

**SOLOMON ISLANDS**

**GLOBAL AIDS MONITORING 2018**

**Monitoring the 2016 United Nations Political Declaration on Ending  
AIDS**

**MINISTRY OF HEALTH AND MEDICAL SERVICES**

**NATIONAL HIV/STI PROGRAMME**

# MAP OF SOLOMON ISLANDS



## TABLE OF CONTENTS

<b>ACRONYMS</b> .....	<b>6</b>
<b>FOREWORD</b> .....	<b>8</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>9</b>
<b>INTRODUCTION</b> .....	<b>10</b>
<b>BACKGROUND</b> .....	<b>11</b>
1.0 <b>Commitment 1:</b> Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020 .....	13
1.1      People living with HIV who know their HIV status .....	13
1.2      People living with HIV on antiretroviral therapy .....	14
1.3      Retention on antiretroviral therapy at 12 months.....	14
1.4      People living with HIV who have suppressed viral loads .....	14
1.5      Late HIV diagnosis .....	15
1.6      Antiretroviral medicine stock-outs .....	15
1.7      AIDS mortality .....	16
2.0 <b>Commitment 2:</b> Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018Early infant diagnosis .....	16
2.1      Mother-to-child transmission of HIV (MTCT).....	16
2.2      Preventing the mother-to-child transmission of HIV .....	17
2.3      Syphilis among pregnant women .....	17
2.4      Congenital syphilis rate (live births and stillbirth).....	18
2.5      HIV testing amongpregnant women .....	18
3.0 <b>Commitment 3:</b> Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners .....	19
3.1      HIV incidence.....	19
3.2      Estimates of the size of key populations .....	21
3.2.1      Population Size Estimates of FSW in Solomon Islands.....	22
3.2.2      Population Size Estimates of MSM in Solomon Islands.....	23
3.3      HIV prevalence among key populations.....	23
3.4      HIV testing among key populations.....	24

3.4.1	HIV testing among female sex workers .....	24
3.4.2	HIV testing among MSM.....	24
3.5	Antiretroviral therapy coverage among people living with HIV in key populations .....	25
3.6	Condom Use .....	25
3.6.1	Condom use among sex workers .....	25
3.6.2	Condom use among men who have sex with men .....	27
3.7	Coverage of HIV prevention programmes among key populations.....	29
3.7.1	Coverage of HIV prevention programmes among FSW .....	29
3.7.2	Coverage of HIV prevention programmes among MSM .....	31
3.8	Active syphilis among sex workers .....	32
3.9	Active syphilis among men who have sex with men.....	33
3.10	HIV prevention programmes in prisons.....	33
3.11	Viral hepatitis among key populations .....	35
3.12	People receiving pre-exposure prophylaxis (PrEP) .....	35
3.13	Prevalence of male circumcision.....	35
3.14	Annual number of males voluntarily circumcised .....	36
3.15	Condom use at last high-risk sex .....	37
4.0	<b>Commitment 4:</b> Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020 .....	38
4.1	Discriminatory attitudes towards people living with HIV .....	38
4.2	Avoidance of health care among key populations because of stigma and discrimination .....	39
4.3	Prevalence of recent intimate partner violence .....	39
4.4	Experience of HIV-related discrimination in health-care settings .....	41
5.0	<b>Commitment 5:</b> Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year .....	42
5.1	Young people: Knowledge about HIV prevention .....	42
5.2	Demand for family planning satisfied by modern methods.....	42
6.0	<b>Commitment 8:</b> Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers .....	44
6.1	Total HIV expenditure.....	44
7.0	<b>Commitment 10:</b> Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C.....	45
7.1	Co-management of tuberculosis and HIV treatment.....	45

7.2	Proportion of people living with HIV newly enrolled in HIV care with active TB disease .....	45
7.3	Proportion of people living with HIV newly enrolled in HIV care started on TB preventive therapy ..	46
7.4	Men with urethral discharge .....	46
7.5	Gonorrhoea among men .....	46
7.6	Hepatitis B testing .....	47
7.7	Proportion of people co-infected with HIV and HBV receiving combined treatment.....	47
7.8	Hepatitis C testing .....	47
7.9	Proportion of people coinfectd with HIV and HCV starting HCV treatment .....	47
7.10	Cervical cancer screening among women living with HIV .....	48
<b>REFERENCES .....</b>		<b>49</b>

## ACRONYMS

AIDS	Acquired Immune deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
CIA	Central Intelligence Agency
DBS	Dry Blood Spot
DSDM	Differentiated Service Delivery Model
FSW	Female Sex Worker
GAM	Global AIDS Monitoring
GFATM	Global Fund to fight AIDS Tuberculosis and Malaria
HIV	Human Immuno-deficiency Virus
STI	Sexually Transmitted Infection
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
SIPPA	Solomon Islands Planned Parenthood Association
SIDHS	Solomon Islands Demographic and Health Survey
KP	Key Population
ODK	Open Data Kit
IEC	Information Education and Communication
IBBSS	Integrated Biological and Behavioural Surveillance Survey
MPSE	Mapping and Population Size Estimation
MSM	Men who have Sex with Men
MTCT	Mother-To-Child Transmission (of HIV)
NGO	Non-Governmental Organization
GBV	Gender Based Violence
SI	Solomon Islands
GDP	Gross Domestic Product
ORW	Out Reach Worker
PE	Peer Educator
PHIS	Provincial Health Information System
HIS	Health Information System
PLHIV	Person(s) Living with HIV

PMTCT	Prevention of Mother-To-Child Transmission (of HIV)
RPR	Rapid Plasma Reagin
SCA	Save the Children Australia
SGSS	Second Generation Sentinel Survey
SPC	Secretariat of the Pacific Community
TPHA	Treponema Pallidum Hemagglutination Assay
WVSI	World Vision Solomon Islands
MHMS	Ministry of Health and Medical Services
NRH	National Referral Hospital
STI	Sexually Transmitted Infection
TB	Tuberculosis
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

## FOREWORD

During the 2016 High Level Meeting on Ending AIDS, Member States committed to end the AIDS epidemic as a public health threat by 2030, a key target for the 2030 Agenda on Sustainable Development, adopted by the UN General Assembly in 2015. The 2016 UN Political Declaration on HIV and AIDS reaffirms previous commitments on HIV by the General Assembly made in 2001, 2006 and 2011, which initially led to a dramatic global decrease in new HIV infections and an unprecedented expansion of access to life-saving antiretroviral therapy – with over 17 million people on treatment by the end of 2015.

Solomon Islands welcomes the new Declaration, which endorses the target of ending the AIDS epidemic as a public health threat by 2030. WHO also welcomes the endorsement of global targets to tackle HIV and TB coinfection, and hepatitis B and C epidemics, as well as commitments to the dual elimination of mother-to-child transmission of HIV and syphilis.

This Political Declaration will enable Solomon Islands as a country to intensify and accelerate her National HIV response, to ensure that the national response is fully integrated into the broader Agenda for Sustainable Development, and ultimately to end the AIDS epidemic. This report presents the country's progress made in achieving the commitments of the 2016 Declaration.

Thank You.



.....  
**Dr. Tenneth Dalipanda**

Permanent Secretary

Ministry of Health and Medical Services



## **ACKNOWLEDGEMENT**

The Ministry of Health and Medical Services (MHMS) would like to thank the World Health Organization (WHO) for the financial and technical assistance provided towards the completion of this report. Special thanks go to Mr. Sam Obwona Opwonya – WHO HIV Consultant for his Technical Assistance in the writing of this report.

MHMS would also like to recognize the following individuals in their respective capacities, for their contribution through providing information and inputs for the successful completion of this report.

- |                    |      |
|--------------------|------|
| 1. Isaac Mulioa    | MHMS |
| 2. Timothy Sanau   | MHMS |
| 3. Baakai Kamoriki | MHMS |
| 4. Elliot Piuahi   | NRH  |
| 5. Doris Manongi   | NRH  |
| 6. Hilda Zoleveka  | NRH  |
| 7. Ridha Jebeniani | WHO  |
| 8. Hayfa Elamin    | WHO  |

## INTRODUCTION

This report presents the achievements of the country in the effort to meet its commitments as per the 2016 UN declaration. The UNAIDS encourages countries to submit a narrative report as well which consist of brief narrative summaries for each Fast-Track commitment. Alternatively, countries may also choose to submit a recent national report if available. To make this process inclusive, the Solomon Islands Ministry of Health and Medical Services, mobilized community sector colleagues and partner organizations to advocate for the meaningful involvement of the community sector in the review and reporting processes. The ministry further reviewed all relevant documents: The indicators in the current Global AIDS Monitoring and the National Commitments and Policy Instrument.

The Ministry considered how each indicator applies to the local epidemic indicated in the online tool whether an indicator is considered relevant or not, and if it is relevant, whether new data is available for this indicator. Where the country chose not to report on a specific indicator, we provided our reasons, since this enables an absence of data to be differentiated from the inapplicability of specific indicators to specific country epidemics.

Most of the GAM national indicators apply Solomon Islands. The behavior indicators for key populations at higher risk are relevant as well regardless of the country's national HIV prevalence. The 2016 Political Declaration contains the commitments and promises countries have made.

## **BACKGROUND**

Solomon Islands consist of nearly 1,000 islands spanning over an estimated land area of 30,400 square kilometers in the South Pacific region. The country is administratively divided into 10 Provinces. The population estimate is 609,883 (CIA 2015). Majority of the people were of Melanesian ethnicity (94.5%), followed by Polynesian (3%) and Micronesian (1.2%). English is the official language although the lingua franca in the country is Solomon Pidgin. With per capita GDP of US\$2,146 (in 2015), Solomon Islands is considered as one of the poorest countries in the Pacific (World Bank 2015).

Most of the population depends on fishing, agriculture, and forestry for their livelihood. Over 75% of the labour force in the country is engaged in subsistence farming and fishing. Life expectancy at birth for females was 77.6 years and for males was 72.3 years in 2014 (CIA 2015). Access to primary education for school-age children was only 60%. Radio is the most popular and widely used media in the

World Health Organization (WHO) has classified the HIV epidemic in most Pacific Island Countries and Territories (PICTs) as a low prevalence epidemic except Papua New Guinea (WHO 2006). Second generation surveillance surveys conducted in the PICTs in 2008 reported inadequate knowledge of HIV transmission, unsafe sexual practices, existence of high rates of sex partners and commercial sex in general populations (WHO 2013).

