

# **Second Generation Surveillance of Antenatal Women and Youth Solomon Islands 2008**



**Solomon Islands Ministry of Health**



## Acknowledgements

The contribution to these surveys by the following people is gratefully acknowledged:

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Dr. Divinal Ogaoga	Under Secretary, Health Improvement, MOH
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The Solomon Islands Ministry of Health would also like to acknowledge the Secretariat of the Pacific Community for technical assistance and the Global Fund to fight AIDS, Tuberculosis and Malaria for providing financial assistance to implement this survey.

Last, but not least, we would like to express our sincere gratitude to all who participated in the two surveys. Without your consent and participation, we would not have been able to complete this study.

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## List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
BSS	Behavioural Surveillance Survey
<i>C.trachomatis</i>	Chlamydia trachomatis
ELISA	Enzyme Linked Immunosorbent Assay
FHI	Family Health International
HIV	Human Immunodeficiency Virus
HSS	HIV Surveillance Survey
MDG	Millennium Development Goal
MOH	Ministry of Health
<i>N.gonorrhoeae</i>	Neisseria gonorrhoea
NRL	National Reference Laboratory
PCR	Polymerase Chain Reaction
PICTs	Pacific Island Countries and Territories
PLWH	People Living with HIV
PNG	Papua New Guinea
RPR	Rapid Plasma Reagin
SGS	Second Generation Surveillance
SPC	Secretariat of the Pacific Community
SPS	STI Prevalence Surveillance
STI	Sexually transmitted infection
TPPA	Treponema Pallidum Particle Agglutination test
UNGASS	United Nations General Assembly Special Session
VCCT	Voluntary and Confidential Counselling and Testing

## **Executive summary**

The Solomon Islands are situated in Melanesia, East of Papua New Guinea and consist of nearly 1000 islands spanning over an estimated 28,400 square kilometres. The capital of the Solomon Islands is Honiara which is located on the island of Guadalcanal.

This report presents the findings of the second round of second generation surveillance (SGS) surveys conducted in the Solomon Islands in 2008. As in 2004-05, two population groups were surveyed; Antenatal women and Youth.

Antenatal women were consecutively recruited from Prenatal Clinics in Honiaria, Gizo and Munda from March to June 2008. HIV trained nurse counsellors were identified and offered training to administer the standardized questionnaire and collect venous blood and urine specimens.

Youth were opportunistically recruited from 'hot spots' in Honiara, and Gizo, Munda and Noro towns. Youth volunteers were identified and offered training to administer a standardised questionnaire to all participating youth. A total of 202 urine specimens were collected from youth from Honiara and the Western Province, and 94 viable blood specimens were collected from youth from Honiara.

### **Key findings for Antenatal Women**

The STI Prevalence Survey included 407 women aged 15 to 44 years.

- The majority of women attended for Antenatal care in the second or third trimester of pregnancy.
- Nearly two thirds of women reported that their pregnancies had not been planned. Of these, 85% aged 15 to 24 years and 69% aged 25 to 44 years reported that they did not use any form of contraceptive in the three months prior to becoming pregnant.
- The mean age of first sex was 17.3 years for women aged 15 to 24 years and 18.3 years for women aged 25 to 44years.
- Nearly ninety percent of women reported having only one sexual partner in the last 12 months.
- Approximately half of Antenatal women reported that they had ever used a condom, the majority using male condoms.



- One in ten women aged 15 to 24 years (9%) and two percent aged 25 to 44 years reported having two simultaneous sexual relationships in the previous 12 months.
- Eleven women (2.7%) reported either receiving or paying money, goods or favours in exchange for sex in the last 12 months.
- One in five women (20%) reported using tobacco in the last 12 months.
- Over 90% of women indicated that they had heard of HIV or AIDS.
- While most HIV knowledge questions were correctly answered by around eight in ten women, less than seven in ten women knew that HIV could not be acquired through mosquito bites.
- For women aged 15 to 24 years, only 39% answered all five baseline questions on HIV transmission and major misconceptions correctly.
- One quarter of women reported that they would be willing to have casual contact with a person who has HIV and was not sick.
- Six in ten women reported that they believed they could get a confidential HIV test in the community.
- Only ten women (2.5%) reported that they had ever had a HIV test and received their results.
- Only one in five women who reported potential STI symptoms had sought advice at a hospital or health clinic.
- Trichomonas was the most commonly detected STI (15 to 24 years: 23%, 25 to 44 years 14%) followed by Chlamydia (15 to 24 years: 16%, 25 to 44 years 6%).
- HIV antigen was not detected in any of the ANC women tested.

### **Key Findings for Youth**

The Behavioural Surveillance Survey included 592 participants aged 15 to 24 years.

- Four in five males (85%) and three quarters of females (74%) reported ever having sexual intercourse.
- Sixty eight percent of males and sixty one percent of females reported having sex in the previous 12 months.

- The average number of partners in the last 12 months was 3.8 for males and 2.6 for females.
- Forty three percent of females reported having only one sexual partner in the last 12 months compared with 21% of males.
- Ten percent of males and 18% of females reported using a condom the first time they had sex. Of these 97% reported using a male condom.
- For youth who reported having sex in the last 12 months, just over 30% of males and 25% of females reported using a condom the last time they had sex.
- For sexually active youth, over half of males (56%) and 40% of females reported overlapping sexual relationships in the last 12 months. In the last 12 months 13% of males and 8% females reported having group sex.
- Almost half of the female youth and 25% of male youth reported being forced to have sex at some time. The main perpetrator in the case of female youth was a partner, while for male youth it was a friend.
- Almost all the youth surveyed (99% males and 97% females) reported that they had heard of HIV or AIDS prior to taking part in the survey.
- Knowledge of HIV was high, with each knowledge question correctly answered by eighty to ninety percent of youth. Two thirds of males (66%) and 54% of females correctly answered all five UNGASS questions on HIV transmission and major misconceptions.
- Thirty percent of males and 35% of females either agreed or strongly agreed that a person should be able to keep his/her HIV status private.
- Less than seven percent of youth reported ever having a HIV test, and of these approximately 80% had been tested in the last year. None of the youth tested positive for HIV in this survey.
- Nearly 20% of females and ten percent of males tested were found to have chlamydia. Ten percent of youth tested had active syphilis and 3% gonorrhoea.

## ***Recommendations***

A number of the recommendations that were made following the first round of SGS in 2004/05 were unable to be implemented but are still valid following this more recent round.

- Implement staggered surveys when two or more population groups are to be surveyed. Due to limited personnel it is difficult for PICTs to manage several surveys simultaneously. If surveys are staggered logistical or technical problems will be more readily identified and resolved, and personnel will have an increased opportunity to gain sustainable skills.
- Use probabilistic sampling strategies which help to ensure representative samples and statistically valid estimates from surveys. When convenience sampling is used, there is no way of verifying whether the sample is representative of the population of interest. The other major disadvantage is that findings from future surveys can not be reliably compared with previous findings. Methodologies are available which enable probabilistic sampling, even when sampling frames (population lists) are unavailable.
- Include high risk groups in future SGS, for example sex workers or men who have sex with men. Successful outcomes from surveys from high risk groups will require formative research e.g. group mapping, preliminary estimation of the size of the populations and the prevalence of risk behaviours in the population(s) of interest. Generic questionnaires can then be modified to include relevant behaviours and use appropriate language and terms.

Other recommendations based on findings:

- Use findings from the surveys to improve HIV prevention activities.
- Present data to key personnel who can implement changes in policy and programs.
- Modify existing activities and programs using findings from surveys, e.g. sexual behaviours, condom use, knowledge and attitudes on HIV, access to testing for HIV and STIs.
- Continue with STI screening programs implemented in 2008
- Develop educational activities targeting groups at greater risk for infection

# Introduction

## ***Background***

The Solomon Islands are situated in Melanesia, East of Papua New Guinea (PNG) and consist of nearly 1000 islands spanning over an estimated 28,400 square kilometres. The capital of the Solomon Islands is Honiara which is located on the island of Guadalcanal.

The Solomon Islands consists of 10 Provinces or administrative areas: Central, Choiseul, Guadalcanal, Honiara (Town), Isabel, Makiara-Ulawa, Malaita, Rennell and Bellona, Temotu and Western. In 2007, the population was estimated at 503,900, and the majority of people were of Melanesian ethnicity (94.5%), followed by Polynesian (3%) and Micronesian (1.2%). Although English is the official language, the majority of people speak, Melanesian, Polynesian and Micronesian languages, and only 1-2% of the population speak English.

## ***HIV and STIs in the Solomon Islands and the Pacific***

Human Immunodeficiency Virus (HIV) was detected in Solomon Islands in 1994 and up to the end of December 2008 a cumulative total of twelve HIV cases have been confirmed. The main mode of HIV transmission is thought to have been through heterosexual transmission. Five of the confirmed cases have subsequently died from Acquired Immunodeficiency Syndrome (AIDS) related causes. The seven remaining people living with HIV (PLWH) are aged between 20 and 35 years.

The first round of Second Generation Surveillance (SGS) surveys was conducted in the Solomon Islands in 2004-05 and included a sexually transmitted infection (STI) prevalence survey (SPS) of Antenatal women, an HIV prevalence survey of Antenatal women from border areas and a behavioural risk factor survey of youth. No cases of HIV were diagnosed among either of the antenatal groups. However, 10% of Antenatal women were found to have had exposure to Syphilis and 6.4% were found to have a Chlamydia infection. (1)

Findings from SGS conducted in five other Pacific Island Countries and Territories (PICTS) at that time also found a high prevalence of STI's among Antenatal women, of which Chlamydia was the most commonly detected. The prevalence of Chlamydia ranged from 6% to 29% for women from the 6 PICTs, and with estimates highest among

women aged less than 25 years. (2) As STIs can result in serious complications in adults and the babies of infected women, these surveys identified the need for improving STI surveillance and treatment in the Pacific.

