Global AIDS Monitoring Report for Samoa 2017

Reporting Period Jan -Dec. 2016

Ministry of Health Samoa

UNAIDS

GAM REPORT FOR SAMOA 2017

Reporting Period: January-December 2016

Contents

Foreword

Leausa Toleafoa Dr. Take Naseri
Director General of the Ministry of Health

Samoa's Ministry of Health is proud to present sixth annual report to UNAIDS since 2010 this year entitled Global AIDS Monitoring (GAM Report) and is evidence of Samoa's commitment to the global response to HIV, AIDS, and STI's. This commitment stems from the "Political Declaration on HIV/AIDS: Intensifying Our Effort to Eliminate HIV/AIDS" adopted by the United Nation member states at the high level meeting held in New York in 2011. In 2016, the commitments were reaffirmed when Samoa signed the new political declaration agreeing to end the HIV epidemic by 2030 within the framework of the Sustainable Development Goals.

The Global AIDS Monitoring Report is a highly regarded report with an in-depth analysis of core indicators that provide insight into our national efforts in alleviating HIV/AIDS through collective prevention initiatives and programs carried out by our various committed stakeholders and health sector partners.

In addition, sexually transmitted infections (STI's) pose considerable threats to morbidity and possible mortality in both adults of reproductive age and newborns. STI's can also significantly increase the risk of HIV transmission if not addressed in our population. If STI's are not managed and prevented, they can contribute negatively to healthcare costs attributable to treatment and care, program management, and other costs that will in turn affect the government's overall health budget.

While much has been done by our various partners, there is still room for more strategic interventions to counteract these largely preventable diseases. Samoa's new HIV, AIDS and STI Policy 2017-2021 is set to launch this year and is aimed to guide the national response to combat new and ongoing challenges.

Over the years, Samoa has received financial support from several international and regional partners. The Government of Samoa also contributes significantly through providing human resources and managing the logistical aspects of the National Programme for HIV, AIDS, STI's and TB. The ongoing support and care offered by the National Health Service for our PLWHA and our STI and TB patients is greatly appreciated. Additionally the Government of Samoa through the Ministry of Health acknowledges the continuous support rendered by the UNDP/ Global Fund to Fight HIV, Tuberculosis and Malaria. Without this support, our people living with HIV or AIDS would not receive free treatment. Thank you.

May this report continue to provide strategic direction to all of our national, regional, and international partners whom we are working with to fight HIV/AIDS now and into the future.

Ma lo'u fa'aaloalo lava,

Leausa Toleafoa Dr. Take Naseri
Director General/Chief Executive Officer of Health
Ministry of Health

I. Status at a glance

(a) the inclusiveness of the stakeholders in the report writing process;

The preparation of the 2017 Global AIDS Response Progress Report (GARP) for Samoa was facilitated and compiled by the Ministry of Health (MoH), with relevant government ministries and non-government organization (NGO) partners involved in the response to HIV/AIDS and STIs in Samoa.

Collection of data for this report was carried out in consultation with various stakeholders and health sector partners. Data were collated and analyzed by MoH for the development of this report.

2017 GARPR Team (Ministry of Health)

Ms Aaone Tanumafili
Principal HIV/AIDS National Capacity Support Officer, Health Sector Coordination, Resourcing and Monitoring Division (HSCMRD) (contact person for this report)

Ms Robert Carney (Robina)
Research, M&E Officer HIV, STI's and TB, Office of the CEO

The staff of HIV, STI, and TB National Programme at Ministry of Health

Stakeholders Contribution through submission of reports of activities implemented in 2015:

i. Ministry of Women, Community and Social Development
– Division for Youth and Division for Women.

ii. Samoa Family Health Association

iii. National Health Services
- Public Health Clinic (HIV/AIDS Patient Register Summary)
- Laboratory Services (National Surveillance STIs Data)

- Pharmaceutical Services (ARV Drugs Supply Record)

iv. Samoa Red Cross Society

v. PLWHA

vi. Samoa Faafafine Association Inc.

vi. Ministry of Health-
HIV/TBNational Program
Sexual Reproductive Health Unit

(b) the status of the epidemic;

The first case of HIV recorded in Samoa was in 1990. Since then, 24 cumulative cases have been reported. Currently there are 11 living cases of HIV. Though this is a low prevalence, low testing rates (4-5%) indicate that there are many more cases likely undetected. The high prevalence of other STI's (Chlamydia 26% in 2015) are also a concern and pose risks for increasing HIV transmission..

The primary mode of HIV transmission in Samoa is through heterosexual sex. There are currently 7 cases of mother-to-child transmission (3 adults, 4 children). Of the living cases of HIV, 9 are receiving treatment from the public health sector, while 2 receive private treatment from overseas. There have been 2 cases of successful prevention of MTC transmission through the administration of ARV regimens in pregnant women. The last reported case of HIV was reported in 2013. In 2014, a stillbirth occurred to an HIV positive mother.

STI's generally have low voluntary testing rates (apart from ANC STI testing which is mandatory). Table 1shows that Chlamydia, which has the highest prevalence, also has the low testing rate (26%) last available in 2015.

Table 1. STI Surveillance Data at a Glance

	2016 Prevalence	2016 Testing Coverage Rate
Chlamydia	Not Tested	Not Tested
Hepatitis B	2.4%	3.9%
Syphilis	0.4%	3.6%
Hepatitis C	0.5%	1.9%
HIV	0%	3.8%

(c) the policy and programmatic response;

Samoa Ministry of Health, being the National Focal point for HIV/AIDS, has the responsibility for the strategic oversight and acts as the Monitoring and Evaluation entity for the country's response to HIV/AIDS. Samoa's National Strategic Plan for HIV/AIDS covers the period 2012-2016, and reviews of this National Strategic Plan and Policy took place in November 2015, December 2016, and February 2017 with stakeholders and health sector partners. The new policy is expected to be launched March 2017 to cover the period of 2017-2021.

Furthermore, under the Ministry of Health, a National AIDS Coordinating Council (NACC) was established in 1987. This is an equivalent to the Country Coordinating Mechanism (CCM). In 1988, a Technical AIDS Committee (TAC) was established as the working arm of NACC. TAC is tasked to

provide technical advice to the NACC on policy, to manage and monitor the programmatic aspects of HIV/AIDS interventions, and to suggest appropriate actions to further strengthen policy and programmatic response to HIV/AIDS through a multi-sector approach.

Overall, the Ministry of Health provides clear policy guidance and relevant, technical assistance, to ensure HIV/AIDS and STI interventions are delivered in accordance within national policies and appropriate frameworks, and to minimize fragmentation and duplication of programs.

A Health Sector Monitoring and Evaluation (M&E) framework was operationalized in 2010, which includes some indicators relevant to HIV/AIDS and STIs. A specific M&E framework for HIV/AIDS and STI's was developed in late 2015 and was reviewed by HIV/TB Stakeholders and health sector partners, staff and management at MoH. The manual was finalized in February 2017 and set to be implemented in that reporting year.

(d) Indicator data overview

Indicator	***Value***
1. PLWHIV that know their status	100%
1.2 PLWHIV on ARV therapy	100%
1.3 Retention on ARV at 12 months	100%
1.4 PLWHIV with suppressed viral loads	44%
1.5 Late HIV Diagnosis	no new data
1.6 Antiretroviral medicine stockouts	no new data
2.1 Early infant diagnosis	no new data (0 cases)
2.2 Mother to child transmission of HIV	no new data (0 cases)
2.3 Preventing mother to child transmission of HIV	no new data (0 cases)
2.4 Syphilis among pregnant women	
a. Coverage of syphilis testing in women attending antenatal care services	99.80%
b. Percentage of pregnant women attending antenatal clinics with a positive (reactive) syphilis serology	0.30%
c. Percentage of antenatal care attendees during a specified period with a positive syphilis serology who were treated adequately	100%
2.5 Congenital syphilis rates	no new data
3.1 HIV incidence	0 new cases
3.2 Size estimates of Key Populations	
a. sex workers	400
b. MSM	25,000-30,000
c. people who inject drugs	no new data
d. transgender	25,000-30,000
e. prisoners	no new data
3.3A HIV prevalence among sex workers	no new data
3.3B HIV prevalence among men who have sex with men	no new data
3.3C HIV prevalence among people who inject drugs	no new data
3.3D HIV prevalence among transgender people	no new data
3.3E HIV prevalence among prisoners	no new data
3.4A Knowledge of HIV status among sex workers	0%

Indicator	***Value***
3.4B Knowledge of HIV status among men who have sex with men	5.70%
3.4C Knowledge of HIV status among people who inject drugs	no new data
3.4D Knowledge of HIV status among transgender people	5.70%
3.5A Antiretroviral therapy coverage among sex workers living with HIV	no new data
3.5B Antiretroviral therapy coverage among men who have sex with men living wit HIV	no new data
3.5C Antiretroviral therapy coverage among people who inject drugs living with HIV	no new data
3.5D Antiretroviral therapy coverage among transgender people living with HIV	no new data
3.5E Antiretroviral therapy coverage among prisoners living with HIV	no new data
3.6A Condom use among sex workers	27.30%
3.6B Condom use among men who have sex with men	11.40%
3.6C Condom use among people who inject drugs	no new data
3.6D Condom use among transgender people	11.40%
3.7A Coverage of HIV prevention programmes among sex workers	27.30%
3.7B Coverage of HIV prevention programmes among men who have sex with men	28.60%
3.7C Coverage of HIV prevention programmes among people who inject drugs	no new data
3.7D Coverage of HIV prevention programmes among transgender people	28.60%
3.8 Safe injecting practices among people who inject drugs	no new data
3.9 Needles and syringes distributed per person who injects drugs	no new data
3.10 Coverage of opioid substitution therapy	no new data
3.11 Active syphilis among sex workers	no new data
3.12 Active syphilis among men who have sex with men	no new data
3.13 HIV prevention programmes in prisons	no new data
3.14 Viral hepatitis among key populations	no new data
3.15 People receiving pre-exposure prophylaxis	no new data
3.18 Condom use at last high-risk sex	no new data
4.1 Discriminatory attitudes towards people living with HIV	Only 2.6% of women and 3.3% of men expressed acceptance of PLWHA on all four indicators of accepting attitudes towards PLWHA (2014).
4.2A Avoidance of HIV services because of stigma and discrimination by sex workers	no new data
4.2B Avoidance of HIV services because of stigma and discrimination by men who have sex with men	no new data
4.2C Avoidance of HIV services because of stigma and discrimination by people who inject drugs	no new data
4.2D Avoidance of HIV services because of stigma and discrimination by transgender people	no new data

Indicator	Value
4.3 Prevalence of recent intimate partner violence	no new data
5.1 Young people: Knowledge about HIV prevention	5.2% (2014)
5.2 Demand for family planning satisfied by modern methods	15.10%
10.1 Co-managing TB and HIV treatment	0 cases
10.2 Proportion of people living with HIV newly enrolled in HIV care with active TB disease	0 cases
10.3 Proportion of people living with HIV newly enrolled in HIV care started on TB preventative therapy	0 cases
10.4 Men with urethral discharge	no new data
10.5 Gonorrhoea among men	no new data
10.6 Hepatitis B testing	no new data
10.7 Proportion of people co infected with HIV and HBV receiving combined therapy	0 cases
10.8 Hepatitis C testing	0 cases
10.9 Proportion of people co infected with HIV and HCV starting HCV treatment	0 cases
10.10 Cervical cancer screening among women living with HIV	0%

II. Overview of the AIDS epidemic

HIV Epidemiology

The first case of HIV recorded in Samoa was in 1990. Since that time, the recorded prevalence of the virus has remained low in prevalence (0.005%) with 0 new cases being captured between 2012-2015. However, testing rates are low with around only 4 to 5% of the population being tested each year according to quarterly surveillance reports (see Table 2). Other STI's, particularly Chlamydia, are high in prevalence (26%) with low testing rates.

Table 2. HIV Testing Rates

Year	HIV Tests	Percent of Population
2012	9394	4.9%
2013	8443	4.4%
2014	7461	3.9%
2015	8870	4.6%
2016	7408	3.8%

Most of those tests come from routine antenatal blood panels in mothers having their first antenatal care visit. Voluntary testing, and testing in males are low. For these reasons, the full impact of HIV/AIDS on Samoa remains relatively unknown. However, Table 2 shows that a quarter of the documented HIV cases are mother to child transmissions, which suggests that HIV may be more prevalent than what current surveillance systems are detecting. All documented living cases are currently receiving ARV treatment, which is free at all health sector partners of the Ministry of Health.

As of 2016 there were 24 cumulative cases of HIV in Samoa (Surveillance Data). 11 of these cases are currently living. All are recorded as adhering to ARV regimens. The primary mode of transmission of HIV in Samoa is heterosexual sex. Results from the 2008 Second Generation Surveillance Survey reveal that HIV in Samoa occurs at a rate of 10.4 cases per 100,000 with a male to female ratio of 2:1. Surveillance data is currently gathered from hospital records on Upolu and Savaii, Private provider offices, health clinics, Immigration, various NGO's, Samoa Family Health Association, and from blood donors. However funding and staffing shortages at all of these organizations has limited the amount and frequency of data that can be collected for HIV and other STI's. Table 3 shows selected demographic characteristics and Table 4 shows the number of infections by year. 13 of the 24 cumulative cases are deceased.

Table 3. HIV/AIDS Summary

HIV/AIDS Profile		
Cumulative Cases	24	
People Living with HIV	11	
Deceased	13	
Primary Transmission	Heterosexual sex	
Mother to child transmission	**6 births**	2 living children with HIV
Children living with HIV	2	
Deceased	4	
Successful Prevention of MTCT	**2**	Not getting the virus from their HIV+ mothers, because of successful treatment ie: ARVs
Gender Disaggregation		
Males	18	(6 are children and 12 and adult males) - overall 3/4 of cases are males.
Females	6	(all are adult females)

Table 4. HIV infections by Date, Gender and Age 1990-2016

Date Registered	0-4	20-24	25-29	30-34	35-39	40-44	50+	Total
1990					M (d)			1
1994				M (d)				1
1995	U (d)		F (d)					2
1996	M (d)		F (d)		M (d)	F (d)		4
1999					M (d)			1
2000		M (d)				M		2
2001				M				1
2007			M	M, F,M (d)				4
2008	M			M (d), F				3
2009	M (d), M		F	F				4

Date Registered	0-4	20-24	25-29	30-34	35-39	40-44	50+	Total
2013							M	1
2014-2016								
Total								24

*M- Male; F-Female; d-deceased; U-sex unknown

The high rates of Chlamydia in Samoa also potentially increase the risk for HIV transmissions. Chlamydia is a major problem in Samoa with a high prevalence in pregnant women, who are supposed to be low risk for the disease. Of 2,025 individuals tested at hospitals and health clinics in 2015, 26% had Chlamydia. This rate is made up of predominantly antenatal women. The prevalence may be higher in rural areas with one study with women age 18-29 estimating a prevalence of 36.7%. Chlamydia also has a low testing rate for the general population (only 1% in 2015).

STI's generally have low voluntary testing rates (apart from ANC STI testing which is mandatory). Table 4 shows that Chlamydia, which has the highest prevalence, also has the low testing rate. Testing stopped in 2016, due to stock-outs of testing kits. This is a particular concern considering that a high prevalence of 26% is detected in only 1% of the population. Testing coverage is also decreasing.

Table 4. STI Surveillance Data at a Glance

	2015 Prevalence	2015 Testing Coverage Rate	2016 Prevalence	2016 Testing Coverage Rate
Chlamydia	26%	1.0%	Not Tested	Not Tested
Hepatitis B	2%	4.6%	2.4%	3.9%
Syphilis	0.3%	4.4%	0.4%	3.6%
Hepatitis C	0.1%	2.0%	0.5%	1.9%
HIV	0%	4.6%	0%	3.8%

HIV Knowledge and Condom Use

Regarding HIV prevention and knowledge of HIV and AIDS, the Demographic Health Survey 2014 found that condom use (of male condoms) is low, although higher in males (14-15%, see Table 5). The amount of youth that know condoms prevent HIV rose 10.1% in women and 5.3% in men between 2009 and 2014. Though increasing, the percent of individuals that have comprehensive knowledge of HIV and AIDS transmission/prevention is still low (6.5% of women and 6.4 % of men).

Table 5. Select DHS 2009 and 2014 Findings

DHS Findings	2009		2014	
Measure	***Female***	***Male***	***Female***	***Male***
Condom Use (Current)	0.1%	unavailable	0.1%	unavailable
Condom Use (Ever)	1.1%	14.3%	1.5%	15%
Percent of youth age 15-24 that know condoms prevent HIV	53%	56.3%	63.1%	61.6%
Percent of individuals having comprehensive knowledge of HIV and AIDS transmission and prevention	3.9%	7%	6.5%	6.4%

DHS Findings	2009		2014	
Measure	***Female***	***Male***	***Female***	***Male***
Percent of individuals expressing acceptance of PLWHA on all 4 indicators	2.1%	3.4%	2.6%	3.3%

Regarding the acceptance of persons living with HIV or AIDS (PLWHA) only 2.6% of women and 3.3% of men express acceptance of PLWHA on all 4 indicators. This has remained roughly the same since 2009. This illustrates the stigma that is still associated with HIV and AIDS and previous programming has not effectively addressed it.

Though Samoa has a low prevalence of HIV and good case management of the identified cases of PLWHIV, there are multiple findings that suggest HIV in particular could potentially be a bigger problem for Samoa.

1. HIV has a low testing rate of 4.6% of the population being tested in hospitals and clinics in 2015. The Demographic Health Survey (2014) reveals that only 4% of women and 3% of men have ever been tested for HIV. So the true prevalence may be much higher, especially in rural areas where access to testing is lower.
2. Of women who have given birth in the past 2 years, only 23.9% have received HIV counselling in prenatal care visits, and only 4.1% percent received counselling, testing, and testing results, suggesting high risk for mother-to-child infections (DHS 2014)
3. Youth are also at risk with only 5% of women and 6% of men having comprehensive knowledge of HIV. Urban youth are also more likely to have sex before the age of 15 than rural youth (DHS 2014). Youth ages 15-19 are less likely to know where to access condoms (25.1 compared to 34.7 for all age groups). Youth ages 15-24 account for 26.3% of all Chlamydia infections in 2015, which has a syndemic relationship with HIV (Global Fund Progress report 2015).
4. Chlamydia, which has a high prevalence in Samoa, is also primarily transmitted sexually, and has been known to increase infectiousness in people with HIV via increase viral shedding in the cell walls of genitals. High Chlamydia rates increase HIV transmission.
5. Condom use is low. Only 1.5% of women have ever used a male condom and only 0.1% have used a female condom. For men only 14.4% have used a male condom during sex (DHS 2014)
6. Men in particular may be more vulnerable to HIV exposure than women, due to their lower age of first sexual intercourse, and higher rates have having first intercourse before the age of 15, both of which are risk factors for HIV (DHS 2014).
7. Increasing teenage pregnancy
8. Highly mobile population including seafarers, police engaged in UN operations, residents returning from overseas, and tourists.
9. Low access to prevention materials and condoms

Other STI's

Additionally, Samoa faces challenges in sexual health regarding Chlamydia, Gonorrhea, Syphilis, and Hepatitis B&C. As mentioned previously, Chlamydia is a major problem in Samoa, and the most prominent sexual health issue in terms of STI's. Chlamydia occurs at a high prevalence in pregnant women, who are supposed to be low risk for the disease. Of the 2,025 individuals tested at hospitals and health clinics in 2015, 26% had Chlamydia. Though this rate is made up of predominantly antenatal women, Chlamydia is more prevalent in men (31% compared to 25% in females in 2014). The prevalence may be higher in rural areas with one study with women age 18-29 finding a prevalence of 36.7%. Ages 15-24 represented 26.3% of all Chlamydia infections in 2015, which suggests youth are at particular risk. Chlamydia also has a low testing rate for the general

population (only 1.0% in 2015). Chlamydia if left untreated can lead to sterility and blindness (for infants born to mothers with Chlamydia). Testing for Chlamydia has stopped due to lack of funding for testing kits in 2016.

Table 6. Prevalence from 2015-2016

STI	2015	2016	Status
Chlamydia	26%	-	-
Hepatitis B	2.4%	2.9%	**Increase**
Syphilis	0.30%	0.9%	**Increase**
Hepatitis C	0.10%	0.5%	**Decrease**
HIV	0%	0%	0%

Syphilis, though lower in prevalence than Chlamydia, is increasing from 0.3% detected infections from NHS testing in 2014 and 2015 to 0.9% in 2016. Hepatitis B is the second highest STI prevalence to Chlamydia, and remains as such despite a slight decrease in cases from 2013-2015 (2.5% to 2.0% respectively). This rate has increased to 2.4% in 2016.

Multiple factors, including stigma around sexual health, low access to condoms, confidentiality concerns, and stigma around the prevention and treatment of STI's all pose challenges to addressing STI prevalence and encouraging regular testing.

Gender violence may also play a role in exacerbating the health burden of STI's. Many women in Samoa feel domestic violence is justified with 70% stating it is permissible for a husband to beat his wife if she is unfaithful to him, doesn't do housework, or disobeys him (State of Human Rights Report 2015). A multi-country study conducted by WHO from 2000-2003 found that in Samoa that 10% of all women who had ever been pregnant were beaten during at least one pregnancy. Among women that were ever physically abused in their lifetime, 24% reported the abuse occurred during pregnancy. In 96% of those cases, the perpetrator was the father of the child. In terms of the health of these women, abused women who had ever been pregnant were significantly more likely to have had stillborn children (16% versus 10%) and miscarriages (15% versus 8%).