The first HIV case in Solomon Islands was in 1994. Since then, SI has had low HIV incidence each year. UNAIDS classified Solomon Islands as a low HIV prevalence country with an estimated prevalence of 0.002% that remained unchanged since 2010 (UNAIDS 2012). Despite the low prevalence of HIV, data consistently show high number of people infected with STIs across the country.

The Provincial Health Information System (PHIS) data for 2014 shows that, there were 2,037 men reported with urethral discharge and 538 adults reported with genital ulcer identified through syndromic diagnosis of STIs during the reporting year.

Limited laboratory testing facilities and poorly trained and resourced health workers in many settings, especially rural areas, make confirmatory diagnosis of specific infections difficult to ascertain, however comprehensive syndromic diagnosis and management of suspected STIs,

and a number of surveillance activities provide a strong indicator of this significant contributory risk factor to both STI-related morbidity and HIV transmission. Furthermore, the high prevalence of STIs indicates that certain risk behaviours, such as unprotected sex with multiple partners are widespread, which in turn poses a significant risk for the exponential transmission of HIV.

Different studies conducted in Solomon Islands targeting other population groups have shown evidence of existence of key populations such as Female Sex Workers (FSWs) and Men who have Sex with Men (MSM), though no survey has focused on key populations only. Notably: The 2008 SGSS asked male respondents aged 15 to 24 in Honiara city about relationships with male sex partners in the past 12 months. Of approximately 240 respondents, 0.8% reported sex with another man in the last 12 months. This figure may represent an under-estimate due to the illegality of male-to-male relationships in the country and social desirability bias due to stigma around sexual diversity.

In addition, three qualitative studies have identified practices of transactional and commercial sex and described such practices as common in the general population of young girls, women and young men, yet the number of individuals engaged in these activities is unknown. Self-report of transactional and commercial sex among antenatal women is at about 5%. This increases to about 20% in studies that have specifically targeted vulnerable groups, although inclusion criteria for “vulnerability” was not well defined.

## **1.0 Commitment 1: Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020**

### **1.1 People living with HIV who know their HIV status**

In Solomon Islands currently, there are 12 (8 female, 4 male) people living with HIV, and they all know their status. All newly identified cases are immediately counselled and enrolled into Antiretroviral (ART) treatment, as per the country's national HIV treatment guidelines 2016, which rolled out the test and treat strategy to reduce AIDS deaths in the country.

Knowledge about one's HIV status has implications for motivating behavioural change and establishing linkages to care, treatment, and support services. Knowledge of HIV status is important for helping individuals make specific decisions about adopting safer sex practices to reduce their risk of contracting or transmitting HIV. For those who are HIV positive, knowledge of their HIV status allows them to take actions to protect their sexual partners and to access treatment services.

Solomon Islands most recently conducted a Demographic and Health Survey (DHS) in 2015, with the final report launched in June 2017, dubbed the Solomon Islands Demographic and Health Survey (SIDHS) 2015. To assess awareness of HIV testing services, the DHS respondents were asked whether they knew where to get an HIV test and whether they had ever been tested for HIV. Respondents who reported that they had been tested for HIV were asked whether they received the results of their last test. Overall, 37% of women and 49% of men know where they can get an HIV test. Knowledge of a place for HIV testing is highest among women and men who have divorced, separated and widowed (48% of women in this category, 58% of men) and among urban women and men (57% of urban women, 69% of urban men). Knowledge of where to get HIV testing among women and men increases with increasing level of education and wealth. By marital status, never-married women and men who have not yet initiated sexual activity are least likely to know a place to obtain an HIV test (22% of never-married women, 28% of never-married men). Among the regions, women's and men's knowledge of a place to get tested for HIV is lowest in the Guadalcanal and Malaita provinces. Among women and men tested for HIV in the 12 months preceding the SIDHS 2015, only 2%

of women and 1% of men received their results. Urban women are more likely (3%) than rural women (1%) to have been tested for HIV in the 12 months preceding the survey, and to have received their test results.

## **1.2 People living with HIV on antiretroviral therapy**

Currently, 100% (12 out of 12) people currently living with HIV in the country have been enrolled into ART as compared to 77% (10 out of 13) in 2016. With the rollout of the new HIV testing and treatment guidelines in 2016, Solomon Islands is now implementing the Test-and-Treat strategy to prevent AIDS related deaths among PLHIV. Therefore, all patients testing HIV positive are eligible for treatment despite their viral load or CD4 count.

## **1.3 Retention on antiretroviral therapy at 12 months**

By the end of 2017, out of the 12 PLHIV in the country, only 10 of them have been on ART for over 12 months. Previously, even with the very low numbers of HIV cases, not all people testing HIV positive were successfully enrolled and monitored in care and treatment, including ART. Patients continued to die due to non-response to treatment or adherence challenges. Some patients adamantly rejected being enrolled into ART despite repeated counselling by health workers. By the end of 2016, only 10 (3 males and 7 females) out of 13 PLHIV in the country were receiving treatment; the remaining 3 PLHIV (1 male and 2 females) were eventually enrolled in 2017 after rigorous counselling and follow-up by the HIV Core Care Team.

## **1.4 People living with HIV who have suppressed viral loads**

By the end of 2017, with the exception of one PLHIV who died mid 2017 due to AIDS related causes, monthly patient clinical assessments have revealed that all the remaining 12 PLHIV currently on ART have suppressed viral loads. However, there is need for strengthening of viral load testing in the country, to be more regular. At the moment, it has been done since 2015 after

being rolled out with the support of UNICEF funding to procure viral load cartridges, but short shelf life of the cartridges in addition to lengthy procurement processes have led to frequent stock outs hence leading to some patients missing out on the testing.

### **1.5 Late HIV diagnosis**

In 2017, there was no new HIV case reported, as compared to 2016 and 2015 where one late diagnosis cases was reported in each year, and they both died. Although the most AIDS deaths have been among HIV patients detected in advanced stages of the disease, the risk of late diagnosis and premature death continues to be a problem due to the low HIV testing coverage and inadequate treatment management compounded by the limited laboratory capacity and equipment, which hampers effective patient monitoring. Intermittent availability / frequent stock-outs of HIV testing kits also hampers the progress of increasing HIV testing coverage throughout the country.

The SGSS conducted in 2015 among 650 pregnant women in eight provinces about 14.1% antenatal women reported that they had ‘ever been tested’ for HIV and nearly half (7.6%) tested in the past year thus suggesting that access to HIV testing was low in the country. Of the people tested for HIV in the past year, about 5.2% had received the test results. Generally, younger women were less likely to take an HIV test than older women. Testing HIV was least among the youngest (15 – 19 year old) women indicating the need of promotion of HIV testing among this high risk group.

### **1.6 Antiretroviral medicine stock-outs**

The Solomon Islands Government (SIG) has been funding the procurement of ARVs for the past three years, and there have been no stock-outs of the drugs for the same period at least. The drugs are available for both prevention (PEP) among non-infected people, and for treatment among PLHIV. Treatment, Care & Support (TC&S) services including paediatric ART, are currently available in 5 out of 315 active health facilities in the country (excluding Nurse Aide Posts as they will be phased out soon). These facilities offering ART include National Referral Hospital (NRH), Helena Goldie Hospital, Gizo Hospital, Kilu‘ufi Hospital and Lata Hospital.

## **1.7 AIDS mortality**

In 2017, one person (female) died of AIDS related causes. The deceased had only been initiated on ART recently before she died. This means that Solomon Islands has now recorded a total of 15 AIDS related deaths to date, dating way back from 1994 when the first case was discovered. The country has now had 30 cumulative cases, with 15 deaths, 3 lost to follow-up and 12 currently alive and on ART.

Expanded access to antiretroviral therapy (ART) to 100% coverage in 2017, and a declining incidence of HIV infection to zero in 2017, are good indicators that the country is on track and living up to the commitment to end the AIDS epidemic as a public health threat by 2030 - a target included in the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly in September 2015.

**2.0 Commitment 2:** Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018  
Early infant diagnosis

## **2.1 Mother-to-child transmission of HIV (MTCT)**

Solomon Islands has had a MTCT rate of 0% since 2015. All female PLHIV are counselled and enrolled into ART, and given information about PMTCT and family planning. Since the first HIV case was discovered in the country in 1994 to-date, only five children have been born to women living with HIV in the country out of which one of the children was not tested before the child died, one was not tested at birth or in the first 18 months but later tested HIV positive at 13 years in 2014, and it is assumed that this was not a case of MTCT since global evidence shows that a child born with HIV is highly likely to die of AIDS related causes with the first 2 or 5 years of life.. The other three were tested at birth and follow up testing was done at 24 months, and both tests were negative for HIV among all three cases. For all the cases no ARV syrup or PMTCT related therapy was given to the children, but the mothers were on treatment and did not breastfeed.