Although the reported HIV prevalence in the general community is currently very low in all PICTs except PNG, the prevalence of STIs is a major concern.(3,4) This is because HIV is acquired through the same mechanisms as other STIs and blood borne infections which have already been shown to be prevalent in the Pacific. Two other important factors are that persons who already have an STI are known to be more susceptible to the transmission of HIV and research has shown a high prevalence of risk behaviours for acquiring HIV in the Pacific. (5)

The risk of the increased prevalence of HIV has resulted in increased attention being given to STIs and their control as an intervention to limit the spread of an HIV epidemic. One recent intervention has included the introduction of pilot programs for screening adults for Chlamydia, Gonorrhoea and Trichomonosis in a number of PICTS in 2008. These programs will help to reduce the prevalence of STI's and facilitate ongoing surveillance of these infections.

### ***SGS background***

Second generation surveillance (SGS) involves strengthening existing HIV surveillance systems to improve the quality and breadth of information. SGS uses information from ongoing routine data collection systems *and* includes periodic collection of behavioural and biological data. SGS includes both surveillance of both the general population and specific high risk subgroups. (6)

SGS aims to:

- Increase the understanding of trends over time
- Increase knowledge of risk behaviours driving trends
- Use flexible tools that can change according to changes over time
- Make better use of existing surveillance data

Recommended frequency and type of surveillance differ according to the level of the HIV epidemic. HIV epidemics can be broadly classified into three levels:

Low: HIV is present in 'high risk' population subgroups, such as sex workers, injecting drug users, and men who have sex with men. HIV may have present in these groups for sometime, but prevalence remains low and stable.

Concentrated: There has been a rapid increase of HIV in high risk population subgroups, but HIV is not yet prevalent within the general community.

Generalised: While high risk groups have a disproportionately high prevalence, HIV is also established within the general population.

### ***SGS in Low Prevalence Settings***

SGS aims to provide an early warning of groups who are a high risk and the associated risk behaviours.

Comprehensive SGS activities in low-level epidemics include

- cross-sectional behaviours surveys
- surveillance of STI's
- HIV serosurveillance
- HIV and AIDS Case reporting
- screening donated blood.

During the second round of SGS all participants completed a questionnaire which provides information on demographic characteristics, sexual risk behaviours, alcohol and other drug use, HIV knowledge, attitudes and access to testing, and STI history.

Questionnaires were based on surveys developed by the Family Health International Organisation (FHI), and modified for use in the Pacific by the University of New South Wales (UNSW) in Australia, the World Health Organization (WHO) and the Secretariat of the Pacific Community (SPC).

The behavioural questionnaires are very similar for all population groups. The surveys have been adjusted to make them relevant to that population of interest and enable reporting of population specific indicators.

## Surveys Conducted in Country

In 2008, an STI Prevalence Survey (SPS) was conducted among pregnant women attending Antenatal Clinics (ANC) in Honiara, Gizo and Munda and a Behavioural Surveillance Survey (BSS) and SPS were also conducted among youth 15 to 24 years from these regions and also Auki in Malaita.

### ***Survey Methodology***

One of the most important reasons for conducting population based health surveys is to be able to describe the characteristics of a population and make comparisons between subgroups of interest. To facilitate statistically valid comparisons, data is normally weighted to the population of interest (for example youth aged 15 to 24 years), so that comparisons can be made on the basis of factors such as age, sex and area of residence.

As non-probabilistic sampling techniques were used when conducting these surveys, it is not possible to determine whether samples are truly representative of entire populations of interest and the data have not been weighted to population(s).

### ***Specimen Collection and testing***

STI prevalence surveys involved the collection of urine samples to test for the presence of Chlamydia and gonorrhoea, and blood for syphilis, hepatitis B and HIV antigen testing. HIV prevalence surveys involved the collection of blood for syphilis, hepatitis B and HIV antigen testing.

Participants who took part in SPS surveys were asked to provide a 10-15 ml first catch urine sample. Specimens were transferred to the central laboratory in country and frozen at -20 degrees Celsius until subsequent shipment to Melbourne. Frozen urine specimens were sent to the Molecular Microbiology Laboratory at the Royal Women's Hospital in Melbourne, Australia to test for chlamydia and gonorrhoea.

Laboratory testing for *C.trachomatis* and *N.gonorrhoeae* involved amplification of sequences, using the ROCHE COBAS Amplicor (Roche Diagnostics, Branchburg, New Jersey, United States of America). All positive *N.Gonorrhoeae* specimens were then confirmed by an alternate Polymerase Chain Reaction (PCR) assay using primers and probes directed at a 90 base pair region of OPA gene.(7)

For participants involved in SPS a 10 ml blood sample was taken for testing. Screening for Syphilis by Rapid Plasma Reagin (RPR) and Treponema Pallidum Particle Agglutination test (TPPA), and for Hepatitis B and HIV by Enzyme Linked Immunosorbent Assay (ELISA) (Determine and Serodia) was undertaken.

Blood specimens were tested at the National Referral Laboratory (NRL) in Honiara for Honiara participants and Gizo and Helena Goldie Hospitals for participants from the Western Province. Arrangements were made to send HIV positive specimens to Melbourne Hospital for HIV confirmatory tests, however, there was no positive HIV case detected, thus no specimen sent.

**Table 1: Specimens collected and tests performed, SGS, Solomon Islands, 2008**

<b>Infection</b>	<b>Specimen</b>	<b>Tests</b>
Chlamydia	Urine	PCR Assay
Gonorrhoea	Urine	PCR Assay
Syphilis	Blood	TPPA RPR RPR titre (if RPR was reactive). Cases were recorded as positive if titres were greater than or equal to 1:8.
Hepatitis B	Blood	ELISA: Determine and Serodia
HIV antibodies	Blood	ELISA: Determine and Serodia
HIV Confirmatory	Blood	Confirmed according to the regional algorithm

### **Data analysis**

Data was analysed using EpiInfo (v3.5). The information in this report is presented as a percentage of those who had a particular characteristic. The term prevalence has also been used to describe of the percentages of individuals with a particular characteristic or behaviour. Prevalence differs from incidence, which is the number of *new* cases of a condition in the population.

No statistical tests have been performed for the presented data unless specifically shown in tables or stated in text, therefore comparisons between population subgroups are general trends and observations, and should not be taken to indicate statistically significant differences.



Where confidence intervals are presented in this report, the 95 percent confidence range has been used. When confidence intervals overlap, this indicates that there is probably no difference in the estimates being compared. If the confidence intervals do not overlap, then the estimates are considered to be significantly different.

Confidence intervals are considered to be a conservative measure of difference. The Chi Square statistic is a more powerful statistical test and has been used to identify significant differences associated with demographic and risk factors for Chlamydia infections in Antenatal women.

## Surveys

### STI Prevalence Survey of Antenatal clinic attendees

#### *Survey Methodology*

Table 2 shows an overview of the survey methodology used for the Antenatal women's survey.

**Table 2: Overview of the Survey Methodology, Antenatal Women. Solomon Islands, 2008**

<b>Methodology</b>	<b>Survey details</b>
Population	<i>Antenatal women</i>
Survey type	<i>STI Prevalence Survey (SPS)</i>
Sampling method	<i>Consecutive recruitment</i>
Inclusion criteria	<i>Women attending the antenatal clinic for the first time for the pregnancy or who had not been tested for an STI during the pregnancy</i>
Target Sample Size	<i>400</i>
Final Sample Size	<i>407</i>
Interview location(s)	<i>Prenatal Clinics in Honiaria (Kukum Clinic, Naha Clinic, Rove Clinic and Mataniko Clinic), Gizo (Gizo Hospital) Munda (Helena Goldie Hospital, Noro Clinic, Noro Soltai Clinic)</i>
Administration of the survey	<i>Interviewer administered by nurses from the clinic</i>
Type of consent	<i>Verbal. Interviewers signed a declaration not to release any information without the participants' approval.</i>
Time required for interview	<i>20-25 minutes</i>
Data collection period	<i>March to June</i>

#### ***Eligibility criteria***

Women aged 15 to 44 years were consecutively recruited from Prenatal Clinics in Honiaria (Kukum Clinic, Naha Clinic, Rove Clinic and Mataniko Clinic), Gizo (Gizo Hospital) and Munda (Helena Goldie Hospital, Noro Clinic, Noro Soltai Clinic). The upper age limit of 44 years was used in order to increase the proportion of younger women in the survey sample. The total number of participants in the survey was 407. No women refused to take part in the survey.

## Results

### ANC survey

#### Demographic characteristics.

Table 3 shows the demographic characteristics of women who took part in the survey.

**Table 3: Reported Demographic Characteristics, Antenatal Women, Solomon Islands, 2008**

	N	%		N	%
Age group			Area of Residence		
<i>15 to 24 years</i>	189	46.4	<i>Urban - Honiara</i>	306	75.2
<i>25 to 44 years</i>	218	53.6	<i>Rural - Gizo/Munda</i>	101	24.8
<i>Total</i>	407	100.0	<i>Total</i>	407	100.0
Place of Birth			Education		
<i>Malaita</i>	113	28.1	<i>Never attended school</i>	22	5.4
<i>Honiara</i>	103	25.6	<i>Some primary school</i>	91	22.4
<i>Other Provinces</i>	93	23.1	<i>Completed primary school</i>	123	30.2
<i>Western Province</i>	92	22.9	<i>Completed secondary</i>	140	34.4
<i>Other country</i>	1	0.2	<i>Completed higher</i>	31	7.6
<i>Total</i>	402	100.0	<i>Total</i>	407	100.0
Ethnicity			Occupation		
<i>Melanesia</i>	361	88.7	<i>Housewife/Home Duties</i>	309	75.9
<i>Polynesia</i>	30	7.4	<i>Other</i>	67	16.5
<i>Micronesia</i>	14	3.4	<i>Clerical/Office work</i>	17	4.2
<i>Mixed ethnicity</i>	2	0.5	<i>Not employed</i>	14	3.4
<i>Total</i>	407	100.0	<i>Total</i>	407	100.0

