

Samoa Global AIDS Monitoring Report **2020**





2020

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GLOBAL AIDS MONITORING REPORT FOR SAMOA 2020

REPORTING PERIOD: JANUARY-DECEMBER 2019



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Key Abbreviations

- AIDS- acquired immune deficiency syndrome
- ANC- Antenatal Care
- ART or ARV Anti-retroviral treatment or therapy
- **DOTS** directly observed treatment, short-course (for TB treatment services)
- EXP TB- extra pulmonary TB (TB infection occurring outside of the lungs)
- **GBV** Gender based violence
- **GF** The Global Fund to Fight HIV, Malaria and TB
- **HIV** human immunodeficiency virus
- ICHAP- Integrated Community Health Approach Program
- MoH- Samoa Ministry of Health
- MSM- men who have sex with men
- MT2- Malietoa Tanumafili II Hospital, Savai'i
- MTC- Mother to Child Transmission of HIV
- NCD's- Non-communicable diseases
- **PLWHIVA** people living with HIV or AIDS
- **PMTCT** Preventing Mother to Child Transmission of HIV
- **SS-** sputum smear negative (patient tests negative for TB via sputum smear testing, but has latent TB infection)
- SS+ sputum smear positive (patient tests positive for TB via sputum smear testing)
- **STI** Sexually Transmitted Infection
- **TB** tuberculosis
- TTM- Tupua Tamasese Meaole Hospital, Apia
- UNDP- United Nations Development Program
- WHO- World Health Organization

Foreword



Samoa's Ministry of Health is proud to present tenth annual report to UNAIDS since 2010 this year entitled Global AIDS Monitoring (GAM) Report 2020 and is evidence of Samoa's commitment to the global response to HIV, AIDS, STI's, and TB. 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 new-borns. 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.

2019 was a year of considerable challenges in public health, with the Measles Epidemic declared 15th October 2019 and the initial outbreak of COVID-19 in Wuhan, China 31st December, 2019. Samoa's health system is still grappling with these impacts today, but we have not lost sight of the importance of HIV, STI and TB prevention. We have integrated these issues into our response to emerging public health emergencies.

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 on-going support and care offered by Clinical Services at MoH (formerly known as the National Health Service) for our PLWHA and our STI and TB patients are greatly commended. 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 and World Health Organization. Without this support, our people wouldn't receive subsidized prevention services.

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, as well as an education resource for the public on these issues.

Ma le faaaloalo lava,

Leausa Toleafoa Dr. Take Naseri CEO / Director General Ministry of Health

I. STATUS AT A GLANCE

Stakeholders in the Report Writing Process

The preparation of the 2020 Global AIDS Monitoring (GAM) Report 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. The majority of the recent work in engaging key affected populations was done by Samoa Fa'afafine Association, as well Samoa Family Health Association and their THRIVE initiative, supported and coordinated by UNDP/Global Fund and the Ministry of Health. The data from these activities was collated by MoH for the GAM 2020. Collection of data for this report was carried out during implementation and via consultation with various stakeholders and health sector partners throughout 2019. Data were collated and analyzed by MoH for the development of this report.

2019 GAM Report Team (Ministry of Health)

Ms. Robert Carney (Robina)- Epidemiologist, Office of the CEO

Ms. Aaone Tanumafili Taveuveu- Principal HIV/AIDS National Capacity Support Officer, Health Sector Coordination, Resourcing and Monitoring Division

Stakeholders Contribution through submission of reports of activities implemented in 2018:

- K Clinical Services, Ministry of Health
 - Communicable Disease Clinic
 - Laboratory Services
 - Pharmaceutical Services
- Samoa Family Health Association and the THRIVE Initiative
- Health Promotion and Enforcement Division, Ministry of Health
- 🐹 Samoa Red Cross Society
- People living with HIV or AIDS
- Samoa Fa'afafine Association
- Young Women's Christian Association
- Samoa AIDS Foundation