In 2017, none of the pregnant mothers who received an HIV test, was found HIV positive. Only one out of the eight female PLHIV was given family planning in 2017, but none of the



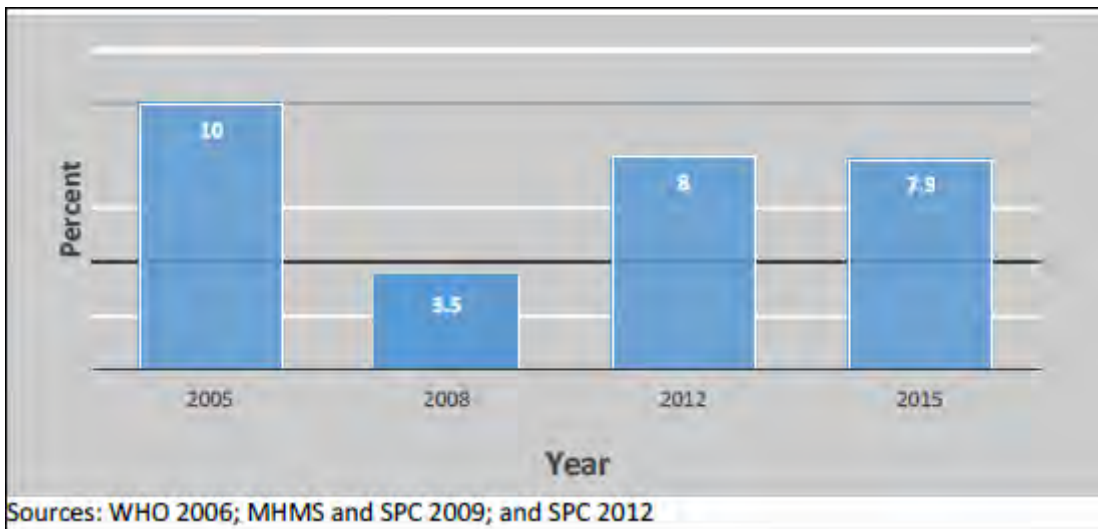
PLHIV mothers became pregnant, hence there was no known risk of MTCT. But the level of unknown risk of MTCT remains significantly big, due to the low coverage of HIV testing among ANC mothers, standing at less than 15%.

## **2.2 Preventing the mother-to-child transmission of HIV**

In the 2015 SGSS among ANC attendees, an attempt was made to understand the willingness of taking HIV tests and PMTCT services as perceived by the antenatal women. The table below shows that nearly 99.2% of the antenatal women were willing to take an HIV test if offered in convenient locations. About 94.1% antenatal women would be willing to access PMTCT services if needed. This means that the problem is not about attitude towards the services but rather due to the unavailability of the service.

## **2.3 Syphilis among pregnant women**

Overall, the prevalence of syphilis among antenatal women in Solomon Islands has historically been high compared to the prevalence rates estimated in other Pacific Islands countries (WHO 2006). From a very high prevalence (10%) in 2005 sentinel survey, the rate had reported to drop to as low as 3.5% in 2008 sentinel survey (MHMS and SPC 2009). One of the limitations in both surveys was that they were conducted in selected clinics by excluding most of the provinces. Sample sizes were also small and the refusal rates were high. The prevalence was estimated as 8% in 2012 in the SPC surveillance study (SPC 2012). The 2015 sentinel survey was designed to be largely representative of the antenatal women of the country covered wide geographical areas. The evidence presented in this figure does not indicate that the prevalence of syphilis infections among antenatal women in Solomon Islands has significantly declined since 2005. The trend in syphilis prevalence rates from 2005 to 2015 are presented in Figure below.



In the 2015 SGSS study in Solomon Islands, about 8.8% specimens showed reactive rapid plasma reagin (RPR). Using a combination of a positive TPHA & an RPR titre of 1:8 or more, the prevalence of syphilis among antenatal women was estimated as 7.9% which was consistent with estimated syphilis prevalence rates found in other studies conducted in Solomon Islands in 2005 (10%) and 2012 (8%). Prevalence of syphilis infections appears to be higher in Honiara city and Guadalcanal province and among the relatively younger (< 24 years), less educated, and women with multiple sex partners.

#### **2.4 Congenital syphilis rate (live births and stillbirth)**

Solomon Islands only included indicators for monitoring of congenital syphilis in the HIS in November 2017. To-date the country has not been reporting on congenital syphilis. This data will be reported in the next GAM report (2019).

#### **2.5 HIV testing among pregnant women**

Although the country rolled out rapid HIV testing in 2011, uptake of the service remains low in Solomon Islands, with very few people seeking the service on their own, and less than 15% pregnant mothers being tested during ANC visits. Less than 50 health facilities in the country offer HIV testing services, and yet even in those facilities, sometimes there are frequent stock-outs of HIV testing kits, and for others there is expiry of HIV kits because the health workers trained to provide the service in those locations have been transferred or seconded for further

studies. Supervision on HIV testing services by the provincial health leadership also remains low, and the task is left upon the national HIV/STI division which is located at the MHMS headquarters and hence can't supervise regularly due to inadequate funding. The table below shows the number of pregnant women tested for HIV in 2017.

HIV Testing Data by Province 2017		
Province	HIV testing at ANC (pregnant women)	VCCT
Central Islands	N/A	N/A
Choiseul	80	1
Guadalcanal	230	43
Honiara	1126	924
Isabel	73	17
Makira	N/A	1
Malaita	335	38
Renbel	N/A	N/A
Temotu	226	3
Western	349	85
<b>Solomon Islands</b>	<b>2419</b>	<b>1,112</b>

**3.0 Commitment 3:** Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners

### 3.1 HIV incidence

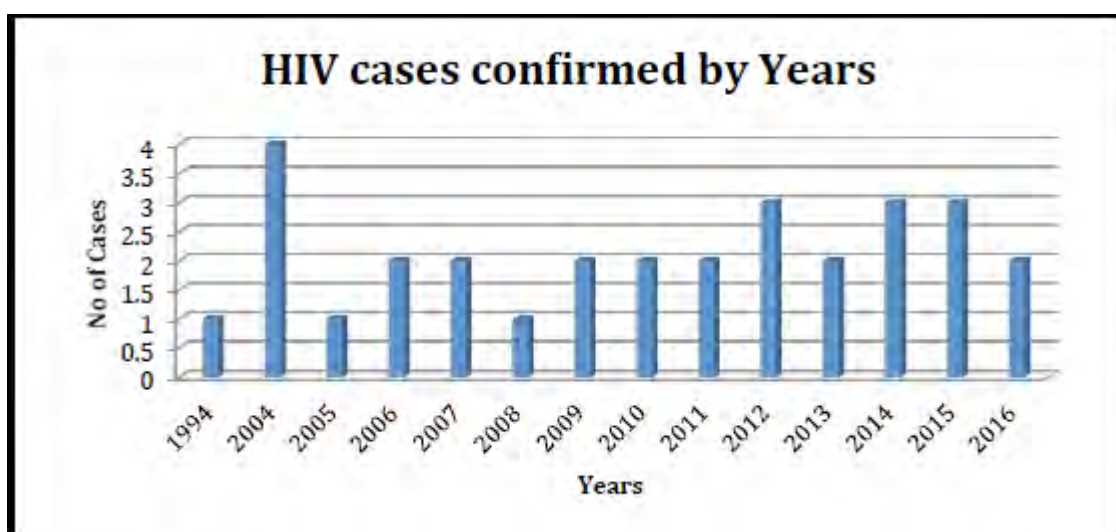
HIV incidence is the number of new HIV infections in a population during a certain time period. The determination of HIV incidence in a population is important to: monitor the epidemic, improve the targeting of populations for interventions, and to evaluate the effectiveness of HIV prevention and treatment programs. The identification of newly infected persons allows for interventions to reduce the risk of HIV transmission.

The prevalence of HIV has been used for many years to assess epidemic patterns and trends. However, it is increasingly difficult to interpret prevalence data because of changes in the survival period from infection to death as a result of the increased provision of antiretroviral

therapy. The incidence of HIV infection, the rate at which new infections are acquired over a defined time period, is much more sensitive to the changing dynamics of disease transmission and provides a more sensitive measure of the current state of the epidemic and of the impact of programmes. However, while estimates of HIV prevalence are widely available from sentinel surveillance or cross-sectional studies, estimates of HIV incidence are more difficult and more costly to obtain.

Determining the best strategy for measuring incidence remains a challenge in the country. Traditional HIV surveillance methods have used changes in measures of prevalence to estimate HIV incidence rates, but this approach requires multiple rounds of surveillance over many years in the same population groups. The prospective follow-up of a cohort of HIV-negative persons provides a direct measure of HIV incidence; however such studies are challenging, expensive, not sustainable in resource-limited settings such as Solomon Islands and they raise ethical issues. Furthermore, the enrollment of persons into a cohort study often leads to behaviour changes that result in a lower observed HIV incidence than in the broader population of interest. Therefore, the MHMS has continued to measure the country's HIV incidence through HIV testing at ANC clinics and VCCT at health facilities.

The figure below shows the trend of HIV incidence since the first HIV case was discovered in Solomon Islands in 1994 to-date, with the highest number of cases (four) being reported in 2004.



*Figure showing the trend of HIV incidence in the country*

In 2017, there were zero new HIV infections in Solomon Islands. This is an improvement compared to 1 case discovered in 2016, 3 in 2015 and 3 in 2014, and it shows a step in the right direction by the country to attain the goals: Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths. Nevertheless, there is no room for complacency as STI rates are still significantly high in the country. The Solomon Islands Demographic and Health Survey (SIDHS) 2015, when respondents who had ever had sexual intercourse were asked if in the past 12 months they experienced a disease acquired through sexual contact or if they experienced either of two symptoms associated with STIs: a bad-smelling, abnormal discharge from the vagina or penis, or a genital sore or ulcer. Overall, 5% of women and 4% of men reported having had an STI or experiencing STI symptoms in the 12 months preceding the survey. Among both women and men, the prevalence of STIs and STI symptoms is higher among the 20–29 age group for women (6%) and the 20–24 age group for men (7%). By region, the prevalence is relatively high among women living in Honiara (5%) and men living in Guadalcanal Province (5%). By wealth, women living in middle and fifth wealth quintile households are slightly more likely than others to have reported an STI infection or STI symptoms. Women with a higher education (4%) and women who are married or living with a partner (4%) have the lowest prevalence of STIs or STI symptoms. Among men, those living in rural areas are more likely to have an STI or STI symptoms (4%) compared with urban men and (3%). Men with a higher education have the lowest prevalence of STIs or STI symptoms.

However, more specific population targeted studies have revealed a higher prevalence of STIs. For example, the Second Generation Surveillance Survey (SGSS) 2015 conducted among ANC mothers revealed a Syphilis prevalence of 7.9%; and the Integrated Biological and Behavioural Surveillance Survey (IBBSS) 2017 conducted among Female Sex Workers (FSW) revealed a Syphilis prevalence of 22%.