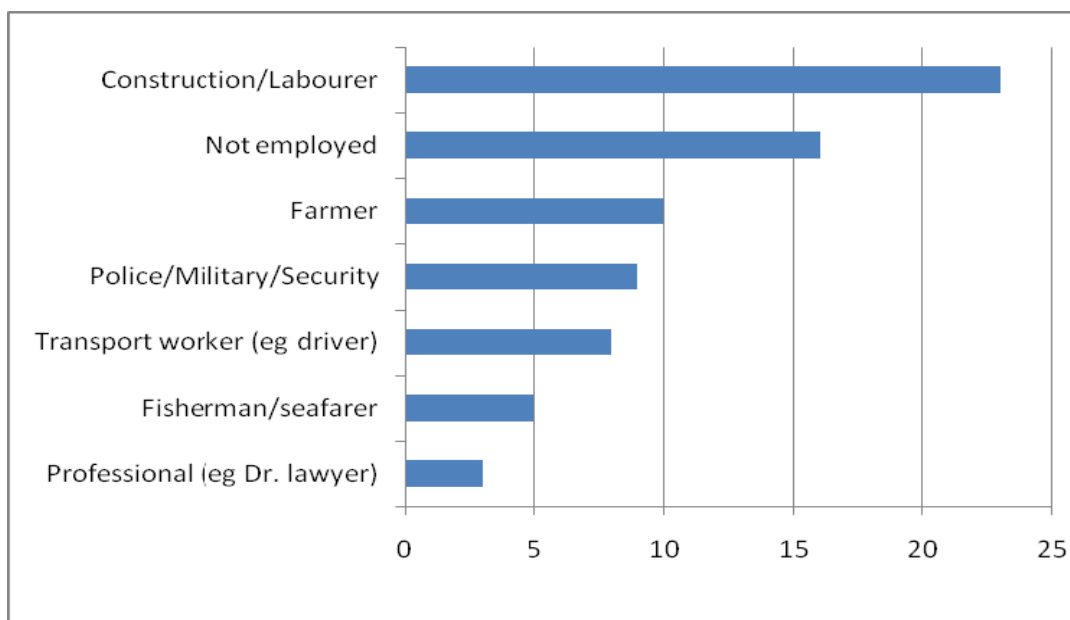
There was a higher proportion of women aged 25 to 44 years (54%) compared with those aged 15 to 24 years (46%). The majority of women were born in the Solomon Islands (99%). More than half of the women had completed primary education or less (58%). Three quarters of women reported being a housewife or doing home duties.

**Table 4: Reported Marital Status and Living Arrangements, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
<b>Marital Status</b>				
<i>Ever married</i>	84	45.4	145	67.4
<i>Currently married</i>	79	42.7	133	61.9
Still in a relationship with the father of your unborn child	163	88.1	208	96.7
<b>Living Arrangements:</b>				
<i>Living with your spouse</i>	57	31.0	59	27.4
<i>Living with a sex partner (non-married)</i>	92	50.0	145	67.4
<i>Not living with any sex partner</i>	35	19.0	11	5.1

Table 4 shows that one in four women aged 15 to 24 years (43%) and one in six aged 25 to 44 years (62%) were currently married. Eight in ten women aged 15 to 24 years (81%) reported living with a spouse or sex partner compared with 95% of women aged 25 to 44 years.

**Figure 1: Partners' Occupation as a Percentage of All Partners, Solomon Islands, 2008**



The most commonly reported occupations for partners were labourers, construction workers or landscape gardeners (25%), farmers 10% and police, military or security work (9%). Sixteen percent of women also reported that their partner was unemployed.

### ***Pregnancy characteristics***

Table 5 shows the reported pregnancy characteristics for Antenatal women.

**Table 5: Pregnancy Characteristics, Antenatal Women by Age Group, Solomon Islands, 2008**

	15 to 24 years		25 to 44 years	
	N	%	N	%
Number of previous pregnancies				
0	101	53.4	26	11.9
1	58	30.7	36	16.5
2	16	8.5	51	23.4
3	9	4.8	52	23.9
4 or more	5	2.6	53	24.3
Number of miscarriages				
0	166	87.8	178	81.7
1	20	10.6	35	16.1
2	1	0.5	3	1.4
3	2	1.1	2	0.9
<i>Number of births at &gt;37 weeks or later</i>				
0	106	56.1	30	13.8
1	59	31.2	42	19.3
2	13	6.9	49	22.5
3	8	4.2	47	21.6
4 or more	3	1.6	50	22.9
Number of live births				
0	106	56.1	31	14.2
1	60	31.7	43	19.7
2	13	6.9	46	21.1
3	7	3.7	49	22.5
4 or more	3	1.6	49	22.5
Trimester of current pregnancy (women attending for 1st ANC visit)				
1	5	2.8	7	3.6
2	105	59.0	104	54.2
3	68	38.2	81	42.2
Planned pregnancy				
No	124	65.6	135	62.2
Yes	65	34.4	82	37.8

More than half of women aged 15 to 24 years reported that they had never been pregnant before (53%) and a further third reported only one previous pregnancy (31%). In contrast, nearly ninety percent of women aged 25 to 44 years reported having at least one previous pregnancy, with almost 50% reporting three or more previous pregnancies.

Twelve percent of women aged 15 to 24 years and one in five women aged 25 to 44 years (18%) reported ever having a miscarriage, with the majority of these women reporting having only one miscarriage.

Less than three percent of the women surveyed were in the first trimester of pregnancy. Six in ten women aged 15 to 24 years and five in ten aged 25 to 44 years reported that they were in the second trimester, while the remainder reported that they were into the third trimester of pregnancy.

Over sixty percent of women in both age groups reported that their pregnancies had not been planned. Of these, 85% of women aged 15 to 24 years and 69% of women aged 25 to 44 years reported that they did not use any form of contraception in the three months prior to becoming pregnant.

### ***Sexual behaviours***

Table 6 shows reported age of first sexual intercourse, and the number of sex partners over the lifetime and in the last 12 months for Antenatal women.

**Table 6: Reported Sexual History, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	Mean	Range	Mean	Range
Age at when first had sex	17.3	12 to 23	18.3	12 to 31
Number of sex partners in lifetime	4.4	1 to 82	3.8	1 to 22
Number of sex partners in the last 12 months	1.3	1 to 9	1.1	1 to 6

The average age of first sex was one year older for women aged 25 to 44 years compared with those aged 15 to 24 years (18.3 years compared with 17.3 years). The mean number of sex partners in their lifetime was 3.8 for the older age group and 4.4 for the younger age group. However, if the one woman reporting 82 partners is excluded, the mean number of partners is 3.8 for both groups.

Table 7 shows overall, less than 7% of women surveyed were under fifteen years when they first had sex. Approximately one in three women in both age groups reported that they had only ever had one sexual partner (15 to 24 years: 31%; 25 to 44 years: 30%).

**Table 7: Reported Sexual Behaviours/History, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Age at first sex less than 15 years	13	6.9	13	5.9
Only 1 lifetime sex partner	55	30.4	62	29.7
Only 1 sex partner in past 12 months	151	82.1	204	94.9
More than two sexual relationships during the same time period, in the last 12 months	17	9.2	4	1.9
Has been off-island in the last 12 months	9	5.0	17	8.1
Had sex with someone (other than partner) while off-island (as percentage of those who have been off island).	1	12.5	0	0.0
Ever forced you to have sex	52	28.3	61	28.8
Relationship with person who forced sex				
Partner	29	60.4	49	90.7
Relative	8	16.7	1	1.9
Stranger	7	14.6	1	1.9

Eight in ten women aged 15 to 24 years (82%) and nine in ten women aged 25 to 44 years (94%) reported having only one sexual partner in the last 12 months. The table also shows the reported prevalence of overlapping relationships in the last 12 months, off island travel and associated sexual intercourse with someone other than usual partner in the last 12 months and ever being forced to have sex for Antenatal women.

While nine percent of Antenatal women aged 15 to 24 years reported having two sexual relationships at the same time in the last 12 months, less than two percent of women aged 25 to 44 years reported overlapping relationships in the last 12 months.

Reported off island travel in the last 12 months was uncommon for both age groups. Of women who had travelled off island, one in ten women aged 15 to 24 years only reported having sexual intercourse with someone other than usual partner.

Over one quarter of women in both age groups reported that they had ever been forced to have sexual intercourse. The most common persons to force sex were partners (15 to 24 years: 60%; 25 to 44 years: 90%).

Table 8 shows the reported prevalence of ever having heard of condoms, ever use of condoms and condom use in the last 12 months for Antenatal women.

**Table 8: Reported Knowledge of Condoms and Condom Use, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Ever heard of a male condom	166	89.7	186	86.5
Ever heard of a female condom	99	54.4	109	50.9
Used a condom first time had sex	93	50.3	112	52.1
Ever used a condom:				
<i>Male condom only</i>	93	50.3	112	52.1
<i>Female condom only</i>	3	1.6	2	0.9
Condom use in past 12 months:				
<i>Every time</i>	0	0.0	0	0.0
<i>Sometimes</i>	72	38.9	77	35.8
<i>Never</i>	113	61.1	138	64.2

Nearly nine in ten women in both age groups reported that they had heard of a male condom, while half had heard of a female condom. Male condoms had ever been used by approximately half of the women in both age groups, while less than two percent reported ever using a female condom.

Over one third of women reported that they sometimes used a condom (15 to 24 years: 39%; 25 to 44 years: 36%), while none reported using a condom every time in the past 12 months.

**Table 9: Reported Transactional Sex, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Paid someone money in exchange for sex	0	0.0	1	0.5
Paid someone goods or favours in exchange for sex	0	0.0	1	0.5
Received money in exchange for sex	7	3.8	0	0.0
Received goods or favours in exchange for sex	2	1.1	0	0.0



Only two women reported paying money, goods or favours in exchange for sex in the last 12 months, both were aged 25 to 44 years. Seven women aged 15 to 24 years (3.8%) reported receiving money and a further two women (1.1%) reported receiving goods or favours in exchange for sex in the previous 12 months.

### **Substance use**

Table 10 shows the reported frequency of alcohol consumption and usual intake in the 12 month period before becoming pregnant, and whether women had consumed alcohol during the current pregnancy.