STI's among antenatal women are very prevalent with 26% of ANC women testing positive for Chlamydia in 2015. There is likely related to the high prevalence of domestic violence, as women in abusive relationships are not able to demand condom use for fear of further violence. Accessing treatment is also met with stigma. Despite the high prevalence of Chlamydia, the actual figure is likely higher, as only 2,822 out of an estimated 9616 (29.3%) pregnant women reported for ANC visits and were screened for STI's in 2015. This rate increased to 46.9% of ANC females being screened for STI's in 2016, but this progress needs to be sustained and expanded.

Key Populations

The main source of data for key populations comes from the Pacific Multi-country Mapping and Behavioural Study 2016. For fa'afafine (transgender), the study found that though knowledge of HIV was generally high, condom use was low (43.9% never used a condom) and only 16.3% had an HIV test in the last month. The main reason for not using condoms was that fa'afafine felt they were safe from HIV. About 32% were paid for sex within the past month.

For female sex workers in the study, most engage in sex work for economic reasons. Sex work currently is illegal in Samoa. About 58% of the women had children and no other source of employment. The average sexual partners in the past month was 10, with 9 of those being paying

clients. Condom use was low (33%) at the last occasion of vaginal sex. None of the women had accessed a sexual health service within the last 12 months nor had been tested for HIV.

Drug use is largely un-documented in Samoa outside of law enforcement. The main form of drug use occurs with non-injected opiates. The needs of drug users have not been defined by any research studies at this time.

The Multi-sectoral Response to HIV and STI's

Under the Ministry of Health, a National AIDS Coordinating Council (NACC) was established in 1987 after the AIDS crisis. This is an equivalent to the Country Coordinating Mechanism (CCM) and addresses HIV/AIDS, STI's and TB. In 1988, a Technical Advisory Committee (TAC) was established as the working arm of NACC. TAC is tasked to provide technical advice to the NACC on policy, to manage and monitor the programmatic aspects of HIV/AIDS interventions, and to suggest appropriate actions to further strengthen policy and programmatic response to HIV/AIDS through a multi-sector approach.

Ministry of Health's role has been to provide clear policy guidance and relevant, technical assistance, to ensure HIV/AIDS, and STI interventions are delivered in accordance within national policies and appropriate frameworks, and to minimize fragmentation and duplication of programs. Due to the relatively low prevalence of HIV, the Ministry of Health has taken a broad sexual health approach, addressing all STI's and sexual health threats in order to prevent HIV and safeguard the population from future epidemics. TB interventions have also been integrated into this programming.

Beyond the National AIDS Coordination Committee (NACC) and the Technical AIDS Committee (TAC) composition that included multi-sector partners from government ministries and non-government and civil society sectors, the donor partners ie: Global Fund to fight AIDS, TB and Malaria (GFATM) provided financial support to allow Health Sector partners from government ministries and non-governmental organizations (NGOs) to become more actively engaged in the HIV/AIDS and STI response in Samoa.

MoH's programme activities are mainly implemented through the National Health Service (NHS) and NGO stakeholders. NGOs such as the Samoa Faafafine Association (SFA), Samoa Family Health Association (SFHA), and Samoa Red Cross Society (SRCS) have been remarkable in strategizing ways to combat the spread of HIV/AIDS, including (i) addressing vulnerable groups such as men who have sex with men (MSM); (ii) mobile clinics promoting safer sex and distributing condoms; (iii) and ensuring safe blood is provided to the blood banks. Red Cross continues to advocate for safe blood donors thus contributing to a greater pool of voluntary blood donations (VNRBD). The majority of blood provided is from family replacement donors. Despite these efforts, an entity dedicated solely to the fight against HIV/AIDS does not exist after the programmes carried out by the Samoa AIDS Foundation and Samoa Plus ceased since 2012.

Mass media campaign and peer education programs that mobilizes young girls and women about their rights for their safety and health, inclusion of men in discussion of sexual reproductive health issues with emphasis on STIs/HIV and AIDS, the strong involvement of Samoa Faafafine Association in many other activities that targets fa'afafine populations is crucial, and many other programs carried out by the sector partners. A 2011 documentary "E te silafia", which described the status of the HIV/AIDS epidemic in Samoa is regularly aired on World AIDS Day each year.

Peati Maiava, the only PLHIV who has publicly declared her HIV status and worked with other PLHIV under the SRCS, passed away in 2015 at the age of 65. Thus far none of the PLWHIV have been willing to take her place as spokesperson and work with the national councils on issues of confidentiality. This poses a challenge to advocating for the rights of PLWHA.

The NGOs namely the Samoa Family Health Association (SFHA) and Samoa Red Cross Society (SRCS) are active in implementing many HIV/AIDS and STI interventions, and can seek support from the MOH for funding, current data and information, and technical training, This resource/policy and strategic development, monitoring versus implementer' type of relationship is emphasized in the Health Sector Plan. The Health Ordinance 1959 MOH Act and NHS Act 2006 articulates this

relationship with regards to the expectation that sector partners will implement, record and report data to ensure progress against national health targets and health-related policies is informed by evidence.

The Ministry of Women, Community and Social Development (MWCSD) has developed a "Strategy: For the Reproductive and Sexual Health of women of Samoa 2014-2018" with the emphasis on further advocating the SRH rights of women of Samoa in line with the CEDAW. This strategy is premised on previous policies that the MWCSD had in the past years.

The Ministry of Education Sports and Culture (MESC) also plays a vital role in incorporating Health and Physical Education into their Secondary Schools curriculum since 2008. The latest update on the progress towards realising that fundamental reproductive health issues are included in the school's curriculum and is scheduled to take place in 2015. This review of the current curriculum will take into account SRH as a whole to be taught in schools, and the need to have it a compulsory subject rather than as an optional subject. UNFPA and UNESCO are also currently working towards addressing this area with the MESC.

Police officers do not undergo mandatory HIV or STI screening before or after their overseas peacekeeping missions, whereas seafarers have a structured process for HIV, syphilis, HepB. Ministry of Police also conducted several health interventions with the assistance from the Ministry of Health and SFHA on activities highlighting STIs/HIV and AIDS for new police recruits in both Upolu and Savaii.

The primary sources of funding for Samoa's HIV programs for this reporting period are from: (i) the Global Fund to fight AIDS, TB and Malaria (GFATM) (ii) funding from UNFPA for the Sexual and Reproductive Health (SRH) program and World Health Organization (WHO). The AusAID has earmarked SAT2m for SRH programs, highlighting the increasing prevalence of STIs that needs dire attention from all different health sector partners. The government of Samoa assisted tremendously in financing human resource for HIV/AIDS program, and some activities were well mainstreamed into the MOH budget by the end of 2013.

Even though there are many intervention programs implemented by our sector partners in such prevailing conservative contexts, there is still a lot more efforts that needs to be directed at changing behaviour of our people, and addressing stigma surrounding sexual health and HIV.

The public funded National Health Service (NHS) is the main service delivery point for all health care services in Samoa, including for HIV/AIDS care and treatment. The NHS laboratory is responsible for all diagnostic procedures to ensure quality of HIV testing. It is also involved in external quality assurance (EQA programmes) which ensures the quality of all tests done in the laboratory. The Communicable Diseases Public Health Clinic is also under the NHS jurisdiction and proper care and treatment for HIV/STI is also offered free of charge to those who require it.

Treatments of STIs are offered free of charge by the Public Health Clinic at the NHS, SFHA clinics, and all national health centers. Patients' information regarding voluntary testing and counselling remains confidential. Homecare visits for HIV+ are offered free of charge. These visits encompass health education talks, ARV drug regimen sessions, and offering support where necessary. Presumptive treatment for Chlamydia is currently offered free to all ANC mothers and their partners. In 2015, presumptive treatment was implemented in an estimated 19.7% of the ANC female population, 15% if males partners are included in the target population. A second evaluation of the implementation is scheduled for 2016.

Continuing VCCT monitoring visits are conducted every 3 months. The objectives behind these visits are to ensure that tracking of utilisation of Family planning commodities. Ii) Ensure that all facilities are offering treatment for STIs where needed, iii) Identify any gaps with the DOTS strategy. Reports of these visits are submitted to MoH management for strategic advice and so forth.

Counselling services remain a challenge to date. There needs to be another conselling training for all healthcare workers dealing directly with cases of STIs/HIV/AIDS and TB as well. Treatment guidelines for both STIs and AIDS are to be drawn for the updated versions of the Oceania Society for Sexual Health and Medicines (OSSHM) and technical guidelines periodically updated by WHO. The

OSSHM Guidelines 2013 provided assistance in terms of treatment and care in all STIs and HIV/AIDS. Presumptive Treatment Guidelines and Protocols in both English and Samoan languages were distributed to all healthcare facilities for clinicians use.

CD4 counts for 2016 were done consecutively every 4 months for all 9 (10) registered HIV+ cases at the Public Health Clinic. CD4 counts tests are done at the National Laboratory. Viral loads for all patients were done as well. A full report of each patients' viral load and CD4 tests are provided below.

ANC care for HIV+ mothers is offered at all healthcare centres. For in the case of PPTCT, Samoa still does not have any policies or guidelines addressing this issue, but utilise WHO guidelines and policies as guiding principles in these areas. In case of any emerging case of MTCT, authorities are alert and preventive measures are practiced. Prophylaxis had not been administered on pregnant women with HIV due to a range of logistical and non adherent purposes, but ARV regimens recommended by WHO for pregnant women and women breastfeeding infants are practiced.

Nutrition care for PLWHA is not addressed in the current National Nutrition Policies; however, health talks on proper nutrition care for PLWHA is given on one to one consultation with anyone who requires it. Breastfeeding issues with HIV+ mothers is covered under the Baby Friendly Hospital initiative extensively, but there still need a lot of work to ensure that these are carried out efficiently.

All ANC visiting mothers both public and private healthcare facilities are mandated to undergo HIV testing on first visit. Results are all treated confidentially, and pre and post counselling are offered when required by a mother. Other mandatory STI tests included in this blood panel for ANC visits are Chlamydia, Syphilis, Hepatitis B and Hepatitis C.

There is only one dispensing clinic for ARV treatments and that is the Public Health Clinic. In cases of common STIs such as Chlamydia, treatments are offered in all healthcare facilities with a prescription from the physician on board.

To date there is no known case of TB/HIV co-infection reported. There is however a noted mark improvement of TB/HIV co-infection test in the last reporting period ie: 86% of people with TB were tested for HIV a target reached and achieved significantly after many years of trying to mobilise TB patients to test for HIV as well.

ARV and STI treatments are provided for free of charge under the Global Fund. All HIV, STI, and TB clinical care is headquartered at the Communicable Disease Clinic, located at the new Primary Healthcare Centre in Apia (opened in November 2016).

III. National response to the AIDS epidemic

Prevention

The activities for the national response in 2016 focused heavily on prevention, knowledge and behavior change, and improvements to monitoring and evaluation. Programming became more focused on outreach to key populations. MoH was able to coordinate with the National Health Service (NHS) to implement prevention activities complimentary to clinical interventions during the same period.

Condom distribution with sex workers

Reports from the previous implementation period (2015) highlighted the need to increase prevention efforts with key populations. Female sex workers in particular were an identified group with no previous prevention programming within the health sector. At the beginning of the financial year, no data had existed on the status of sex work and the health needs of female sex workers. Sex work itself is illegal in Samoa, making service delivery to sex workers difficult and a high risk to confidentiality. Staff of the HIV,STI and TB Programme at MoH had previously established networks with female sex workers. It was decided that the staff would deliver condoms, lubricants, clothing,

and sanitary items to known female sex workers in the Apia Urban Area on a casual regular basis as a preliminary step to formal programming. The goal was to build trust and rapport.

What was learned from these casual distribution efforts was that most sex workers were homeless, coming from rural villages to conduct sex worker in the urban area in secret. Their source of condoms was primarily through dispensers in nightclubs, to which access varied. Their clients consisted of locals, tourists, and periodic seafarers. Most did not have access to a doctor, or were worried a doctor would judge them if they accessed care. When asked, sex workers indicated they would be open to consultations with MoH.

This network of sex workers in the Apia Urban Area served as the initial sample of FSW's in the UNDP and UNSW Pacific Multi-country Mapping and Behavioural Study conducted in September 2016. The study found that 12 women took part in the behavioural survey. They work from public spaces around town, but are likely to also work via mobile phones, at tourist sites and in villages. Most women are doing sex work for economic reasons. Payment varied considerably from 50 to 200 tala. The women had a wide range of clients, including local and foreign men. The age of the women was between 18 and 46; 58.3% had children and the majority had no other employment. The age at which women began sex work ranged from 13 to 21 years old. The mean numbers of partners in the last 12 months was 10, of whom nine were clients (most likely many regular clients).

Only 33% of the participants used a condom on the last occasion of vaginal intercourse with a client; a majority were inconsistent condom users with clients in the last 12 months. Condom use with casual non-paying partners was low;50% used a condom on the last occasion. A minority of the women (18.2%) drank alcohol in the last week. HIV knowledge was moderate. None of the women had accessed a sexual health service in the last 12 months, although 60% had been given condoms in that period. None had been tested for HIV in the previous 12 months.

The data on this group was highly valuable. However, there was an incident where one of the research assistants threatened to expose these sex workers to their families and communities. The incident was reported to the Health Research Committee at MoH. It could not be determined if the research assistants actually threatened the study participants, but the FSW community became very distrustful as a result. MoH is currently working to restore trust with this group and encourage them to attend outreach programming.

Infection Control Consultation with Tattoo Artists

In July, an HIV positive case (a contract worker from overseas) was detected after the patient reported to the hospital for an infection that resulted from a tattoo performed using traditional methods. Contact tracing revealed that no transmissions resulted from those in contact with the tattooing instruments used on that patient. CD4 testing revealed that the HIV infection likely occurred long before the tattoo via sexual transmission. The patient was ultimately linked to treatment in their home country. The incident revealed the need for strengthening infection control in the art of Samoan tatau (especially for Hepatitis B).

On 30th of August 2016, a consultation with tufuga (tattooists) in the Apia Urban Area was hosted by the Ministry of Health in order to address infection control in preventing blood-bourne infections in modern and traditional Samoan tattooing. This consultation was an historical first for Samoa. 12 tufuga representing groups from the Apia Urban Area attended and were given a questionnaire to assess their tattooing practices and how to improve the safety of the process. The results revealed the following key findings;

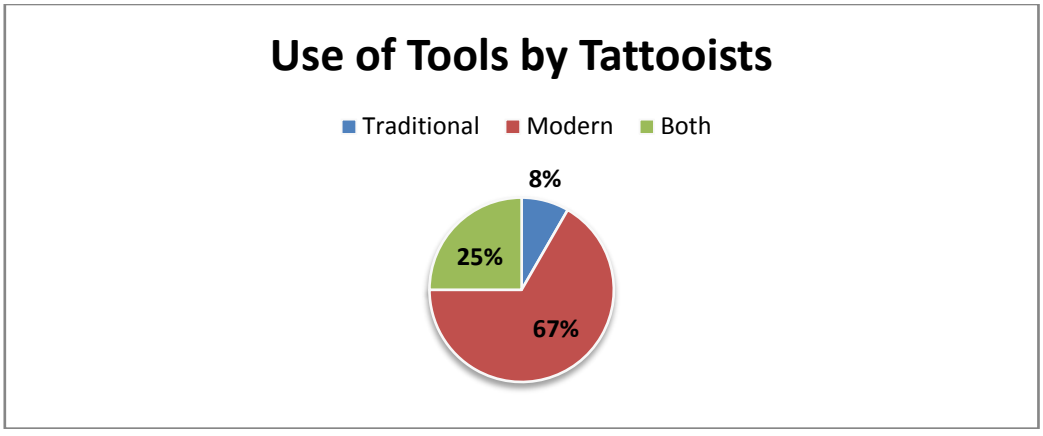
Key Findings
❖ **Most tufuga use disposable needle tattoo machine and traditional Samoan tatau instruments**
❖ **All tufuga reported using gloves during tattooing sessions**

Key Findings
❖ No tufuga reported hand washing as part of their safety practices
❖ None of the tufuga reported adequate waste disposal procedures. Many used normal rubbish bins, buried used needles, or burned tattooing waste.
❖ Sterilization practices varied between tufuga for re-usable tools, with only 33.3% demonstrating adequate sterilization and cleaning practices.
❖ The health sector should equip tufuga with health safety guidelines, infection control supplies, register and license tattooists, inspect practices and premises, educate tufuga on infection control, and hold further consultations with tufuga.

Dr. Take Naseri, (center) CEO of MoH, with attendees of the Apia Tufuga Consultation

Tools Used by Tattooists

Over 30% tufuga used traditional tools, which carries a higher risk of infection. When tufuga indicated they used modern instruments (67%), they also indicated that the needles used were disposed of between clients.



Use of gloves by tattooists

All 12 respondents used gloves in their work (100%). Hand washing was however not mentioned by any tufuga as a infection control practice.

Disposal of waste

None of the tufuga that responded to the questionnaire (0%) indicated proper waste disposal practices in line with the Healthcare Waste Policy. Only 4 out of 12 tufuga (33.3%) indicated that they separated needles from tattooing waste. Tufuga indicated the disposed of waste from tattooing in the following ways:

1) Using Normal Rubbish Bins
2) Burying Needles
3) Burning Waste

This indicates that policies regarding healthcare waste need to be fully communicated and promoted among tattooists. MoH, NHS, and tattooists need to establish processes for proper disposal of sharps and waste from tattooing.

Sterilization Practices

Sterilization practices varied between tattooists. Below is a list of the common methods they reported starting with the most frequent response;

1) Boiling re-usable tools water
2) Chemical sterilizer
3) ultrasonic cleaner or autoclave machine
4) Cleaning and re-use of modern needles
5) new tools for each session

Only one respondent indicated that they used plastic bags to protect cleaned tools (8.3%) and only one respondent indicated that they use new ink reservoirs (ink cups) for each client to prevent cross-contamination (8.3%). Only 4 (33.3%) indicated adequate sterilization procedures for reusable instruments.

This indicates that a standard practice of sterilization, cleaning, and handling of traditional and modern tools would be of great use for tufuga and their assistants.

Partnership with the Health Sector

The tufuga identified specific areas of collaboration between tattooists and the health sector to ensure the safety of the tradition. These actions were;

1) Standards of safety for tattooing
2) Further consultations with more tattooists
3) Inspection of tufuga practices and tattooing premises
4) License tattooists based on a criteria of infection control accreditation
5) Provide sterilization and infection control supplies for tattooists
6) Education of tufuga on infection control and blood bourne pathogens

Prevention with fa'afafine (transgender)

Since the onset of the height of the HIV crisis in the 1980's MoH has historically partnered with Samoa Fa'afafine Association (SFA) to reach the fa'afafine community and their families. In 2016, MoH partnered with SFA in the following initiatives;

- Sponsorship for the Annual Miss Fa'afafine Pageant
- The National Fa'afafine Forum for health issues within the community
- Facilitation of the Speech Competition of the Annual Miss Fa'afafine Competition
- Launching of the Inaugural National Fa'afafine Week

The former Miss Health Fa'afafine, Steva Auina, pictured with members of SFA and MoH staff

National Fa'afafine Forum 2016

Date: 1 Sept. 2016	***Location: Ministry of Health Conference Room 1***
Facilitators: Aaone Tanumafili and Robina (Bobby) Carney	***Attendants: 30***

***Goals*:**

- To educate the fa'afafine community on sexual health and gender issues that affects them and the community.
- Create a democratic forum where the fa'afafine can engage and network around critical issues that affects their health.
- Discuss and dialog on what fa'afafine can do best to promote health.

Results and Recommendations

Key Findings

- The majority of attendants were age 20-29 (69.5%) from either the Apia Urban Area or Upolu. Efforts should be made to increase attendance from Savaii and amongst the 15-19 age group.
- The aspects of the forum that attendees felt could be improved were 1) participation and interaction, 2) relevancy of topics, 3) the handouts, 4) completing forum objectives, 5) the time allotted for the event, and 6) the facilities.
- Attendees commented that they liked how the forum gave them an opportunity to share ideas and gain new knowledge.
- Attendees thought that the forum could be improved by have more interactive activities and adding new topics (like other areas of health and wellness).
- 69% of forum attendees stated that the forum had an impact on their work or personal life

- SFA has mostly engaged their community on sexual health through activities run through the MoH or NGO's
- Group activities revealed that the SFA should move more into providing health services, health outreach, health mentorship and health communication directly for the community.

Who Attended?

Out of a total of 30 fa'afafine who attended the forum, 23 completed the event feedback survey, making the response rate 76.7%. 50 other attendees represented the media, the National Health Service, development partners, and MoH staff. The majority of the fa'afafine were between the ages of 20-29 from the Apia Urban Area or other villages on Upolu. Since youth ages 15-19 and rural populations have unique challenges in addressing sexual health and prevention, future forums should aim to increase attendance from these demographic groups.

Table 7. Attendee Demographics

Age Group	Percent	Gender	Percent	Village	Percent
20-24	21.7	Faafafine	87	Apia Urban Area	43.5
25-29	47.8	Woman	8.7	Upolu	43.5
30-24	4.3	Not Reported	4.3	Savaii	8.7
30-34	8.7			Not reported	4.3
35-39	4.3				
40-44	13				

Effectiveness of the Forum

Attendees were asked to rate different aspects of the forum on a scale of 1-5 (5 being strongly agree, and 1 being strongly disagree. The aspects of the forum that attendees felt could be improved were 1) participation and interaction, 2) relevancy of topics, 3) the handouts, 4) completing forum objectives, 5) the time allotted for the event, and 6) the facilities. However overall the forum received a high satisfactory rating.