Status of the Epidemic



The first case of HIV recorded in Samoa was in 1990. Since then, 26 cumulative cases have been reported. Currently there are 11 living cases of HIV. In 2018, 2 new cases of HIV were detected as testing services expanded their coverage, marking the first new cases since 2013. Though HIV is low prevalence in Samoa, other factors highlight susceptibility to future outbreaks. The high positivity rates of other STI's (Chlamydia at 23.7% in 2018), are also a concern and pose risks for increasing HIV transmission. Additionally, STI testing overall has low population coverage. Roughly 14% of people above the age of 15 were tested for a least one type of STI in 2018. Less than 10% were tested for HIV. However, HIV and STI have greatly increased over the last 5 years showing an increasing trend of improved testing coverage.

The primary mode of HIV transmission in Samoa is through heterosexual sex, in situations of multiple sexual partnerships. Of the living cases of HIV, all 11 are receiving treatment from the public health sector. Two previously reported cases have transferred out of care to overseas health systems. Historically, there have been 4 cases of mother-to-child (MTC) transmission of HIV (3 adults with 4 HIV positive births). There have been 2 cases of successful prevention of MTC transmission through the administration of ARV regimens in pregnant women. In 2014, a stillbirth occurred to an HIV positive mother.

Of the PLWHIV, 3 are members of key populations (1 transgender and 2 men-who-have-sex-with-men).

Policy and Programmatic Response

Samoa Ministry of Health, being the National Focal point for HIV, AIDS and STI's, has the responsibility for the strategic oversight and acts as the coordination, monitoring and evaluation entity for the country's response. Samoa's National HIV, AIDS, and STI Policy was launched in August 2017 and covers the period 2017-2022. The HIV, AIDS, STI and TB Monitoring and Evaluation Reference Manual 2017 was launched in August 2017 in order to provide results based decision making for the national response. Overall, the Ministry of Health provides policy guidance, coordination, resourcing, and technical assistance across the sectors to ensure HIV/AIDS and STI interventions are delivered in accordance within national policies and frameworks.

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. The NACC was absorbed under the Sexual Reproductive Stakeholders Group in 2014, but is set to be revived as the stakeholder's group is to be discontinued and there is a need to up-scale prevention.

The Communicable Disease Clinic serves as the primary clinical services authority on HIV, STI's and TB and delivers both clinical and public health interventions. It also is tasked with managing multiple other neglected communicable diseases, such as leprosy. All health care for people living with HIV is coordinated and managed through the clinic which has numerous achievements in anti-retroviral therapy (ART) adherence and maintaining the good health of people living with HIV.

Since 2016, the National Program for HIV, STI's and TB, in partnership with the clinical staff of the Communicable Disease Clinic, established the first health advocacy and screening initiative with sex workers in the Apia Urban Area. This involved MoH staff directly with patient advocacy, linking people to health services, and building the capacity of sex workers for prevention. In 2018, this program was transferred to civil society organizations in 2019.

The civil society organizations (that MoH has historically partnered with) are also an integral part of the national response to HIV, AIDS and TB. In 2018, efforts to reach key affected populations were scaled up and launched, with Samoa Fa'afafine Association and Samoa Family Health Association serving as the main mechanisms for expanding HIV testing services (HTS) to transgender women (known locally as fa'afafine), sex workers, and men who have sex with men (MSM). This was supported by the UNDP/Global Fund as the global focus shifts to key population programming.

Samoa 2019 HIV & STI Indicator Highlights



By 2020, 90% of estimated people with HIV will know their status:

No estimates of prevalence. All detected cases know their status

By 2020, 90% of people diagnosed with HIV, will receive treatment:

100% of people diagnosed with HIV in Samoa are receiving treatment

By 2020, 90% of people living with HIV on treatment will have suppressed viral loads:

31% of people living with HIV in Samoa have suppressed viral loads

10,310 people were tested for HIV and notified of the results



89.4% (4,369) of women attending antenatal care (4,889) were screened for syphilis. 0.3% (14) were positive for syphilis. 100% of those women received WHO recommended treatment.