**Table 10: Reported Frequency of Alcohol Consumption and Usual Intake, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Frequency of alcohol use:				
<i>4 or more times a week</i>	0	0.0	1	0.5
<i>2 to 3 times a week</i>	1	0.5	2	0.9
<i>2 to 4 times a month</i>	2	1.1	3	1.4
<i>Monthly or less</i>	25	13.7	29	13.6
<i>Never</i>	155	84.7	179	83.6
Number of standard drinks usually consumed:				
<i>1 to 2</i>	12	46.2	10	29.4
<i>3 to 4</i>	8	30.8	14	41.2
<i>5 to 9</i>	4	15.4	7	20.6
<i>10 or more</i>	1	3.8	1	2.9
Has drunk alcohol while pregnant	8	4.4	8	3.7

Over eighty percent of women from both age groups reported that they hadn't consumed alcohol in the 12 month period before becoming pregnant. Of women who did consume alcohol, the majority reported consuming alcohol on a monthly or less than monthly basis.

One in five women aged 15 to 24 years (19%) and one in four women aged 25 to 44 years (24%) who consumed alcohol prior to the pregnancy, reported that they normally consumed 5 or more standard drinks. Less than five percent of women from both age groups reported consuming alcohol during their current pregnancy.

Table 11 shows the prevalence of ever use of recreational drugs and use in the last 12 months for Antenatal women.

**Table 11: Reported Recreational Drug Use, Antenatal Women, by Age Group, Solomon Islands, 2008**

	Ever used		Used in last 12 months		
	N	%	N	% ever users	% all respondents
<b>15-24</b>					
Betel nut	130	70.3	118	90.8	63.8
Tobacco	57	31	39	68.4	21.1
Kava	2	1.1	0	0.0	0
Amphetamines/Ecstasy	3	1.6	0	0.0	0
Butane/gas/glue (sniffing)	0	0.0	-	-	-
Marijuana/cannabis	4	2.2	2	50.0	1.1
<b>25-44</b>					
Betel nut	155	72.8	144	92.9	67.0
Tobacco	62	29	43	69.4	20.0
Kava	4	1.9	0	0.0	0
Amphetamines/Ecstasy	3	1.4	0	0.0	0
Butane/gas/glue (sniffing)	4	1.9	0	0.0	0
Marijuana/cannabis	6	2.8	0	0.0	0.0

Although Betel Nut is a mild stimulant, can satisfy hunger and is a common social and cultural practise, it is also associated with serious potential side effects including oral fibrosis and oro-pharyngeal cancer. (8) Betel nut was the most commonly reported recreational drug, and was used by approximately two-thirds of Antenatal women in the last 12 months (15 to 24 years: 64%; 25 to 44 years: 67%).

One in five women in both age groups reported using tobacco in the last 12 months. While 26 women (7%) reported ever having used other recreational drugs, only two women aged 15 to 24 years reported using marijuana in the last 12 months.

## HIV knowledge and attitudes

Table 12 shows findings for knowledge of HIV/AIDS for Antenatal women surveyed.

**Table 12: Knowledge of HIV/AIDS, Antenatal Women, by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Before this survey, had you heard of HIV/AIDS	169	91.4	200	93.9
Having sex with only one, uninfected, faithful partner can reduce the chance of getting HIV:				
<i>True</i>	125	74.9	169	84.9
<i>False</i>	14	8.4	10	5.0
<i>Don't know</i>	28	16.8	20	10.1
Using condoms correctly can reduce the chance of getting HIV:				
<i>True</i>	140	82.8	165	82.5
<i>False</i>	11	6.5	10	5.0
<i>Don't know</i>	18	10.7	25	12.5
A healthy looking person can be infected with HIV:				
<i>True</i>	126	74.6	169	84.5
<i>False</i>	13	7.7	15	7.5
<i>Don't know</i>	30	17.8	16	8.0
A person can get HIV from mosquito bites:				
<i>True</i>	21	12.4	17	8.5
<i>False</i>	120	71.0	137	68.5
<i>Don't know</i>	28	16.6	46	23
A person can get HIV by sharing a meal with someone who is infected with HIV:				
<i>True</i>	8	4.8	6	3.0
<i>False</i>	141	84.4	169	84.5
<i>Don't know</i>	18	10.8	25	12.5
A mother can pass HIV to their baby during pregnancy, delivery or breastfeeding:				
<i>True</i>	150	90.4	171	85.5
<i>False</i>	1	0.6	5	2.5
<i>Don't know</i>	15	9.0	24	12
<i>Overall Knowledge (as percentage of all survey respondents)</i>				
<i>Correct response to 2 prevention questions</i>	118	63.8	147	68.4
<i>Correct response to 3 misconceptions</i>	91	49.2	117	54.4
<i>Correct response to all 6 questions</i>	68	36.8	84	39.1

Seventeen women aged 15 to 24 years (9%) and thirteen aged 25 to 44 years (6%) reported that they had not heard of HIV or AIDS. Only women who reported that they had heard of HIV or AIDS were asked questions on the prevention and transmission of HIV.

Levels of knowledge were relatively high for individual questions. Knowledge was highest for: the correct use of condoms can reduce the chance of acquiring HIV (15 to 24 years: 83%; 25 to 43 years: 82%); a person cannot get HIV by sharing a meal with a person who has HIV (15 to 24 years: 84%; 25 to 44 years: 84%) and a women can pass HIV onto her baby during pregnancy, childbirth or breastfeeding (15 to 24 years: 90%; 25 to 44 years: 86%). The lowest percentage of correct responses was for knowledge that HIV cannot be acquired from mosquito bites (15 to 24 years: 71%; 25 to 44 years: 68%).

However, overall (including the women who had not heard of HIV) less than 70% of all survey participants could correctly identify the two prevention strategies and only around half of all women surveyed could correctly identify the three misconceptions. Less than 40% of all women in the survey could correctly answer all six questions.

Table 13 shows the reported attitudes towards people living with HIV/AIDS and opinions on whether a person has the right to keep their HIV status private.

Fewer than half of the women from both age groups reported that would be willing to care for a relative with HIV in their own home (15 to 24 years: 46%; 25 to 44 years: 42%). However, only around 40% of the women from both age groups reported that they would want their relatives HIV status to remain a secret (15 to 24 years: 43%; 25 to 44 years: 39%).

Only one in four women reported that they would be willing to have casual contact with shopkeeper or vendor and only one in five women agreed that a female teacher who has HIV and is not sick should be allowed to keep teaching.

Further, only 21% of women aged 15 to 24 years and 13% aged 25 to 44 years agreed that a person should be allowed to keep their HIV status private.

**Table 13: Attitudes towards Those Living with HIV, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
If a family member had HIV, would you be willing to care for him/her in your home				
Yes	85	45.9	90	42.3
No	80	43.2	102	47.9
<i>Don't Know</i>	16	8.6	21	9.9
If a member of your family became ill with HIV, the virus that causes AIDS, would you want it to remain secret:				
Yes	79	42.7	83	39.2
No	97	52.4	111	52.4
<i>Don't Know</i>	9	4.9	18	8.5
Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV:				
Yes	46	24.9	50	23.4
No	123	66.5	145	67.8
<i>Don't Know</i>	16	8.6	19	8.9
In your opinion, if a female teacher has HIV and is not sick, should she be allowed to continue teaching in the school:				
<i>Should be allowed</i>	35	19.0	44	20.6
<i>Should not be allowed</i>	114	62.0	136	63.6
<i>Don't know/not sure/depends</i>	35	19.0	34	15.9
A person should be able to keep his/her HIV status private (no one else needs to find out):				
<i>Agree</i>	30	16.2	16	7.5
<i>Strongly agree</i>	9	4.9	12	5.6
<i>Disagree</i>	103	55.7	127	59.6
<i>Strongly disagree</i>	28	15.1	47	22.1
<i>Don't Know</i>	15	8.1	11	5.2

Table 14 shows reported exposure to HIV prevention activities within the community for Antenatal women. At least 84% of antenatal women reported hearing messages about HIV on the radio and approximately six in ten women had either read leaflets or pamphlets, or received information from outreach workers. Exposure to messages about HIV on television was the least common mode of obtaining information.

**Table 14: Exposure to HIV Prevention Activities, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Heard messages about HIV on radio	157	84.9	179	84.0
Read leaflets or pamphlets about HIV/AIDS	64	58.2	65	68.4
Received HIV information from outreach workers visiting the community/village	69	62.7	59	62.1
Read messages about HIV in newspapers	95	51.4	108	50.7
Seen HIV/AIDS messages on billboards	97	52.4	113	53.1
Seen messages about HIV on TV	77	41.6	100	46.9

## Access to testing

Table 15 shows the reported prevalence of believing that confidential HIV testing is available in the community, reasons why women do not believe confidential testing is available and prevalence of being tested for HIV for Antenatal women.

Six in ten women from both age groups reported that they believed it was possible to obtain a confidential HIV test in their community.

The three most common reasons for it not being possible to obtain a confidential test for both age groups in the community were: too frightened, believing that everyone would find out and believing that HIV testing was not available.

**Table 15: Reported Access to Testing, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Believe it is possible for someone in the community to get a confidential test	109	59.2	127	59.3
Reasons why you can't get a confidential test:				
<i>Too frightened</i>	17	32.1	14	19.4
<i>Everyone will find out</i>	9	17.0	12	16.7
<i>HIV testing is not available</i>	7	13.2	16	22.2
<i>Testing site too difficult to get to</i>	5	9.4	10	13.9
<i>Testing site too public</i>	2	3.8	4	5.6
Has ever been tested for HIV	6	3.3	8	3.8
When had last HIV test:				
<i>In the last 3 months</i>	1	16.7	1	16.7
<i>In the last year</i>	3	50.0	2	33.3
<i>Over a year ago</i>	2	33.3	3	50.0
Reason why had last HIV test:				
<i>Blood donor</i>	1	16.7	0	0.0
<i>Don't Know</i>	1	16.7	0	0.0
<i>Medical Check</i>	4	66.7	7	100.0
Received result of HIV test	5	83.3	5	71.4

\* Respondents could provide more than one answer

### ***History of STIs and Symptoms of STIs in the last month***

Table 16 shows the reported history of STIs, prevalence of STI symptoms in the month preceding the survey and treatment seeking behaviours for Antenatal women.