### **3.2 Estimates of the size of key populations**

In 2017, the Ministry of Health and Medical Services, with technical assistance from WHO, and funding from GFATM, conducted a Mapping and Population Size Estimation (MPSE) among key populations in the country. The MPSE targeted Female Sex Workers (FSW) and Men who have Sex with Men (MSM). Previous studies conducted in the country had shown that MSM and FSW are the main key populations existing in the country. The MPSE was conducted in urban towns of the three most

populated provinces in the country, with the highest tourism and economic activities. The results of the 3 provinces were used to extrapolate national estimates based on population projections data. Data Extrapolation was done to come up with the national estimates through extrapolation of estimates for the other provinces where the study didn't take place. The Solomon Islands Population Projections 2009 – 2024 provided the current population estimates for all disaggregation relevant for this key population estimation exercise.

### 3.2.1 Population Size Estimates of FSW in Solomon Islands

FSW Population Size Estimation Findings in the 3 provinces				
S/N	Province	Pop'n aged 15+yrs	FSW counted	%age of Popn
1	Honiara Province	24,707	173	0.70
2	Western Province	26,547	127	0.48
3	Malaita Province	48,090	20	0.04
4	Average provincial percentage			0.41

National FSW Population Size Estimates / by province				
S/N	Geographical	Pop'n aged 15+yrs	FSW %age	FSW Pop'n
1	Choiseul Province	9,084	0.41	37
2	Western Province	26,547	0.41	109
3	Isabel Province	9,418	0.41	39
4	Central Province	9,216	0.41	38
5	Renbel Province	1,072	0.41	4
6	Guadalcana	32,028	0.41	131
7	Malaita Province	48,090	0.41	197
8	Makira Province	13,636	0.41	56
9	Temotu Province	8,182	0.41	34
10	Honiara City	24,707	0.41	101
11	<b>Solomon Islands</b>	<b>181,979</b>	<b>0.41</b>	<b>746</b>

### 3.2.2 Population Size Estimates of MSM in Solomon Islands

MSM Population Size Estimation Findings in the 3 provinces				
S/N	Province	Male 15+yrs	# MSM	%age of Pop'n
1	Honiara Province	28,108	47	0.17
2	Western Province	28,722	23	0.08
3	Malaita Province	45,955	18	0.04
<b>Average Percentage</b>				<b>0.1</b>

National MSM Population Size Estimates				
S/N	Geographical Coverage	Male Pop'n	%age of	Estimated # of MSM
1	Choiseul Province	9,227	0.1	9
2	Western Province	28,722	0.1	29
3	Isabel Province	9,474	0.1	9
4	Central Province	9,179	0.1	9
5	Renbel Province	1,118	0.1	1
6	Guadalcanal Province	33,625	0.1	34
7	Malaita Province	45,955	0.1	46
8	Makira Province	13,958	0.1	14
9	Temotu Province	7,176	0.1	7
10	Honiara City Council	28,108	0.1	28
<b>11</b>	<b>Solomon Islands</b>	<b>186,542</b>	<b>0.1</b>	<b>187</b>

### 3.3 HIV prevalence among key populations

In 2017, MHMS conducted an Integrated Biological and Behavioural Surveillance Survey among key populations in Solomon Islands. The IBBSS was designed to represent the diverse epidemic of hidden populations. The survey targeted two key population groups i.e. Female Sex Workers (FSWs) and Men who have Sex with Men (MSM) focusing on geographical areas with high HIV risk and KP population based on the MPSE data.

The survey sample size was 95 for FSW and 85 for MSM calculated from the MPSE findings. Recruitment of participants was conducted using Responded Driven Sampling (RDS) and data was collected using Open Data Kit (ODK) software installed on android tablets for data collection. Behavioural interviews were conducted face-to-face using android-based application on tablets and immediately downloaded on a central server at the end of every data collection day. For the biological part, Dried Blood Spot (DBS) method was appropriate to ensure quality sample collections in the remotest places.

Out of 71 FSW and 39 MSM that consented for an HIV and syphilis test blood draw, 34.7% of the FSW and 34.9% of the MSM tested positive for previous exposure to Treponema infection (syphilis or yaws). Current infections were at (22%) for FSW and none for MSM. None of the participants was HIV reactive.

***Table showing HIV and syphilis prevalence for FSW and MSM***

	FSW		MSM	
	Positive	Negative	Positive	Negative
Syphilis serological test				
Previous Exposure (RPR <1:8)	25 (34.7)	47 (65.3)	14 (34.9)	25 (65.1)
Current Infection RPR >1:8)	13 (22.0)	46 (78.0)	0 (0.0)	39 (100)

***NB: No KP was diagnosed as HIV positive.***

### **3.4 HIV testing among key populations**

#### **3.4.1 HIV testing among female sex workers**

In the 2017 IBBSS, of the 79 FSW respondents, only 9% reported to have ever taken an HIV test. All FSW were asked if they were aware of HIV testing points. About two thirds of the FSWs (66.6%) were aware about places where one can be tested for HIV (Table 16.). Of those who were aware of points of HIV testing, they were further asked if they had ever taken an HIV test. A few (13.4%) of FSWs reported that they had ever tested for HIV (Table 16.). For the FSW who responded yes to the question of ever having had an HIV test, they were further asked if a doctor or NGO referred them for the HIV test. More than two thirds (66.6%) of the FSWs who had ever tested for HIV reported that they voluntarily (went on their own) tested for HIV. Of the FSW that had taken an HIV test only a few (14.9%), reported having knowledge of ART

#### **3.4.2 HIV testing among MSM**

MSM respondents in the 2017 IBBSS were asked if they had ever been tested for HIV and those who ever tested were asked if they had been tested for HIV in the last 12 months. Only very few MSM (16.3%) reported that they ever tested for HIV.



MSM who had ever tested were asked if they went to be tested on their own or if they were referred by a health professional or NGO, the last time they were tested for HIV. About 57.1% of MSM reported seeking an HIV test on their own without referral by a health professional nor an NGO

### **3.5 Antiretroviral therapy coverage among people living with HIV in key populations**

Currently there are no key populations living with HIV. However, in 2017 a Differentiated Service Delivery Model (DSDM) for key populations was developed and it covers access to ART if required. Given the unique challenges faced by these populations in freely accessing health information and services, it became imperative to adopt strategies designed for key populations in order to meet the unique needs of these individuals. Programme adaptations must be executed with particular attention to the needs of key populations to ensure that services are truly appropriate, accessible and acceptable to them, as well as affordable and equitable.

The comprehensive package of HIV/STI interventions including GBV presented in this Differentiated Service Delivery Model (DSDM) is specific to key populations, specifically Female Sex Workers (FSW) and Men who have Sex with Men (MSM). Most of these interventions are the same HIV and STI prevention, diagnosis, treatment and care interventions as for the general population, but also includes GBV as FSW and MSM are highly exposed to sexual violence from partners and clients.

### **3.6 Condom Use**

#### **3.6.1 Condom use among sex workers**

FSWs are at high risk of HIV infection as they have multiple sexual partners and the patterns of condom use with these partners vary considerably. We asked all FSWs about their sexual behaviours with different types of male partners including commercial partners who pay for sex and non- commercial partners who do not pay for sex.

In 2017 IBBSS study, sexual behaviour of FSW with two types of commercial partners was investigated: occasional clients i.e. those who are unfamiliar, one time partners to the FSW; and regular clients i.e. those who are recognized by the FSW because they regularly

or repeatedly visit the FSW for sexual transactions. Similarly, information was collected about two types of non-commercial, non-paying sexual partners: regular male partner who is usually a husband or boyfriend of FSW; and casual male partner, lover or boyfriend of the FSW with whom she has a sexual relationship, but who is not her regular partner.

#### ***Casual sexual clients male clients and HIV risk***

We asked all FSW about having sex with occasional clients and 58% of them reported having occasional clients. Condom use practices examined among FSW who reported having an occasional client. Condom use during last sex act with an occasional client was reported by 28% of the FSW. FSWs who had occasional clients were also asked if they ever had anal sex with their occasional clients. About a fifth of them (23.1%) reported that they ever had anal sex with an occasional client. FSW, who reported having anal sex with occasional clients were asked about condom use practices during anal sex. Overall, none of FSW reported condom use at last anal sex with occasional client.

#### ***Regular sexual clients male clients and HIV risk***

We asked all FSW about having sex with regular clients and 92.5% of them reported having regular clients. Condom use practice was examined among FSW who reported having regular client. Condom use during last sex act with regular clients was reported by (21%) of FSW. FSWs who had regular clients were asked if they ever had anal sex with their regular clients. About (16.1%) of them reported that they had ever had anal sex with a regular client. Out of those who reported having anal sex with regular clients, (10%) reported condom use at last anal sex with regular clients.

#### ***Regular non-paying male clients AND HIV RISK***

We asked all FSW if they had a regular non-paying male partner such as spouse, lover, boyfriend or other live-in sexual partner; 82.1 % of them reported having such regular non-paying male partner. All FSWs who reported having a regular non-paying male partner were asked about condom use practices with this partner. Condom use at last sex with regular non-paying partners was reported by 14.5% of them. FSW who had regular non-paying clients were asked if they ever had anal sex with their regular non-paying clients. About (12.7%) of them reported that they ever had anal sex with regular non-paying clients. Out of those who reported having anal sex with regular non-paying clients, none reported condom use at last anal sex with regular non-paying clients.

### ***Casual non-paying male clients and HIV risk***

All FSWs were asked if they had a casual non-paying male sexual partner. About 48.3 % of FSW reported having such casual non-paying male partners. All FSWs who reported having a casual non-paying male partner were asked about condom use practices with this partner. Last time condom use with this partner was reported by 16.3% of FSWs at last sex with casual non-paying partners. FSW who had casual non-paying clients were asked if they ever had anal sex with their casual non-paying clients. About (6.5%) of FSW reported that they ever had anal sex with casual non-paying clients. Out of those who reported having anal sex with casual non-paying clients, all (100%) reported condom use at last anal sex with casual non-paying clients

### **3.6.2 Condom use among men who have sex with men**

MSM do not form a separate or discreet sexual network but are part of the rest of the society. There is criminalization of male-to-male sex but at the same time, men who self-identify as MSM often marry and have children. Therefore, MSM are a diverse group who have sex with men and women, have multiple partners including regular and casual male partners, and may play different roles during sexual activity. In these different partnerships, MSM are well known to engage in unprotected anal sex or vaginal sex, putting themselves and others at risk of acquiring HIV and other sexually transmitted infections.