Table 8. Forum Ratings

Forum Rating	**Average Rating Overall**	**Clarity of Objectives**	**Participation & Interaction**	**Relevant Topics**	**Content Easy & Organized**	**Handouts**
Score/100	88.4	89.6	82.6	87	89.6	86.1
Recommendation	Satisfactory	Satisfactory	Can improve	Can improve	Satisfactory	Can improve
Forum Rating	**Usefulness of Forum**	**Staff knowledge**	**Staff Preparedness**	**Completed Objectives**	**Time for Forum**	**Facilities Ratings**
Score/100	92.2	93	92.2	85.2	87	87.8
Recommendation	Satisfactory	Satisfactory	Satisfactory	Can improve	Can improve	Can improve

Forum Feedback

Attendees really enjoyed the activities where they got to share ideas on how to improve health within their communities as well as learning about new health topics. They felt that the forum

could include different topics next year that covered various health related areas. They indicated that the forum should be longer and cover more topical areas. The majority felt that the forum had an impact on their life or work.

Table 9. Analysis of Forum Comments

Feedback	Number of Respondents	Percent
What worked?	*(Total 23)*	
Sharing Ideas	10	43.5
Getting knowledge from speakers	8	34.8
Content of the forum	4	17.4
Improvements for the next forum…		
Other health related topics should be added (ex. other diseases, political and legal topics, more on violence, suicide, prostitution, nutrition, prevention, environmental health, how to implement health interventions and rural fa'afafine issues)	21	91.3
Photos of infections	3	13
More interaction, discussion, and activities	7	30.4
Samoan Translation for all materials	3	13
Results of Forum Feedback	3	13
Impact of Forum…		
The forum had an impact on the life or work of the attendee	16	69.6

Analysis of Group Work

Attendees were given 4 discussion questions to respond to after presentations in the forum program. They were divided into four groups. The purpose of this exercise was to gain structured feedback from the fa'afafine community on what efforts to promote sexual health are under way in the community and what else can be done.

The respondents indicated that the Samoa Fa'afafine Association have engaged the fa'afafine community on sexual health prevention through multiple activities. Primarily, SFA has engaged the community in prevention through participation in events drive by MoH and NGO's as well as personal efforts to share information with friends and community members. The following list summarizes the activities SFA and community emembers have done to promote the following;

1. ***What activities have you done to promote…***

- ***Sexual health?***

  a) Participation in MoH funded events such as the Annual Pageant, the Health Speech Competition and the Fa'afafine Forum
  b) Walk with Me Parade to promote suicide prevention
  c) Talanoa (dialogue consultation) session with the community

- ***Prevention?***

  a) The use of peer educators
  b) Booths at local events
  c) Individuals ensuring and promoting they get blood tests every 3 months
  d) Individuals ensuring self care and self protection

- ***Condom use?***

  a) Personal use of lubricants
  b) Multimedia condom use campaigns (ex. Love Your Condom)

- ***STI testing and treatment?***

  a) Private testing
  b) Use of peer educators

- ***STI and HIV knowledge and awareness?***

  a) Annual discussion at the National Fa'afafine Forum
  b) Membership to SFA promotes health and wellbeing
  c) Sharing information with personal networks

2. What services do you think are needed the most for the fa'afafine community?

a) More community health forums
b) A formal drop in center for SFA to provide a safe place to access services and prevention
c) A national fa'afafine day for public awareness
d) A partnership with an NGO to specifically address health issues in the community and engage the community

2a. What needs does the fa'afafine community have?

a) Need more free lubricants to compliment condom distribution
b) More condom distribution
c) Outreach to rural fa'afafine
d) More educators on STI and HIV
e) Transportation of rural fa'afafine to services or vice versa
f) More mentoring and leadership to promote good conduct, self-care, access to healthcare and education in schools, churches, communities, etc.

3. What additional activities do you think SFA should do throughout the year to promote sexual health and STI prevention (besides the pageant)?

a) Media campaign
b) Community services like screening for STI's
c) Tournaments promoting physical activity and simultaneously other areas of health
d) A yearly work plan of services and activities
e) School outreach initiative
f) Text message health alerts promoting health issues for fa'afafine

4. What are you ideas for future events that MoH and SFA can collaborate on?

a) Awareness programs on STI's and more broadly healthy living
b) TV programs on health issues involving SFA directly in health education through media

Future directions for the SFA, as indicated from this list, state that SFA should move more into providing health services, health outreach, health mentorship and health communication. All of these would require more resources. Considerations for rural communities were also highlighted as important issues.

In addition to the forum, the pageant was also used by MoH and SFA to promote health nationally for the general populations and amongst the fa'afafine community. The main event for health promotion was the speech component of the competition which took place during the week leading up to the performance night of the Annual Miss Fa'afafine Pageant. Both events were nationally televised. A summary of the speech competition is provided below.

Miss Health Fa'afafine Speech Competition 2016

Date: 30th August 2016	***Location: Ministry of Health Conference Room 1***

Goal:

- *To promote healthy living by having contestants share their views on critical health issues in Samoa*

Program

Time	Activity
10:00-10:30am	***Introduction of Pageant Contestants***
10:30-12:00pm	***Speech Competition***

Speech Competition Schedule

1. Moyesha Sua
Our diet as Samoans should contain enough fruits and vegetables! Please tell the audience your views on this statement and what do you think is enough?

2. Celine Hunter
Please tell me what your views are on violence against women and fa'afafine (domestic and intimate partner violence) and how both women and fa'afafine can protect themselves from being victims?

3. Tara Bomare
Fast foods should be banned in schools! Do you agree with this statement? Why or why not?

4. Jessica Hunt Auva'a
Mental Health and Youth are key to the development of any nation. How do you suggest we as young fa'afafine break the silence when it comes to mental health?

5. Lageisha Liu Kiu
The Ministry of Health recommend that eating fresh fruits and vegetables on a daily basis is one of the keys to staying healthy! What fresh fruits and vegetables do you include in your diet? Do you agree with the MOH's suggestion?

6. Tanu Ushel Okesene
We live in a connected world with technology. What would you say are the positive long-term effects of living in such technological world? And any negative effects?

7. Maxine Fa'amoe Etene
Local communities should have mandatory community fruits and vegetable gardens! Do you agree or not? Why or why not?

8. Percillia Ulberg
Fruits and vegetables for good health must be promoted on social media. What are your favourite fruits and vegetables and how would you promote them on social media?

9. Barbara Va'a Tiufea
Tell our audience your views on fa'afafine and suicide. Specifically, how to prevent it, who to work with, target age group, where to get help. And what should we as a country do to help with this problem?

Samoa Fa'afafine Association in preparation for this event consulted the Ministry of Health regarding speech topics that related to the pageant theme of healthy nutrition and other issues relevant to the fa'afafine community. Contestants were then randomly assigned topics to prepare their speeches. 10 minutes was the allotted time for the speech, and going over that time was factored into the final score.

Judges were selected from major sponsors (SSAB and the Ministry of Health) and the previous Miss Fa'afafine Samoa 2015, Steva Auina was also selected to judge. Attendees included representatives from Ministry of Health, SSAB, the media, the fa'afafine community, multiple community organizations and general attendees.

All contestants were thoughtful and original in addressing very challenging and sensitive topics. Jessica Auva'a was selected as the winner for her quality delivery of the speech, well reasoned views on mental health, and manner that judges felt best represented a pageant crown winner.

The pageant allowed the public to gain a more personal perspective on the contestants as they shared their views, demonstrated their knowledge and communication skills, and spoke about on key issues that affect their communities. The Ministry of Health was pleased to see how well aligned the content of the speeches was aligned with messages of national health campaigns.

As part of the week of activities leading up to the fa'afafine pageant, SFA and MoH co-facilitated an HIV, AIDS, and STI Seminar at MOH's Conference Room [Wed 31st Aug, 2016, ½ Day] open to all fa'afafine and communities allies. It was a community awareness program on STIs/HIV/AIDS from a fa'afafine perspective, targeting faafafines all around Samoa. During the forum, participants were asked to design a pamphlet or poster targeting their own community. The seminar focused on identifying most at risk/vulnerable fa'afafines, in terms of sexual behavior, and advised them on where they should get help when needed.

The staff of the HIV, STI and TB Program also assisted SFA in procuring funding for the inaugural launch of National Fa'afafine week from 1st Dec. (World AIDS Day) to 10th of Dec. (Human Rights Day). MoH staff also assisted in the implementation of the week long programme. Activties included;

- Organizational reviews of SFA's constitution and policies
- Daily condom distribution to Apia Urban Areas by Miss Health Fa'afafine 2016 and team
- Nightly condom distribution in night clubs
- Outreach to schools on preventing bullying, protecting rights of fa'afafine and fa'atama students, and public awareness of the needs of fa'affafine and fa'atama youth
- Human rights consultations with law reformers and community partners (attended by the Prime Minister)
- Legal consultations relating to discrimination in employment, public services, and education
- Charity visits to the Paediatric Ward of TTM Hospital, Apia

Inaugural Samoa Fa'afafine Week Promotion

World AIDS day

World AIDS Day (WAD) is an annual event that is commemorated on the 1st of December to acknowledge the ongoing efforts and initiatives by health workers, institutions, communities and individuals in the fight against the spread of HIV/AIDS. It is an opportunity for Samoa to unite in the fight against HIV, showing support for people living with HIV and to commemorate people who have died. This commemoration is also the pinnacle event of the year to further raise public awareness and to remind people to take responsibility as individuals in preventing the spread of this disease and other infectious STDs, and to increase awareness among people, most possible access to the treatment as well as discussing the preventive measures.

Prime Minister Tuilaepa Aiono Sailele Malielegaoi attending WAD opening ceremony

The theme for this year is 'Hands Up for HIV Prevention' which puts more emphasis on the efforts to end the AIDS epidemic by 2030 as part of the Sustainable Development Goals that requires investment, commitment and innovation to be accelerated by all UN member countries. It aligns with the Samoa's work towards achieving its National Plans and Health Sector frameworks in place particularly on the HIV/AIDS agenda and its effective responses. The objectives of 2016 were to continue to 1) raise public awareness on HIV/AIDS and its effects,2) to upscale preventive and control interventions to combating HIV/AIDS and other infectious, 3)advertise testing and screening services, 4) promote non-discrimination of PLWHIV, and strengthen collaboration with partners and stakeholders.

1st December, 2016 marked the launching of the WAD Commemoration which was conducted through the Samoa Fa'afafine Association Candle Light Service at the break of dawn at the Sheraton Hotel Waterfront in Apia. In attendance were representatives of the Health Sector, SPAGHL members, Cabinet, Dip Corps, NGOs, Government Ministries and Corporations, and NCC. A 'Siva Fa'amalositino' or zumba exercise class was held free for the public at the Samoa Tourism Authority fale to promote healthy lifestyles.


Candlelight memorial service in Apia Harbour

Also on 1st December, a men's health forum was held at the Ministry of Health as an awareness program with male sports players from Upolu and Savaii. The goal was to spread awareness of HIV, STI's and safe sex practices.

Men's health forum

Red ribbons were distributed by volunteers in town and at Samoa Family Health Association Office during the commemoration week. Peer Educators from Samoa Red Cross and also Samoa Family Health coordinated the distribution.

'Radio Talk Back" and Radio Program on 2AP was broadcasted nationally during the week (28th Nov – 2nd December) discussing HIV and STI's in Samoa. Advertisement of the WAD pogram was also publicized on the radio (26th Nov – 1st Dec, 2016). A documentary on HIV/AIDS showcasing the journey of the Health Sector, stakeholders and the communities on interventions and control measures to combating this disease was produced and aired on TV1 national network.

Members of SFA and HIV/STI/TB National Programme attending memorial service

Samoa Fa'afafine Association also had their own activities as part of World AIDS Day from the 1st – 10th December to celebrate WAD 2016 and Human Rights Day . Samoa Family Health Association will be having their awareness programs prior to the week and during the week of the commemoration of the WAD 2016. NHS continued with their community engagements during this week with TB outreach. The Ministry of Women Community and Social Development (MWCSD) through the Social Development Division and the Samoa National Youth Council also celebrated this week with their own initiatives.

Treatment, Care and Support

TB DOTS Visits

For TB, midyear reporting revealed that performance indicators were lacking in critical areas of treatment success rates and co-infection testing coverage for TB and HIV. This was mainly due to the lead nurse at the Communicable Disease Clinic lacking support for monitoring of TB treatment visits and contact tracing. The national programme proposed funding for Direct Observation of Treatment visits (DOTS visits) to support data collection and treatment monitoring for TB. This allowed for needed contact tracing of TB cases in rural areas of Upolu and Savai'i and critical data collection.

Table 10. TB Performance Measures

Indicator	Jan-June 2016	Target Value	Jan-Dec. 2016	Achievement
TB2a and DOTS2a- Treatment success rates of all forms of TB	58.06%	85%	89%	***Exceeded***
TB2b and DOTS2b- treatment success rates of bacteriologically confirmed TB	58.06%	85%	89%	***Exceeded***
TBHIV1- Percent of TB cases screened for HIV	0.04%	65%	82%	***Exceeded***

The result was that data collection and reporting processes were improved between MoH and the CD clinic, more patients were reached by contact tracing, and critical areas of poor performance exceeded regional targets set for their respective indicators. TB care was greatly improved by implementing HIV screening procedures to increase co-infection screening coverage.

Training of TB community volunteers

To improve case detection and linkage to care for TB at the community level, MoH partnered with Samoa Family Health Association to deliver capacity building training to community nurses and representatives. This compliments an overall move in the health sector of Samoa to create the capacity for and utilize service delivery at the community level.

TB Training for Nurses, Volunteers and Community Representatives

Date: 17th and 18th October 2016 (Upolu) ***20th and 21st October 2016 (Savai'i)***	
Facilitators: Samoa Family Health Association	***Attendants: 40***

Goals:

- To improve the knowledge of community nurses, village representatives and volunteers on TB prevention, symptom detection, referral skills and related issues
- To reduce stigma around TB and improve integration of TB services with communities to improve referrals and partnership in addressing TB

Key Findings and Recommendations:

- Attendees felt that 1) the interactivity of the workshop, 2) organization and clarity of the content, and 3) the duration of the workshop can be improved.
- Attendees indicated that they were more confident and competent in detected TB, linking people to care and prevention of TB.
- Attendees indicated that future workshops and partnership around other health issues would be well received.

Two workshops were conducted in Upolu and Savai'i with community nurses, village representatives and community volunteers. There were 40 attendees, 38 of which completed feedback questionnaires on the workshops. The majority of participants were between the ages of 20-24 and male. Roughly equal attendance was reported for Savai'i and Upolu.

Table 11. Attendee Demographics

Age Group	Number	Percent	Sex	Number	Percent	Residence	Number	Percent
20-24	*17*	*44.7*	**Female**	*16*	*42.1*	**Upolu**	*20*	*52.6*
25-29	*9*	*23.7*	**Male**	*22*	*57.9*	**Savaii**	*18*	*47.4*
30-34	*4*	*10.5*	**Total**	*38*	*100*	**Total**	*38*	*100*
35-39	*6*	*15.8*						
40-44	*2*	*5.3*						
Total	*38*	*100*						

The aspects of the forum that attendees rated the lowest were 1) the interactivity of the workshop, 2) organization and clarity of the content, and 3) the duration of the workshop. The aspects that were rated the highest were 1) the clarity of the objectives, 2) usefulness of the workshop material, and 3) the relevancy of the topics. Overall, the workshops received a ratings of 92% satisfaction among attendees.

Table 12. Forum Ratings

Forum Rating	**Average Rating Overall**	**Clarity of Objectives**	**Participation & Interaction**	**Relevant Topics**	**Content Easy & Organized**	**Handouts**
Score/100	92.4	98.4	88.9	94.2	89.5	90
Recommendation	Satisfactory	Satisfactory	Can improve	Satisfactory	Can improve	Satisfactory
Forum Rating	**Usefulness of Forum**	**Staff knowledge**	**Staff Preparedness**	**Completed Objectives**	**Time for Forum**	**Facilities Ratings**
Score/100	96.8	93.7	92.1	92.1	88.4	92.6
Recommendation	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Can improve	Satisfactory

Attendees were also given questions with open ended responses to assess their thoughts and comments on the workshops. Table 13 summarizes these responses.

Table 13. Forum Feedback

What participants liked most about the training	**What to improve**	**Impact on life or work**	**Additional topics in future programs**
• The practical information on TB, how to detect and prevent	• Need information on how to support those affected by TB	• Will provide health education and health messages to patients and communities	• Other diseases such as RHD, Asthma, Malnutrition, STI's, HIV, AIDS, filariasis, diabetes, and high blood pressure
• The clarity of the material	• Need information on how TB is transmitted	• Will encourage follow-up visits	• Further outreach to villages, prisons, and church based groups

What participants liked most about the training	What to improve	Impact on life or work	Additional topics in future programs
	• Simplify delivery of presentation	• Confidence in identifying TB symptoms	
	• Two day workshop is too long		

Knowledge and behavior change

Integrated Community Health Approach Programme (ICHAP)

In September 2016, the ICHAP initiative was launched covering 5 villages and their primary schools in Upolu, 5 villages in Savai'I, and the prison facility Tafaigata located in Upolu. The programme was aimed at delivering key health information regarding HIV, STI's, TB, and strengthening climate resilience through reproductive, maternal, newborn, child and adolescent health. The target populations were women of village committees (Komiti Tumama), college students, and male and female inmates. Communities lack knowledge and awareness of these topics. The curriculum of ICHAP was therefore designed to build capacity in these areas, communicated in a way that had practical application for community life.

The villages themselves were selected due to the prevalence of TB cases reported in that area. The populations were selected due to 1) village women's committees being the primary mechanism for implementing health initiatives at the community level, 2) youth representing over 60% of reported STI cases, 3) and inmates being identified as a vulnerable group with no data currently available on their needs. The ICHAP's overarching logic was to holistically deliver outreach education communities and key population groups to overcome the sensitivity of sexual health, and get communities to adopt STI and TB prevention as part of an integrative approach to improving health.

The ICHAP also served as an opportunity to collect monitoring data on these communities' needs identify potential mechanisms for linking people to services from a grassroots level. From an M&E standpoint, it allowed MoH staff to trial what types of M&E data collection methods work at the village level, and how to collect data from populations with low health literacy.

Key Findings and Recommendations		
Number of Respondents		
Village Women's Comittees	College Students	Prison Inmates
77	**155**	**43**
Results		
For Inmates: • 61% of respondents had seen a doctor in the past month, reporting flu or flu like symptoms (38%). • 96% NEVER tested for HIV or STI's and 86% NEVER tested for TB. For college students: • 106 (68%) respondents were able to correctly answer that condoms are the best		

method of prevention if you are having sex.

- A significant percent (24% or 37 people) thought that being married would protect them from HIV and STI's. This may be a misconception to address in future trainings.
- The most important point of the presentation was communicating to youth that free condoms and STI testing are both available at all hospitals in Samoa. 97% of respondents answered this item correctly. This is reassuring that youth know where to access prevention services. However, barriers to access were not assessed in the program monitoring.

For village women's committees on climate change/disasters and maternal/reproductive health:

- 38% identified the 3 simple ways mothers with children can prepare for disasters
- 65% knew that during disasters, the transmission of diseases (including STI's), increases.

Recommendations

- Women with children need to have more knowledge on how to prepare for natural disasters and protect their health and their children. Further outreach should focus on delivering strategies.
- Further assess what barriers youth and others populations experience in accessing condoms and STI testing at health centres. Youth know where condoms are. What prevents condom use?
- Revise the content of the STI and HIV presentations to address common misconceptions found in the evaluation
- Programmes to link inmates to TB and STI testing services need to be designed and implemented, with sustainable condom distributions mechanisms put into place with the partnership of prison administrations. Linking inmates to regular healthcare should also be addressed by future programming.
- Pre and post test evaluation for M&E is difficult to implement in a community setting. Ensuring that evaluation is properly explained and has proper time allotment for the programme is essential for this method to prevent response bias and low response rates. Short demographic behavioural surveys might be a better approach.