**Table 16: Reported History of STIs, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
Ever been diagnosed with an STI by a doctor or health worker	7	3.8	17	7.9
Infections women were you diagnosed with:				
<i>Gonorrhoea</i>	4	57.1	11	64.7
<i>Syphilis</i>	1	14.3	5	29.4
<i>Genital warts</i>	2	28.6	0	0.0
<i>Trichomonas</i>	1	14.3	0	0.0
Were your partners also treated	2	28.6	15	88.2
Symptoms in the last month:				
<i>Unusual genital or anal discharge</i>	6	5.7	10	11.5
<i>Rash, ulcer or sore around your genitals</i>	8	7.5	8	9.2
<i>Lower abdominal pain during sex</i>	24	22.4	22	25.6
<i>At least one symptom</i>	30	27.0	27	28.4
Has seen someone for treatment of symptoms	5	16.7	7	25.9
If you were worried you had a STI where would you go for help:				
<i>Health Clinic</i>	95	85.6	80	84.2
<i>Hospital</i>	13	11.7	13	13.7
<i>No answer</i>	3	2.7	2	2.1

Seven women aged 15 to 24 years (3.8%) and seventeen women aged 25 to 44 years (7.9%) reported ever being diagnosed with an STI. Gonorrhoea was the most commonly reported STI by both age groups. While 88% of women in the older age group reported that their partner had been treated, less than 30% of women aged 15 to 24 did.

Abdominal pain during sex was the most common symptom in the last month, reported by one in four women from both age groups. Although over 97% of women reported that they would attend a health clinic or hospital if they thought they had a STI, only one in six women aged 15 to 24 years and one quarter of women aged 25 to 44 years reported that they had sought treatment for their STI symptoms.



## Prevalence of STIs

Table 17 shows the results of STI testing for Antenatal women from the Solomon Islands.

**Table 17: Prevalence of STIs, Antenatal Women by Age Group, Solomon Islands, 2008**

	N Reactive/ positive	N tested	%	LCI	UCI
<b>15-24</b>					
Trichomonas	20	86	23.3	14.8	33.6
Hepatitis B (Antigen)	22	139	15.8	10.2	23.0
Chlamydia	28	175	16.0	10.9	22.3
Syphilis	7	139	5.0	2.0	10.1
Gonorrhoea	4	175	2.3	0.6	5.7
HIV	0	139	0.0	-	-
<b>25-44</b>					
Trichomonas	14	103	13.6	7.6	21.8
Hepatitis B (Antigen)	19	159	11.9	7.4	18.0
Chlamydia	12	196	6.1	3.2	10.5
Syphilis	3	157	1.9	0.4	5.5
Gonorrhoea	1	196	0.5	0.0	2.8
HIV	0	159	0.0	-	-

Trichomonas was the most common infection detected in the survey. Of women in the 15 – 24 year age group 23% tested positive compared with 14% in the 25 – 44 year age group.

Hepatitis B surface antigen, which indicates prior exposure to the Hepatitis B Virus, was detected in approximately 16% of women aged 15 to 24 years and 12% of women aged 25 to 44 years.

Chlamydia was detected in 16% of women aged 15 to 24 years and six percent of women aged 25 to 44 years.

Ten women were also found to have an active Syphilis infection (seven aged 15 to 24 years and three aged 25 to 44 years) and five women also had Gonorrhoea detected.

HIV was not detected amongst any of the women tested.

Table 18 shows the prevalence of Chlamydia by selected demographic and risk factors for SGS conducted in 2008.

**Table 18: Prevalence of Chlamydia by selected demographic and risk factors, Antenatal Women, Solomon Islands, 2008**

	Total N	Chlamydia N	%
Age			
15 to 25 years	175	28	16.0
25 to 44 years	196	12	6.1
Currently married			
Yes	202	15	7.4
No	168	25	14.9
Education			
Never attended school	18	1	5.6
Primary	112	10	8.9
Secondary	132	18	13.6
Higher	27	2	7.4
Age at first sex			
Less than 18 years	167	27	16.2
18 years or older	179	13	7.3
N of sex partners in life			
One	110	9	8.2
Two or more	251	30	12.0
N of sex partners in last 12 months			
One	331	31	9.4
Two or more	39	8	20.5
Sex for money/favours in last 12 months			
Yes	21	6	28.6
No	343	32	9.3

There was found to be significant differences in the prevalence of Chlamydia for a number of the factors investigated: age group (15 to 24 years: 16% versus 25 to 44 years: 6%, chi square 8.4,  $p < 0.01$ ), currently married (yes: 7% versus no: 15%, chi square 4.5,  $p < 0.05$ ), age at first sex (less than 18 years: 16% versus 18 years or older: 7%, chi square 5.9,  $p = 0.01$ ), number of partners in the last 12 months (one: 9% versus two or more: 15%, Fishers exact test,  $p < 0.05$ ) and engaging in sex for money, goods or favours in the last 12 months (yes: 29% versus no: 9%, Fishers exact test,  $p = 0.01$ ).

**United Nations General Assembly Special Session on HIV/AIDS Core Indicators**

**Table 19: UNGASS indicators, Antenatal Women by Age Group, Solomon Islands, 2008**

	15-24		25-44	
	N	%	N	%
7. Percentage of women aged 15-49 who received an HIV test in the last 12 months and who know their results	3	1.6	2	0.9
13. Percentage of antenatal women aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	72	38.9		
15. Percentage of antenatal women aged 15-24 who have had sexual intercourse before the age of 15	13	6.9		
16. Percentage of antenatal women aged 15-49 who have had sexual intercourse with more than one sexual partner in the past 12 months	33	17.8	10	4.7
17. Percentage of antenatal women aged 15-49 who have had sexual intercourse with more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse	NR		NR	

NR = Not reported

Three Antenatal women aged 15 to 24 years and two aged 25 to 49 years reported that they had a HIV test in the last 12 months and received their results.

Less than forty percent of the women aged 15 to 24 years correctly answered all five of the questions used to determine indicator 13, basic level of knowledge:

- *Having sex with only one, uninfected, faithful partner can reduce the chance of acquiring HIV*
- *Using condoms correctly can reduce the chance of getting HIV*
- *A healthy looking person can be infected with HIV*
- *A person can get HIV from mosquito bites*
- *A person can get HIV by sharing a meal with someone who is infected with HIV*

Approximately seven percent of women aged 15 to 24 years reported that they had sex before they were 15 years of age. One in five women aged 15 to 24 years (18%) and one in twenty women aged 25 to 46 years (5%) reported that they had more than one sexual partner in the last 12 months. The number of women reporting more than one partner in the past twelve months and using a condom at last sex (UNGASS 17) cannot be calculated from the data collected in this survey.

# Behavioural Surveillance Survey of Youth

## Survey Methodology

Table 20 shows an overview of the methodology used for the behavioural surveillance survey of youth from the Solomon Islands.

**Table 20: Overview of the Survey Methodology, Youth, Solomon Islands, 2008**

<b>Methodology</b>	<b>Survey details</b>
Population	<i>Youth</i>
Survey type	<i>BSS</i>
Sampling method	<i>Convenience sample</i>
Inclusion criteria	<i>Youth aged 15 to 24 years</i>
Target Sample Size	600
Final Sample Size	592
Interview location(s)	<i>Youth 'hot spots' identified by youth volunteers. Sites included Honiara town centre, Tuvaruhu (suburb outside main town), White river (Western end Honiara), Lunga (Eastern end Honiara), Kolaridge (Central Honiara), Gizo town, Munda town and Noro town (Western Province) and Auki town (Malaita Province)</i>
Administration of the survey	<i>Interview administered by trained youth volunteers</i>
Type of consent	<i>Verbal</i>
Time required for interview	<i>20-25 minutes</i>
Data collection period	March to June 2008

### ***Eligibility criteria***

Youth were eligible to participate if they were aged 15 to 24 years of age. Seven surveys were excluded from analysis because age and/or sex were not recorded on the questionnaire.

Youth were opportunistically recruited from 'hot spots' identified by youth volunteers. Sites included Honiara town centre, Tuvaruhu (suburb outside main town), White river (Western end Honiara), Lunga (Eastern end Honiara), Kolaridge (Central Honiara), Gizo town, Munda town and Noro town (Western Province) and Auki town (Malaita Province).

## Results

### Demographic characteristics.

Table 21 shows the demographic characteristics of youth who took part in the survey.

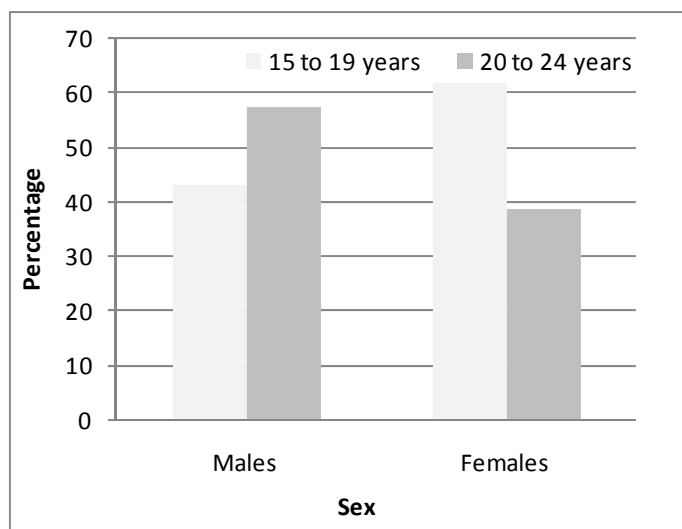
**Table 21: Reported Demographic Characteristics, Youth, Solomon Islands, 2008**