Since MSM may have sex with women, they therefore become a ‘bridge’ for HIV transmission to the general population of heterosexual women. Given the importance of these issues, questions on different types of sexual partners (both male and female) and condom use practices with each partner type, was a significant component of the IBBSS questionnaire for MSM. The following section covers HIV risk among the following partners of MSM: regular male partners, paying male partners, paid male partners, casual male partner, regular female partner, paid female partner and casual female partner.

The 2017 IBBSS investigated condom use among MSM with their different types of partners as elaborated below.

### ***MSM regular partners and HIV risk***

Almost half of MSM reported having a regular male partner (44.2%). MSM who had a regular male partner were to respond to the question about the type of sex (penetrative, oral or manual)

that they generally practice with this regular male partner. Among those with a regular male partner, 78.9% reported that they generally have penetrative (either insertive or receptive) sex with this regular male partner. Out of these only 21% reported having used condoms the last time they had sex with a regular male sexual partner.

MSM in this IBBSS were also to respond to the question about selling or buying sex from other men. MSM who sold sex or ever received cash or gifts from other men in exchange for sex are referred to as having paying male partners; and MSM who bought sex or who paid cash or gifts to have sex with another man are referred to as having paid a male partner. For each of these paying or paid partners, MSM were to respond if they had ever had sex with such partners, and if they had sex with these partners in the previous 12 months.

Those who had sex with such partners were to respond if they had penetrative sex with these partners in the previous 12 months. Among the MSM who had these partners and practiced penetrative sex, they were to respond to questions on condom use practices. The practices examined were consistent condom use, defined as condom use at every sex act in the last one month with these partners.

#### ***Experience of having paying male partners and HIV risk***

Substantial number of MSM reported ever having a paying male partner (16.3%). Among those who ever had a paying partner, 71.4% of MSM reported having a paying partner in the previous 12 months. All MSM (100%) reported condom use during last penetrative sex with paying male partner.

#### ***Experience of paying male partners and HIV risk***

Compared with those having paying partners, lower proportion of MSM reported ever having paid a male partner (7%) for sex. Among the MSM who had ever paid a male partner for sex, 66.7% reported that they had paid a male partner for sex in the last 12 months. Among these, all of them reported having used a condom the last time they paid a male partner for sex.

#### ***MSM and casual male partners***

Other than the male partners described above, MSM respondents in this IBBSS were also asked if they had other casual male partners (other than their regular male partner), who were a non-paying partner. Last time condom use and consistent condom use were defined the same as

describe above for commercial partners. About 25.6 % of MSM reported ever having sex with a casual male partner. Among those who ever had a casual male partner, 2.3% reported that they had sex with a casual male partner in the last 12 months.

### ***MSM experience of vaginal sexual intercourse with females***

All MSM respondents were asked if they had ever had vaginal sexual intercourse with a female. Among those (48.8%) who reported ever having sex with a female partner, were then asked about having regular female partner such as spouse, girlfriend, or live in partner. Some MSM (27.9%) reported that they currently have a regular female partner. MSM who had currently had a regular female partner were further asked the question on condom use. Of these, about 16.7% reported having used a condom with a regular female partner (Table 20.).

### ***MSM having paid sex with female partner***

All MSM who reported ever having sex with a female were also asked if they ever paid a female for having sexual intercourse. About 5% reported having paid sex with a female. All MSM who reported ever having sex with a female partner were also asked if they had ever had sexual intercourse with a casual female partner, such as lover, other than their regular male partner. Few (9.3%) of the MSM reported having sex with a casual female partner.

## **3.7 Coverage of HIV prevention programmes among key populations**

### **3.7.1 Coverage of HIV prevention programmes among FSW**

To estimate the coverage and intensity of HIV prevention efforts in the country, the 2017 IBBSS included one section with a comprehensive set of questions on exposure to HIV/AIDS related services. FSW respondents in the study were asked about exposure to any of HIV/AIDS services in the last 12 months preceding the study. The questions asked included the following HIV prevention services;

- Behaviour Change Communication (BCC) services,
- Condom promotion including condom distribution and demonstration,
- STI management related services including routine check-ups, counseling and treatment,
- Referral to other related healthcare services including HIV Counseling and Testing,
- Exposure to drop-in centres

- Help and support when faced with physical or sexual violence as well as during trouble with law enforcement agencies.

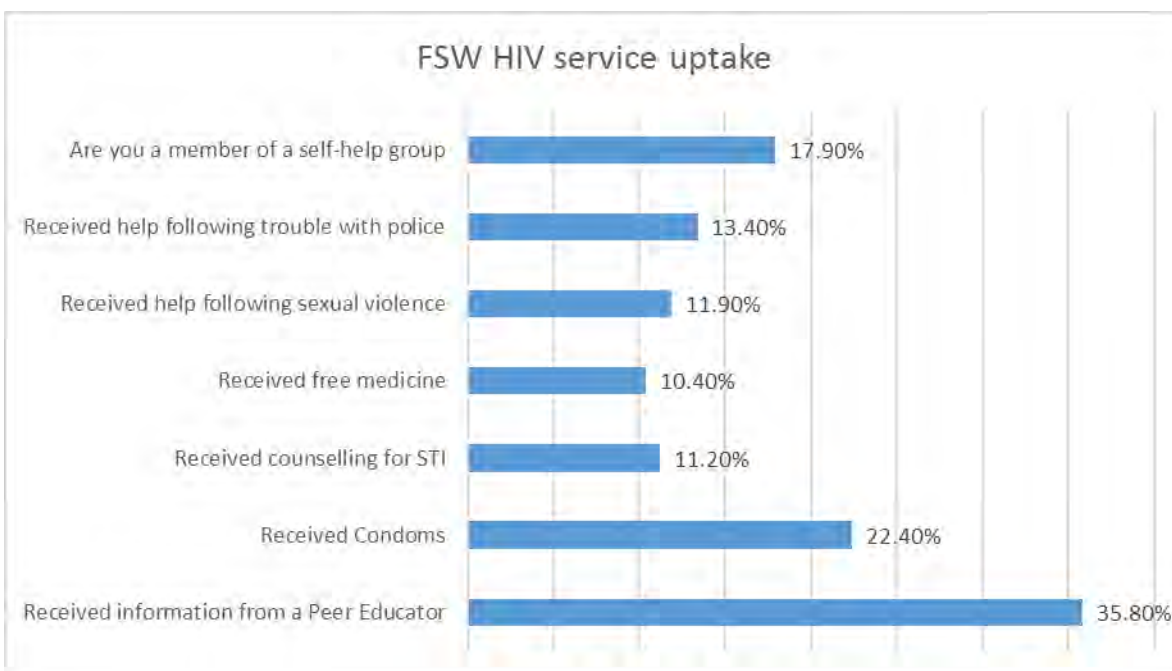
Those FSW who took up any of the listed HIV/AIDS related services in the referenced period responded to more questions to understand the intensity of their exposure to the services.

***FSW exposure to one or more HIV/AIDS related services***

17.5 % of FSWs reported to have received one or more HIV and AIDS related services during the 12 months preceding the IBBSS. The table below presents the proportion of respondents exposed to each of the four core HIV and AIDS related services during the reference period.

***FSW Exposure to HIV/STI services***

More than two thirds (35.8%) of FSW had been exposed to BCC services through a peer educator (PE) or outreach worker (ORW), 22.4% had been provided condoms by PE/ORW, and 11.2% had received check- up and counseling for STI (Fig. and Table below).



***Figure showing coverage of HIV & GBV response and prevention programs among FSW***

*Table showing coverage of HIV prevention services among FSW*

		<b>Frequency</b>	<b>%</b>
Accessed services from NGO (N=67)	Yes	8	11.9
Received information from a Peer Educator	Yes	24	35.8
Received Condoms	Yes	16	22.4
Received counselling for STI	Yes	8	11.2
Received free medicine	Yes	7	10.4
Received help following sexual violence	Yes	8	11.9
Received help following trouble with police	Yes	9	13.4
Are you a member of a self-help group	Yes	12	17.9

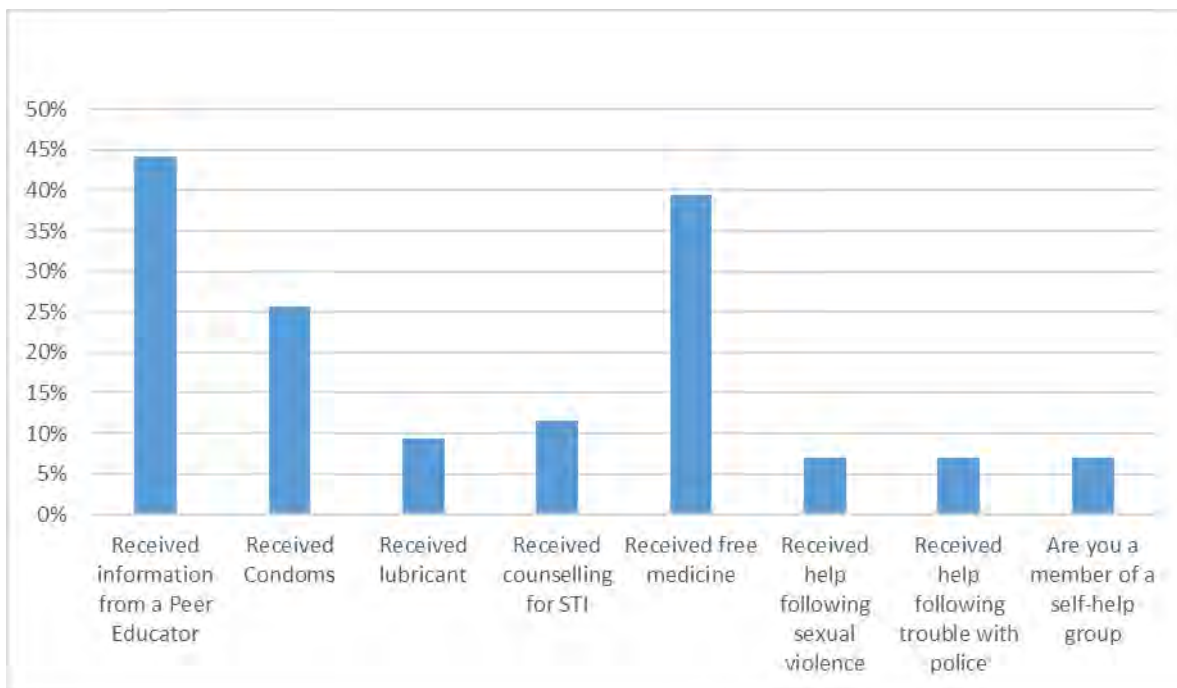
### **3.7.2 Coverage of HIV prevention programmes among MSM**

In the 2017 IBBSS, MSM were asked about exposure to Information Education and Communication (IEC) through outreach services, receipt of condoms and lubricants from outreaches, regular medical checkups, counseling and treatment for STIs, or referrals for STI or HIV testing etc., in the last one year. More than two thirds (44.2%) of MSM reported to have received HIV services from a peer educator (PE). In addition, MSM reported to have received free medicine (39.5%), condoms (25.6%), counselling for STI (11.6%), lubricants (9.3%) and help following sexual harassment (7%). Only 7% of the MSM reported being members of a self-help group.

