1.7	28.5	1.1	100.0	117
45–49	86.3	107	32.6	32.8	3.0	31.7	0.0	100.0	92
Total 15–49	87.1	939	52.1	24.2	1.4	21.7	0.6	100.0	818
50+	76.5	375	39.6	26.5	2.0	31.9	0.0	100.0	287
Total men 15+	84.1	1,314	48.8	24.8	1.6	24.4	0.4	100.0	1,105

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

## 14.2 CONTROL OVER HUSBAND'S EARNINGS

Table 14.2 shows who decides how men's cash earnings are spent, by background characteristics. The data show that nearly 16% of women aged 15–49 take the main responsibility for how their husband's earnings are spent. About 56% of women report that it is a joint decision between the husband and the wife, and about 22.5% report that the husband has control over how his earnings are spent. These results seem to show that women have quite a significant amount of control over how earnings are spent even if those earnings are the husband's. It is encouraging that the majority of women make financial decisions together with their husbands.

**Table 14.2: Control over men's cash earnings**

*Percent distribution of currently married women aged 15–49 whose husbands receive cash earnings, by person who decides how men's earnings are used, according to background characteristics, Solomon Islands 2007*

Background characteristic	Women					Total	Number
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing		
<b>Age</b>							
15–19	*	*	*	*	*	100.0	13
20–24	13.1	63.8	16.8	0.0	6.2	100.0	63
25–29	13.5	63.7	20.4	0.2	2.2	100.0	95
30–34	16.4	51.2	26.9	0.0	5.4	100.0	110
35–39	17.0	53.6	18.2	0.0	11.3	100.0	84
40–44	16.3	52.4	27.0	0.0	4.3	100.0	60
45–49	(16.0)	(66.5)	(13.8)	(0.0)	(3.8)	100.0	26
<b>Number of living children</b>							
0	13.9	62.4	16.3	0.3	7.0	100.0	59
1–2	19.0	52.6	26.2	0.0	2.1	100.0	116
3–4	10.9	58.8	26.8	0.0	3.5	100.0	165
5+	20.7	51.1	15.7	0.0	12.5	100.0	110
<b>Residence</b>							
Urban	8.8	65.3	21.0	0.1	4.8	100.0	133
Rural	18.7	51.8	23.2	0.0	6.3	100.0	317
<b>Region</b>							
Honiara	10.1	60.8	21.5	0.2	7.4	100.0	86
Guadalcanal	21.9	45.6	32.4	0.0	0.0	100.0	116
Malaita	(9.7)	(76.8)	(11.8)	(0.0)	(1.6)	100.0	78
Western	17.1	51.0	24.2	0.0	7.7	100.0	74
Other provinces	17.3	50.1	19.0	0.0	13.6	100.0	95
<b>Education</b>							
No education	(12.5)	(54.8)	(30.3)	(0.0)	(2.4)	100.0	31
Primary	18.6	52.0	21.7	0.0	7.7	100.0	227
Secondary	13.3	61.0	23.6	0.1	2.0	100.0	141
More than secondary	12.1	58.9	18.9	0.0	10.1	100.0	51
<b>Wealth quintile</b>							
Lowest	(22.6)	(40.6)	(34.7)	(0.0)	(2.1)	100.0	56
Second	(28.9)	(46.8)	(23.4)	(0.0)	(0.9)	100.0	42
Middle	16.0	43.6	23.7	0.0	16.8	100.0	72
Fourth	11.7	64.7	20.5	0.0	3.0	100.0	103
Highest	12.8	62.6	19.2	0.1	5.3	100.0	176
Total 15–49	15.8	55.8	22.5	0.0	5.8	100.0	450

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = not applicable

Women in the youngest age group are the most likely to take joint responsibility with their husband. At first this seems counter intuitive because older women usually develop more power within the household over time; however, there may be a generational shift in attitudes and that younger married couples are taking a more collaborative approach to financial decision making.

Urban women are slightly more likely than rural women to be in control of their husband's earnings either on their own or jointly. Women who have a secondary education level or higher are more likely to share in the decision-making responsibility with their husbands than those who have a lower education level. This indicates that the education of women can contribute to their empowerment and decision-making ability within the home. Couples that have a higher income also seem to share the responsibility more.

## 14.3 WOMEN'S EMPOWERMENT

In addition to educational attainment, employment status and control over earnings, the 2006/2007 SIDHS collected information 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 conditions under which a wife should be able to deny sex to her husband. 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 husband is justified in beating his wife, reflect a low status of women, and 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<sup>10</sup>. 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.

### 14.3.1 Women's participation in household decision making

To assess women's decision-making autonomy, questions were asked about women's participation in four different 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. Having a final say in 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 14.3 shows the percent distribution of currently married women according to the person in the household who usually makes decisions concerning these matters.

Women most often reported that these household decisions were made jointly. However, 28.8% of women reported that decisions about major household purchases are primarily made by their husbands. On the other hand, 40.0% of women reported that they make decisions regarding purchases for daily household needs. It is concerning that only 28.1% of women reported that they have exclusive control over their own health care. This indicates that women do not have full rights over their own bodies. Furthermore, only 19.8% of women reported that they have the main decision-making power with regards to visits to their family and friends. Table 14.4 shows that only 7% percent of men aged 15–49 reported that their wife has the primary responsibility for this decision. This is significant because when men control women's behaviour, it often results in limiting a woman's access to her sources of support (i.e. family and friends), thus isolating her. This can make women particularly vulnerable if they are experiencing abuse in the home.

In all other areas, men's understanding of women's participation in decision making is relatively similar to that of women's.

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<sup>10</sup> The ownership of one's own body and ability to determine what happens to it, how it happens, and even why it happens.