	N	%		N	%
<b>Sex (N=592)</b>			<b>Age group (N=592)</b>		
<i>Female</i>	283	47.8	<i>15 to 19 years</i>	306	51.7
<i>Male</i>	309	52.2	<i>20 – 24 years</i>	286	48.3
<b>Area of Residence (N=588)</b>			<b>Ethnicity (N=592)</b>		
<i>Honiara</i>	392	66.7	<i>Melanesian</i>	555	93.8
<i>Western Provice (Gizo, Munda and Noro towns)</i>	196	33.3	<i>Micronesian</i>	16	2.7
<b>Place of Birth (N=589)</b>			<i>Mixed ethnicity</i>	11	1.9
<i>Central</i>	13	2.2	<i>Polynesian</i>	10	1.7
<i>Chosieul</i>	14	2.4	<b>Living arrangements (N=591)</b>		
<i>Guadalcanal</i>	31	5.3	<i>With family</i>	415	70.2
<i>Honiara</i>	79	13.4	<i>With relatives</i>	131	22.2
<i>Isabel</i>	13	2.2	<i>With peers/friends/other students</i>	28	4.7
<i>Makira</i>	7	1.2	<i>Alone</i>	15	2.5
<i>Malaita</i>	244	41.4	<i>On the street</i>	2	0.3
<i>Renbel</i>	4	0.7	<b>Education (N=582)</b>		
<i>Temotu</i>	16	2.7	<i>Never attended school</i>	8	1.4
<i>Western</i>	168	28.5	<i>Some primary school</i>	165	28.4
<b>Marital status (N=592)</b>			<i>Completed Primary school</i>	50	8.6
<i>Not married</i>	565	95.4	<i>Completed Secondary</i>	348	59.8
<i>Married</i>	27	4.6	<i>Completed Higher</i>	11	1.9

Table 21 shows similar proportions of males (52%) and females (48%), and similar proportions of youth in both age groups (15 to 19 years: 52%; 20 to 24 years: 48%). Two thirds of the youth were from Honiara (67%) whilst the remaining third were from the Western Province (33%).

Figure 2 shows the reported age and sex distribution of youth who took part in the survey. For males, 43% were aged 15 to 19 years and 57% aged 20 to 24 years. For females, over half were aged 15 to 19 years (61%) and 39% were aged 20 to 24 years.

**Figure 2: Reported Age and Sex Distribution, Youth, Solomon Islands, 2008**



Youth most commonly reported being born in the Province of Malaita (41%) followed by Western Province (28%) and Honiara (13%). The vast majority of youth were of Melanesian ethnicity (94%) and were not married (95%). Seven in ten youth reported living with their immediate family (70%) and over one in five reported living with other relatives (22%).

The level of education was low for nearly one third of youth, with eight participants reporting that they had never attended school (1.4%) and over one quarter reporting they did not complete some primary school (28%).

## Sexual behaviours

Table 22 shows the reported prevalence of ever having sexual intercourse, age at first sex, sex in the last 12 months and age of first sexual partner.

**Table 22: Reported Sexual History (1), Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Ever had sexual intercourse	263	85.1	209	74.4
Age at first sex less than 15 years	58	18.8	45	15.9
Age of first sexual partner:				
<i>Younger or same age</i>	158	60.0	89	42.6
<i>Less than 5 years older</i>	20	7.6	29	13.9
<i>5 or more years older</i>	47	17.9	48	22.9
<i>Don't know</i>	38	14.4	43	20.6
<i>Total</i>	263	100	209	100.0

Over eight in ten males (85%) and three quarters of females (74%) reported that they had ever had sexual intercourse. Less than twenty percent of all youth reported they were less than fifteen years old at first sex. Males and females most commonly reported that their first sex partner was younger or the same age as them (Males: 60%; Females: 43%).

Table 23 shows the average and range of age of first sex and number of sex partners in the last 12 months.

**Table 23: Reported Sexual History (2), Youth, Solomon Islands, 2008**

	Males	Females
Age at first sex in years		
<i>Mean</i>	15.8	16.1
<i>Range</i>	10-23	10-24
Number of sex partners in the last 12 months		
<i>Mean</i>	3.8	2.6
<i>Range</i>	1-26	1-34

The reported average age at first sex was similar for both sexes (15.8 for males and 16.1 for females), with 66% males and 61% females reported having sexual intercourse by 16 years of age. The average number of sex partners in the last 12 months was a little higher for males compared with females. Table 24 shows the reported prevalence of condom use at first sex, prevalence of ever using a condom, condom use in the last 12 months and at last sex.

**Table 24: Reported Condom Use, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
<b>Youth who reported ever having sex (Males, N=263; Females, N=209):</b>				
Used a condom at first sex				
<i>Male condom</i>	27	10.3	37	17.7
<i>Female condom</i>	1	0.4	1	0.5
<i>No</i>	233	88.6	167	79.9
<i>No, never heard of a condom</i>	2	0.8	4	1.9
Ever used a condom				
<i>Male condom</i>	121	46.0	101	48.3
<i>Female condom</i>	3	1.1	2	1
<b>Youth who reported having sex in the last 12 months (Males, N=206; Females, N=169):</b>				
<i>Every time</i>	22	10.7	7	4.1
<i>Sometimes</i>	105	51.0	91	53.8
<i>Never</i>	79	38.3	71	42.0
Used a condom at last sex				
<i>Yes</i>	67	32.2	35	26.1

One in ten males (11%) and one in six females (18%) reported using a condom at first sex. All except one male and one female reported using a male condom. Nearly half of the males and females who had ever had sex reported that they had ever used a condom.

For youth who reported having sex in the last 12 months, one in ten males (11%) and one in twenty females (4%) reported using a condom every time they had sex. Nearly one third of males (32%) and one quarter of females (26%) reported using a condom at last sex.

Figure 3 shows the most common reasons reported for not using a condom for Youth who reported having sex in the last 12 months. The most common reasons reported for



not using a condom at last sex were that 'none were easily available' (38%), followed by 'sex doesn't feel as good' (21%) and 'partner didn't want to' (13%).

**Figure 3: Reported Reasons for Not Using a Condom, Youth, Solomon Islands, 2008**

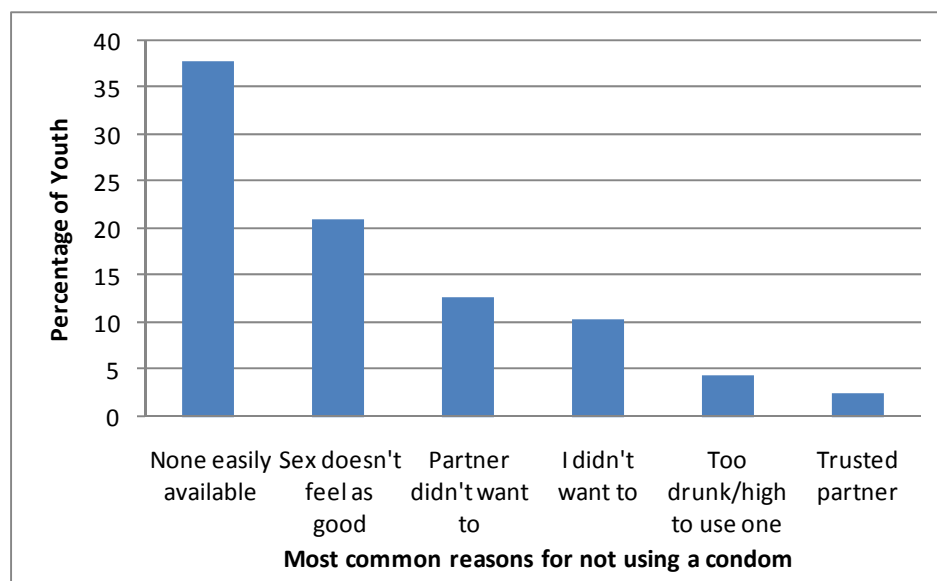


Table 25 shows the reported prevalence of overlapping sexual relationships, group sex, off island sex and forced sex for youth who reported having sex in the last 12 months.

Only two thirds of males (68%) and six in ten females (61%) reported that they had sex in the last 12 months.

Only one in five males (21%) and two in five females (43%) who had sexual intercourse in the last twelve months reported having only one partner. More than half of the males surveyed had more than two sex partners in the past twelve months.

Over half of sexually active male youths (55%) and four in ten females (40%) reported they had had more than two sexual relationships at the same time, while one in eight males and one in twelve females reported having group sex in the last 12 months.

**Table 25: Other Sexual Behaviours, Youth who Reported Having Sex in the Last 12 Months, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Has had sex in the last 12 months	209	67.6	171	60.9
Number of sex partners in past 12 months				
1	41	20.6	70	42.9
2	49	24.6	45	27.6
>2	109	54.8	48	29.4
More than two sexual relationships in the same time period, in the last 12 months	116	55.5	68	40.5
Sex with more than two people at the same time (group sex)	26	12.6	14	8.3
Been off been off island in the last 12 months	9	4.4	13	7.8
Had sex with someone (other than partner) while off island	5	71.4	5	45.5
Ever forced to have sex	65	24.8	99	47.6
Relationship with person who forced sex				
Partner	8	12.9	40	44.9
Friend	26	41.9	30	33.7
Neighbour	10	16.1	8	9
Stranger	11	17.7	0	0

Although only nine males and thirteen females reported that they had been off island in the last 12 months, five males and five females reported that they had sex with someone other than their usual sexual partner.

A history of forced sex was reported by one quarter of males (25%) and nearly half of females (45%) who had ever had sex. For males, friends (42%) and strangers (18%) were the most commonly reported perpetrators, while for females partners (45%) and friends (34%) were the most commonly reported persons to force sex.

Youth who reported having sex in the last 12 months were asked whether they had paid or received money, goods or favours in exchange for sex during this period. Table 26 shows the prevalence of reported transactional sex.

**Table 26: Reported Transactional Sex by Youth Who Reported Having Sex in the Last 12 Months, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Paid money in exchange for sex in last 12 months	6	2.9	2	1.2
Paid goods or favours in exchange for sex in last 12 months	20	9.5	5	2.9
Received money in exchange for sex in last 12 months	13	6.2	9	5.3
Received goods or favours in exchange for sex in last 12 months	22	10.5	10	5.8

Less than three percent of sexually active males and approximately one percent of females reported paying money in exchange for sex in the last 12 months. While less than three percent of females also reported giving goods or favours in exchange for sex, nearly 10% of males reported this type of transaction.