*Table showing MSM coverage by HIV prevention programmes*

		<b>Frequency</b>	<b>%</b>
Accessed services from NGO	Yes		N/A
Received information from a Peer Educator	Yes	19	44.2
Received Condoms	Yes	11	25.6
Received lubricant	Yes	4	9.3
Received counselling for STI	Yes	5	11.6
Received free medicine	Yes	17	39.5
Received help following sexual violence	Yes	3	7
Received help following trouble with police	Yes	3	7

		Frequency	%
Are you a member of a self-help group	Yes	3	7
In the last 12 months have you stood up to any of the following to help a fellow MSM	Police	5	11.6
	Local Leader	4	9.3
	Other MSM	4	9.3



*Figure showing coverage of HIV services among MSM*

### 3.8 Active syphilis among sex workers

The 2017 IBBSS investigated FSW exposure to syphilis infection. However, because of lack of a specific serological test for syphilis, it was difficult to differentiate between yaws and syphilis infection based on the endemic nature of yaws in pacific countries including Solomon Islands.

In a sample of 71 FSW that consented for an HIV and syphilis test blood draw, 34.7% of the FSW tested positive for previous exposure to Treponema infection (syphilis or yaws). Current infections were at (22%).



*Table showing active Syphilis among FSW (IBBSS 2017)*

Syphilis serological test	FSW	
	Positive	Negative
Previous Exposure (RPR <1:8)	25 (34.7)	47 (65.3)
Current Infection RPR >1:8)	13 (22.0)	46 (78.0)

### **3.9 Active syphilis among men who have sex with men**

Similarly, the 2017 IBBSS also investigated MSM exposure to syphilis infection. And just like in the case of FSW, lack of a specific serological test for syphilis also made it difficult to differentiate between yaws and syphilis infection among the MSM tested, based on the endemic nature of yaws in pacific countries such as Solomon Islands.

In a sample of 39 MSM that consented for an HIV and syphilis test blood draw, 34.9% of the MSM tested positive for previous exposure to Treponema infection (syphilis or yaws). Current infections were none (0%).

*Table showing active Syphilis among MSM (IBBSS 2017)*

Syphilis serological test	MSM	
	Positive	Negative
Previous Exposure (RPR <1:8)	14 (34.9)	25 (65.1)
Current Infection RPR >1:8)	0 (0.0)	39 (100)

### **3.10 HIV prevention programmes in prisons**

In 2017 Solomon islands participated in is conducting a global study on prisoner health. The survey was conducted by The United Nations Office on Drugs and Crime (UNODC) to assess the HIV situation in prisons, and the availability and coverage of HIV prevention, treatment, and care services. By participating in this survey, the country contributed to the global community initiative of working towards 'leaving no one behind' on the fast-track to end AIDS as a public health threat. This in turn helps to strengthen the global HIV response in an attempt to achieve the 90-90-90 target by 2030.

With a keen focus on the health-related Sustainable Development Goal number 3, the country's participation and contribution will also assist to identify the current situation of HIV and other related infections and highlight key challenges and gaps in the provision of HIV prevention, treatment, and care service, in prisons globally. According to the survey findings, there are 6 prisons in total in the country, and the total number of inmates as shown in the table below, served by a total of 8 prison health staff:

*Table showing the total number of prisoners on January 1st, 2016, or earlier.*

	<b>Number</b>	<b>Data unavailable (x)</b>
Total number	303	
Male	290	
Female	7	
Juveniles (Under the age of 18 years of age)	16	
What is the % of prisoners under 25 years of age?	34 %	
Comments: data for both sentenced/unsentenced		

*Table showing interventions available at the prisons*

<b>Interventions</b>	<b>Yes (x)</b>	<b>No (x)</b>
Needle and syringe programs (NSP)		<b>x</b>
Drug dependence treatment, including opioid substitution therapy (OST)		<b>x</b>
HIV treatment, care and support		<b>x</b>
Condom programs	<b>x</b>	
Prevention, diagnosis and treatment of tuberculosis		<b>x</b>
HIV testing and counselling	<b>x</b>	
Post-exposure prophylaxis (PEP)		<b>x</b>
Information, education and communication on HIV, tuberculosis (TB), hepatitis and sexually transmitted infections (STIs)	<b>x</b>	
Prevention and treatment of sexually transmitted infections	<b>x</b>	
Prevention of sexual violence		<b>x</b>
Prevention of mother-to-child transmission of HIV		<b>x</b>
Prevention of transmission through medical or dental services	<b>x</b>	
Prevention of transmission through tattooing, piercing and other forms of skin penetration	<b>x</b>	
Vaccination, diagnosis and treatment of viral hepatitis (HBV & HCV)		<b>x</b>
Protecting staff from occupational hazards	<b>x</b>	

However, there are no drug-dependant prisoners in Solomon Islands and therefore the country is not implementing needle syringe programs. Also, there are no PLHIVs in prisons, through HIV

testing in prisons is low and adhoc. Condoms were reported as available at the prisons, and HIV awareness campaigns are conducted one a year whenever funding is available to the national HIV/STI Division at the MHMS.

In 2016, 4 prisoners were tested for HIV, and other STIs. 100% (4 out of 4) of the prisoners who were tested for STIs were found positive for Syphilis, and negative for both Gonorrhoea and Chlamydia. All the 4 were treated at the prison, as there is treatment available at the prison clinic.

### **3.11 Viral hepatitis among key populations**

The Solomon Islands Key Populations programme started in 2018, and the IBBSS conducted in 2017 only focused on HIV and Syphilis testing among the key populations. Therefore, the country has no data, and has never tracked this indicator in the past.

### **3.12 People receiving pre-exposure prophylaxis (PrEP)**

In Solomon Islands, PrEP guidelines are in place as part of the consolidated HIV treatment guidelines, but PrEP has not been rolled out yet. The IBBSS conducted in 2017 among key populations did not discover any HIV positive case among the respondents tested.

### **3.13 Prevalence of male circumcision**

Evidence from studies such as Bailey et al. (2007) shows that male circumcision is correlated with lower vulnerability to transmission of STIs, including HIV. Because men who are not circumcised have a higher risk of HIV and AIDS transmission, the SIDHS 2015 asked male respondents about their circumcision status. About 6% of men aged 15–49 reported that they are circumcised. This trend increased marginally from 4%, as reported in the previous SIDHS (2006–2007). Among men who are circumcised, urban men are more likely to be circumcised (8%) than rural men (5%).

By region, Malaita Province has the lowest percentage of circumcised men (2%) and among religious groups, the United Church has the highest percentage of circumcised men (14%). Detailed findings from the SIDHS are illustrated in the figure below:

*Percentage of men aged 15–49 who report having been circumcised, by background characteristics, Solomon Islands 2015*

Background characteristic	Percentage circumcised	Number of men
<b>Age</b>		
15–24	4.2	1,124
..15–19	3.8	605
..20–24	4.7	519
25–29	5	479
30–39	7.5	830
40–49	7.6	516
<b>Residence</b>		
Urban	8.2	720
Rural	5.1	2,229
<b>Region</b>		
Honiara	8.5	475
Guadalcanal	3.3	547
Malaita	1.8	710
Western	7.3	451
Other provinces	9.1	765
<b>Religion</b>		
Anglican	5.8	990
Roman catholic	5.4	538
United church	14.1	299
Southseas evangelical	2.5	515
Seventh day adventist	6	352
Other	4.3	249
Missing	*	6
<b>Ethnic group</b>		
Melanesian	4	2,833
Polynesian	32.4	56
Micronesian	77.2	50
European	*	2
Chinese	*	3
Other	*	3
Missing	*	2
<b>Total 15–49</b>	<b>5.9</b>	<b>2,948</b>
50+	8.7	643
<b>Total 15+</b>	<b>6.4</b>	<b>3,591</b>

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

*Figure showing percentage of men reporting being circumcized*

### 3.14 Annual number of males voluntarily circumcised

Safe Male Circumcision is not a fully-fledged intervention area in Solomon Islands. There is no data for this for the year 2017 or before. The SIDHS did not calculate the annual number of males circumcised, nor does the HIS have an indicator to measure the annual this indicator.

### **3.15 Condom use at last high-risk sex**

#### *Multiple sex partners and condom use*

In the Solomon Islands Demographic and Health Survey (SIDHS) 2015, a much larger proportion of men than women reported having two or more sexual partners in the 12 months preceding the survey (8% for men vs 3% for women). This trend has slightly declined since the SIDHS 2006–2007 findings (9% for men vs 4% for women). Among people aged 15–49, men had a greater number of sexual partners during their lifetime (mean number 9) than women (mean number 3.9). The mean number of lifetime sexual partners for women and men is highest in Western Province (8.2 for women, 11.9 for men) and other provinces (3.9 for women, 12.2 for women). Although the mean number of lifetime sexual partners increases with increasing education and wealth, for women, this trend slows down beyond post-secondary education, as is the case beyond the fourth-wealthiest group among both sexes. The results further show that slightly over 5% of never-married women and 9% of women who were divorced, separated, or widowed reported having two or more sexual partners, as compared with 1% of married women.