**Table 14.3: Women's participation in decision making**

*Percent distribution of currently married women aged 15–49 by person who usually makes decisions about four kinds of issues, Solomon Islands 2007*

Issue	Who makes the decision?					Missing	Total	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other			
Own health care	28.1	54.4	16.6	0.1	0.2	0.5	100.0	2,560
Major household purchases	21.0	49.3	28.8	0.1	0.1	0.6	100.0	2,560
Purchases of daily household needs	40.0	43.3	15.8	0.2	0.3	0.4	100.0	2,560
Visits to her family or relatives	19.8	60.8	18.5	0.0	0.1	0.8	100.0	2,560

**Table 14.4: Women's participation in decision making according to men**

*Percent distribution of currently married men aged 15–49 by person who they think should have a greater say in making decisions about five kinds of issues, Solomon Islands 2007*

Issue	Who should make the decision?				Missing	Total	Number of men
	Wife	Wife and husband equally	Husband	Don't know/depends			
Major household purchases	19.5	55.7	23.2	1.3	0.3	100.0	939
Purchases of daily household needs	46.5	40.4	11.0	1.9	0.3	100.0	939
Visits to wife's family or relatives	7.0	70.2	18.3	3.9	0.6	100.0	939
What to do with the money wife earns	20.7	58.8	12.8	7.1	0.6	100.0	939
How many children to have	1.7	92.3	3.7	1.7	0.6	100.0	939

### 14.3.2 Women's participation in decision making by background characteristics

Table 14.5 shows the percentage of women who reported that they alone, or jointly, participate in specific household decisions, according to background characteristics. Generally speaking, the percentage of women who usually make specific decisions, either by themselves or jointly with their husband, increases as women get older. This reflects that women tend to gain more power within the home over time.

Women who are employed are also more likely to participate in household decision making, confirming that employment is a source of empowerment for women. In addition, 70.3% of women in urban areas participate in all four categories of household decision making compared with only 55.2% of women in rural areas. This is because patriarchal family ideology, which limits women's participation in household decision making, is often more deep-seated in rural areas. Furthermore, women in urban areas tend to have higher levels of employment and education, other factors that contribute to their empowerment within the home.

**Table 14.5: 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, Solomon Islands 2007*

Background characteristic	Specific decisions				Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives			
<b>Age</b>							
15–19	75.8	77.6	77.2	70.8	58.2	11.8	86
20–24	81.0	70.2	81.4	77.4	53.8	5.0	383
25–29	82.7	70.1	83.7	82.0	56.2	6.1	588
30–34	82.5	69.5	84.4	79.6	58.3	6.4	533
35–39	85.3	72.8	88.2	83.3	61.2	5.7	433
40–44	82.0	69.2	79.9	81.1	62.1	8.7	311
45–49	83.2	67.0	81.0	82.3	50.5	5.9	226
<b>Employment (last 12 months)</b>							
Not employed	80.1	67.5	80.4	78.0	56.3	9.4	1,479
Employed for cash	88.7	82.1	91.0	88.9	70.3	1.4	456
Employed not for cash	84.3	68.3	84.8	80.6	50.9	3.1	620
<b>Number of living children</b>							
0	70.6	68.6	74.5	77.4	50.9	8.5	247
1–2	82.1	69.1	83.4	79.7	57.8	7.2	742
3–4	86.4	75.3	86.8	82.4	61.8	4.5	837
5+	82.7	66.4	82.3	80.5	54.2	7.1	734
<b>Residence</b>							
Urban	85.5	78.8	85.6	84.9	70.3	7.7	372
Rural	82.1	68.9	83.0	79.8	55.2	6.2	2,187
<b>Region</b>							
Honiara	84.2	78.2	85.3	83.6	70.9	10.0	278
Guadalcanal	88.6	69.1	88.4	88.1	58.9	0.8	445
Malaita	86.7	76.3	83.8	81.6	65.6	6.0	612
Western	88.4	77.2	89.4	90.4	68.5	2.5	303
Other provinces	74.5	62.3	78.1	72.1	43.5	9.7	922

**Table 14.5 (continued)**

Background characteristic	Specific decisions				Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives			
<b>Education</b>							
No education	84.6	71.1	77.9	81.2	60.1	8.9	385
Primary	81.7	68.3	84.5	79.7	55.6	6.4	1,610
Secondary	83.2	74.3	83.0	82.8	59.3	4.3	493
More than secondary	87.1	83.5	90.3	81.6	71.8	8.1	72
<b>Wealth quintile</b>							
Lowest	85.3	71.7	85.3	82.1	57.4	3.0	499
Second	80.7	66.5	81.6	84.7	52.1	5.7	500
Middle	80.9	74.3	84.8	78.4	60.0	6.9	490
Fourth	83.3	65.1	83.7	77.4	54.7	8.3	546
Highest	82.6	74.4	81.5	80.5	63.0	8.0	524
Total	82.6	70.3	83.4	80.6	57.4	6.4	2,560

Total includes five cases with missing information on employment.

**Table 14.6: 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 alone, or equal say with her husband, on five specific kinds of decisions, by background characteristics, Solomon Islands 2007

Background characteristic	Specific decisions					All five decisions	None of the five decisions	Number of men
	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			
<b>Age</b>								
15–19	*	*	*	*	*	*	*	1
20–24	71.9	88.4	75.3	80.5	92.8	39.5	0.0	75
25–29	82.0	87.0	85.1	82.9	97.2	54.6	0.0	171
30–34	71.7	89.0	73.8	81.5	94.5	42.2	0.0	226
35–39	73.4	83.8	80.1	73.9	96.0	36.3	0.6	230
40–44	78.1	86.0	73.1	85.2	90.8	47.7	0.0	129
45–49	75.0	87.7	72.2	75.1	88.1	34.9	1.4	107
<b>Employment (last 12 months)</b>								
Not employed	80.6	90.4	91.2	58.1	98.4	39.7	0.0	121
Employed for cash	78.2	88.0	78.4	80.6	93.8	46.7	0.3	624
Employed not for cash	61.3	80.3	64.9	89.1	91.6	30.6	0.6	189
Missing	*	*	*	*	*	*	*	5
<b>Number of living children</b>								
0	76.1	92.0	76.2	79.7	96.5	46.8	0.0	113
1–2	76.2	86.4	81.1	79.2	94.5	44.7	0.5	297
3–4	81.1	85.6	74.0	83.0	96.2	46.1	0.4	293
5+	66.2	86.3	77.1	75.4	89.4	34.1	0.1	236
<b>Residence</b>								
Urban	80.6	88.0	72.2	93.9	96.0	44.5	0.2	162
Rural	74.1	86.6	78.3	76.5	93.6	42.3	0.3	778
<b>Region</b>								
Honiara	77.2	91.2	66.1	93.6	96.4	38.5	0.2	124
Guadalcanal	90.7	87.1	72.8	90.5	98.5	52.8	0.0	180
Malaita	62.6	87.7	93.9	76.4	98.3	38.3	0.0	222
Western	64.1	78.8	74.9	79.0	85.8	39.8	2.8	94
Other provinces	77.6	86.7	73.3	70.1	89.9	42.6	0.0	320