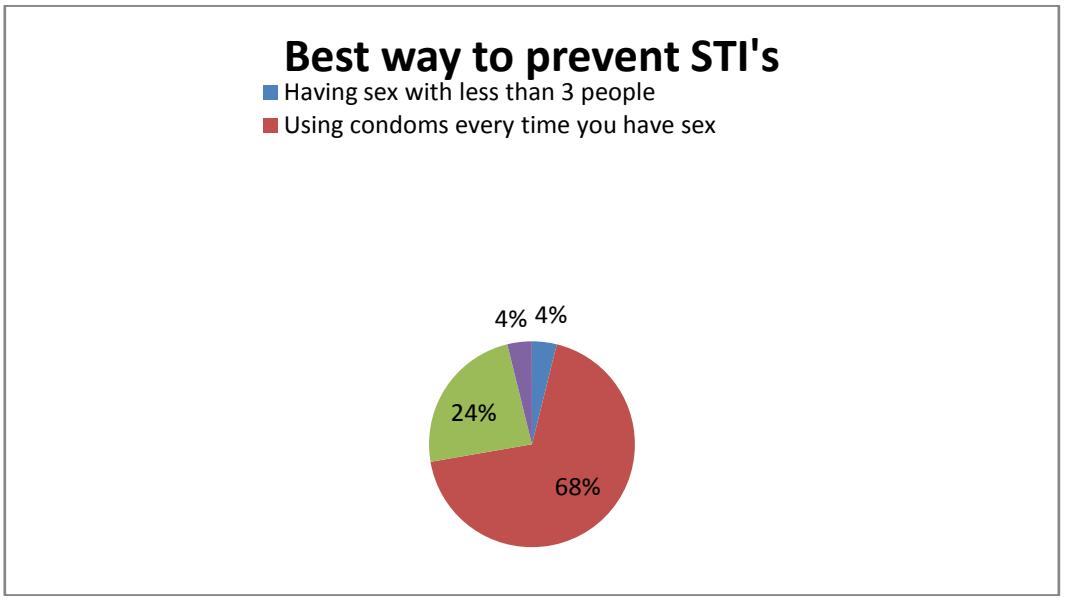
College Youth HIV and STI Basics Training Evaluation

A short 3 question survey was distributed after the HIV and STI portion of the Integrated Sexual and Reproductive Health Outreach Program 2016. This program component was conducted with college age students (age 14-17) at various colleges targeted by the program in Upolu and Savaii. The objective was to keep the presentation short, clear, concise and practically oriented. Responses from 155 individuals were collected. The three items on the survey assessed if respondents understood the 3 main points of the HIV and STI component;

1. Condoms are the best method of prevention if you are sexually active
2. HIV and AIDS are not the same condition
3. Free testing and condoms are available at all hospitals in Samoa

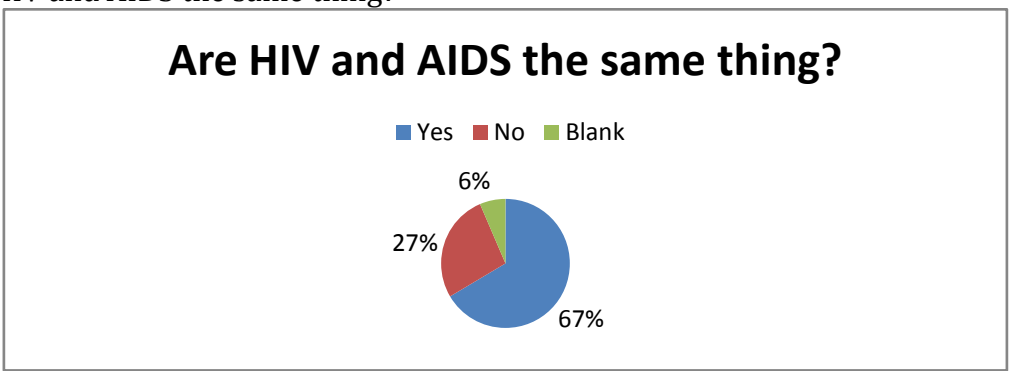
A baseline was not determined due to time constraints of the programme. Therefore these results do not necessarily measure the impact of the programme on levels of knowledge. Instead this data should be used as a baseline for follow up evaluations with these colleges and to see which of the main points have been adequately communicated to youth.

1. HIV and STI Prevention



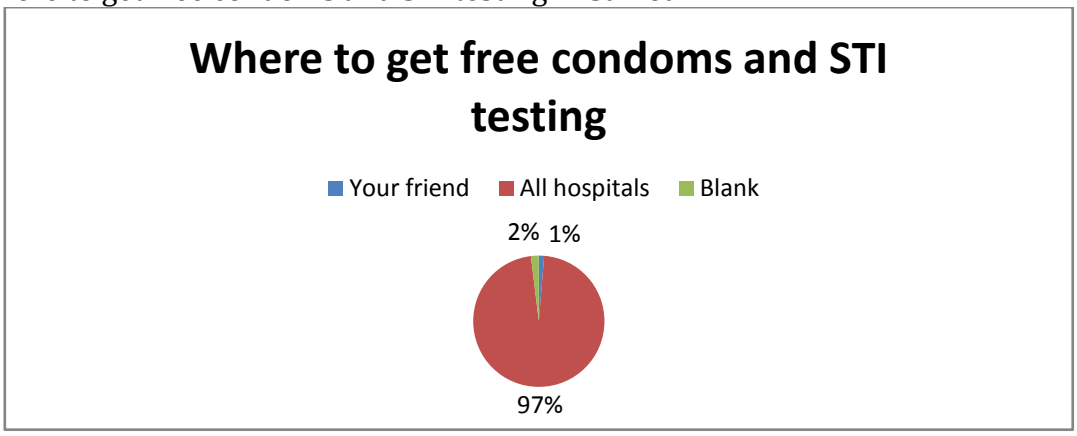
106 (68%) respondents were able to correctly answer that condoms are the best method of prevention if you are having sex. A significant percent (24% or 37 people) thought that being married would protect them from HIV and STI's. This may be a misconception to address in future trainings.

2. Are HIV and AIDS the same thing?



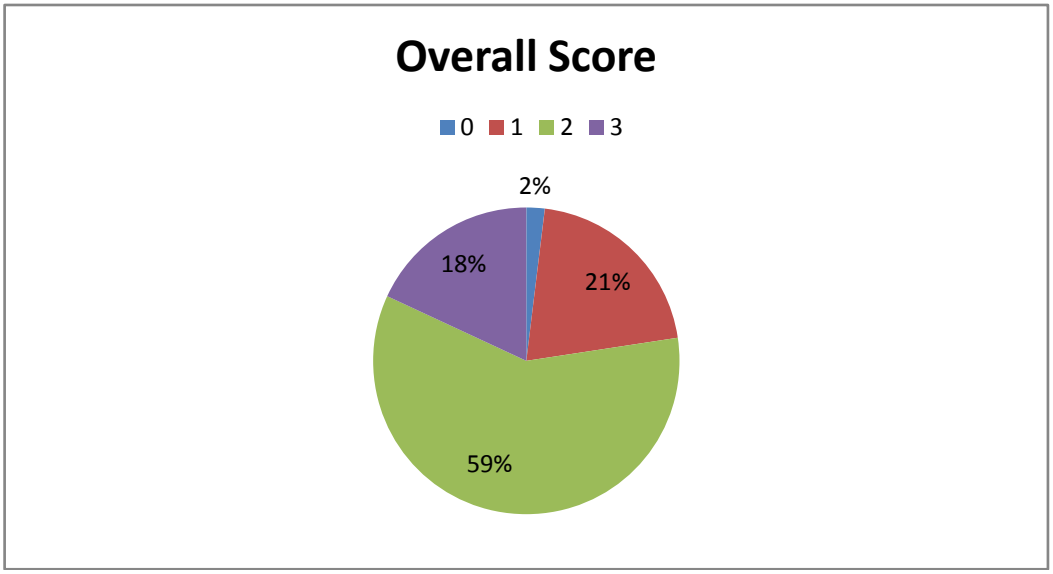
67% of respondents indicated that HIV and AIDS are the same condition. This demonstrates that this point needs to be more clearly explained in future trainings. Rewording this question or using a more pertinent question to prevention behaviour would be possible solutions.

3. Where to get free condoms and STI testing in Samoa



The most important point of the presentation was communicating to youth that free condoms and STI testing are both available at all hospitals in Samoa. 97% of respondents answered this item correctly. This is reassuring that youth know where to access prevention services. However, barriers to access were not assessed in the program monitoring.

4. Overall score



Only 28 people (18%) answered all 3 questions correctly. 59% answered at least 2 correctly and very few (2%) got none of the questions correct. Improvement in the overall scores can probably be seen through improving question 2 and clarifying that main point in the programme.

Tafaigata Prison Health Needs Assessment

As part of the Integrated Sexual Reproductive Health Outreach Program 2016, a 10 item general health survey was distributed to participants the Tafaigata Prison as part of the programme. The survey was designed to obtain a general measure of health of inmates to inform future service delivery activities. 48 responses were collected from male and female participants.

Executive Summary

- 61% of respondents had seen a doctor in the past month, reporting flu or flu like symptoms (38%).
- 21% reported high blood pressure, 14% diabetes, and 7% had high blood sugar.
- 35% were currently sick reporting 1) pain in the back, chest or abdomen, 2) symptoms consistent with STI's, 3) fatigue, and 4) Flu or flu like symptoms (all 17%).
- 96% NEVER tested for HIV or STI's and 86% NEVER tested for TB.
- 46.5% smoked and average of 23 cigarettes per day
- For main sources of health information, 30% indicated they get their information from the hospital and 26% indicated the Ministry of Health's outreach programs

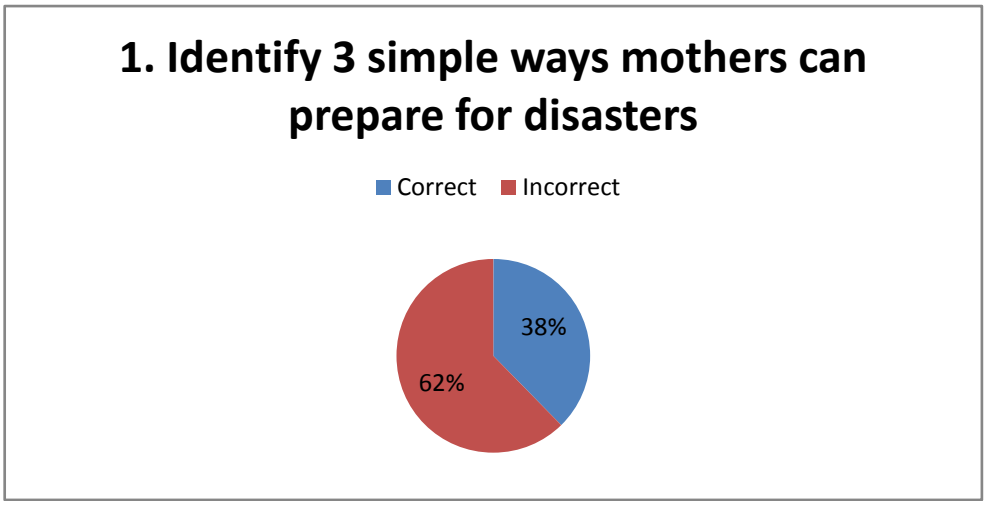
Community church at Tafaigata Prison, Upolu

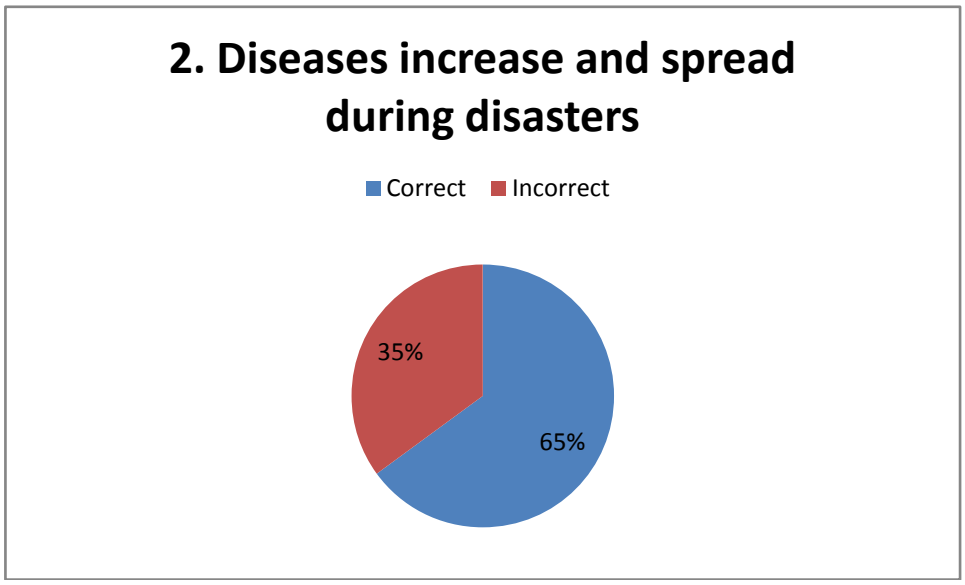
Strengthening Climate Resilience through reproductive, maternal, newborn, child and adolescent health (RMNCAH)

Community consultation with 77 members of Komiti Tumama (Women's committees) in several villages in Upolu and Savaii were conducted to build capacity on TB, HIV, STI's and strengthening climate resilience through RMNCAH. These are the baseline results of the 2 item questionnaire. There were not enough received post-test evaluations to perform a pre-post analysis.

Question 1 asked participants to identify the 3 simple ways mothers with children can prepare for disasters; 1) breastfeed, 2) boil water for sanitation, and 3) be prepared (have a plan or emergency kit). Question 2 assessed if participants knew that diseases can increase and spread during natural disasters. 38% answered Question 1 correctly, while 65% answered Question 2 correctly. Only 25% got both questions correct, while 50% answered one question correctly.

Baseline Results:





IV. Changes in National Commitments and Policy

2016 marked the development and consultation of 4 key documents; 1) the updated HIV, AIDS, and STI Policy for 207-2021, 2) the HIV, AIDS, STI and TB Monitoring and Evaluation Reference Manual, 3) the Health Sector Monitoring and Evaluation Manual (redraft), and 4) 2017 Health Guidelines for Tattooing. All documents are currently being finalized for launch on World TB Day 24th March, 2017 with the exception of the Health Sector M&E Manual.

Table 14. Key Document Development

Document	Number of Consultations with Stakeholders, Community and Partners	Consultation with MoH Staff
HIV, AIDS, and STI Policy 2017-2021	4	4
HIV, AIDS, STI and TB M&E Reference Manual	3	3
Health Sector M&E Manual	0	1*
Health Guidelines for Tattooing	1	1

**not funded by Global Fund but facilitated by National Programme Staff*

The HIV, AIDS, and STI Policy for 2017-2021 sought to improve upon the previous policy in several areas. The first was to update the epidemiological profile and add more reference materials for service providers relating to key policy areas so that policy serves as a practical reference document. Secondly, it also sought to align national and global standards for services and research, as well as harmonize national and donor M&E frameworks. Third, the new policy focused broadly on community based delivery of services, expansion of services to address social determinants of disease for general and key populations, and moving from awareness models to behavior change in prevention.

Using the NCPI instrument provided by UNAIDS for measurement, the following advancements were mad within 2016;

NCPI 2016 Advancements
HIV Testing Approaches- *shift towards* ***provider initiated counselling***

NCPI 2016 Advancements
Assisted HIV Partner notification
National policies and strategies on ARV retention and support
National prevention strategy for sex workers
Condom and lubricant distribution for prisoners
National prevention strategy for MSM (fa'afafine)
national plan or strategy to address gender-based violence and violence against wmen that includes HIV
Social Protection strategy for PLWHIV, young women and girls, and key populations
Strategies for engaging community level structures in the national response
HIV services integrated with TB prevention
HIV and STI national M&E plan and strategy
National strategy and implementation of PEP (Post exposure prophylaxis)

The HIV, AIDS, STI and TB Manual was the first document of its kind for the program. A health sector M&E manual was operationalized in 2010 with a few indicators relevant for HIV, STI's, and TB, but no results framework for sexual health outside of donor reporting indicators existed. This manual sought to harmonize international measures with Samoan M&E priorities. Intensive consultations with partners and stakeholders generated feasible goals, data collection improvements, and implementation guidelines for the framework and indicators.

Global fund also supported M&E activities to improve data collection across all divisions of the Ministry of Health and the health sector. The main deliverable of this was the redrafted Health Sector Monitoring and Evaluation Manual. An initial draft with cost estimations of each indicator was drafted in December 2016 and is currently under review by MoH management.

In addition to the infection control consultations with tattoo artists, the staff of the National Programme were tasked with developing health guidelines for tattoo artists and those seeking tattoos. A short handbook with health guidelines for infection control of the tattooing process, healing, and best practices for tattooists was developed that delivered information on infection risk of HIV, Hepatitis B&C, and extra-pulmonary TB via invasive procedures. This document is set for launch on 24th March 2017.

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

Out of 24 cumulative cases of detected HIV infections, 13 are currently deceased. There are currently 11 detected cases of PLWHIV. All currently living cases were diagnosed between 2002-2013. ART is coordinated through the Communicable Disease Clinic.

Table 15. ART Register Profile

ART Demographics	Number	Percent
PLWHIV on public ART	9	81.8
Private ART treatment	2	18.8
Out of PLWHIV on public treatment…		
Males	6	62.5
Females	3	33.3

Started ART Same year as diagnosis	4	44.4
Had a CD4 test in 2016	8	88.9
Healthy CD4 counts (500-1,600)	2	22.2
Low CD4 Counts (200-500)	4	44.4
Progressed to stage 3 infection (AIDS) <200	2	22.2
No CD4 test in 2016	1	11.1

The first case of HIV was detected in 1990. The 8 cases registered since then in the 90's died without registering for ART treatment. All other cases were linked to ART after their confirmed cases leaving 5 deceased cases that died while receiving ART. 2 male cases are on treatment overseas leaving 9 cases that disaggregated ART data by sex and age is available.

Table 16. ART Enrollment by Age and Sex

Age Group	Males	Females	Total
5-9	1	0	1
10-14	1	0	1
15-19	0	0	0
20-24	0	0	0
25-29	0	0	0
30-34	0	1	1
35-39	1	0	1
40-44	1	2	3
45-49	1	0	1
50-54	0	0	0
55-59	1	0	1
Total	*6*	*3*	*9*

ART regimens are aligned with WHO recommendations. The ART recommended regulations taken from the policy are included below;

Regimen Type	**Approved for…**
First Line	
TDF/3TC or (FTC)/EFV Fixed dose 3 drugs as 1 pill once a day	Adults, adolescents, and pregnant women
Second Line	
AZ/3TC or (FTC)/ATV/r or LPV/r	Adults and Adolescents
NRTI: LPV/r and AZT	children less than 3
Third Line	
LPV/r based-regimens	all infants and children <36 months with HIV (regardless of NNRTI exposure)
NNRTI: Efavirenz (EFV)	treatment initiation in children aged three and older
AZT+3TC or FTC	recommended NRTI backbone for treatment initiation in children aged 3–10 years

ART regimens are subject to availability and regional procurement processes. Clinical equivalents are always used in stock-out situations or lack of availability. Below is the ART regimen for all PLWHIV by age and sex during 2016.

Table 17. ART Guidelines

Regimen	ART Patients
Zidovudine (AZT) 300 mg PO BD + lamivudine (3TC) 150 mg PO BD + lopinavir 200 mg/ritonavir 50 mg (LPV/r) 2 tablets PO BD	3 Males age 40-44 1 Male 45-49
Zidovudine (AZT) 11 ml PO BD + lamivudine (3TC) 6 ml PO BD + lopinavir 200 mg/ritonavir 50 mg (LPV/r) 1 tablet PO BD	1 Male age 10-14
Zidovudine (AZT) 300 mg PO BD + lamivudine (3TC) 150 mg PO BD + nevirapine (NVP) 200 mg PO BD	1 Female age 30-34
Tenofovir (TDF), Emtricitabine, Lopinavir/Ritonavir	1 Male age 5-9
Tenofovir (TDF) 300 mg PO OD + lamivudine (3TC) 300 mg PO OD + nevirapine (NVP) 200 mg PO BD	2 Males ages 35-39 and 55-59

Through the Communicable Disease Clinic based at TTM Hospital in Apia, ART treatment is provided to all PLWHIVA free of cost. Treatment visits are coordinated by the Senior Nurse of the clinic to ensure adherence and access. Based on the SPECTRUM estimates provided for Samoa by the SPC, there should be an estimated 12 PLWHIV between 2016 and 2019. With the current ART caseload (11), the ARV coverage would then be 91.7%. The main challenge for ART is assisting PLWHIV achieve health CD4 counts through adherence and healthy lifestyles to support ART.

COMMITMENT 2: Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018

Historically there have been 6 children born to 5 mothers living with HIV that were not on preventative ART regimens. Currently there are 2 children living with HIV from these mother-to-child (MTC) transmissions and 1 stillbirth to an HIV positive mother occurring in 2015. There has also been 2 successful cases of PLWHIV given proper ARV regimens to prevent HIV transmission that were successful. This low incidence of MTC transmission is largely due to the work of the Communicable Disease Clinic in ensuring treatment is brought to all cases to support adherence.

Preventing mother to child transmission (PMTCT) of HIV and STI's has always been a national priority in Samoa. Screening of all women who report to Antenatal Care (ANC) are mandatorily screened for HIV and STI's, in addition to HIV and STI testing be included as part of infant blood panels. For pregnant women, Samoa has used WHO Option B+ (i.e. treat all ANC women free of cost) which has been implemented country-wide. Below are the recommended ARV regimens for pregnant women in accordance with WHO guidelines.

Table 18. PMTCT ART/ARV Regimens

First Line ARV for PMTCT	Specifications
TDF/3TC(FTC)/EFV	For women nursing
Infant Prophylaxis	
6 week neonatal zidovudine prophylaxis regimen duration 6 weeks	For exposed infants
AZT/NVP x 6 weeks	Dual prophylaxis for high risk exposed infants

The challenge remains with encouraging higher rates of ANC attendance by pregnant women. Out of all estimated pregnant women in the country, 26% reported for ANC care in 2016.[1] The Apia Birth Health Study conducted in 2016 by the HIV, STI, and TB National Programme revealed that out of all the births that occurred at TTM between 2014-2015, 71.2% of women (4,280) had at least 1 recorded antenatal care visit at a healthcare facility (and therefore had HIV/STI screening). However, only 47.1% (2,829) had the minimum recommended number of ANC visits (4). Married women are more likely to have less than 4 recommended antenatal visits. Birth cases that reported to TTM between 2014-2015 were mostly from Upolu (specifically the Apia Urban Area and North West Upolu regions. This indicates the women that do receive mandatory HIV and STI testing are largely representative of the Apia Urban Area and Northwest Upolu and have access to TTM Hospital in Apia for their births. Though this may not be adequate access as the study also found that majority of birth complications between 2014-2015 were related to not accessing healthcare services at the right time for labour. This may also have implications for ANC HIV and STI testing.

A mapping analysis of the ANC cases that received mandatory HIV and STI screening between January and June 2016 revealed that:

- Most of the ANC women screened for STI's resided in coastal village or areas of low elevation vulnerable to natural disasters.
- ANC STI screening and ANC attendance is lower in Savai'i.
- Coastal disaster situations would directly impact STI screening and access to STI services.