Just over one in ten males reported receiving goods or favours in exchange for sex and 6% reported receiving money in exchange for sex. Approximately 6% of females reported receiving money in exchange for sex and a similar proportion reported receiving goods or favours in exchange for sex in the last 12 months.

### **Male to male sex**

Table 27 shows the reported prevalence of male to male sex for youth from the Solomon Islands.

**Table 27: Reported Male to Male Sex, Youth, Solomon Islands, 2008**

	N	%
Ever had sexual contact with another man	2	0.8
Had sexual contact with another man in the last 12 months	0	0.0

Only two males reported ever having sexual contact with another male, and neither reported having sexual contact with another man in the last 12 months.

### **Reported Alcohol and Substance use**

Table 28 shows reported frequency and quantities of alcohol consumed by youth from the Solomon Islands.

**Table 28: Reported Frequency and Consumption of Alcohol, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Frequency of alcohol use :				
<i>4 or more times a week</i>	13	4.5	4	1.5
<i>2 to 3 times a week</i>	42	14.4	29	10.7
<i>2 to 4 times a month</i>	66	22.6	47	17.3
<i>Monthly or less</i>	102	34.9	46	17.0
<i>Never</i>	69	23.6	145	53.5
Number of standard drinks usually consumed:				
<i>1 to 2</i>	29	12.5	33	25.4
<i>3 to 4</i>	26	11.2	25	19.2
<i>5 to 9</i>	109	47.0	55	42.3
<i>10 to 19</i>	25	10.8	11	8.5
<i>20 or more</i>	43	18.5	6	4.6

Approximately on quarter of males (24%) and half of females reported that they did not consume alcohol in the previous 12 months.

Nearly 20% of males and 12% of females in the survey drink alcohol more than once a week. Of those who reported consuming alcohol in the last 12 months, three quarters of males (79%) and over half of females (57%) reported that they normally consumed 5 or more standard drinks.

Table 29 shows the reported prevalence of ever use by youth of recreational drugs and use in the month preceding the survey for youth from the Solomon Islands.

**Table 29: Reported Recreational Drug Use, Youth, Solomon Islands, 2008**

	Ever used		Used in last one month		
	N	%	N	% of all respondents	% of ever users
<b>Males</b>					
Betal Nut	281	90.9	270	87.4	96.1
Tobacco	205	66.3	199	64.4	97.1
Marijuana/cannabis	166	53.7	138	44.7	83.1
Kava	66	21.4	40	12.9	60.6
Sniffings (eg butane/gas/glue)	7	2.3	5	1.6	71.4
Viagra/Cialis/sex enhancers	1	0.3	1	0.3	100.0
Speed/Ice/Ecstasy	0	0.0	-	-	-
<b>Females</b>					
Betal Nut	250	88.7	236	83.4	94.4
Tobacco	178	63.6	164	58.0	92.1
Marijuana/cannabis	65	23.0	64	22.6	98.5
Kava	17	6.0	14	4.9	82.4
Speed/Ice/Ecstasy	3	1.1	2	0.7	66.7
Sniffings (eg butane/gas/glue)	2	0.7	0	0.0	-
Viagra/Cialis/sex enhancers	1	0.4	1	0.4	100.0

For youth, ever and recent use of Betel nut was highly prevalent, with more than ninety percent of youth reporting they had ever used Betel Nut, and 87% of males and 83% of females using Betel Nut in the month prior to the survey.

Tobacco was also commonly used, with two thirds of both sexes reporting ever using tobacco, and 64% of males and 58% of females reporting they had used tobacco in the previous month.

Marijuana use was reported by two in five males and one in four females in the last months, while Kava use was reported by one in eight males and one in twenty females in the last month. Use of other drugs was not commonly reported by youth.

The majority of youth who reported ever using Betel Nut, tobacco and marijuana, also reported use in the month preceding the survey. This strongly indicates a tendency towards ongoing use of these drugs following initiation of use amongst youth.

### ***HIV knowledge and attitudes***

Table 30 shows the proportions of youth who had heard of HIV prior to the survey, knew someone with HIV/AIDS, and knowledge of HIV transmission, prevention and common fallacies for youth who reported that they had heard of HIV/AIDS.

**Table 30: Knowledge of HIV/AIDS, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Before this survey, had heard of HIV/AIDS	306	99.0	274	97.2
Know someone who is infected with HIV/AIDS or has died of an AIDS related condition	163	53.4	136	49.8
Having sex with only one, uninfected, faithful partner can reduce the chance of getting HIV:				
True	274	89.5	221	81.5
False	23	7.5	30	11.1
Don't know	9	2.9	20	7.4
Using condoms correctly can reduce the chance of getting HIV:				
True	281	91.8	237	86.5
False	20	6.5	25	9.1
Don't know	5	1.6	11	4.0
A healthy looking person can be infected with HIV:				
True	265	86.9	220	80.6
False	27	8.9	30	11.0
Don't know	13	4.3	23	8.4
A person can get HIV from mosquito bites				
True	28	9.2	27	9.9
False	271	88.6	226	82.8
Don't know	7	2.3	20	7.3
A person can get HIV by sharing a meal with someone who is infected with HIV:				
True	15	4.9	23	8.4
False	281	91.8	238	86.9
Don't know	10	3.3	13	4.7
A mother can pass HIV to their baby during pregnancy, delivery or breastfeeding:				
True	260	85.0	240	87.6
False	13	4.2	14	5.1
Don't know	33	10.8	20	7.3

Knowledge of HIV or AIDS was almost universal among youth surveyed, with 99% of males and 97% of females reporting having heard of HIV prior to taking part in the survey. Of these, approximately half of both sexes reported that they knew someone who has HIV/AIDS or has died of an AIDS related condition. At least 80% of both males and females correctly answered each of the six questions, relating to HIV prevention and transmission, suggesting a high level of knowledge among the youth surveyed about ways in which HIV is transmitted and can be prevented.

Table 31 shows responses for attitudes towards those living with HIV in the community.

**Table 31: Attitudes towards Those Living with HIV, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
If a family member had HIV, would you be willing to care for him/her in your home				
Yes	215	70.0	160	56.7
No	77	25.1	105	37.2
Don't Know	15	4.9	17	6.0
If a member of your family became ill with HIV, the virus that causes AIDS, would you want it to remain secret:				
Yes	134	43.5	139	49.3
No	156	50.6	118	41.8
Don't Know	18	5.8	25	8.9
Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV:				
Yes	207	67.2	160	56.7
No	93	30.2	105	37.2
Don't Know	8	2.6	17	6.0
In your opinion, if a female teacher has HIV and is not sick, should she be allowed to continue teaching in the school:				
Should be allowed	137	44.6	112	39.9
Should not be allowed	140	45.6	138	49.1
Don't know/not sure/depends	30	9.8	31	11.0
A person should be able to keep his/her HIV status private (no one else needs to find out):				
Agree	60	19.5	69	24.5
Strongly agree	34	11.1	29	10.3
Disagree	149	48.5	72	25.5
Strongly disagree	42	13.7	90	31.9
Don't Know	22	7.2	22	7.8

Most responses were similar for the sexes, although a higher proportion of males (70%) compared with females (57%) agreed that they would be willing to care for a family member with HIV in their own home. Approximately half of females and 43% males said that they would not want it to remain a secret if a family member had HIV.

Two thirds of males (67%) and six in ten females (60%) reported that they would be willing to purchase fresh vegetables from a vendor or shopkeeper if they knew the person had HIV. However only around 40% of youth surveyed thought that a teacher with HIV should be allowed to continue to teach.

Only one third of males (31%) and females (35%) either agreed or strongly agreed that a person should be able to keep his/her HIV status private.

### ***Exposure to Prevention Activities***

**Table 32: Exposure to HIV Prevention and Educational Activities, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Heard messages about HIV on radio	301	97.4	268	95.0
Read messages about HIV in newspapers	269	87.1	225	79.8
Seen messages about HIV on TV	191	61.8	203	72.0
Attended HIV community event	197	63.8	164	58.2
Participated in HIV peer education program	164	53.1	126	44.8
Participated in HIV education program	159	51.5	144	51.1
Seen 'Mr Right Guy' on film or CD	64	20.7	67	23.8
Heard of the VCCT services available	239	77.3	167	59.2

Radio was the most common medium for receiving messages about HIV from the media for both sexes (Males: 97%; Females: 95%), followed by exposure to messages in newspapers (Males: 87%; Females: 80%).

Half of males (53%) and 45% of females reported participating in peer education and similar proportions reported participating in a HIV educational program.

Over three quarters of males (77%) and nearly six in ten females (60%) reported that they had heard of Voluntary Confidential Counselling and Testing (VCCT) services available.



## Access to testing

Table 33 shows the prevalence of believing that it is possible to obtain a confidential HIV test and access to testing for youth.

**Table 33: Reported Access to Testing, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Believe it is possible for someone in the community to get a confidential test				
Yes	292	94.5	241	85.8
No	13	4.2	30	10.7
Don't know	4	1.3	10	3.6
Reasons why you can't get a confidential test				
<i>Everyone will find out</i>	8	47.1	19	47.5
<i>HIV testing is not available</i>	1	5.9	1	2.5
<i>Testing site too public</i>	1	5.9	1	2.5
<i>Opening hours not convenient</i>	1	5.9	2	5.0
Ever been tested for HIV	20	6.6	19	6.8
When did you have you last HIV test				
<i>In the last 3 months</i>	3	18.8	1	5.9
<i>In the last year</i>	9	56.3	14	82.4
<i>Over a year ago</i>	4	25.0	2	11.8
Why did you have your last HIV test?				
Blood donor	7	43.8	0	0.0
I asked for it	3	18.8	5	31.3
Medical check	6	37.5	11	68.8
Received result of HIV test	11	55.0	10	52.6

More than 90% of males and 80% of females surveyed believed they could get a confidential HIV test in their community. The main reason given for not believing or being unsure whether confidential testing was available was a concern that everyone would find out.

Less than seven percent of males and females (20 and 19 respectively) surveyed had ever been tested for HIV. Of these 75% of males and 88% of females had been tested in the previous 12 months. Just over 50% of those tested reported they knew their HIV result.