**Table 14.6 (continued)**

Background characteristic	Specific decisions					All five decisions	None of the five decisions	Number of men
	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			
<b>Education</b>								
No education	67.1	82.8	79.6	66.3	93.8	28.5	0.0	60
Primary	74.0	88.2	75.3	80.8	93.0	40.9	0.0	510
Secondary	75.4	84.0	79.5	78.4	95.6	44.0	0.6	268
More than secondary	85.1	89.5	80.2	83.8	94.7	56.5	1.2	102
<b>Wealth quintile</b>								
Lowest	76.1	85.2	77.6	83.0	95.7	46.7	0.0	185
Second	71.8	88.0	85.1	80.0	93.7	48.9	0.0	178
Middle	68.5	85.3	70.4	72.5	94.8	32.3	0.8	172
Fourth	79.3	89.1	77.5	73.9	89.1	43.0	0.6	209
Highest	79.1	86.1	75.8	87.9	97.2	42.1	0.1	196
Total 15-49	75.2	86.8	77.3	79.5	94.0	42.7	0.3	939
50+	74.0	89.1	75.1	80.3	92.1	43.2	1.4	375
Total men 15+	74.9	87.4	76.7	79.7	93.5	42.8	0.6	1,314

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

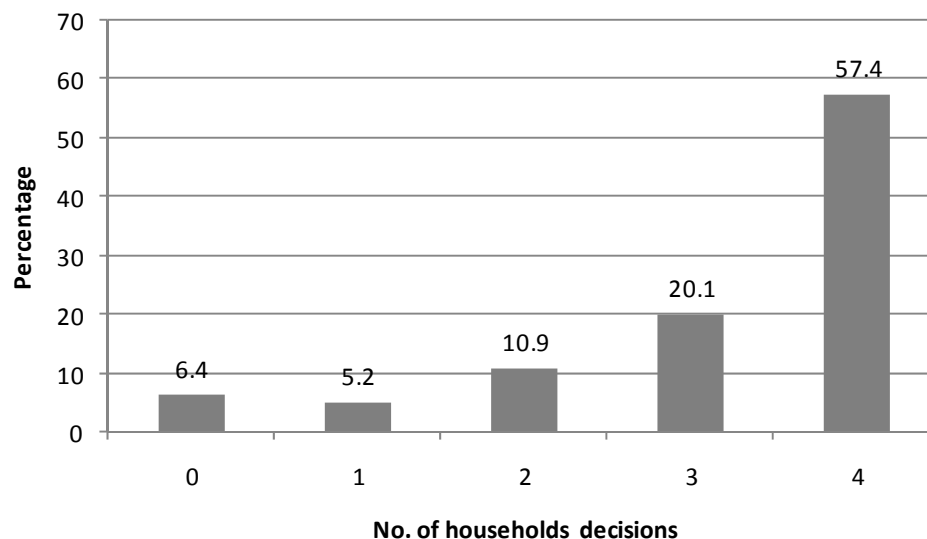


### 14.3.3 Men's attitude towards their wife's participation in decision making

Table 14.6 shows men's attitudes towards their wife's participation in decision making, and indicates that 42.8% of men aged 15 and older support women's participation in five areas: making major household purchases; making purchases for daily household needs; visiting family and friends; deciding how to spend her own income; and how many children to have. Of all five decisions, men most supported women's participation in deciding how many children to have, and least supported women's involvement in decisions about major household purchases. In general, men with a higher education level are more likely to support their wife's involvement in household decision making, demonstrating that men's education helps to promote gender equality and women's empowerment. In most cases, men in urban areas are more likely to support their wife's participation in decision making more than men in rural areas. If the husband has not employed in the last 12 months he is significantly less likely to support his wife's participation in deciding how to spend her own earnings. That is, if household earnings are only made up of the wife's earnings then the husband is more likely to expect to have more control over it.

Figure 14.1 shows the distribution 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 majority of women in Solomon Islands participate in all specific decisions regarding her own health care, making major household purchases, making purchases for daily household needs and visits to her family or relatives that were asked about in this survey. Only 6.4% of women in Solomon Islands do not participate in any of the four survey questions regarding household decisions. Although this is encouraging, there is clearly still room for improvement because more than 40% of women do not participate in all household decisions.

**Figure 14.1: Number of decisions in which currently married women participate in the final say**



### 14.3.4 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 2006/2007 SIDHS 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 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. Women were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children and refuses to have sexual intercourse with him. Table 14.7 summarises women's attitudes toward wife beating in these five specific circumstances.

Just under 70% of women agreed with at least one justification for a husband beating his wife. It is significant that the majority of women believe that intimate partner violence is justified under some circumstances. Such findings are of concern because they indicate that the subordinate status of women within the marital relationship is generally accepted by women. Women seem to make distinctions about the specific circumstances under which beating is justifiable. The most commonly accepted justification for wife abuse — according to women — is if she neglects the children. The justification considered least acceptable was if she refuses sex with her husband.

The attitudes of women do not vary significantly across different demographical and social characteristics, although women with some education are less likely to justify violence than those who have no education. Also, women who are divorced, separated or widowed are less likely to agree that violence is justified under some circumstances. There is some evidence that women who are divorced or separated have a higher prevalence of partner violence than other women. This suggests that violence may be an important cause of marriage breakdowns (Garcia-Moreno, 2005). It is possible that divorced or separated women are less likely to justify violence because they are more likely to have experienced the impact first hand.

Men were also asked about their opinions on the justification of wife beating under certain circumstances. As shown in Table 14.8, 65.1% of men aged 15–49 agreed with at least one justification for wife beating. This is similar to, but slightly less than, the percentage of women in the same age group who agreed with one or more justifications for wife beating. For men, the most commonly accepted justification for beating a wife is if the wife neglects the children; the least accepted justification is if she refuses sex with her husband. This consistency between men and women's attitudes indicates a cultural and social understanding of partner violence that cuts across genders.