Methods

Surveillance data from the National Health Service (NHS) Lab located at TTM Hospital in Apia is routinely collected by the Ministry of Health (MoH). For the reporting period of January through June 2016, surveillance data on STI screening was available, but only for antenatal female patients. ANC women receive mandatory blood screening for STI's on their first antenatal care visit. The data for these cases (2,503 patients) contained each person's village of residence. Data of positive cases by type of STI was not mapped for concerns of patient confidentiality. Therefore the maps in this report represent all ANC patients tested for all STI's within the period of 1st January 2016 to 31st June 2016.

This data was entered in ArcGIS mapping software for spatial analysis. A pin was placed on the village area (determined by the ArcGIS program) corresponding to each patients' village of residence. When all of these points were plotted on a map, geographic patterns emerged as to where ANC STI screened patients were located.

[1] This measure was calculated using the following formula: WRA/1,000 * {(B*Pb) + (A*Pa) + (D*Pd)}, whereareas WRA =women of reproductive age in Samoa 2015, B= Fertility Rate, A=Abortion Rate, D=Fetal Loss (death) rate per 1,000 women, and Pb, Pa, and Pd representing the proportion of the year a woman is pregnant; 9months=.75, 2 months=.167, 3 months=.25, respectively. According to the calculation, approximately **9,615.7** women were pregnant at any given point in time in 2015. Assuming that each pregnant woman has only 1 partner, the estimated target population that includes both antenatal mothers and their male partners would be **19,232** at any given time in 2015 (based on the point-in-time estimate of antenatal women).

Results:

Distribution of ANC cases

Figure 1. ANC Patients Screened for STI's in Upolu

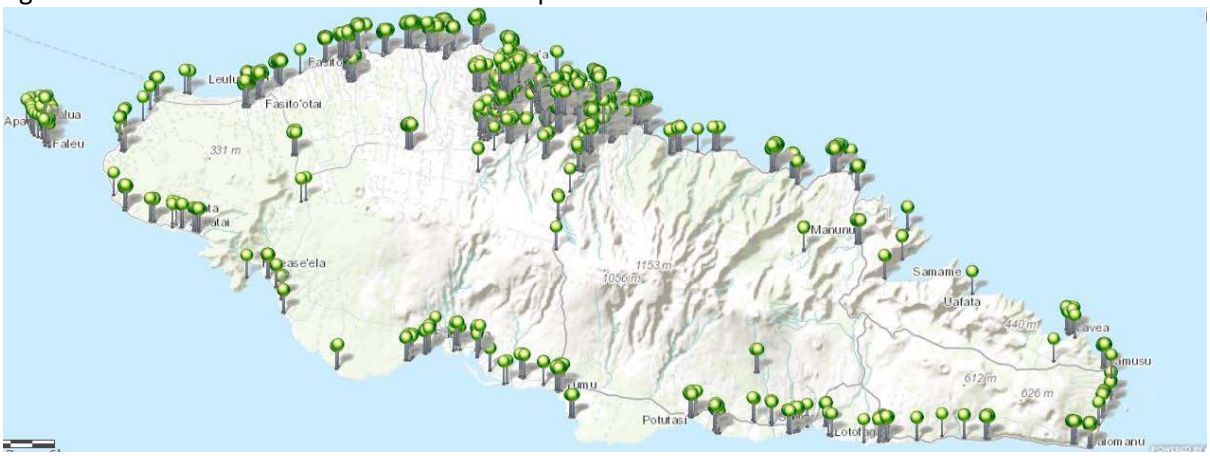


Figure 1 shows the clusters of ANC STI screening cases on Upolu. Most cases reside in villages in areas of low elevations near the coast. This matches the general population distribution as most Samoans reside in villages within or in close proximity to coastal regions. Figure 2 below shows the Apia Urban Area, which is where the majority of ANC women screened for STI's are located.

Figure 2. ANC Patients Screened for STI's in Apia Urban Area

Figure 2 demonstrates that the in the area where the most ANC women are concentrated, most of them live in villages on the coast or in areas of low elevations proximal to the waterfront.

There were much lower numbers of ANC women screened for STI's in Savaii. Figures 3 and 4 show that the clusters of cases are located in coastal villages.

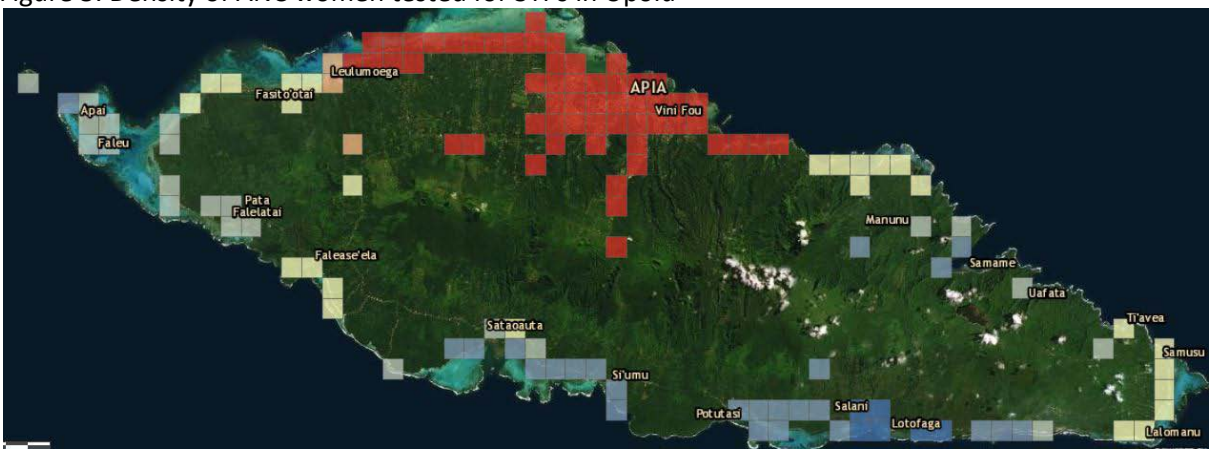
Figure 3. ANC Patients Screened for STI's in Northern Savaii

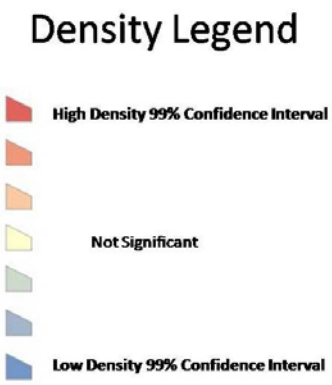
Figure 4. ANC Patients Screened for STI's in Southern Savaii

Hot Spots: Density of ANC women receiving STI testing

Since case markers on the map are larger than the actual scale of villages, case density maps were generated from the data to locate areas of high concentration of ANC patients screened for STI's. This reveals the location of "hot spots" where the most ANC STI testing cases are concentrated. The density is displayed in a grid of 1 square kilometre units. Figure 5 shows the density of cases in Upolu.

Figure 5. Density of ANC women tested for STI's in Upolu





Most of the ANC cases tested for STI's in Upolu are concentrated in the Northwest coastal region of Upolu from the Apia Urban Area to Faleolo. This pattern of concentration can also be seen when case densities are ranked by size. For Figure 6, the larger pink circle represents a larger density of cases in that region.

Figure 6. Ranked Density of ANC women tested for STI's in Upolu

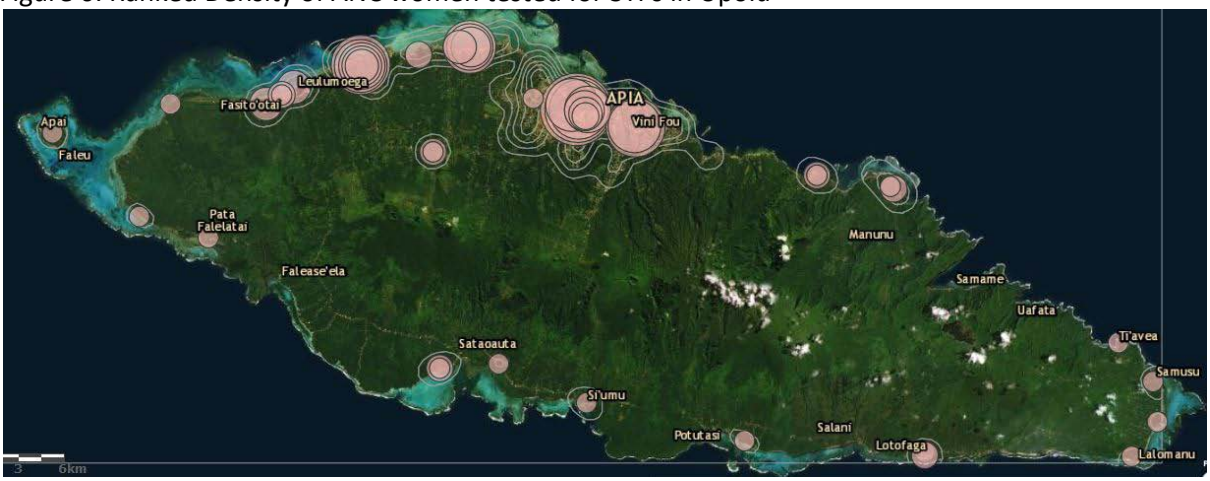


Figure 7 shows the concentration of cases in Savaii. Though there are fewer cases, the clusters of cases are located in low lying coastal regions. It also shows that Savai'i needs greater ANC STI testing coverage.

Figure 7. Density of ANC women tested for STI's in Savaii

Overall the threats to ensuring continued strong achievements to PMTCT of HIV and STI's are;

- Low ANC attendance and therefore low HIV and STI screening
- Low access to ANC and testing services in rural areas of Samoa, especially Savai'i
- Women accessing ANC testing services are located in regions vulnerable to disasters which can pose access issues in disaster situations

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

Until 2016, there were no current data on key populations to inform HIV and STI prevention, which has limited the implementation of targeted programming for these groups. During 2016, data from research studies and monitoring data from outreach programs provided necessary information on behavior and health needs needed for planning. These services and interventions are currently being designed for implementation within the next 2 years. Below are the data describing the health status of key populations in Samoa. Seafarers, male sex workers, and migrant workers have not yet been identified by any health studies. However, there are currently data for female sex workers, fa'afafine (transgender), MSM, and inmates.

Female Sex Workers

The Pacific Multi-country Mapping and Behavioural Study 2016 found that there are an estimated 400 female sex workers in Samoa. Most women are doing sex work for economic reasons. Payment varies considerably from 50 to 200 tala. These women have a wide range of clients, including local and foreign men.58.3% had children and the majority had no other employment. The age at which women began sex work ranged from 13 to 21 years old. The mean numbers of partners in the last 12 months was 10, of whom nine were clients (most likely many regular clients). Only 33% of the participants used a condom on the last occasion of vaginal intercourse with a client; a majority were inconsistent condom users with clients in the last 12 months. Condom use with casual non-paying partners was low; 50% used a condom on the last occasion. A minority of the women (18.2%) drank alcohol in the last week. Their HIV knowledge was moderate. None of the women had accessed a sexual health service in the last 12 months, although 60% had been given condoms in that period. None had been tested for HIV in the previous 12 months.

There is therefore a need for extensive condom programming and health education outreach to this group. Interventions should also seek to provide female sex workers with housing, sanitation, and economic services to support their participation in prevention interventions.

Fa'afafine (Transgender)

Historically, fa'afafine have been classified as a vulnerable group. Though traditionally valued within Samoan culture, fa'afafine face marginalization within their communities and there is anecdotal evidence that they face high rates of violence.

The Pacific Multi-country Mapping and Behavioural Study 2016 found that there are an estimated 25-30,000 fa'afafine and MSM in Samoa. 80 participants had sexual intercourse, and the

mean age of sexual debut was close to 16 years. In the interviews, fa'afafine talked about the problems of relationships with men. They said that they had often had their hearts broken as men moved into relationships with women. The most common number of sexual partners in the 12 months prior to the survey was between one and three, with 49% reporting concurrent sexual partners in the six months prior to the survey. 32.4% had been paid for sex in the last 12 months.

Condom use was low, with 43.9% stating that they had never used a condom for sex with a regular partner in the last 12 months and 40% reported never using a condom with paying partners. In the interviews, many participants said that they did not use condoms because they felt safe from HIV. 41% of participants used a condom at last anal intercourse with a casual partner. 10 people reported having sex with a female partner in the last 12 months. 58.58% never used a condom for vaginal intercourse with a casual female partner in that period.

Knowledge about HIV was generally high. However, only 16.3% had an HIV test in the last 12 months. A small proportion of participants had experienced stigmatizing attitudes from family and community. Only 8.7% felt ashamed about their sexual identity, although the interviews indicate that this is complicated, particularly when young. 11.9% of participants had been sexually assaulted in the previous 12 months. 57.4% of participants knew of a local organization that provided access to information or services related to condoms, HIV and STIs, and sexual assault.32.7% had accessed these services in the past 12 months.

All health sector and partner organizations should partner with fa'afafine community leaders in order to deliver prevention, screening, health education, behavior change, and outreach. Organizations should strategize on how to reach fa'afafine in rural villages. Improving screening and surveillance of this group will also require revisions to the data collections systems and methods used by MoH and partners, as fa'afafine needs to be legally recognized and recorded as a valid gender in health records.

There should be needs assessments conducted to determine why fa'afafine don't feel they are at risk for HIV and don't utilize condoms. Interventions should also address the marginalization and abuse fa'afafine experience in their communities to fully enable them to participate in prevention and behavior change.

MSM (Men who have sex with men)

Fa'afafine are categorized as MSM despite being a distinct social group from MSM, as their gender identity is distinct from man and woman. MSM describes a group in Samoa of males who identify as men and engage in sexual relations with fa'afafine or other men. This group, included in the predominantly fa'afafine sample of the Pacific Multi-country Mapping and Behavioural Study 2016, remains much less researched than the fa'afafine community. A behavioural surveillance survey of young people in 2005 reported that 21.8% of male participants had ever had sex with a man, with 14.7% having had male-to-male sex in the past 12 months (WHO 2006). Such statistics indicate that there is a significant community of MSM in Samoa, part of which may remain hidden in comparison to *fa'afafine*. Man and man sexual relations are highly stigmatized, especially compared to man and fa'afafine (which are permitted but not highly regarded by society).

Conversely, a 2005 HIV surveillance survey indicated that only 4.2% of STI clinic attendees were men reporting sex with men in the past 12 months, while 7% of attendees had experienced sex with another male in their lifetime (WHO 2006).While the variance in rates of self-reported MSM between these two different demographics could be caused by a number of factors – location of the clinic, age groups involved, and so on – it is highly likely that there is an underreporting of STI symptoms among MSM communities, which corresponds to the low level of MSM attendance at the clinic. As homosexual relationships are sitgmatized in Samoa, there is potential that this underreporting is due to fear of exposure and lack of confidentiality in the screening process.

Inmates

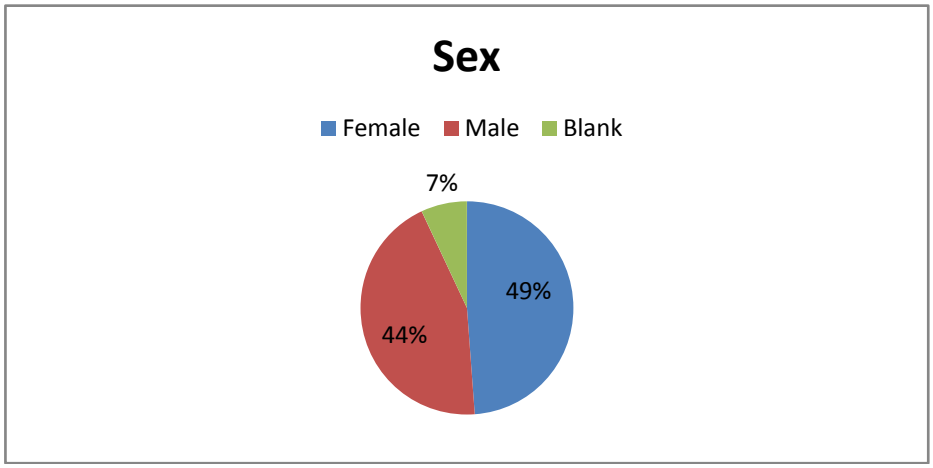
The population of those incarcerated in Samoa has not been estimated. As part of the Integrated Sexual Reproductive Health Outreach Program 2016, a 10 item general health survey was

distributed to participants the Tafaigata Prison as part of the programme. The survey was designed to obtain a general measure of health of inmates to inform future service delivery activities. 48 responses were collected from male and female participants.

Executive Summary

- 61% of respondents had seen a doctor in the past month, reporting flu or flu like symptoms (38%).
- 21% reported high blood pressure, 14% diabetes, and 7% had high blood sugar.
- 35% were currently sick reporting 1) pain in the back, chest or abdomen, 2) symptoms consistent with STI's, 3) fatigue, and 4) Flu or flu like symptoms (all 17%).
- 96% NEVER tested for HIV or STI's and 86% NEVER tested for TB.
- 46.5% smoked and average of 23 cigarettes per day
- For main sources of health information, 30% indicated they get their information from the hospital and 26% indicated the Ministry of Health's outreach programs

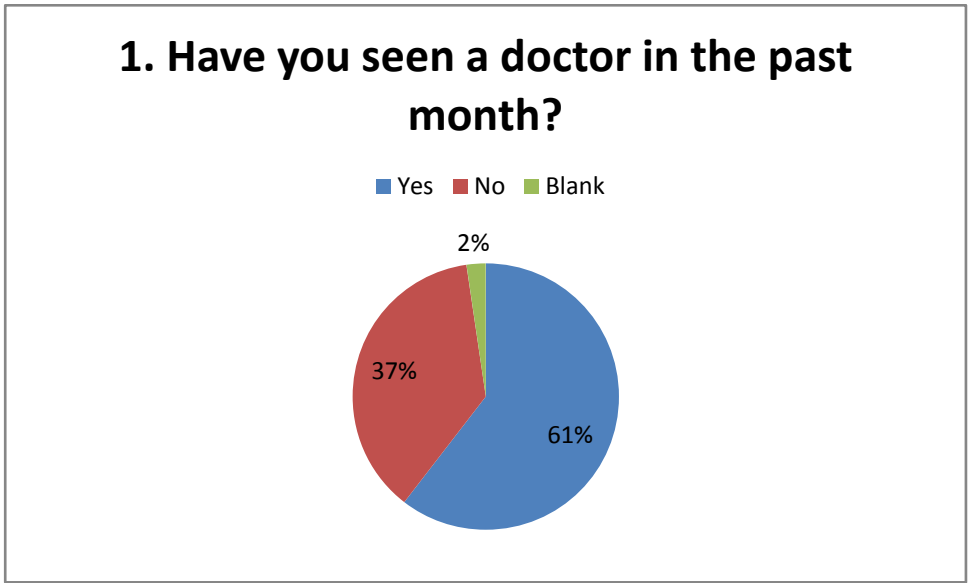
More female respondents completed the questionnaire (21 or 49%). However the sample was fairly equal regarding sex. 19 were male and 3 did not list their sex.



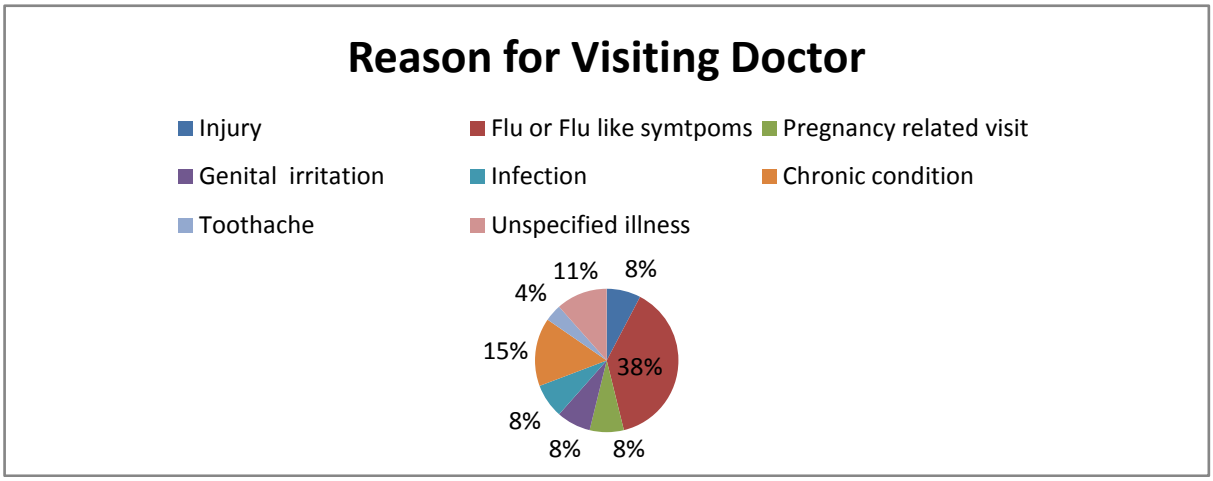
The average age of the 43 respondents was 33.5. The most common age group were individuals between the ages of 25-29.