Condom usage appears to be slightly higher among men (20%) than women (19%). The results show that close to one in four never-married women and men reported condom use during their last sexual intercourse (22% for women, 24% for men).

#### *Payment for sexual intercourse*

In the SIDHS 2015, men who had sexual intercourse in the 12 months preceding the survey were asked if they had paid anyone for sexual intercourse during that time. Those who had engaged in paid sexual intercourse in the prior 12 months were asked if they used a condom the last time they paid for sexual intercourse. Such information provides insights into understanding the prevalence of commercial sex practices and its linkages to higher risk sexual behaviour where those involved have a high risk of contracting HIV and related STIs. The absolute number of men who use condom at last paid sexual intercourse in the 12 months preceding the survey compared with men who paid for sex was very low; hence, it is difficult to make conclusions about the variation of condom use. However, condom used by men aged 15–49 at last paid sex is 21%.

#### **4.0 Commitment 4:** Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020

##### **4.1 Discriminatory attitudes towards people living with HIV**

Knowledge and beliefs about HIV infection affect how people treat those that they know to be living with HIV or AIDS. The level of progress in reducing stigma and related attitudes such as discrimination against people living with HIV or AIDS is an important measure in supporting strategies and programmes aimed at preventing and controlling infection. In the SIDHS 2015, a number of questions were posed to respondents to measure their attitudes towards HIV-infected people. These questions concerned their willingness to buy vegetables from an infected produce seller, to let others know the HIV status of family members, and to take care of relatives who have AIDS in their own household. They were also asked whether an HIV-positive female teacher who is not sick should be allowed to continue teaching.

Accepting attitudes with regard to all four indicators among women and men are very low, with women indicating less acceptance towards individuals with HIV or AIDS (6%) than men (16%). Only a very low proportion of women in rural areas, with no education or just a primary education, and living in lowest wealth quintile have positive attitudes towards people living with HIV or AIDS.

The results also show that more men than women are likely to express their support to each specific attitudes toward those people living with HIV or AIDS. For example, 61% of men are willing to care for a family member with AIDS living in the same house compared with 42% of women; 56% of men would buy fresh vegetables from shopkeeper who has AIDS compared with only 33% of women; and 30% of men and 19% of women would agree to allowing a female teacher who has AIDS but is not sick to continue teaching. About the same percent of women and men (67% and 66%) agree that they would not want to keep it a secret that a family member was infected with the AIDS virus.

## **4.2 Avoidance of health care among key populations because of stigma and discrimination**

In Solomon Islands key populations have mainly been accessing services under adolescent and youth programmes offered mainly by SIPPA and MHMS. The sex workers programme under SIPPA is made of sex workers volunteers who sensitize, mobilize and refer their group members for HIV and services. MSM programmes have not been implemented since 2012 when SCA last implemented their MSM programme, but many MSM recently reported having received services from the youth friendly health centres in Honiara. It is therefore important to use the youth friendly clinics as referral points for key populations to receive services without being identified as FSW or MSM due to stigma and discrimination surrounding them.

## **4.3 Prevalence of recent intimate partner violence**

The ground breaking Solomon Islands Family Health and Safety Study conducted by SPC in 2009 revealed extremely high incidence of violence against women and children. Two out of three women (64%) aged 15-49, who have ever been in a relationship, reported experiencing some form of physical and/or sexual violence by an intimate partner. Sexual violence was more common. Violence reported was more likely to be severe than moderate, including punching, kicking, and having a weapon used against them. Levels of violence were higher in Honiara than the provinces, and this may be related to the wider availability and consumption of alcohol (which acts as a dis-inhibitor), as well as social problems such as unemployment and overcrowding.

The study also found high levels of child sexual abuse and forced first sex. Some 37% of women aged between 15 and 49 reported they had been sexually abused before the age of 15 with girls mostly at risk from male acquaintances and male family members. Of women who reported to have ever had sexual intercourse, 38% reported that their first sexual intercourse was coerced or forced. The Solomon Islands Family Health and Safety Study (SIFHS) in 2009 also found that for many girls their first experience of sexual intercourse was forced.

According to the SIFHS, women who were victims of Intimate Partner Violence (IPV) were significantly more likely to report that their current partner, or any other partner, had abused

their children (emotionally, physically and/or sexually) (36% versus 11%,  $P < 0.001$ ). In fact, women who have experienced IPV are 4.5 times more likely to have children who are also abused than those who have not experienced partner violence (AOR1 = 4).

A Second Generation Sentinel Study (SGSS) conducted in 2015 revealed that 12.3% antenatal women reported that they were forced to have sexual intercourse at least once in their lifetime. Younger women were more likely than older women to be the victims of sexual violence. Most often, the perpetrators were their partners, neighbours or family friends. Other sexual offenders included relatives and work colleagues. In most countries, sexual violence is not recognised as a health problem. As a result, harmful effects of coerced sex, are largely ignored by the public health professionals.

*Table showing experience of having forced sex in antenatal women by age group, SGSS 2015*

Forced sex	Age group				All
	15 – 19 (%)	20 – 24 (%)	15 – 24 (%)	25 – 49 (%)	
Ever forced to have sex	14.8	13.9	14.1	11.0	12.3
Relationship with person who forced to have sex*					
Partner	25.0	20.7	21.6	22.5	22.1
Relative	12.5	17.2	16.2	12.5	14.3
Neighbour	37.5	20.7	24.3	20.0	22.1
Work colleague	0.0	3.4	2.7	5.0	3.9
Stranger	12.5	10.3	10.8	20.0	15.6
Family friend	12.5	27.6	24.3	20.0	22.1

Among key populations, FSWs especially are highly vulnerable to sexual violence. All FSWs in the 2017 IBBSS were asked if they had been physically forced to have sexual intercourse with someone though they did not want to, in the last 12 months. Compared with physical violence, fewer FSW (31.3%) reported experiencing sexual violence in last 12 months. Among those who had experienced sexual violence, the most commonly reported perpetrators of such violence were clients (38.1%), strangers (28.6%), partners (19.2%), goons (thugs or members of an armed security group), husband (4.8%) and other (9.5%). All FSW that had reported sexual violence experience, were asked if they had informed anyone that last time they experienced sexual violence. Most FSW (71.4%) reported that they had not informed someone about their experience of sexual violence (Table 3.6). However, a few of them had informed relatives and friends (14.3%), fellow FSW (9.5%) and a non-sex worker (4.8%).



In 2017, the MHMS with TA from WHO developed Guidelines and a Clinical Handbook for Minimum Standards for Management of Care for Survivors of GBV to ensure all health care workers in the country have the necessary skills to implement the Minimum Standards of Treatment for Survivors of SGBV and are supported to adhere to the Clinical Guidelines; as well as ensure that all survivors of SGBV can access appropriate health care in a timely manner and receive the survivor-centered medical and psychosocial support that is necessary to improve health outcomes and end the cycle of violence, regardless of their social status, race, sexual orientation, religion e.t.c. towards the achievement of Universal Health Coverage. This will strengthen GBV response in the country, including among PLHIV and Key Populations.

#### 4.4 Experience of HIV-related discrimination in health-care settings

Female sex workers face considerable marginalization and are discriminated against due to the nature of their sexual behaviours. Such discrimination prevents them from accessing services that they need and can become a barrier to adopting safer sex practices. To help with better understanding of the perceived stigma and discrimination that FSWs face, the 2017 IBBSS included questions on this issue.

All FSWs in the IBBSS were asked: if they had been treated disrespectfully by their family, friends or neighbour because of being an FSW; and if they had felt that they were being treated differently (such as received less care, attention) than others in health facilities because of being an FSW. More than a third (38.8%) of FSWs respondents in the IBBSS reported that they had been treated disrespectfully.

*Table showing percentage of FSW reporting maltreatment*

		<b>Frequency</b>	<b>%</b>
Do you feel treated disrespectfully because you are FSW	Yes	26	38.8
Do you feel treated differently because you are FSW	Yes	29	43.3

**5.0 Commitment 5:** Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year

### **5.1 Young people: Knowledge about HIV prevention**

According to UNAIDS, “Adolescents” are defined as persons between the ages of 10-19 and “youth” are defined as persons between the ages of 15-24; and “young people” refer to both groupings ie those aged 10-24 years.

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.

The 2015 DHIS did not cover the age group 10-15 years, but covered from 15 years onwards, including 15-19 years and 15-24 years. Findings of the SIDHS 2015 reveal a fairly high level of awareness among young people (15-24) that can be prevented by limiting sexual intercourse to one uninfected partner (77.2% young women, 80.9% young men). 62% of young women and 64.6% of young men are aware that HIV can be prevented by using condoms every time they have sexual intercourse, while another 58% of women and more than 65% of men are aware of both prevention methods.

### **5.2 Demand for family planning satisfied by modern methods**

According to the SIDHS 2015, about 35% of currently married women have an unmet family planning need, 20% have unmet need for spacing births, and 15% have an unmet need for limiting births. Fewer women reported that their family planning needs were currently being met (29%). Younger married women have a high unmet need for spacing births while older women have an unmet need for limiting births. Unmet spacing and limiting needs were similar

between urban women (21% and 14%, respectively) and rural women (20% and 15%, respectively).

Overall, knowledge of family planning is high in Solomon Islands, with 94% of women and 98% of all men aged 15–49 knowing at least one contraceptive method. The most commonly known modern methods among all women include the male condom (90%), followed by an injectable (87%), female sterilization (85%) and birth control pills (79%). Emergency contraception, which is an emergency measure of contraception, is one of the two least known contraceptives, with only 34% of all women knowing about the method. These findings are similar with those of the previous SIDHS (2006–2007).