A very interesting observation from Table 14.8 is that men with no education are much less likely to believe that violence is justified than those who are educated. For example, 24.8% of men with no education agree with one or more justifications for wife abuse while 69.4% of men who have a tertiary level education agree with one or more justifications for wife abuse. Other research suggests that male education usually helps to promote women's empowerment and, therefore, this result needs to be analysed further. Younger men are also more likely to justify partner violence against women than older men, perhaps indicating a conservative revival among younger generations. Both of these findings highlight the importance of including gender equality and women's rights in educational programmes, particularly those that involve boys.

Men in urban areas are also more likely to justify violence, with the highest percentage in Honiara and Western Province. Interestingly, 29.6% of men from Malaita Province agree with one or more justifications for wife abuse. More research should be conducted to ascertain whether Malaita Province has a particular culture that is less violent, or recognises women's rights more than other provinces in Solomon Islands.

**Table 14.7: 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, Solomon Islands 2007

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of women
	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	31.1	36.3	51.2	64.4	13.3	71.6	687
20–24	26.0	35.0	55.9	55.2	13.0	72.2	716
25–29	23.6	30.1	45.6	52.0	11.7	64.4	729
30–34	31.9	34.8	49.3	59.3	18.3	67.8	600
35–39	26.9	32.4	46.8	55.7	14.4	68.8	482
40–44	26.8	37.3	49.8	66.1	8.2	71.8	336
45–49	27.3	35.3	44.1	50.8	13.9	63.2	273
<b>Employment (last 12 months)</b>							
Not employed	26.6	35.5	52.5	57.5	13.9	67.9	2,245
Employed for cash	25.5	29.1	43.3	55.9	10.2	68.7	655
Employed not for cash	31.3	34.0	47.5	59.5	14.9	70.9	909
<b>Marital status</b>							
Never married	30.4	34.8	52.1	61.2	13.9	69.9	1,125
Married or living together	27.1	34.7	49.0	56.5	13.5	69.1	2,560
Divorced/separated/widowed	15.8	19.5	38.8	47.6	9.1	54.8	138
<b>Number of living children</b>							
0	28.6	31.8	52.2	57.6	12.7	69.8	1,213
1–2	25.7	35.4	49.4	58.1	13.4	67.8	954
3–4	24.7	36.1	50.3	57.4	12.4	69.3	885
5+	32.0	34.1	44.7	57.2	16.0	67.8	772
<b>Residence</b>							
Urban	20.4	32.9	49.6	53.4	15.8	65.1	636
Rural	29.1	34.4	49.5	58.4	13.0	69.5	3,187

**Table 14.7 (continued)**

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of women
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Region</b>							
Honiara	18.6	31.6	51.6	58.3	15.1	65.7	481
Guadalcanal	42.8	40.7	54.5	58.6	27.1	69.9	637
Malaita	18.2	42.0	50.7	58.4	9.7	67.3	840
Western	32.4	25.7	41.5	66.6	15.7	76.5	458
Other provinces	28.0	30.2	48.5	53.5	8.2	67.8	1,407
<b>Education</b>							
No education	22.2	38.1	48.8	57.9	12.1	63.2	520
Primary	31.6	35.3	51.0	57.4	14.8	70.8	2,114
Secondary	23.2	30.4	48.0	58.1	11.0	67.7	1,067
More than secondary	22.1	30.0	40.7	54.1	16.0	67.3	122
<b>Wealth quintile</b>							
Lowest	32.4	31.9	45.6	49.5	17.6	65.5	696
Second	32.5	40.1	49.4	60.6	12.9	70.7	755
Middle	23.3	34.5	47.7	58.3	11.0	68.3	738
Fourth	26.9	33.4	54.7	61.6	12.5	71.4	769
Highest	24.0	31.2	49.8	57.4	13.6	67.9	864
<b>Total</b>	<b>27.7</b>	<b>34.2</b>	<b>49.5</b>	<b>57.6</b>	<b>13.4</b>	<b>68.8</b>	<b>3,823</b>

Total includes 14 cases with missing information on employment.

**Table 14.8: 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, Solomon Islands 2007*

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of men
	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	35.2	42.6	52.7	61.1	10.3	72.9	292
20–24	30.8	39.0	40.9	52.1	10.6	64.1	304
25–29	34.1	32.4	49.0	56.1	16.3	69.9	266
30–34	31.1	28.3	33.7	55.4	14.9	62.7	266
35–39	35.8	28.9	32.9	48.8	15.9	61.2	239
40–44	29.9	33.5	43.9	55.2	19.8	58.9	134
45–49	34.2	40.5	40.5	52.5	21.3	57.6	113
<b>Employment (last 12 months)</b>							
Not employed	27.7	33.6	38.4	40.0	16.0	50.5	360
Employed for cash	38.1	39.1	48.9	63.0	16.8	74.4	893
Employed not for cash	26.2	26.6	28.4	48.4	6.8	56.0	354
<b>Marital status</b>							
Never married	32.7	40.9	47.2	56.9	12.5	69.2	660
Married or living together	33.7	30.8	38.8	53.5	15.8	62.6	939
Divorced/separated/widowed	*	*	*	*	*	*	14
<b>Number of living children</b>							
0	32.4	39.2	46.5	57.4	11.7	69.2	754
1–2	36.4	34.6	43.4	54.5	15.4	65.1	322
3–4	30.0	28.1	34.5	53.1	16.9	59.9	298
5+	34.8	30.5	36.9	48.6	19.2	58.8	240
<b>Residence</b>							
Urban	43.4	47.1	55.6	65.3	20.9	76.1	301
Rural	30.7	32.2	39.2	52.3	13.0	62.6	1,313
<b>Region</b>							
Honiara	46.6	55.4	56.8	66.9	20.7	77.4	240
Guadalcanal	16.3	22.8	28.6	40.5	9.0	54.7	249
Malaita	11.1	18.0	19.0	22.3	15.6	29.6	345
Western	43.2	20.5	52.9	63.5	28.6	79.1	181
Other provinces	44.3	46.0	52.2	71.7	9.4	80.7	599