Table 18. Age of Respondents

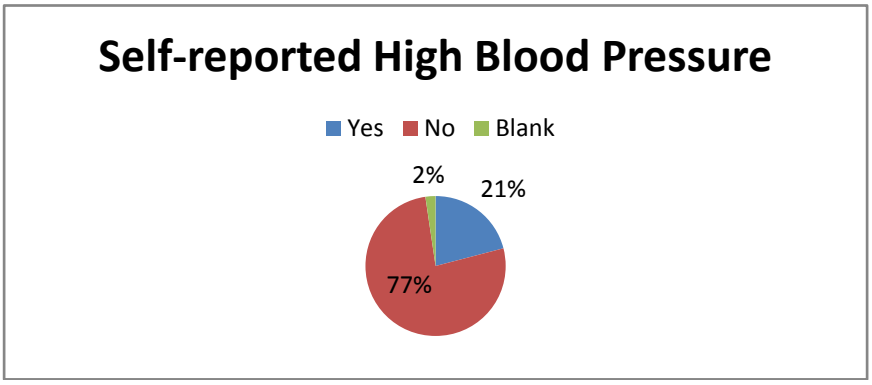
Age Group	Number	Percent
15-19	1	2.3
20-24	7	16.3
25-29	10	23.3
30-34	5	11.6
35-39	4	9.3
40-44	5	11.6
45-49	1	2.3
50-54	5	11.6
Unknown	5	11.6



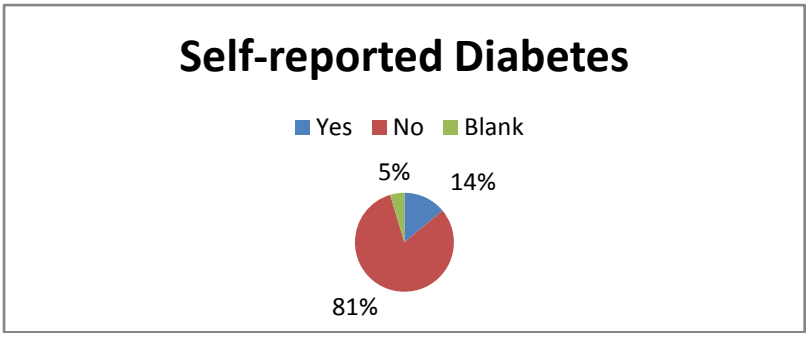
26 out of 48 respondents (61%) had seen a doctor within the past month while 16 (37%) did not. The most common reason for visiting the doctor among the 26 who visited one in the past month was reporting flu or flu-like symptoms (38%).



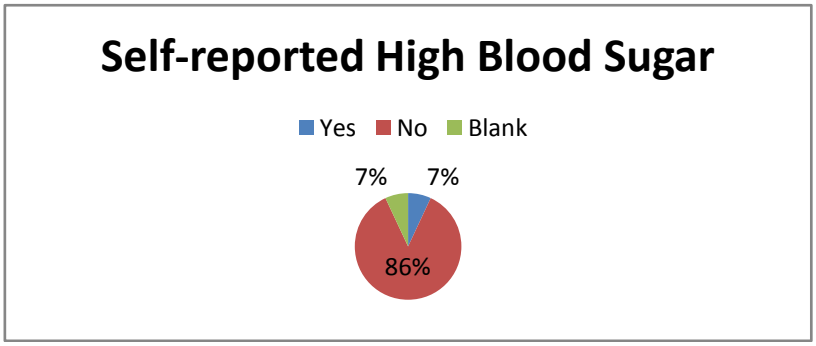
Respondents were also asked if they had ever been told by a doctor or nurse that they have high blood pressure, diabetes, or high blood sugar. 21% (9) reported high blood pressure.



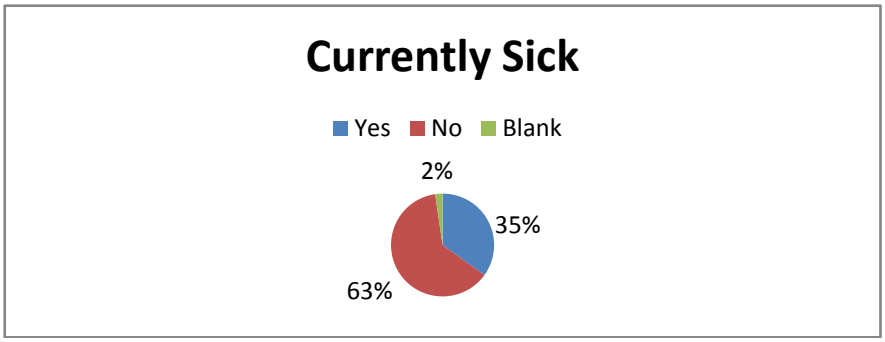
14% (6) reported having diabetes.



7% (3) reported having high blood sugar.

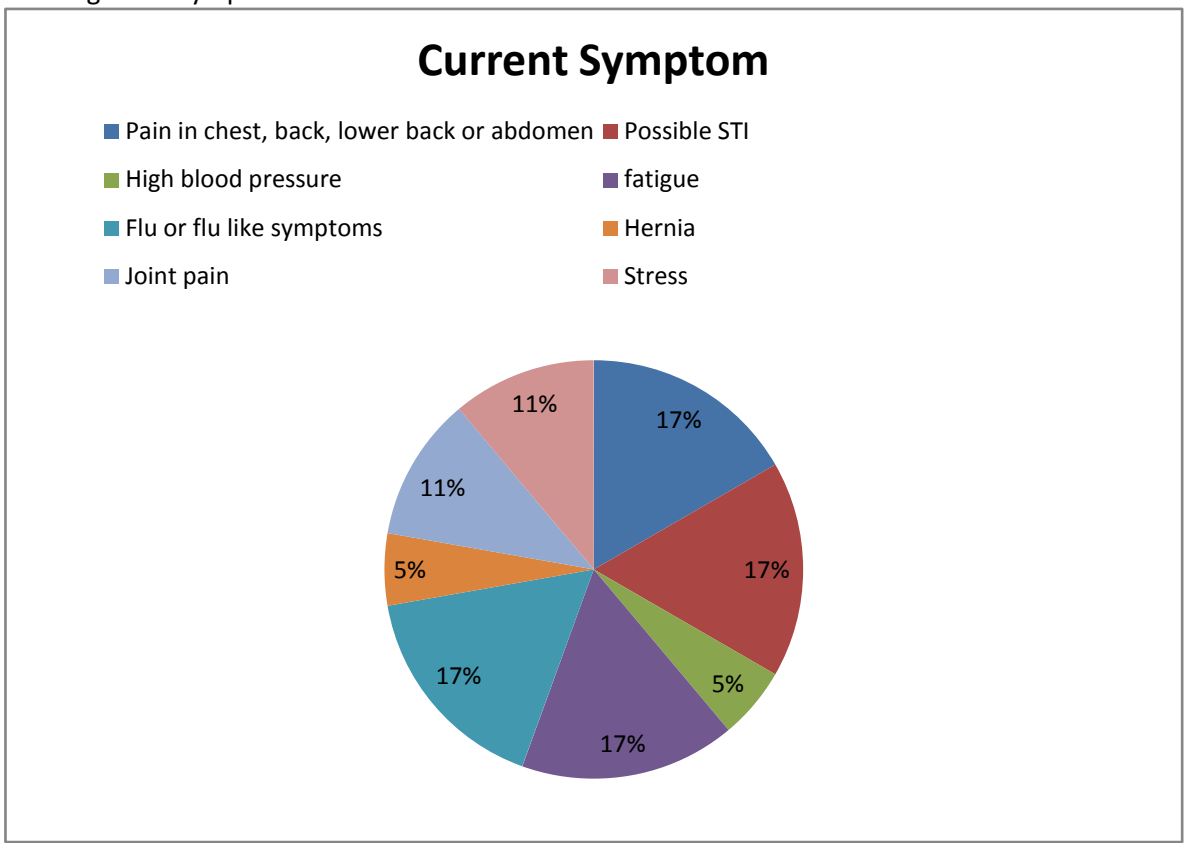


35% of respondents (15) reported being sick at the time of the survey. These 15 respondents were asked to describe their symptoms.

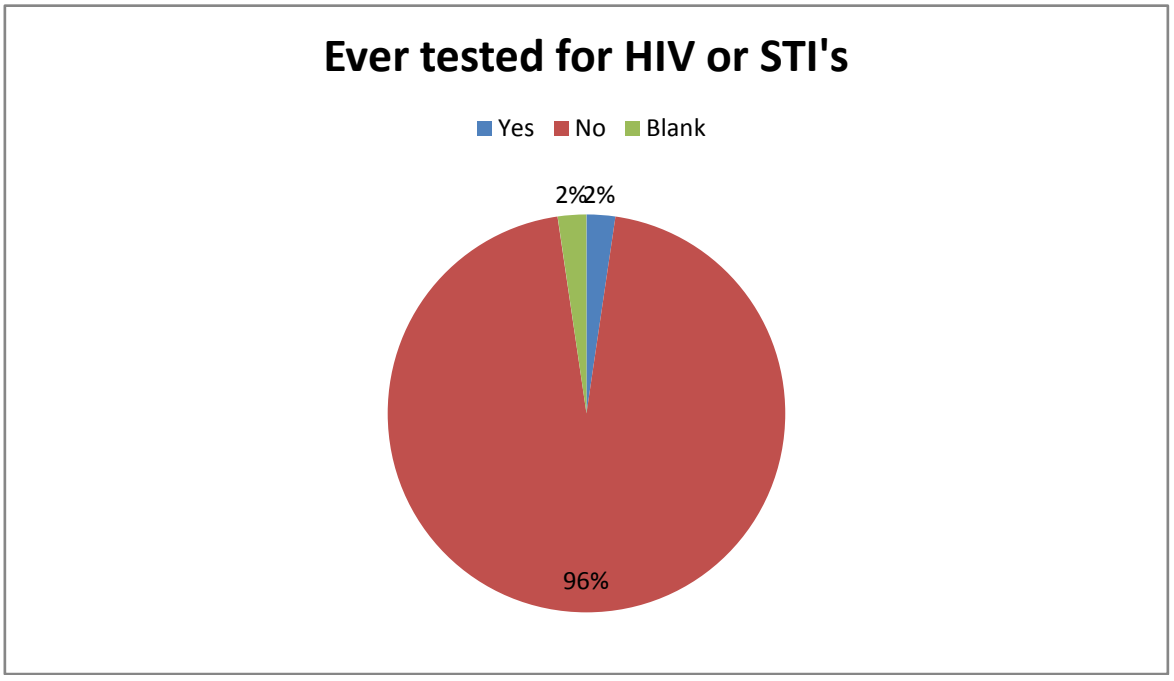


When describing what symptoms they were currently experiencing, the most common reported symptoms were 1) pain in the back, chest or abdomen, 2) symptoms consistent with STI's, 3) fatigue, and 4) Flu or flu like symptoms.

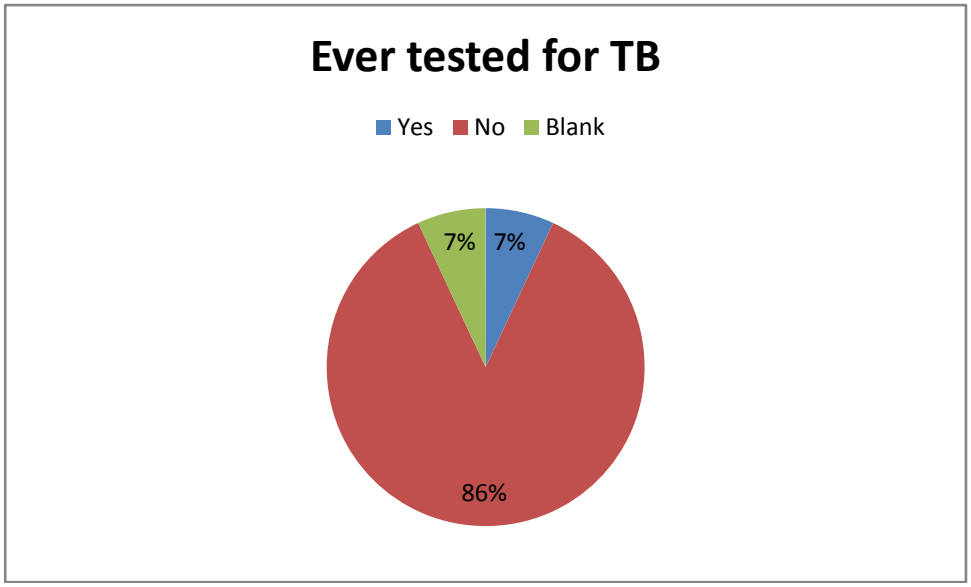
Figure 8. Symptoms



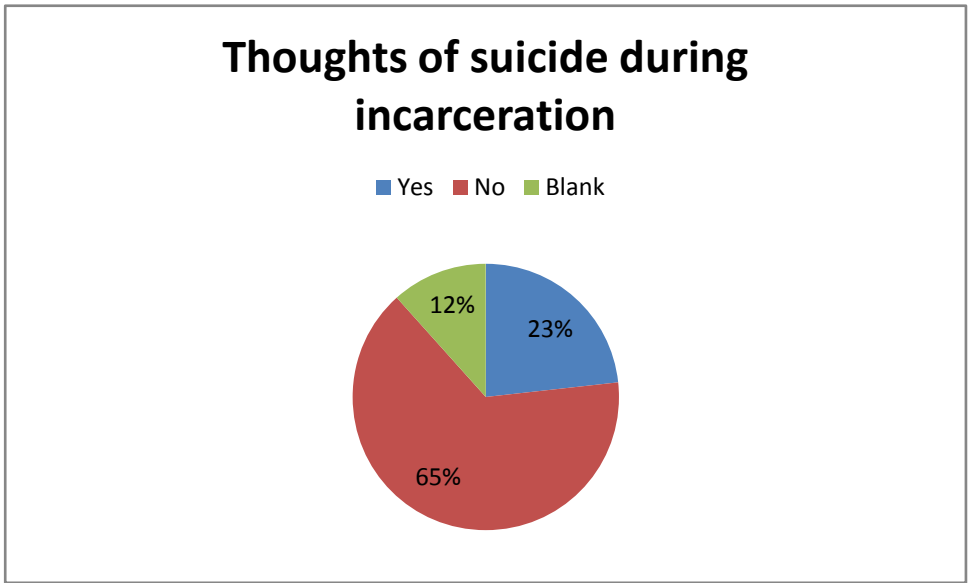
Respondents were also asked if they have ever been tested for HIV or STI's. Nearly all (96%) indicated that they have not received any testing.



Respondents had similar responses when asked if they have ever been tested for TB. 37 (86%) indicated they have never been tested.

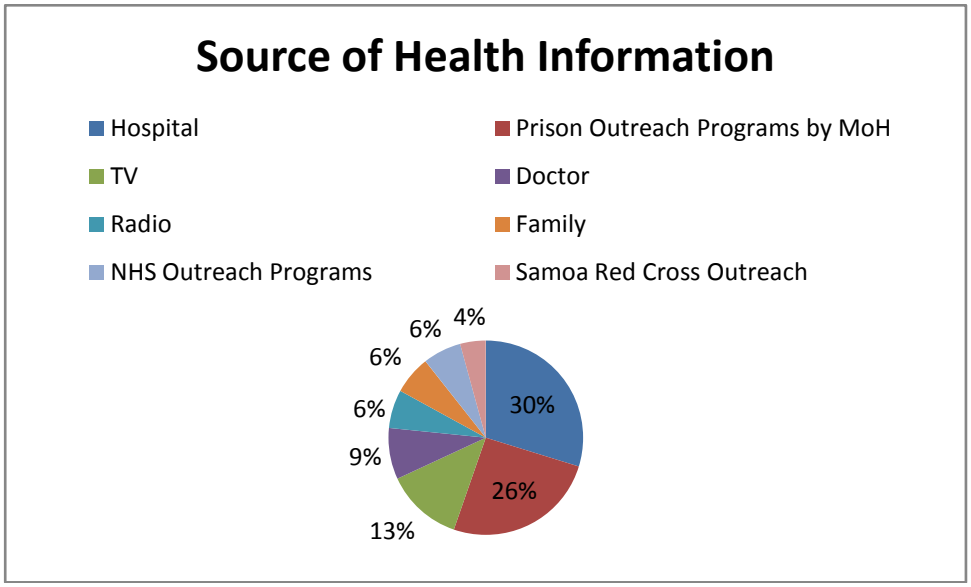


Respondents were asked if they ever experience thoughts of suicide during their incarceration. 10 respondents (23%) indicated they had thought of suicide.



Respondents were asked how many cigarettes they smoke each day. 23 respondents did not smoke (53%). Of the 16 respondents that did smoke the average amount was 23 cigarettes per day or 2.3 packs (regular size). 4 additional respondents did smoke but did not properly indicate how many cigarettes a day they have on the survey.

The main sources of health information for the respondents at Tafaigata were 1) the hospital and 2) the Ministry of Health outreach programs.



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

Studies have shown that gender inequality is quite common and a growing issue in Samoa. Domestic violence is highly prevalent. Many women in Samoa feel domestic violence is justified with 70% stating it is permissible for a husband to beat his wife if she is unfaithful to him, doesn't do housework, or disobeys him (State of the Human Rights Report Samoa, Ombudsman 2015). Overall, 46% of Samoan women who have ever been in a relationship have experienced one or more kinds of partner abuse (UN Women 2011). The most common form of spousal abuse is physical abuse (38%), followed by sexual abuse (20%) and emotional abuse (19%). The kinds of abuse experienced by women include: being slapped or having objects thrown (35%); being punched (18%); being forced to have sex (17%); insults (14%); being coerced into having sex (11%); and being kicked, dragged or beaten (11%) (UN Women 2011). About 30% of women who had been physically abused reported being injured, with the most common injury being abrasions and bruises (22%), followed by damage to eye or ear (9%); cuts, punctures and bites (9%); and losing consciousness (8%) (UN Women 2011).

Women who reported abuse were significantly more likely to report that their partner was opposed to contraception (15% compared with 5%) (UN Women 2011). A multi-country study conducted by WHO from 2000-2003 found that in Samoa that 10% of all women who had ever been pregnant were beaten during at least one pregnancy. Among women that were ever physically abused in their lifetime, 24% reported the abuse occurred during pregnancy. In 96% of those cases, the perpetrator was the father of the child. In terms of the health of these women, abused women who had ever been pregnant were significantly more likely to have had stillborn children (16% versus 10%) and miscarriages (15% versus 8%).

A legal analysis of violence against women found that there is a range of factors that increase women's vulnerability to violence, including economic opportunities, poverty, status and dependency. In patriarchal societies the status of women is determined by the social ranking system of the family and the kin group, with customary practices determining how women are treated. Female abuse is not seen as a violation of women's human rights as it is often justified as a means of discipline and correction, and dismissed as a private dispute within the family. Law enforcement agencies and the courts, until recently, have traditionally taken a hands-off approach to VAW, deferring to family privacy and the traditional dispute resolution processes. In small close-knit

communities where members are closely related, law enforcement agencies are reluctant to arrest perpetrators. Reconciliation of the parties is encouraged in both law and customary practice. The social costs of domestic violence on health care, the justice system, the economy, and on families remains high.

Fa'afafine community in Samoa are well accepted in our society. Faafafine (transgender) although very visible and vocal in their own way, they are also being faced with problems from particular the males of our communities. Sexual abuse, with physical abuse that these people experience is not properly recorded. Measures need to be formalised in order to gauge in a clear perspective of issues facing these group.

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

In 2016, 36.5% of all people screened were youth between ages of 10 and 24 years. Looking at prevalence rates from the last year of surveillance, it can be seen that STI's are rates are low. However this is misleading because Chlamydia testing was stopped in January 2016 because of stock outs of testing kits.

Table 19. Youth STI Surveillance 2016

	HIV		Syphilis		Hepatitis B		Hepatitis C	
Age Group	**Total tests**	**% Positive**	**Total tests**	**% Positive**	**Total tests**	**% Positive**	**Total tests**	**% Positive**
10-14 yrs	35	0	29	0.00%	40	0.00	29	0.00%
15-19 yrs	755	0	724	0.14%	751	0.27%	359	0.28%
20-24 yrs	1919	0	1867	0.00%	1915	0.78%	786	0.00%

Chlamydia rates in youth are particularly high. In 2015, 36.7% of all STI testing was done with youth ages 10-24. Approximately 22% of all positive cases of Chlamydia were youth ages 10-24. Particularly age group 20-24 had the highest number of positives cases (21.5%). Youth ages 10-24 made up 26.5% of all positive Chlamydia tests.

Table 20. Youth Chlamydia Surveillance 2015

Chlamydia	Tests	Positive Cases	Percent
10-14 yrs	3	1	0.33%*
15-19 yrs	202	23	11.4%
20-24 yrs	539	116	21.5%
All youth	744	140	18.8%
All ages	2025	528	26.1%

**High rate due to small sample size*

Male youth tend to have higher rates of Chlamydia than female. Less males report for testing which also skews prevalence estimates. This can be improved by improving voluntary testing coverage for all youth groups.

Table 21. Youth Chlamydia testing by Sex July-Dec. 2015

Age Group	Tests in Females	Positive Females	%	Tests in Males	Positive Males	%
10-14 yrs	2	1	50%*	0	0	0%
15-19 yrs	71	22	31%	3	1	33.3%*
20-24 yrs	248	102	41.1%	17	10	58.8%*
All Youth	321	125	38.9%	20	11	55%*

**High rate due to small sample size*

The actual Chlamydia rates in youth for 2016 are likely similar as Chlamydia prevalence has only increased in the past few years (2013- 24%, 2015- 26%).

The Demographic Health Survey 2014 surveyed 1,891 youth on their knowledge of HIV/AIDS and for male youth only, their knowledge of the source of condoms. Knowledge was defined by the survey as; 1) knowing that using condoms and limiting sexual intercourse to 1 uninfected person are prevention methods, 2) being aware that a healthy looking person can have the virus, 3) and rejecting 2 most common local misconceptions about the virus. HIV knowledge was relatively the same between male and female youth and very low. Male youth age 20-24 were more likely to know where to access condoms than those ages 15-19.