The SIDHS 2015 also reported about one in three (29%) currently married women using any contraceptive method, compared to 35% in the previous SIDHS 2006–2007. Female sterilization and injectable are currently the most commonly used methods among all women, at 6% and 5.8% respectively. About 4% of all women use traditional methods of contraception: the rhythm method is the most commonly used traditional method, used by 2% of women.

Contraceptive use among all women increases with age, peaking around the mid-30s and declining thereafter. The two most commonly used methods of contraception among currently married women are female sterilization and injectable objects currently used by 9% and 8.2% of these women. Women in rural areas are more likely to use contraceptive methods (30%) than women in urban areas (26%). In general, contraceptive use among women does differ significantly by women's education or wealth.

In Solomon Islands, 88% of current users of modern contraceptive methods obtained the methods from public places, and about 5% sourced the methods from private and other service providers.

One in five women aged 15–49 (20%) who started an episode of contraceptive use, discontinued its use within 12 months for any reason; 5% discontinued because of side effects or health concerns, and 5% discontinued because of other reasons. Wanting to become pregnant or wanting a more effective method of contraception were the next most common reasons for discontinuing a contraceptive method, with both reasons comprising about 3% of women. About 2% of women stopped using a contraceptive method due to method failure and another 5% switched to another method.

**6.0 Commitment 8:** Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers

**6.1 Total HIV expenditure**

Domestic funding for HIV interventions has not changed, but international financing has continued to reduce annually, and funding for HIV from international partners may stop completely by 2018. The many competing priorities in the health sector and the very low number of HIV cases to date have kept HIV low on the national agenda.

Despite research showing the presence of many risk factors and behaviors among key populations – including sex workers, women and men engaging in transactional sex and adolescents – political and financial commitment remains largely limited to interventions in the health sector. With the competing priorities and decreasing willingness of donors to fund HIV/STI-related interventions, the funding gap for the near future is expected to increase.

In recent years, including 2017, Solomon Islands Government resources for HIV have mainly been committed to payroll expenditure, as well as procurement of commodities such as ARV drugs and HIV testing kits. Therefore, HIV prevention activities for the general population and especially for key populations remains dependent on external donor funding from the Global Fund.

*Table showing HIV Spending between 2015 - 2017*

Costs	Actual		Budget	Comments
	2015	2016	2017	
HIV/STI Division (Earmarked) - National	172,704.00	320,866.00	2,184,851.00	Includes Direct Payroll & all SIG & Donor Funding on SIG Systems
HIV/STI Division (Earmarked) - Provincial	565,217.00	379,887.00	703,153.00	Provincial Programmatic Expenditure
<b>Total (SIS)</b>	<b>737,921.00</b>	<b>700,753.00</b>	<b>2,888,004.00</b>	

**7.0 Commitment 10:** Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C

### **7.1 Co-management of tuberculosis and HIV treatment**

HIV testing among TB patients continues to improve steadily; as it improved by 10% in 2017 compared to 2016. In 2017, 29% (111 out of 377) of TB patients were tested for HIV compared to 18.9% in 2016. None of the TB patients tested for HIV was found reactive. Testing of HIV patients for TB did not happen for any of the 12 PLHIV currently living with HIV; however, 3 of the PLHIV were enrolled on TB prophylaxis using Isoniazid Preventive Therapy (IPT).

Historically, there has been few programmatic links between the Solomon Islands National TB Programme and the HIV response. In 2010, TB treatment and management guidelines were formally reviewed and updated to include HIV/TB co-management, and in 2011, 12 TB nurses and coordinators throughout the country were trained to do HIV Counselling and Testing. Since then, there have been programmatic links between the NTLP and the HIV programs. TB/HIV collaborative activities were introduced in the TB manual updated in 2012 while the HIV programme staffs were involved in the development of the TB NSP, which includes HIV in its situation analysis and its strategies. The same was true for the new HIV NSP in whose development the NTLP programme manager was involved while the National ART guideline has a special chapter devoted to TB/HIV collaborative activities.

### **7.2 Proportion of people living with HIV newly enrolled in HIV care with active TB disease**

Hence today, HIV/TB collaboration remains weak in the country, except for the fact that the TB GenXpert machine is being used to monitor viral load of PLHIV. TB screening among PLHIV remains low, with 0% PLHIV being screened for TB in 2017 during their follow-up visits for drug refills and /or viral load testing. Likewise, HIV testing among TB patients continues to be low, with only 111 out of 377 (29%) patients accessing HIV testing in 2017.

### 7.3 Proportion of people living with HIV newly enrolled in HIV care started on TB preventive therapy

Testing of HIV patients for TB and Vice Versa remains weak in the country due to the inadequate collaboration of the two programs at the facility level. In the past, TB staff have been trained on HIV testing and counselling e.g. in 2010, and they started to routinely offer HIV testing service to TB patients but this was not sustained in many of the TB clinics despite being certified as HIV testing sites.

In 2017, none (0%) of the 12 PLHIV currently in the country were tested for TB, and only 3 (25%) of them (PLHIV) were placed under TB prophylaxis with IPT. It is important to strengthen HIV testing among TB patients in Solomon Islands given the country is highly burdened by the TB disease. To-date, only one case of TB-HIV co-infection has been reported, and this occurred in 2014. The client was a late diagnosis after an HIV test was recommended while on admission in the TB ward. The client died soon after being enrolled on ART.

### 7.4 Men with urethral discharge

Refer to section 7.5 (next table) for 2017 data.

### 8.5 Gonorrhoea among men

Laboratory testing and reporting of Gonorrhoea remains weak in Solomon Islands, with weak laboratory and HIS systems, and syndromic management being the main course of management of the STI in the country.

STI and Testing Data by Province 2017					
Province	Urethral Discharge Syndrome Cases	Genital Ulcer Syndrome Cases	Vaginal Discharge Syndrome Cases	Pregnancy VCCT Pre Tests	VCCT Pre Tests
Central Islands	48	9	32	N/A	N/A
Choiseul	87	19	115	80	1
Guadalcanal	309	69	349	230	43
Honiara	1507	180	1713	1126	191
Isabel	53	10	24	73	17

STI and Testing Data by Province 2017					
Province	Urethral Discharge Syndrome Cases	Genital Ulcer Syndrome Cases	Vaginal Discharge Syndrome Cases	Pregnancy VCCT Pre Tests	VCCT Pre Tests
Makira	128	22	107		1
Malaita	367	91	421	335	38
Renbel	19	2	7	N/A	N/A
Temotu	72	22	79	226	3
Western	471	59	283	349	85
<b>Solomon Islands</b>	<b>3061</b>	<b>483</b>	<b>3130</b>	<b>2419</b>	<b>379</b>

## 7.6 Hepatitis B testing

In Solomon Islands, Hepatitis B testing is mainly conducted among blood donors. However, guidance for of patients with HBV is included in the country’s consolidated ARV guidelines. In NRH alone, covering Honiara city Council, the table below shows HBV and HCV stats for 2017 alongside the area stats for other STIs.

## 7.7 Proportion of people co-infected with HIV and HBV receiving combined treatment

There have been no co-infections discovered yet in this regard. However, this may be due to the fact that Hepatitis B testing has thus far been limited to blood donors.

## 7.8 Hepatitis C testing

Similar to Hepatitis B, Hepatitis C testing in Solomon Islands is also done only among blood donors. However, guidance for of patients with HCV is included in the country’s consolidated ARV guidelines.

## 7.9 Proportion of people coinfectd with HIV and HCV starting HCV treatment

There have been no co-infections discovered yet in this regard. However, this may be due to the fact that Hepatitis C testing has thus far been limited to blood donors.

## **7.10 Cervical cancer screening among women living with HIV**

In Solomon Islands todate, women living with HIV have had cervical cancer screening as part of their integrated service, but the country is steadily making inroads in strengthening cervical cancer services in general, for all women especially young girls.

In 2015 and 2016, the Solomon Islands Ministry of Health and Medical Services (MHMS) (MHMS) implemented a human papillomavirus (HPV) vaccine coverage survey to generate population-based estimates of the coverage of fully vaccinated girls. In HCC, 71.8% of eligible girls were fully vaccinated, 11.6% received only one dose, and 16.6% were not vaccinated at all. In Isabel province, 91.1% were fully vaccinated, 5.4% received one dose, and 3.6% were not vaccinated.

Administrative data collected at the regional level reported that the vaccination coverage for both doses for girls in school was 77.4% in HCC and 85.1% in Isabel province. These coverage levels from the administrative data fall just outside the margin of error of the survey and suggest the possibility of under-reporting/under-recording in Isabel and over-reporting/over-recording in HCC.

There were too few girls out of school to accurately estimate coverage in these populations; however, it should be noted that only 2% (n = 6) of the girls in the survey in Isabel and 8% (n = 22) in HCC were reported to be out of school. Both provinces had some in- and out-migration to other provinces between the two doses, which elevated partial vaccination rates, particularly in HCC.



## REFERENCES

1. Differentiated HIV and STI Service Delivery Model for sex workers and MSM in Solomon Islands
2. MHMS National HIV/STI Programme Report 2017
3. MHMS NTP Annual Report 2017
4. Report on the mapping and population size estimation among female sex workers and MSM in Solomon Islands
5. Report on the Profile of STIs in the Pacific 2016
6. Report on the Solomon Islands Integrated Biological and Behavioural Surveillance Survey 2017
7. Solomon Islands Demographic and Health Survey 2015
8. Solomon Islands Family Safety and Health Survey 2009
9. Solomon Islands Global AIDS Monitoring (GAM) 2017 Narrative
10. Solomon Islands - Global survey on the HIV situation and other related infections, and services in prisons
11. Solomon Islands Guidelines for Minimum Standards of Management of Care for Survivors of Sexual and Gender Based Violence
12. Solomon Islands National Consolidated Guidelines on the use of ARVs in the prevention and treatment of HIV among adults, adolescents and children 2016
13. Surveillance of HIV and Syphilis Infections among Antenatal Clinic Attendees in Solomon Islands 2015

**Ministry of Health and Medical Services**

**National HIV/STI Program**

**P.O. Box, 349, Honiara**

**Telephone: +677 28210; Fax +677 28210**