**Table 14.8 (continued)**

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of men
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
<b>Education</b>							
No education	9.5	16.8	14.7	18.2	7.0	24.8	88
Primary	37.8	37.8	46.4	56.9	15.9	66.8	794
Secondary	31.3	36.7	42.0	55.7	14.7	67.8	593
More than secondary	28.7	22.8	37.0	61.0	10.8	69.4	138
<b>Wealth quintile</b>							
Lowest	40.7	35.4	38.1	52.8	10.7	62.1	281
Second	35.3	40.8	51.6	62.2	12.4	68.5	291
Middle	22.5	28.8	32.5	46.0	13.3	60.2	323
Fourth	32.6	27.4	39.3	52.6	18.0	62.3	353
Highest	35.3	42.8	49.4	59.9	16.8	71.9	366
Total 15–49	33.1	35.0	42.2	54.7	14.5	65.1	1,614
50+	27.6	30.5	42.8	51.9	11.1	58.4	442
Total men 15+	31.9	34.0	42.4	54.1	13.8	63.7	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
Total includes seven cases with missing information on employment.

### **14.3.5 Attitudes toward refusing sex with husband**

The extent of control women have over when and with whom they have sex has important implications for outcomes such as the transmission of HIV and other STIs. To measure women's beliefs about sexual empowerment, female respondents were asked whether it is justifiable for a wife to deny her husband sex in the following circumstances: when she knows her husband has an STI, when she knows her husband has had sex with other women and when she is not in the mood.

Table 14.9 shows that the majority of women report a relatively high level of sexual autonomy in Solomon Islands: 74.3% of women agree that a woman is justified in refusing to have sex with her husband for all three reasons, while only 6.4% of women do not agree that a woman has the right to refuse sex with her husband for any of these reasons. The most commonly accepted reason among women was if she knows that her husband has had sex with other women. Older women, women in higher wealth quintiles, women with a higher education, women in urban areas, and women who are employed for cash are more likely to believe that wives are justified in refusing sex under all circumstances. This confirms that the extent of control women have over their own sexuality is related to other sources of empowerment such as employment and education.

**Table 14.9: Attitudes 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, Solomon Islands 2007*

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 of women
	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	80.5	86.1	80.2	69.0	8.3	687
20–24	85.3	88.1	86.3	76.1	6.0	716
25–29	83.9	87.5	84.2	74.7	6.0	729
30–34	81.9	89.5	83.7	74.9	6.8	600
35–39	84.8	87.7	87.8	76.1	5.4	482
40–44	84.6	88.6	86.5	76.1	5.8	336
45–49	80.5	88.2	89.7	75.5	5.7	273
<b>Employment (last 12 months)</b>						
Not employed	81.7	87.0	83.9	73.3	7.2	2,245
Employed for cash	86.6	89.5	89.5	79.6	4.7	655
Employed not for cash	84.3	88.7	83.8	73.0	5.6	909
<b>Marital status</b>						
Never married	79.4	84.4	79.9	68.4	9.3	1,125
Married or living together	84.7	89.0	86.9	76.5	5.3	2,560
Divorced/separated/widowed	86.0	94.4	86.1	81.3	2.9	138
<b>Number of living children</b>						
0	82.8	86.4	80.9	72.0	8.3	1,213
1–2	83.7	89.5	87.5	76.0	4.3	954
3–4	82.8	88.0	87.6	75.1	5.3	885
5+	83.5	87.8	84.5	74.8	7.4	772
<b>Residence</b>						
Urban	92.6	93.8	91.9	85.7	2.4	636
Rural	81.3	86.6	83.4	72.0	7.2	3,187



**Table 14.9 (continued)**

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 of women
	Knows husband has a sexually transmitted disease	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Region</b>						
Honiara	91.3	94.5	90.7	84.7	2.9	481
Guadalcanal	89.2	93.6	91.4	84.0	2.6	637
Malaita	82.1	86.2	82.5	72.2	7.6	840
Western	78.2	81.3	78.7	72.8	15.2	458
Other provinces	79.9	86.1	83.2	68.1	5.7	1,407
<b>Education</b>						
No education	82.1	86.3	83.4	74.0	6.9	520
Primary	81.3	86.9	84.7	71.5	6.1	2,114
Secondary	86.8	90.1	85.5	79.3	7.0	1,067
More than secondary	89.0	90.1	87.9	81.3	3.9	122
<b>Wealth quintile</b>						
Lowest	82.6	85.3	83.3	71.3	7.3	696
Second	80.6	85.8	85.0	71.4	6.8	755
Middle	79.2	85.6	83.0	71.0	7.9	738
Fourth	83.3	89.7	83.0	73.8	6.1	769
Highest	89.1	92.0	89.1	82.5	4.2	864
Total	83.2	87.8	84.8	74.3	6.4	3,823

Total includes 14 cases with missing information on employment.

Table 14.10 shows the percentage of men who believe that a wife is justified in refusing sex with her husband under specific circumstances. The data show that 75.5% of men aged 15–49 agree with all three justifications for a wife refusing sex with her husband. Only 4.1% believe that women are not justified in refusing sex under any of the specified circumstances. This percentage is even less than for women indicating that men have greater respect for women’s sexual autonomy than do women. Like women, men who were older, employed for cash, and had a secondary or higher education were more likely to believe that women are justified in refusing sex under all circumstances. The association with income and rural-urban settings among men, however, was not clear.