Table 22. Youth Knowledge of HIV/AIDs and Prevention

DHS 2014	Female	Male	
Age	***Comprehensive Knowledge of HIV/AIDS***	***Comprehensive Knowledge of HIV/AIDS***	***Percent who know a source of condoms***
15-19	3.6	3.5	25.1
20-24	7.3	8.3	52.7

Youth also have high rates of awareness of contraceptive methods. Particularly youth ages 20-24 have heard of modern methods of contraception. This knowledge has increased over the years across all age groups, especially regarding male condoms (37-51%).

Table 23. Youth Awareness of Contraception

Age Group	Percent of female youth who have heard of any method of contraception	Percent of female youth that have heard of any Modern method of contraception	Percent of male youth that have heard of any method of contraceptive	Percent of male youth that have heard of any Modern method of contraception
15-19	76.1	73.7	n/a	n/a
20-24	91.5	91.2	90.3	88.7

Sex education is a mandatory part of public college level curriculum enforced and monitored by the Ministry of Education, Sports and Culture (MESC). However, due to cultural and religious stigma towards sex and sexuality, in addition to poor curriculum enforcement and development by

MESC, sex and sexual reproductive health (SRH) education is poorly implemented nation-wide. In recent years, the health sector and its partners have been advocating for a comprehensive sexual reproductive health education in public schools to address HIV, STI's and sexual reproductive health awareness.

The stigma around sex, sexual reproductive health, and family planning services is largely tied to religion. Samoa is a predominantly Christian nation, with the majority of denominations advocating for youth to not engage in sex until marriage. Family planning services are also to a large extent discouraged due to conflict with religious values. This stigma prevents all age groups from accessing services, discussing SRH, discussing STI's, and hinders STI prevention.

For youth this is a particular barrier, as it is not socially permissible to be sexually active at younger age. Youth are therefore concerned about accessing SRH services, worried that it will affect how they are perceived by their communities or conflict with their families' values. Confidentiality is therefore also a major concern in Samoa, as with most small island nations. Youth accessing condoms at a health center could easily be seen by a relative or village member, who may also work at the district health center. So while youth awareness of contraception (including condoms) is high, youth utilization is low.

Table 24. Youth Use of Contraception

	Female		Males	
Age Group	**Ever use of any contraception**	**Ever use of Modern contraception**	**Ever use of any contraception**	**Ever use of Modern contraception**
15-19	0.8	0.8	8.6	5.6
20-24	17.6	16.9	22.1	20.5

COMMITMENT 8: Ensure that HIV investments increase to US$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enable

Total HIV/AIDs spending in Samoa totalled 577,149 USD in 2016. Government contributions made about roughly 19% of HIV/AIDS. Out of government spending, most of the funding was allocated to prevention and governance & sustainability. Prevention in 2016 consists of social and behaviour change programming. Governance and sustainability consist of health systems strengthening and HIV/AIDS research. Out of all government and development partner funding, the largest expenditures were for children and adolescents programming.

The government budget can only finance logistics for programming but donor funding is heavily relied upon for all other aspects of implementation and service delivery.

Table 25. HIV/AIDS Expenditures 2016

Activities	Government	Global Fund	All Other Internationals
Treatment Care and Support	all treatments are supported by UNDP Global Fund	in kind	in kind
Prevention	$52,000.00	$13,500.00	$27,500.00
Gender Program			$26,000.00

Activities	Government	Global Fund	All Other Internationals
Program for Children and Adolescents	$5,000.00		$157,000.00
Social Protection			$61,000.00
Community Mobilisation		$24,186.00	$70,000.00
Governance and sustainability	$41,000.00	$23,426.00	$57,037.00
Critical Enablers	$10,000.00	$9,500.00	
Total	**$108,000.00**	**$70,612.00**	**$398,537.00**

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

Testing and treatment for TB, Hepatitis B and C, and all STI's are coordinated through the Communicable Disease Clinic of the National Health Service. The National Reference Lab at TTM Hospital in Apia serves to process all testing specimens, notify providers of new cases, and provide surveillance data for public health. Testing and treatment services for TB and STI's are all provided for free of cost to all citizens. HIV and TB co infection screening is currently fully implemented with TB detected cases. Co infection for Hepatitis (B&C), diabetes and TB has yet to be fully implemented among all detected cases.

Hepatitis B&C

The majority of screening for Hepatitis B&C comes from mandatory ANC blood testing (59.7%) and mandatory immigration screenings (23.9%). The overall prevalence of Hepatitis B was 2.4%. The type of patients that make up the majority of total reported cases are ANC patients (40%), Upolu general patient screening (25%), and Immigration (20%). Patient Category represents the type of visit in which a patient was screened. It describes a location (Upolu and Savai'i screening) and purpose of a visit (ANC, STI Clinic, Immigration), and type of service provider (Private). All categories are exclusive of each other. The highest case detection rate among categories of patient visits proportionate to their caseload are unrecorded patient types (15.4%) and patients reporting to the STI Clinic (11.1%). Hepatitis C is currently 0.54% prevalence, with the majority of positive patients coming from Upolu general patient screenings. The highest case detection rate among categories of patient visits proportionate to their caseload is private patient screening (2%). However both Hepatitis B&C have low screening coverage in the population (3.9% and 1.9% respectively). This indicates there are a high number of undetected cases in the population.

Table 26. Hepatitis B&C Testing by Location

2016 Surveillance	*Hep B (HBsAg)*			*Hep C (HCV)*		
Patient Category	**Total tests**	**Number Positive**	**% Positive**	**Total tests**	**Number Positive**	**% Positive**
ANC Testing (public and private)	4506	72	1.60%	1027	1	0.10%
Upolu NHS Patient Screening	822	45	5.47%	694	11	1.59%
Savaii NHS Patient Screening	3	0	0%	2	0	0%
Private Patient Screening	304	15	4.93%	240	5	2.08%

2016 Surveillance	*Hep B (HBsAg)*			*Hep C (HCV)*		
Patient Category	**Total tests**	**Number Positive**	**% Positive**	**Total tests**	**Number Positive**	**% Positive**
(Upolu and Savaii)						
STI Clinic	72	8	11.11%	67	0	0%
Immigration Testing (public and private)	1805	36	1.99%	1640	3	0.18%
Unknown	26	4	15.38%	19	0	0%
Total Tests	***7538***	***180***	***2.39%***	***3689***	***20***	***0.54%***

The age groups that make up the majority of testing for Hepatitis B are 30+ (36.8%), 15--24 (35.4%), and 25-29 (21.6%%). The age group with the highest prevalence rate is 35+years. 42% of positive cases are above age 35 . In comparison, 31% of people screened for Hepatitis C were youth age 15-24 and 27.3% were age 35+. Adults age 35+ had the highest prevalence rate and represented the majority of positive cases (60%).

Table 27. Hepatitis B&C Screening by Age Group

2016 STI Surveillance	**Hep B (HBsAg)**			**Hep C (HCV)**		
Age Group	**Total tests**	**Positive**	**% Positive**	**Total tests**	**Positive**	**% Positive**
0-4 yrs	175	5	2.86%	100	0	0.00%
5-9 yrs	28	0	0.00	23	1	4.35%
10-14 yrs	40	0	0.00	29	0	0.00%
15-19 yrs	751	2	0.27%	359	1	0.28%
20-24 yrs	1915	15	0.78%	786	0	0.00%
25-29 yrs	1628	29	1.78%	718	1	0.14%
30-34 yrs	1152	41	3.56%	508	4	0.79%
35+ yrs	1621	76	4.69%	1006	12	1.19%
unknown	228	12	5.26%	160	1	0.63%
Total Tests	***7538***	***180***	***2.39%***	***3689***	***20***	***0.54%***

More females are screened for Hepatitis B and more males are screened for Hepatitis C. Female youth age 15-24 made up the majority of females screened for Hepatitis B, and females age 35+ made up the majority of females screened for Hepatitis C. For males, patients age 35+ made up the majority of cases screened for both Hepatitis B&C. Females age 35+ had the highest prevalence of Hepatitis B, and 0% of females tested positive or Hepatitis C. In males, Hepatitis B was most prevalent in ages 30-35+, and all positive male Hepatitis C infection were in males age 35+. This indicates that older men and women are at particular risk of any Hepatitis infection.

Table 28. Hepatitis B&C by Age and Sex 2016

Sex	**Females**						**Males**					
STI	**Hep B (HBsAg)**			**Hep C (HCV)**			**Hep B (HBsAg)**			**Hep C (HCV)**		
Age Group	**Tests**	**Pos.+**	**%**	**Tests**	**Pos+**	**%**	**Tests**	**Pos+**	**%**	**Tests**	**Pos+**	**%**
0-4 yrs	62	0	0	21	0	0	25	3	12	17	0	0
5-9 yrs	4	0	0	3	0	0	9	0	0	7	0	0
10-14 yrs	9	0	0	3	0	0	11	0	0	11	0	0
15-19 yrs	324	1	0.31	57	0	0	80	1	1.25	60	0	0

Sex	Females						Males					
STI	Hep B (HBsAg)			Hep C (HCV)			Hep B (HBsAg)			Hep C (HCV)		
Age Group	Tests	Pos.+	%	Tests	Pos+	%	Tests	Pos+	%	Tests	Pos+	%
20-24 yrs	857	6	0.70	90	0	0	159	1	0.63	138	0	0
25-29 yrs	710	9	1.27	92	0	0	131	6	4.58	106	0	0
30-34 yrs	502	9	1.79	66	0	0	94	9	9.57	72	0	0
35+ yrs	521	12	2.30	152	0	0	269	13	4.83	212	5	2.36
unknown	69	2	2.90	31	0	0	41	3	7.32	38	0	0
Total Tests	3058	39	1.30%	515	0	0%	819	36	4.40%	661	5	0.80%

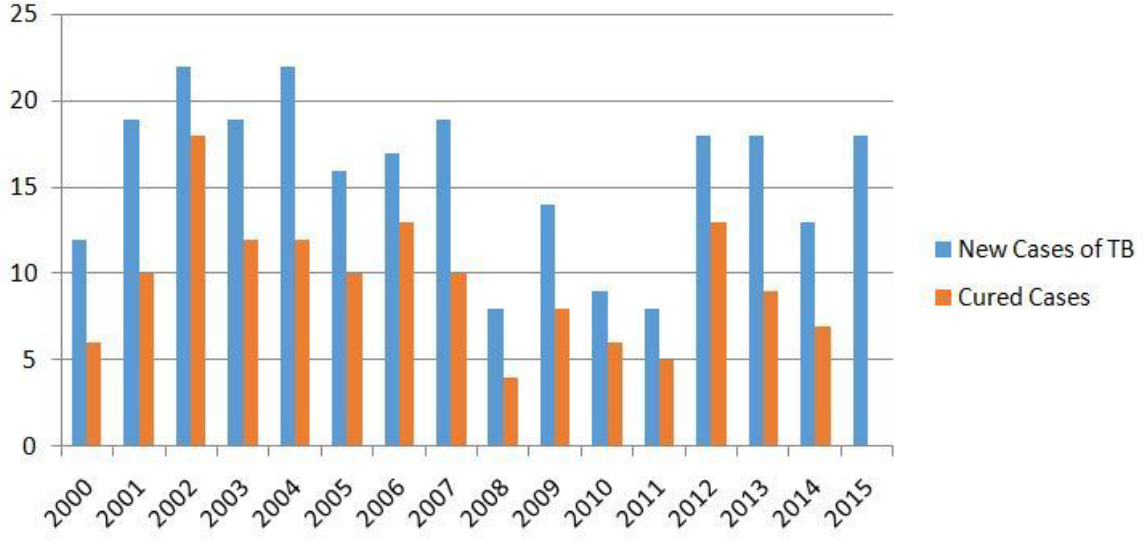
Tuberculosis (TB)

In Samoa, TB is an important public health issue despite low prevalence. In 2015, the annual number of new TB cases has doubled since 2011 (see Table 29). Though the number of cases remains relatively low compared to the estimated population, the identification and diagnosis of TB is poor and screening (especially in remote villages) is limited. In addition, the decrease in TB cases observed between 2009 and 2011 was followed by a sharp increase in cases from 2012-2015. Testing methods for TB is currently limited to sputum smear testing (SS) with long processing times. However, in 2015 the Ministry of Health received tuberculin skin testing supplies (PPD) from donor partners and are currently working to implement to testing with the National Health Service (NHS).

Table 29. TB Incidence from 2011-2016

	2011	2012	2013	2014	2015	2016
New Cases of TB	8	18	18	13	19	11
Extra Pulmonary TB	2	3	7	3	5	2
Cured Cases	5	13	9	7	9	2

Figure 8. TB Cases by Year



The main challenges in eliminating TB in Samoa include increasing testing, training of providers to accurately diagnose and treat TB, linking individuals to treatment, and increasing public awareness and education of prevention, transmission and treatment, and ensuring all TB cases are tested for HIV. Though TB shares some social determinants in common with HIV and STI's, there are a few social contexts that are unique. Since Samoan families are typically large and live in close proximity to each other, exposure to TB usually occurs between family members. Family members are also highly mobile between villages, which poses significant challenges to contact tracing, testing and treatment. Gaps in contact tracing often leads to undetected TB in the population that the Communicable Disease Clinic lacks resources to address. Co-infection testing is also lacking for the same reason.

However major improvements or TB/HIV co infection testing have been made between 2015-2016. Screening coverage went from 0% in 2015 to 82% by the end of 2016 due to improvements made in TB monitoring, direct observation of treatment visits to patients, and improvements in case management made by the Communicable Disease Clinic. TB testing has yet to be implemented with PLWHIV, and none have reported any symptoms.

Table 30. Co infection Testing Coverage.

	Target	2015	2016 (Jan-June)	2016 (full year)
TB-HIV1: TB/HIV-1: Percentage of TB patients who had an HIV test result recorded in the TB register	65%	0%	0.04%	82%

Treatment for TB is aligned with WHO guidelines;

Table 31. TB Regimens by Population

TB Type	Preferred Treatment Regimen
TB Disease in HIV- person	6-9 months of isoniazid (INH), rifampin (RIF), ethambutol (EMB), pyrazinamide (PZA)
TB Regimen for Drug Susceptible TB	Initial Phase: Daily INH, RIF, PZA, and EMB* for 56 doses (8 weeks), Continuation: daily INH and RIF for 126 doses (18 weeks) or two times weekly INH and RIF for 36 doses (18 weeks)
Drug Resistant TB (Resistant to INH or RIF)	Drug resistance is proven by drug-susceptibility testing. However, since this testing can take weeks, treatment should be started with an empirical treatment regimen based on expert advice as soon as drug-resistant TB disease is suspected. When the testing results are known, the treatment regimen should be adjusted according to the results.
Multiple Drug Resistant TB	Bedaquiline
TB Disease in HIV+ person	Cannot take RIF if on ARV, regimen determined by provider
Latent TB Regimens by Drug	
Isoniazid	9 month Regimen: Daily, Preferred treatment for: Persons living with HIV, Children aged 2-11; Twice Weekly for Pregnant Women (with pyridoxine/vitamin B6 supplements)
Isoniazid (Alternative	6 months Regimen: Daily or twice weekly

TB Type	Preferred Treatment Regimen
Isoniazid and Rifapentine	3 month Regimen: Once weekly, Treatment for: Persons 12 years or older Not recommended for persons who are: Younger than 2 years old, Living with HIV/AIDS taking antiretroviral treatment, Presumed infected with INH or RIF-resistant M. tuberculosis, and Women who are pregnant or expect to become pregnant within the 12–week regimen.
Rifampin	4 month regimen: Daily

Cervical cancer

Cervical cancer is low in prevalence, but like many other diseases, this is due to low screening rates and poor population screening strategies. There were 6 per 1,000 admissions for cervical cancer in 2016. Cervical cancer is the third highest type of cancer admission. Treatment is largely done through the overseas treatment scheme and most therapies are not available in Samoa.

The HPV vaccine is of great interest to health sector procurement due to the cost-effectiveness of preventing HPV transmissions in a context where access to treatment is challenging and non-existent for families of low socio-economic status.

The situation with human rights in relation to HIV

In 2009, a legal review was conducted by UNAIDS to identify gaps in current legislation regarding HIV and STI's. Many findings are still relevant with a few areas that have been addressed in newer legislation (like the Crimes Act 2013). This section uses that analysis and more recent legislation to provide information on human rights law in relation to HIV and STI's. Much of the law in Samoa does not have specific legislation to address HIV and STI's, but general powers grant by the current legislation can be used to protect rights in the absence of specific clauses.

Public Health Law

There is no legislation the specifically empowers public health authorities to provide services for HIV and STI's. The Health Ordinance 1959 enables health authorities to quarantine, test and treat individuals on the basis of protecting population health. There is also a general power to medically examine, also supported by the Healthcare Professions Registration and Standards Act 2007. Generally there is no regulation for informed consent of individuals for testing. However, informed consent is clearly defined with all relevant guidelines in the HIV, AIDS and STI Policy 2017-2021 for all service providers involved in the National Response to HIV, AIDS and STI's. This document also states that testing should ideally be voluntary or provider initiated. However, mandatory testing of any group is not prohibited by law. Pregnant women and infants are required by policy and practice to have HIV and STI screenings. However, this is not mandated by law.

Immigration Law

Samoa as a sovereign country has its own laws and policies in place for protection of its own people from being infected with the HIV virus from a foreigner. For temporary and permanent resident applications, blood testing which in includes HIV and Hepatitis B is mandatory. A visitor's visa does not require any screening. Screening is done in compliance with International Health Regulations (IHR). This is to ensure that our health authorities are alert of any new incoming HIV+ case and can then arrange testing, treatment, care and support while in Samoa. There are no legal grounds to deny residency on the basis of sero-status. Laws and policies only apply when there is willful and therefore criminal transmission of HIV. In such a case, malicious intent must be proven

(Crimes Act 2013). As of 2015, the immigration customs form has removed the question on self-reported HIV status and replaced it with Zika virus monitoring questions.

Criminal law

Sex work is currently illegal in Samoa with no immunity for carrying condoms. Homosexual acts and transvestism are no longer criminalized under the Crimes Act 2013. However the establishment of business or public spaces that promote homosexual acts are identified in the current Crimes Act. There is also no legislation that specifically criminalizes the transmission of HIV. However it can be prosecuted under the Crimes Act as "causing grevious bodily harm" and malintent must be established. There is also no specific legislation regarding blood safety and accountability for such transmissions.

Prison and Correctional Law

There are no legal provisions for provided testing or treatment services to prisoners, or confidentiality of prisoners' health information. In terms of early release, HIV is not a valid legal reason because ill-health is not an identified criterion for early release.

Anti-discrimination

Vulnerable groups are not identified in the law, and therefore do not have non-discrimination protections. This includes fa'afafine, MSM, sex workers, prisoners, youth, people with disability, and PLWHIV. There are also no laws granting women the right to non-discriminatory access to health services. Same sex relationships are not legally recognized.

Abortion is illegal except if the birth poses serious physical or mental health threats to the mother, the mother is really young, the pregnancy is a product of rape or incest. However, access to abortion services is non-existent in the country, so even in legal circumstances abortions are not procured.

No laws exist that require children to be provided with information and education about HIV and STI, or to be provided with condoms and prevention materials.

Mandatory HIV screening for employment is not prohibited, but is universally not practiced as no distribution mechanism exists outside of health sector testing and treatment services for patients. There are also no universal infection control measures for health services, but international guidelines and standards are used in the absence of law. The Occupational Safety and Health Act 2002 requires that employers provide safe working conditions for employers which includes infection control. There are no unfair dismissal rights for HIV positive workers, and there are no confidentiality provisions of employee health information. There is also no recognition of occupational HIV transmission or grievance recourse.

Privacy and Confidentiality

There is no legislation that governs health information privacy and confidentiality. Health data is owned by the service providers that create the patient record. However, the Healthcare Professions Registration and Standards Act 2007 dictates that patient and provider confidentiality is to be observed in professional ethics and practice . Common law allows providers to disclose medical records in limited public interest situations to prevent injury of third parties. HIV is classified as a notifiable disease and therefore reported to relevant health authorities.