Most males reported that they were tested because they donated blood (44%). Just over a third of males reported being tested as part of a medical check compared with two thirds of females.

## History of STIs and Symptoms of STIs in the last month

Table 34 shows the reported history of STIs for youth from the Solomon Islands.

**Table 34: Reported History of STIs, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
Ever been diagnosed with a sexually transmitted disease or infection by a doctor or health worker?	45	14.6	19	6.7
Infection(s) respondents were diagnosed with				
<i>Gonorrhoea</i>	33	73.3	12	63.2
<i>Syphilis</i>	8	17.8	4	21.1
<i>Don't know/no response</i>	4	8.9	3	15.8

Of the youth surveyed 15% of males and seven percent of females reported that they had ever been diagnosed with an STI. The most commonly diagnosed STI was Gonorrhoea, which accounted for 73% of cases in males and 63% of cases in females.

Table 35 shows the reported prevalence of symptoms in the last month which may indicate the presence of an STI.

**Table 35: Prevalence of Symptoms for STIs, Youth, Solomon Islands, 2008**

	Males		Females	
	N	%	N	%
<b>Symptoms in the last month:</b>				
Unusual genital or anal discharge	15	4.9	14	5.0
Rash, ulcer or sore around genitals	14	4.5	14	5.0
Stinging burning or pain when passing urine (males only)	30	9.8		
Lower abdominal pain in between periods or during sex (females only)			115	41.8
Has sought treatment for symptoms	19	61.3	31	26.5
If you were worried you had a STI where would you go for help:				
Health Clinic	290	95.7	258	93.8
Traditional healer	10	3.3	8	2.9
Friends	1	0.3	5	1.8
Religious healer	0	0.0	1	0.4
Would not get help	5	1.7	2	0.7

The most commonly reported STI symptom in the last month reported by males was stinging, burning or pain when passing urine (10%).

Lower abdominal pain between periods or during sex in the last month was the most commonly reported STI symptom by females (42%).

Although over 90% of youth reported that they would go to a hospital or health clinic for advice if they thought they had an STI, less than two thirds of males (61%) and one quarter of females (26%) reported that they had sought treatment for their symptoms.

### **Prevalence of STIs**

Table 36 shows the prevalence of Chlamydia and Gonorrhoea for youth, by sex, age group and area of residence.

**Table 36: Prevalence of Chlamydia and Gonorrhoea, Youth, Solomon Islands, 2008**

		N Reactive/ positive	N tested	%	LCI	UCI
<b>Chlamydia</b>						
Sex	<i>Male</i>	9	90	10.0	4.7	18.1
	<i>Female</i>	21	112	18.8	12.0	27.2
Age group	<i>15-19</i>	12	87	15.7	9.5	23.6
	<i>20-24</i>	18	115	13.8	7.3	22.9
Region	<i>Honiara</i>	17	112	15.2	9.1	23.2
	<i>Western Province</i>	13	90	14.4	7.9	23.4
<b>Gonorrhoea</b>						
Sex	<i>Male</i>	4	90	4.4	1.2	11.0
	<i>Female</i>	2	112	1.8	0.2	6.3
Age group	<i>15-19</i>	1	87	1.1	0.0	6.2
	<i>20-24</i>	5	115	4.3	1.4	9.9
Region	<i>Honiara</i>	4	112	3.6	1.0	8.9
	<i>Western Province</i>	2	90	2.2	0.3	7.8

Chlamydia was detected in one in five urine specimens from females (19%) compared to one in ten males (10%). The proportions of youth who had Chlamydia detected were similar for age group (15-19 versus 20-24) and region of residence (Honiara versus Western Province).

Gonorrhoea was detected in four urine specimens from males (4%) compared to two specimens from two females (2%). Five of the six cases were in youth aged 20 to 24 years compared with one case in a youth aged 15 to 19 years.

Due to statistically small numbers of youth sampled and the low prevalence of these conditions, the confidence intervals around these results are relatively wide. No statistically significant differences between comparison groups were identified.

Table 37 shows the prevalence of HIV antigen, Hepatitis B antigen and Syphilis for youth from the Solomon Islands. All specimens tested were from youth in Honiara.

**Table 37: Prevalence of HIV antigen, Hepatitis B antigen and Syphilis, Youth, Solomon Islands, 2008**

	<b>N Reactive/ positive</b>	<b>N tested</b>	<b>%</b>	<b>LCI</b>	<b>UCI</b>
HIV	0	94	0.0	-	-
Hepatitis B (Antigen)	17	94	18.1	10.9	27.4
Syphilis	9	91	9.9	4.6	17.9

None of the 94 youth tested were found to have the HIV antigen. One in five youth were found to have the Hepatitis B antigen, indicating prior exposure to the Hepatitis B Virus. One in ten youth were also found to have active Syphilis (10%).

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Less than three percent of males and females reported that they had a HIV test in the last 12 months and knew their result.

Two thirds of males (66%) and half of females (54%) correctly identified both ways of preventing sexual transmission of HIV and rejected the three major misconceptions about HIV transmission.

Just under 20% of males and 16% of females reported they were less than fifteen years old at first sex.

One half of males (51%) and one third of females (33%) reported that they had sexual intercourse with more than one partner in the last 12 months.

One in three males (34%) and one in five females (19%), who reported having more than one sexual partner in the previous 12 months also reported using a condom at last sexual intercourse.

No males reported having anal sex with another male in the last 12 months.

Table 38 shows outcomes for UNGASS indicators for youth.

**Table 38: UNGASS indicators, Youth,**

	Males		Females	
	N	%	N	%
7. Percentage of women and men aged 15-24 who received an HIV test in the last 12 months and who know their results.	8	2.6	8	2.8
13. Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.	204	66.0	153	54.1
15. Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15 years.	58	18.8	45	15.9
16. Percentage of women and men aged 15-24 who have had sexual intercourse with more than one sexual partner in the past 12 months.	159	51.5	93	32.9
17. Percentage of women and men aged 15-24 who have had sexual intercourse with more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse.	54	34.0	18	19.4
19. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	0	0		

## Discussion

No cases of HIV were detected among Antenatal women or Youth who took part in these surveys. However, the prevalence of Chlamydia was high among Antenatal women aged 15 to 24 years (16%) and Youth (15%), and high proportions of both populations had acquired the Hepatitis B surface antigen (Antenatal women 15-44 years: 14%, Youth: 18%), for which unprotected sexual intercourse is an important risk factor. As the risk factors for acquiring HIV are similar to other STI's, the high prevalence of these conditions is a real concern.

The prevalence of Chlamydia was also higher for Antenatal women aged 15 to 24 years in 2008 (16%) compared with the first round of SGS in 2004-05 (7%). One in twenty Antenatal women aged 15 to 24 years (5%) were also found to have an early syphilis infection, which is a health risk for both mother and child. (9) In addition, the high proportions of Antenatal women (14%) and Youth (18%) who were found to have the Hepatitis B surface antigen, is of concern because of the potential long-term health implications that can be associated with this condition.(10)

Although most Antenatal women and Youth had heard of condoms, and were aware that condoms can reduce the chance of acquiring HIV, only around half of both groups had ever used a one.

High risk behaviours for Antenatal women included: one in ten women reporting having more than one sex partner in the last 12 months, and one in ten women aged 15 to 24 years having two or more simultaneous relationships.

High risk sexual behaviours for Youth included: 79% males and 58% females reporting more than one sexual partner in the last 12 months and only 32% of males and 26% females using a condom at last sex.

While high proportions of Antenatal women and Youth correctly answered individual questions on HIV transmission and common fallacies, used to assess baseline knowledge, the proportions who could answer all five questions correctly were much lower (Antenatal women aged 15 to 24 years: 39%, Male Youth: 66%, Female Youth: 54%). This suggests that more could be done to increase levels of knowledge.

In addition, more than two thirds of Antenatal women and one third of Youth reported that they would avoid casual contact with a shopkeeper or vendor if they knew they had

HIV, suggesting concern about contracting the illness through casual contact and/or fear of discrimination through association with persons who have HIV. This information should be used when revising ongoing HIV educational campaigns run by the MOH.

Although it is recommended that women attend for their first visit to the Antenatal clinic during the first trimester of pregnancy most women surveyed attended for antenatal care during the second or third trimester of pregnancy. Increased awareness of the importance of attending in early pregnancy is recommended to minimise potential complications for women and babies. This would be an important public health measure.

Only 38% of women reported that they had planned their pregnancy and of those who did not plan their pregnancy, approximately three quarters did not use any contraceptives in the three months prior to becoming pregnant. Identification of barriers to contraceptive use and increased awareness of available contraceptives would be of value to help reduce this trend.

## Indicators UNGASS and MDG

Indicators	
<b>National Commitment and Action</b>	
<b>National Programmes: blood safety, antiretroviral therapy coverage, prevention of mother-to-child transmission, co-management of TB and HIV treatment, HIV testing, prevention programmes, services for orphans and vulnerable children, and education.</b>	
7. Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know the results	Population-based survey
8. Percentage of most-at-risk populations that have received an HIV test in the last 12 months and who know the results	Behavioural surveys
9. Percentage of most-at-risk populations reached with HIV/AIDS prevention programmes	Behavioural surveys
<b>Knowledge and Behaviour</b>	
13. Percentage of young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission*	Population-based survey
14. Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Behavioural surveys
15. Percentage of young women and men who have had sexual intercourse before the age of 15	Population-based survey
16. Percentage of adults aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months	Population-based survey
17. Percentage of adults aged 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last intercourse*	Population-based survey
18. Percentage of female and male sex workers reporting the use of a condom with their most recent client	Behavioural surveys
19. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	Behavioural surveys
20. Percentage of injecting drug users who reported using sterile injecting equipment the last time they injected	Special survey
21. Percentage of injecting drug users who report the use of a condom at last sexual intercourse	Special survey
<b>Impact</b>	
22. Percentage of young women and men aged 15–24 who are HIV infected*	HIV sentinel surveillance
23. Percentage of most-at-risk populations who are HIV infected	HIV sentinel surveillance

\*Millennium Development Goals indicator



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