**Table 14.10: Attitudes 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, Solomon Islands 2007*

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 an STI	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15–19	76.8	83.1	82.6	63.7	7.1	292
20–24	85.4	82.9	84.6	75.0	8.0	304
25–29	87.4	83.1	91.6	75.9	1.5	266
30–34	89.9	91.0	89.7	82.8	3.4	266
35–39	89.9	90.3	89.0	77.7	1.5	239
40–44	87.1	89.2	91.0	80.4	4.2	134
45–49	81.7	89.9	92.7	78.9	1.7	113
<b>Employment (last 12 months)</b>						
Not employed	82.0	87.1	87.1	75.2	6.8	360
Employed for cash	84.1	84.2	88.1	72.9	3.9	893
Employed not for cash	92.7	91.2	88.9	82.5	2.8	354
<b>Marital status</b>						
Never married	80.6	82.3	83.8	69.3	7.4	660
Married or living together	89.0	89.3	91.0	79.9	2.1	939
Divorced/separated/widowed	*	*	*	*	*	14
<b>Number of living children</b>						
0	81.4	83.3	84.5	69.2	6.3	754
1–2	88.4	86.3	90.8	78.5	3.7	322
3–4	91.6	93.1	92.4	85.9	2.1	298
5+	86.7	88.2	89.8	78.6	1.6	240
<b>Residence</b>						
Urban	85.0	86.1	89.1	76.1	4.8	301
Rural	85.6	86.5	87.7	75.4	4.2	1,313

**Table 14.10 (continued)**

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 an STI	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Region</b>						
Honiara	87.5	83.6	87.9	76.7	5.0	240
Guadalcanal	96.4	97.1	95.2	92.4	0.6	249
Malaita	94.0	94.8	92.0	89.1	2.3	345
Western	49.1	84.6	79.2	44.2	9.3	181
Other provinces	86.2	78.9	85.4	69.6	5.2	599
<b>Education</b>						
No education	91.5	91.3	89.6	87.1	4.6	88
Primary	81.1	85.3	85.6	71.6	5.1	794
Secondary	88.8	87.2	89.9	77.6	3.4	593
More than secondary	92.2	86.6	92.6	81.8	3.3	138
<b>Wealth quintile</b>						
Lowest	92.9	89.8	92.1	82.5	1.1	281
Second	82.6	90.8	89.2	78.5	4.5	291
Middle	86.9	88.5	88.3	74.1	1.4	323
Fourth	81.4	76.5	81.2	67.0	9.1	353
Highest	84.7	88.2	90.2	77.3	4.5	366
Total 15–49	85.5	86.4	88.0	75.5	4.3	1,614
Total 50+	83.2	88.0	89.2	72.5	3.6	442
Total men 15+	85.0	86.8	88.3	74.9	4.1	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
Total includes seven cases with missing information on employment.  
STI = sexually transmitted infection

**Table 14.11: Men's attitudes toward a husband's rights when his wife refuses to have sexual intercourse**

*Percentage of men aged 15–49 who believe that a husband has the right to certain behaviours when his wife refuses to have sex with him when he wants her to, by background characteristics, Solomon Islands 2007*

Background characteristic	When a wife 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	12.8	11.2	5.1	5.3	0.0	77.2	292
20–24	16.6	10.4	8.8	6.5	1.5	74.3	304
25–29	13.0	10.3	5.9	7.8	1.5	75.5	266
30–34	12.5	9.3	7.4	4.7	2.2	81.2	266
35–39	8.2	8.4	5.6	4.8	0.0	84.6	239
40–44	23.7	14.3	16.1	9.4	5.9	73.2	134
45–49	20.8	8.0	4.2	5.1	0.0	74.5	113
<b>Employment (last 12 months)</b>							
Not employed	10.2	12.6	6.1	6.2	1.0	78.6	360
Employed for cash	14.2	11.3	7.8	7.7	2.1	77.2	893
Employed not for cash	19.0	5.1	7.0	1.5	0.1	77.7	354
<b>Marital status</b>							
Never married	15.7	11.1	6.8	6.3	0.7	74.2	660
Married or living together	13.2	9.3	7.5	6.0	1.9	80.1	939
Divorced/separated/widowed	*	*	*	*	*	70.6	14
<b>Number of living children</b>							
0	14.5	10.8	6.3	5.9	1.1	75.9	754
1–2	12.6	10.2	8.4	5.3	1.2	79.6	322
3–4	12.3	9.9	6.7	5.8	1.3	80.4	298
5+	18.4	8.6	9.2	7.9	2.6	76.8	240
<b>Residence</b>							
Urban	12.2	16.6	4.5	5.4	0.2	71.8	301
Rural	14.8	8.7	7.9	6.2	1.7	79.0	1,313

**Table 14.11 (continued)**

Background characteristic	When a wife 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>Region</b>							
Honiara	9.7	17.4	3.8	3.2	0.2	73.7	240
Guadalcanal	13.7	7.7	6.3	5.8	3.0	81.7	249
Malaita	7.2	3.7	2.6	0.8	0.0	90.1	345
Western	35.8	32.2	37.7	33.1	6.1	38.3	181
Other provinces	14.0	5.5	2.4	2.2	0.6	82.2	599
<b>Education</b>							
No education	4.9	4.6	2.7	1.7	0.4	90.9	88
Primary	18.9	11.0	8.8	6.4	2.1	74.9	794
Secondary	11.1	10.1	7.0	6.4	0.7	77.9	593
More than secondary	7.5	9.6	2.0	5.4	1.1	83.7	138
<b>Wealth quintile</b>							
Lowest	16.9	3.6	6.0	4.1	1.1	80.8	281
Second	10.9	9.5	7.0	6.2	2.3	83.3	291
Middle	15.5	10.8	6.4	8.6	1.8	76.0	323
Fourth	13.3	10.8	8.6	4.0	1.0	77.0	353
Highest	14.8	14.7	7.8	7.3	0.9	72.7	366
Total 15–49	14.3	10.2	7.2	6.1	1.4	77.6	1,614
Total 50+	12.5	10.2	7.2	5.0	2.1	82.9	442
Total men 15+	13.9	10.2	7.2	5.8	1.5	78.8	2,056

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
Total includes seven cases with missing information on employment.

Table 14.11 shows the percentage of men who believe that a husband has the right to certain behaviours when his wife refuses to have sex with him. These behaviours include: getting angry and reprimanding her; refusing her financial support; using force to have sex; and having sex with another woman. A significant majority (77.6%) of men aged 15–49 do not agree with any of these behaviours, which is encouraging. Only 1.5% of men agree that a husband has the right to do all of these things if his wife refuses him sex. Nevertheless, 7.0% of men aged 15–49 believe that a husband has the right to force his wife to have sex if she refuses him. Marital rape is never justified and so this is an area where need further research. Men who have no education are less likely to support these behaviours than men who have some education, and further research is needed to understand why this is the case.