Best practices

In 2016, several programmes were and strategies were implemented that had not been launched in prior years in order to address challenges that arose during 2015. This section presents the successes of programming in 2016, specifically what methods of delivering interventions worked. These lessons have been incorporated into the work plan going forward to 2017.

i. Integrated approach to sexual health

The Integrated Community Health Approach Programme (ICHAP) received overwhelmingly positive reception in the communities that participated. This was due to how the information was delivered. Sexual health topics are very sensitive in Samoa and have to be marketed in a way that they do not conflict with cultural and religious values. One method of accomplishing that is to deliver sexual health education with other health issues. In ICHAP's case, this meant including climate resilience, maternal and child health, family health, and Tuberculosis prevention. This made communities more receptive to the intervention as sexual health was marketed as an integral part of overall good health.

ii. Scale-up of TB care

The 6 month PUDR Report 2016 revealed that there was poor performance in treatment success rates and co infection testing for TB/HIV. Many meetings were held with the Communicable Disease (CD) Clinic to identify the underlying contexts of these indicators. It was determined that the issue was a mix of 1) poor M&E protocols, 2) poor implementation of testing protocols, and 3) the remote location of many TB cases and therefore challenges to promoting patient adherence. These issues are also tied to the fact that the CD Clinic is understaffed. The solution was for National Programme staff to accompany to the TB outreach visits to assist in M&E, implementation of patient protocols and patient data collection. This allowed for a mutual exchange and understanding of data collection/ reporting challenges experienced by both MoH and NHS. This led to an update of reporting templates and focus on the sharing of raw data to improve quality assurance.

iii. Small scale M&E methods

Due to limited resources and staff for data collection, as well as the on-the-ground nature of delivering services and interventions, conventional M&E methods are often difficult to implement or are not sustainable in a community context. In order to initiate the collection of needed data identified by national M&E frameworks, National Programme staff decided to use community interventions as opportunities to collect data from rural areas which are often underrepresented in research studies. Short surveys were distributed to villages during programmes to both monitor the implementation and collect health data for M&E. Surveys were 3-10 items long, worded simply in Samoan to ensure more people could understand the survey and more would be willing to respond to the questions. All of the cases were added together at the end of the year to establish proxy baseline data for national indicators. This grass-roots approach to M&E was very successful in terms of response rates and teaching both participants and programme delivery staff on the value of collecting data. That data comprises most of the data included in this narrative. This M&E approach was also an opportunity to build confidence of M&E staff in collecting data.

iv. Infrastructure development- Primary Healthcare Centre

Opening of the Primary Healthcare Centre, Apia, Samoa

In November 2016, the Primary Healthcare Centre was opened on the grounds of TTM Hospital in Apia, Samoa. The purpose of the building was to emphasize primary healthcare as a mean of preventing costly, prevent advanced stage conditions, and lowering the caseload of the emergency department. The Communicable Disease Clinic which coordinates and delivers testing and treatment services nationally for HIV, AIDS, STI's and TB is now housed within the Primary Healthcare Centre. The new facilities for the CD Clinic are much more adequate for operations, with more computers for health information. These facilities are more accessible and recognizable to the public. The CD Clinic is also housed with the vaccination and primary healthcare units so that visitors to the CD Clinic can be easily linked to other needed services.

v. Monitoring and evaluation manuals developed and linked

In order to improve health information, performance of the health sector, and improve knowledge of population health relating to HIV, AIDS, STI's and TB, the National Programme staff were tasked with developing an M&E manual for HIV, AIDS, STI's and TB and an M&E manual for the health sector. Boths manuals were consulted on with partners and stakeholders. The HIV, AIDS, and STI M&E Reference Manual is scheduled to launch on 24th March 2017 (World TB Day). The HIV, AIDS and STI manual is linked to the health sector indicators, so that reporting of results is unified in sector and donor reporting.

vi. Expansion of partnerships with traditional community structures

The infection control consultations with tattoo artists (tufuga) in August 2016 were historically the first partnership between the government and tattooists. The tufuga community was very receptive of MoH's efforts to establish a working relationship on infection control, creating a register for accredited tattooists, and publishing health guidelines for tattooing. The guidelines are expected to launch 24th March (World TB Day). This partnership showcased the willingness of traditional community groups to engage in prevention and that such relationships should be more utilized going forward.

vii. Scale up of prevention efforts with Sex workers and fa'afafine

There was also an increase in prevention work with key populations during the reporting period. The Ministry of Health assisted with facilitating the Pacific Multi-country Mapping and Behavioural study that provided key data on fa'afafine, MSM, and female sex workers. The MoH also sponsored the Annual Fa'afafine Pageant for health awareness, held the National Fa'afafine Health

Forum on community issues, and supported all of the condom distribution activities during World AIDS Day and National Fa'afafine Week. These partnerships with the fa'afafine community allowed MoH to request from Global Fund a Fa'afafine Drop-in Centre and program coordinator position in order to create clinical services targeting this population. The position has been advertised but has not yet been filled. Samoa Family Health Association has agreed to house the drop-in centre.

Major challenges and remedial actions

(a) progress of key challenges reported in the 2016 Country Progress Report;

The challenges identified in the 2015 reporting period were ongoing in 2016. This section summarizes the current status of those challenges during the 2016 reporting period.

Table 32. Key Challenges

2016 Key Challenge	Progress
1. The national reference lab, thus far the only facility on the island capable of processing test results, is understaffed, leading to limited surveillance reports that they are able to deliver to MoH. This has resulted in surveillance data periods for which disaggregation by sex and age are not available. Program staff at MoH have taken the lab's raw data to supply the aggregation and analysis themselves in order to meet reporting needs, but this is time consuming and has not remedied all the data gaps.	National Programme staff continue to produce reports from reported raw data. To improve the accuracy of the data, the final reporting template has been revised to better fit raw data categories. An electronic reporting tool prototype has been developed and a trial is planned with both the Lab and the CD Clinic.
2. Low voluntary testing rates from the general population also limit the generalizability of our current surveillance data. Most of the cases come from antenatal women, which represents only 29.4% of the estimated ANC population. Improving the lab's capacity is foundational to being able to increase testing rates	Multiple campaigns in 2016 and 2017 focus on increasing awareness and use of HIV/STI testing services. Testing information is distributed during all community outreach programmes and media campaigns. Research on low ANC attendance has been presented to the National Health Service who are working to improve the current rates based on MoH data.

2016 Key Challenge	Progress
3. Compliance from the health sector has also hindered data collection for M&E. Quarterly M&E visits to providers are conducted to collect data and ensure quality of data. Providers are often reluctant to report the data, state that they don't have time to collect certain data, or haven't been told by management about MoH's visit and purpose. This puts MoH in a precarious position in which MoH does not want to burden a fragile health delivery system, but at the same time needs data for monitoring and regulation. Many providers are also of an older generation and do not understand the importance of data collection as well as how to store the information electronically.	Rather than rely on templates that may be confusing for providers, MoH has emphasized the need to report raw data, so National Programme staff can do the analysis and quality assurance. Staff have been using a tablet to capture logbook data quickly to reduce the burden of M&E visits of healthcare providers. Logbooks for all health centres have been printed and distributed with data columns already printed and formatted for easy M&E data collection.
4. The health information in Samoa is currently paper based. Providers record individual patient files, and on a monthly to bi-monthly basis, they fill out logbooks in a MoH template with specific cases and variables of interest for monitoring and regulation. This system is slow, resource intensive and has a high risk of error.	Temporary electronic reporting tools have been identified are being consulted with healthcare providers. MoH staff are also providing technical support regarding data collection to the e-Health project set to be implemented within 10 years. This project aims to make a national electronic health records system
5. Key populations are not recorded by laboratory intake forms that produce surveillance data. Therefore disaggregation by key population is not available.	Targeted screening programs for key populations have been planned so to obtain this data.

(b) challenges faced throughout the reporting period

- **Delay in funding disbursement until July 2016**

Funding for the HIV, STI and TB National Programme was not disbursed until July 2016 due to a delay in the acquittal process. Activities were all delayed for quarters 3&4. Funding from WHO was used to support infection control consultations with tattooists in Upolu and Savai'i. Programme staff used the delay period to prep implementation to maximize utilization in quarters 3&4.

- **Female sex worker distrust of programming**

During the data collection of the UNDP and University of New South Wales Pacific Multi-country Mapping and Behavioural Study, which focused on sex workers, MSM, and fa'afafine, there was an incident that affected confidentiality of participants. The female sex workers reported to MoH staff that one of the research assistants threatened to expose them to their communities.

Internal investigation could not determine if these allegations were true, but the sex worker community trust of MoH was greatly damaged. The MoH had facilitated the study and the female sex workers were mistrustful of MoH's ability to secure their confidentiality, as sex work is currently illegal. This led to their refusal to participate in MoH outreach programming. The ministry is currently designing alternative methods to deliver condoms and IEC materials until the trust of this community is regained.

- **Discontinued Clamydia testing**

Chalmydia testing kit stock-outs due to National Health Service mis-managing funds led to no Chalmydia testing done for the entire 2016 period. Chlamydia is the most prevalent STI and the country's foremost sexual reproductive health challenge. With a presumptive treatment protocol for antenatal mothers and their partners currently implemented, it is imperative that the rates of Chlamydia are monitored with national laboratory surveillance.

- **Barriers to condom distribution in prison facilities**

Implementation of the ICHAP revealed that while prison administration is supportive of education programmes being conducted at prison facilities, condom programming is potentially problematic. MoH staff attempted to distribute condoms to participants in the outreach programme, but prison administration stated that distributing condoms would promote behaviour discordant to their rehabilitation. The administration requested that they deliver the condoms to inmates themselves. However, there is no way for MoH to monitor if all inmates have access to condoms.

- **Lack of co infection testing TB, HIV, and other STI's**

For TB, treatment success rates and co infection testing coverage among TB patient for HIV were significantly low at mid 2016. The rates were improved by both case management interventions and M&E improvements. However, issue of co infection testing coverage for multiple diseases still exists (TB, HCV, and HBV among PLWHIV, and TB among diabetes patients). Patients are referred to TB testing only when they present symptoms, which creates a greater window for exposure and increases the scope of contact tracing.

- **Service delivery barriers to case management and treatment of TB**

The geographic dispersion of TB cases is very wide, encompassing Upolu and Savai'i rural communities. The regular delivery of treatment, monitoring, and regular case management is therefore very difficult with an understaffed CD Clinic. TB site visits are very time consuming, and resources for these visits are not always available.

- **Ongoing low voluntary testing coverage**

As discussed in previous sections, voluntary testing remains low. This is due to population concerns for confidentiality, lack of knowledge of testing services, and constrained resources to expand population surveillance efforts. This creates high undetected rates of HIV, STI's and TB.

- **Ongoing low knowledge, awareness, and coverage of programming in rural populations**

Multiple sources have shown that people in rural areas have the least access to services, lowest level of knowledge of prevention, and have higher rates of STI's. Due to the remote location of some villages, rural communities receive the least amount of coverage of services across all sectors.

- **Lack of M&E data collection and reporting**

The capacity, resources, and coordination of M&E within the health sector and amongst all stakeholders and partners have been longstanding needs of the national response. Both government, NGO, and private sector organizations lack mechanisms to collect and share data. This

has affected the performance indicators for the health sector (both national and international). Improving M&E as a means to better track progress of the national response and health outcomes, better coordinate resources, and improve the sustainability of funding has been identified as a priority area.

(c) concrete remedial actions

The numerous actions have been added to the 2017 work plan to address challenges that have been ongoing for many years in addition to those encountered in 2015.

2016 Challenge	Remedial Activities in 2017 Work Plan
Female sex worker distrust of programming	Specialized programmes for vulnerable groups
Lack of co infection testing TB, HIV, and other STI's	TB DOTS Visits with CD Clinic Staff
Service delivery barriers to case management and treatment of TB	• TB DOTS Visits with CD Clinic Staff • Mobilization of TB community volunteers
Ongoing low voluntary testing coverage	• Implementation of HIV saliva rapid diagnostic test kits • Training of providers on test kits • Integrated Community Health Approach Programme (ICHAP) to be launched again targeting new villages in Upolu and Savai'i
Ongoing low knowledge, awareness, and coverage of programming in rural populations	Integrated Community Health Approach Programme (ICHAP) to be launched again targeting new villages in Upolu and Savai'i
Ongoing lack of M&E data collection and reporting	• Subnational M&E visits • Equipment support for M&E activities • TB DOTS M&E data collection • Development of an electronic data collection and reporting tool for CD Clinic and Lab

Support from the country's development partners

The Global Fund to Fight HIV, TB and Malaria is the main funder of Samoa's national HIV/AIDS programs, with management provided by UNDP. The UNFPA puts emphasise on SRH issues with family planning being one of the main initiatives supported. The IPPF supports mostly the work carried out by the SFHA, and International Red Cross Society injected funds for Samoa Red Cross Society work for HIV/AIDS. WHO provides occasional finding for specific allocations and this year helped to fund the infection control in traditional tattooing initiatives. The ultimate objective of

these donors is in line with what our government had as its vision in its Strategy for the Development of Samoa (SDS 2017-2021) ie: "Healthy Samoa". Taken from this vision the development partners are vigilant on where the country needs are and assist in achieving that vision, at the same time achieving targets for a HIV/AIDS free Samoa.

From August to October of 2016, UNDP funded a research study conducted by the University of New South Wales which was facilitated by the Ministry of Health. This Pacific Multi-country Mapping and Behavioural Study was aimed at collecting data for key missing indicators on fa'afafine, sex workers, and men who have sex with men. Population estimates were also provided by the study. The MoH was able to use this data to plan interventions based on the needs identified in the sample, as well as report on key population indicators that were missing from previous rounds.

For World AIDS Day 1 Dec. 2016, UNDP also provided the national programme with a media package for awareness and advertisement of testing services. Documentaries and MoH clips were also aired during that week with the media package budget.

Monitoring and evaluation environment

Monitoring and evaluation for HIV, STI's and TB is a multi-sectoral effort. Data collection is coordinated by MoH with all stakeholders and partners involved in the national response. The primary source of data comes from the national lab located at TTM Hospital in Apia. All laboratory testing in the country is conducted there, with samples sent to New Zealand labs when kits or assays are unavailable.

Programming through HIV, STI and TB National Programme always involves an NGO or government ministry as implementing partner. In 2016, MoH partnered extensively with;

- Samoa Fa'afafine Association
- Samoa Family Health Association
- The Ministry of Women Community and Social Development
- The National Health Service: Communicable Disease Clinic- Laboratory Services - Pharmaceutical Services
- Samoa Red Cross Society

In addition to monitoring data collected on programmes by the MoH, data is also reported from all partners and stakeholders (especially those listed above for 2016).

Data is also collected every 5 years on HIV knowledge, awareness, and sexual behavior within the Demographic Health Survey though Samoa Bureau of Statistics. Research studies also provide indicator data for M&E on an irregular basis.

Until 2016, the National Programme had no M&E framework for sexual health data outside of the framework of the UNDP/Global Fund program management. The health sector M&E framework (2010) contained only prevalence indicators relevant to HIV and STI's. A framework and M&E manual for HIV, STI's and TB was drafted in 2016 and is set to launch in March 2017. This manual sought to create a universal list of indicators that satisfied the needs of the health sector, donor partners, and was formatted to the data collection processes already in place for HIV, STI's and TB.

Data collection for sexual reproductive health in general faces several ongoing issues;

- Stigma surrounding sexual health, family planning, STI's, HIV, and therefore prevention services prevents attendance, access, and public discussion and promotion of need services to populations
- Lack of a comprehensive sexual health education and population awareness of disease risk and healthy behaviour
- Reporting bias is highly prevalent as the island community is small and socially interconnected. People do not feel confidentiality can be maintained around sensitive

issues in this context, and are more likely to report behaviours and feelings that do not conflict with religious and cultural beliefs. This makes it difficult to monitor accurate behavioural risk factors due to reporting bias.

- Research, M&E, statistics, and survey data collection are all areas where the health sector's human resource capacity and training are lacking. In addition to lack of skilled data officers, there is also a lack of general human resources in health. This results in very few personnel do data collection that would optimally involve a whole team of people (clinical, technical, and administrative). Most personnel in the health sector are tasked with numerous other functions, and therefore lack the time needed for data collection.

Challenges

The HIV, STI, and TB Monitoring and Evaluation Reference Manual (2017) was consulted with the health sector on numerous occasions. This clarified and highlighted challenges moving forward with the implementation of the M&E Manual;

1. Both donors and health sector organizations rely heavily on population based surveys for performance measures and indicator data. These data are available every 4-5 years through surveys implemented through Samoa Bureau of Statistics. However, as the health sector moves from awareness campaigns to programming aimed more at behaviour change, new data are need more frequently to track the impact of interventions. Annual schedules are preferred for many indicators.
2. Many health sector partners, particularly NGO's, lack capacity for data reporting and collection. However, rural health centres often have few staff with little to no capacity for data collection and reporting.
3. The targeted age groups of 0-14, and 15-19 include youth that fall below the national age of consent for accessing health services. This makes both data collection and service delivery an issue where parental consent is needed while simultaneously the youth's confidentiality must be protected.
4. Collecting data on key populations is difficult when they do not have legal status. In the case of sex workers, commercial sex work is illegal making it very difficult to get research studies and interventions approved, because of the confidentiality risk. For fa'afafine (transgender males), third gender status is not nationally recognized. Therefore data that includes that gender category is captured in program records and cannot yet be monitored nationally in surveillance. In the case of fa'atamaloa (transgender females), this label is usually one that the community uses to indentify an individual rather than a term for personal identity. Therefore, service providers are faced with the challenge of identifying these patients during clinical data collection.
5. Without health information confidentiality and privacy legislation in place, M&E data collection poses serious risks and ethical dilemmas. Sensitive health data is legally the property of the clinician or officer that creates the record or database. This poses serious risks as there is no legal framework of accountability if such data were to be made public. Exposure of an individual's sexual health information could result in severe social repercussions, due to the heavy stigma against HIV, STI's and sexual health. There is a concern that expanding data collection without legal protection methods is unethical.
6. There is also no mechanism or infrastructure for a national electronic system of health data. This leads to duplication, loss to follow-up, unavailable health/treatment

histories. Since M&E data collection from the health sector is all paper based, the data collection process is more time-consuming and resource expensive.

Remedial actions

Several remedial actions to address M&E challenges have been planned for 2017-2018;

1. Encourage donors to accept small scale, sub-national monitoring research studies for population estimates in reporting. MoH plans to deliver data collection alongside program implementation so that health data is collected during community events throughout the year. Implementation with the National Programme is always on a sub-national level, targeting key and at-risk communities. Obtaining a sample from targeted villages rather than national is therefore appropriate.
2. In addition to conducting health sector M&E trainings, MoH plans to conduct trainings with key stakeholders and partners to develop M&E capacity.
3. MoH has also planned several programmes targeting youth with capacity building behaviour change interventions, to support clinical screening.
4. Key population data will come from informal, small scale outreach programmes to protect confidentiality. A drop-in centre for these groups is also to be established in 2017, as a means of delivering condoms, lubricants and IEC materials. Further programming will seek to confidentially link these individuals to doctors once rapport has been established.
5. Legal reviews for gaps in legislation to protect key populations are scheduled for the end of 2017. Confidentiality and privacy regulations are currently being developed and reviewed as part of forthcoming National Hospital Standards.
6. The staff of the National Programme continue to provide technical assistance to the team at MoH responsible for implementing an e-health system. The timeline for procurement and operationalization is still uncertain. The National Programme also is developing an electronic data collection and reporting tool with the Communicable Disease Clinic and the National Lab.
7. Since many indicators within the national and donor M&E frameworks have not had any data collected in the past 5 years, MoH is preparing to launch a sub-national data collection exercise to collect a lot of this missing data in Sept. 2017. This exercise is meant to trial core indicators, establish baseline data, and see how M&E can be tailored to existing systems.

Improving M&E Capacity

As previously mentioned, the main barrier to improving M&E is the lack of capacity for data collection, analysis and quality assurance. This can be sustainably remedied with the following;

- Training for MoH personnel on M&E methods and scholarship programs for Samoan nationals in health information sciences and statistics to create a health workforce with specialized skills
- Committed funding at the government and donor level for data officers to support all units at the ministry of health, and funding for the placement of data officers at key partner organizations, stakeholders and NGO's
- Updating MOU's and building inter-organizational relationships around data sharing within the health sector could provide many gaps within the current data and minimize duplication

In addition to capacity building of the health sector, data collection tools designed for the health sector could improve current M&E procedures. This includes the implementation of statistical analysis and data collection software, in addition to training personnel in its applications. This would be especially useful for mobile, or tablet based data collection software that is user friendly for both analysts and research participants alike.

At the political level, evidence-based medicine must be a priority throughout the health sector with a strong emphasis on M&E data as a mechanism for quality assurance. This can be accomplished through both policy and the establishment of outcome-based funding.

Bibliography

1. Ministry of Health STI Surveillance Data 2015-2016
2. National Policy on HIV/AIDS 2011-2016. Ministry of Health.
3. State of Human Rights Report 2015. Office of the Ombudsman and National Human Rights Institution. Samoa. 2015
4. Monitoring and Evaluation Toolkit: HIV, Malaria and TB. World Health Organization. 2004.
5. Walsh, M. S. (2012). Prevalence of Chlamydia trachomatis infection in rural Samoan women aged 18-29 and assessment of associated factors: a population based study (Thesis, Master of Public Health). University of Otago. Retrieved from http://hdl.handle.net/10523/4067
6. Demographic Health Survey 2014. Samoa Bureau of Statistics
7. HIV Surveillance Data. National Health Services. Samoa 2014.
8. Monitoring and Evaluation Operational Manual 2011: Health Sector Performance
9. WHO Multi-country Study on Women's Health and Domestic Violence Against Women: Samoa. 2005. World Health Organization.
10. Heather Worth, Patrick Rawstorne, Hilary Gorman, Michelle O'Connor, Scott McGill Karen McMillan, Hilary Gorman, Michelle O'Connor, Scott McGill. "Pacific Multi-country Mapping and Behavioural Study 2016 Report: HIV and STI Risk Vulnerability among Key Populations." University of New South Wales in Partnership with UNDP. 2016
11. WHO Multi-country Study on Women's Health and Domestic Violence Against Women: Samoa. 2005. World Health Organization.
12. "Legal Analysis on Violence Against Women: Drafting Options for Legislative Reform". 2013. Secretariat of the Pacific Community and the Ministry of Women, Community, and Social Development.
13. UN Women. "Ending Violence Against Women and Girls: Evidence Data and Knowledge in Pacific Island Countries, Literature Review and Annotated Bibliography" 2011.
14. McMillan, K. (2013). Sex work and HIV/STI prevention in the Pacific region, including analysis of the needs of, and lessons learnt from, programs in four selected countries. Suva: Secretariat of the Pacific Community.
15. World Health Organization (WHO) (2006). Second generation surveillance surveys of HIV, other STIs and risk behaviours in 6 Pacific Island countries (2004–2005). Manila: World Health Organization Regional Office for the Western Pacific.