### **14.3.6 Women’s empowerment indicators**

The three sets of empowerment indicators — women’s participation in making household decisions, their attitude toward wife beating, and their attitude toward a wife’s right to refuse sexual intercourse with her husband/partner — can be summarised into three separate indices. The first index shows the number of decisions (see Table 14.5 for the list of decisions) in which women participate alone or jointly with their husband or partner. This index ranges in value from 0 to 4 and is positively related to women’s empowerment. It reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments.

The second index, which ranges in value from 0 to 5, is the total number of reasons (see Table 14.7 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 to 3, is the number of circumstances (see Table 14.8 for the list of the circumstances) in which the 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.

Table 14.12 shows how these three indicators of women’s empowerment relate to each other, and how a higher level of empowerment or sense of entitlement or control in one indicator relates to a higher level of empowerment in another. For example, 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. Similarly, 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. 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.

**Table 14.12: 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, Solomon Islands 2007*

Empowerment indicator	Currently married women		Percentage who disagree with all the reasons justifying wife-beating	Percentage who agree with all the reasons for refusing sexual intercourse with husband	Number of women
	Percentage who participate in all decision making <sup>1</sup>	Number of women			
<b>Number of decisions in which women participate<sup>1</sup></b>					
0	na	na	24.6	68.1	165
1–2	na	na	27.6	71.4	412
3–4	na	na	32.2	78.3	1,983
<b>Number of reasons for which wife-beating is justified<sup>2</sup></b>					
0	59.3	792	na	70.8	1,193
1–2	58.8	870	na	75.6	1,276
3–4	53.7	713	na	75.6	1,061
5	57.1	185	na	78.3	293
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>3</sup></b>					
0	68.7	136	45.8	na	245
1–2	48.1	464	32.1	na	737
3	58.8	1,959	29.7	na	2,841

<sup>1</sup> Restricted to currently married women. See Table 15.5.1 for the list of decisions.

<sup>2</sup> See Table 15.6.1 for the list of reasons.

<sup>3</sup> See Table 15.7.1 for the list of reasons.

na = not applicable

#### 14.4 CURRENT USE OF CONTRACEPTION BY WOMEN'S EMPOWERMENT STATUS

A woman's ability to control her fertility and choose a contraceptive method is likely to be affected by her status, self-image, and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel she can make decisions regarding fertility. She may also feel the need to choose methods that are easier to conceal from her husband or partner, or which do not depend on his cooperation.

Table 14.13 shows the relationship of each of the three indicators of women's empowerment with current use of contraceptive methods by currently married women aged 15–49 in Solomon Islands. It is evident from the data that women who do not participate in any household decisions are less likely to use contraception. Of the women who do not participate in making any household decisions, 22.6% use a contraceptive method compared with 38.7% of women who participate in making 1–2 household decisions, and 34.7% of women who participate in making 3–4 household decisions. In particular, women who do not participate in household decision making are much less likely to use condoms as a contraceptive method and instead use modern female methods that do not depend on her husband's or partner's cooperation.

The association between whether a woman agrees with any justifications of wife beating and her contraceptive use is less clear. Women who accepted all justifications of wife beating had a higher rate of contraceptive use (38.7%) than women who did not agree (32.9%) with any justifications of wife abuse. Similarly, the association between the number of justifications for refusing sex that a woman accepts and her use of family planning methods is also unclear. Women who reported 1–2 justifications for refusing sex had a higher contraceptive rate than women who reported all three justifications, which is not what is expected. However, the rate of condom use is significantly lower among women who do not agree with any justifications for refusing sex with



her husband. This indicates that a lack of control over when a woman has sex also contributes to her lack of control over condom use, which has implications for the transmission of HIV and STIs.

**Table 14.13: 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, Solomon Islands 2007*

Empowerment indicator	Modern methods							Not currently using	Total	Number of women
	Any method	Any modern method	Female sterilisation	Male sterilisation	Temporary modern female methods <sup>1</sup>	Male condom	Any traditional method			
<b>Number of decisions in which women participate<sup>2</sup></b>										
0	22.6	21.8	4.9	0.0	16.5	0.4	0.8	77.4	100.0	165
1–2	38.7	29.8	15.3	0.7	10.5	3.3	8.9	61.3	100.0	412
3–4	34.7	27.2	13.6	0.2	12.3	1.2	7.5	65.3	100.0	1,983
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>										
0	32.9	27.2	12.7	0.1	13.5	1.0	5.7	67.1	100.0	792
1–2	39.3	29.4	15.9	0.0	11.4	2.1	9.9	60.7	100.0	870
3–4	29.5	23.7	11.4	0.8	10.7	0.8	5.8	70.5	100.0	713
5	38.7	31.9	11.4	0.0	17.3	3.2	6.8	61.3	100.0	185
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>										
0	36.5	34.2	17.3	0.0	16.9	0.0	2.3	63.5	100.0	136
1–2	42.6	33.1	17.1	0.4	13.8	1.9	9.4	57.4	100.0	464
3	32.5	25.4	12.1	0.2	11.6	1.5	7.1	67.5	100.0	1,959
Total	34.6	27.3	13.3	0.3	12.3	1.5	7.3	65.4	100.0	2,560

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

<sup>1</sup> Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly and lactational amenorrhoea method

<sup>2</sup> See Table 15.5.1 for the list of decisions.

<sup>3</sup> See Table 15.6.1 for the list of reasons

<sup>4</sup> See Table 15.7.1 for the list of reasons

## 14.5 IDEAL FAMILY SIZE AND UNMET NEED FOR FAMILY PLANNING

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 is lower. Table 14.14 shows how women's ideal family size and their unmet need for family planning vary by the three indicators of women's empowerment.

According to the table, the mean number of ideal children does not vary significantly with women's participation in household decision making, and is, in fact, slightly higher for women who do participate in decision making (3.7) compared with those who do not (3.6). However, women who participate in less household decisions have a greater unmet need for family planning for the spacing of children, although not for limiting children.

**Table 14.14: 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, Solomon Islands 2007*

Empowerment indicator	Mean ideal number of children <sup>1</sup>	Number of women	Percentage of currently married women with an unmet need for family planning <sup>2</sup>			Number of women
			For spacing	For limiting	Total	
<b>Number of decisions in which women participate<sup>3</sup></b>						
0	3.6	152	8.6	3.8	12.4	165
1–2	3.7	368	7.0	3.8	10.8	412
3–4	3.7	1,791	6.8	4.3	11.1	1,983
<b>Number of reasons for which wife-beating is justified<sup>4</sup></b>						
0	3.2	1,088	8.1	5.3	13.4	792
1–2	3.3	1,157	5.9	3.8	9.7	870
3–4	3.3	946	7.2	3.6	10.8	713
5	3.4	273	5.4	4.1	9.5	185
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>5</sup></b>						
0	2.8	200	10.7	5.8	16.5	136
1–2	3.2	633	12.1	2.4	14.5	464
3	3.4	2,632	5.4	4.5	10.0	1,959
Total	3.3	3,464	6.9	4.2	11.1	2,560

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.

<sup>2</sup> See Table 7.3.1 for the definition of unmet need for family planning.

<sup>3</sup> Restricted to currently married women. See Table 14.5 for the list of decisions.

<sup>4</sup> See Table 14.7 for the list of reasons.

<sup>5</sup> See Table 14.9 for the list of reasons.

The mean ideal number of children is positively correlated to the number of justifications that a woman supports for wife abuse. That is, as the number of justifications for wife beating goes up, so does the ideal number of children. However, the percentage of women who do not agree with any justification for wife beating who have unmet family planning needs is higher than those who do justify wife beating in some circumstances. This challenges the assumption that women who support violence have less control over family planning. However, it will be more significant to determine whether women who actually experience partner violence have less control over their reproductive health decisions.

The relationship between unmet family planning needs and women who believe that they are justified in refusing sex with their husband under certain circumstances is more expected. Women who support refusing sex under all three circumstances have the lowest unmet family planning need, indicating again that sexual autonomy has a significant impact on reproductive health.

## 14.6 WOMEN'S STATUS AND REPRODUCTIVE HEALTH CARE

Table 14.15 examines whether women's use of antenatal, delivery and postnatal care services from health workers varies by their level of empowerment 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, however, increased empowerment of women is likely to increase their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood.

Table 14.15 indicates that the relationship between reproductive health care and women's participation in decision making is not clear or not what we would expect. For example, women who do not participate in any household decisions receive the highest percentage of postnatal care

within the first two days after delivery. The lowest proportion of women who receive delivery assistance from health personnel is among women who participate in the most household decisions. Because antenatal and delivery assistance are provided to most women in Solomon Islands, it's possible that the effect of indicators of empowerment are not so pronounced.

Women who are less likely to justify wife beating are more likely to receive antenatal care and receive delivery assistance from health personnel, although the differences are not significant. Probably the most significant difference is that women who support all three reasons for refusing sex with their husband are much more likely to receive postnatal care within the first two days after delivery.

**Table 14.15: 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, delivery assistance and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Solomon Islands 2007*

Empowerment indicator	Received antenatal care from health personnel	Received delivery assistance from health personnel	Received postnatal care from health personnel within the first two days since delivery <sup>1</sup>	Number of women with a child born in the last five years
<b>Number of decisions in which women participate<sup>2</sup></b>				
0	94.9	87.9	55.1	100
1–2	96.2	89.6	45.9	259
3–4	95.4	86.3	49.6	1,257
<b>Number of reasons for which wife-beating is justified<sup>3</sup></b>				
0	96.7	89.4	46.8	594
1–2	94.7	89.6	52.7	566
3–4	93.8	83.2	44.6	490
5	94.7	81.6	53.8	149
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>				
0	88.3	86.7	35.9	104
1–2	94.8	87.7	35.9	342
3	95.7	87.0	52.9	1,352
Total	95.1	87.1	48.7	1,799

Note: 'Health personnel' include doctors, nurses, midwives, or auxiliary nurses or auxiliary midwives.

<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 14.5 for the list of decisions.

<sup>3</sup> See Table 14.7 for the list of reasons.

<sup>4</sup> See Table 14.9 for the list of reasons.

## 14.7 KEY RESULTS

The following details the main findings of the 2006/2007 SIDHS Women's Questionnaire.

- There is still significant gender disparity in the employment participation rates of men and women in Solomon Islands, with women working less than men and also not being paid for the work that they do more often than men.
- Most household decisions are made jointly by the husband and wife, however, between 15.8% and 28.8% of women do not participate in certain household decisions.
- The majority of women and men agree with at least one justification for a husband beating his wife. Such findings are of concern because they indicate that the subordinate status of women within the marital relationship is generally accepted.
- Community education and advocacy should promote an understanding that violence against women is not justifiable under any circumstances. In order to promote this ideal, laws also need to be changed.
- The majority of women have a relatively high level of sexual autonomy, however a number of women also believe that they cannot refuse sex with their husband under certain circumstances.
- About 7% of men aged 15–49 believe that a husband has the right to force his wife to have sex if she refuses him. This is of concern because marital rape is never justified, and this is an area where education efforts should be targeted.
- Interestingly, men with no education are much less likely to believe that violence is justified, and less likely to support men's right to beat their wives if they refuse to have sex. Younger men are also more likely to justify partner violence against women than older men, perhaps indicating a conservative revival among younger generations. Both of these findings need to be examined in greater detail because they challenge our expectations. They highlight the importance of including gender equality and women's rights in the educational programmes of boys in particular.
- The three indicators of women's empowerment are found relate to each other. A higher level of empowerment or sense of entitlement or control in one area relates to a higher level of empowerment in another. 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.
- Women who do not participate in any household decisions are less likely to use contraception than women who do. In particular, women who do not participate in household decisions are much less likely to use condoms as a contraceptive method and instead use modern female methods that do not depend on their husband's or partner's cooperation. This has significant implications for women's reproductive health and, in particular, the transmission of STIs. Women's empowerment within the home should therefore be promoted in programmes that target reproductive health.
- Older women, women who are employed, women who are more educated, and women living in urban areas are more likely to have higher indicators of empowerment such as participating in household decisions.
- Policies should focus on improving women's livelihoods, increasing women's education and providing educational and advocacy programmes in rural areas where patriarchal ideologies appear to be stronger.

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