100% of sex workers know their HIV status 100% of MSM know their HIV status 100% of transgender people know their status



100% of sex workers, 95% of MSM, and 88% of transgender people received at least two of the following services; 1) HIV and STI testing, 2) counseling, 3) condoms and lubricants.

- 86.7% of sex workers used condom at their last sex
- 17.1% of MSM used condoms at their last sex
- 47.9% of transgender people used condoms at their last sex
- 1.9% of transgender women (0.6% of transgender sex workers and 2.5% of transgender women in general) had an active syphilis infection

II. OVERVIEW OF THE AIDS EPIDEMIC

HIV and Other STI's 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 detected between the years 2014-2017. However in 2018, 2 new cases were detected after community based testing was scaled up. Testing rates over the past 5 years are low, with the majority of tests coming from routine testing. However, testing has been increasing in the past 3 years. Health sector and NGO led awareness campaigns initially mobilized in 2017 led to a significant increase for testing from 2016-2017. In 2019, the Measles Epidemic impacted testing the last two months of the year, as laboratory resources were mobilized to respond to the epidemic. Increasing the number of tests going forward will depend on improving lab capacity to process tests and 2020 impact of the COVID-19 Pandemic.



Figure 1. Samoa HIV & STI Testing 2014-2019

The majority of testing in 2019 (90.4%) come from routine testing which includes antenatal screenings in pregnant women, all nationals applying for immigration clearances to travel overseas, and all blood donors screened for routine donation processing. Voluntary testing (9.6%), is low, especially among males¹. This means there is likely a high proportion of undetected cases. Therefore, the full impact of HIV/AIDS on Samoa remains relatively unknown. A quarter of the documented HIV cases are mother to child transmissions, which suggests that HIV predominantly affects general populations as well as key populations (sex workers, transgender, prisoners, etc.). All documented living cases are currently receiving ARV (anti-retroviral) treatment, which is free and coordinated by the Communicable Disease Clinic at TTM Hospital, Apia.

¹MoH HIV & STI Surveillance 2019

The first case of HIV was detected in 1990. Since then there has been a cumulative total of 26 detected cases of HIV, with 13 of those cases still alive to date. The primary mode of transmission of these cases were heterosexual sex with multiple sexual partnerships. There are two children living with HIV under the age of 14 enrolled in anti-retroviral therapy (ART). Three of the current PLWHIV belong to key population groups. To date there have been two cases of successful prevention of mother to child transmission of HIV through the successful delivering of recommended ART regimens for pregnant women. For 2019, there were no new confirmed cases of HIV detected in Samoa. 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.



Figure 1. HIV Detection in Samoa by Year of Patient Registration 1990-2019

The high rates of STI's in Samoa also potentially increase the risk for HIV transmissions. Chlamydia is endemic to the general population with high positivity rates reported over the last decade. Chlamydia rates have been largely unchanged (23.8% positivity in 2019).Increases to Chlamydia testing within the population have always resulted in the increase of detected infections.



Table 5. Chlamydia Case Detection in Samoa, 2010-2019

From 2010-2012, detected Chlamydia cases was at its highest, but decreased testing in subsequent years led to a decline in the number of cases detected, and therefore treated. Infections had started to decline in 2013 and procurement issues of the test kits for Chlamydia contributed to the decline in testing. A national presumptive treatment protocol for antenatal mother and their partners was implemented in 2015 to reduce the rates and prioritized over limited resources available to allocate to testing. However, the other components of a presumptive treatment intervention (aggressive health promotion and education and a national strategy to reach male partners of ANC mothers) were not implemented alongside the treatment protocol. In 2016, there was no testing conducted in any setting. Testing resumed again in 2017 but not as a routine test in antenatal care as with previous years. In 2018, Chlamydia testing was mostly reincorporated into antenatal care assessments, leading to a great increase in testing coverage, but also an increase in detected cases. In 2019, staff shortages and the shift of lab resources during the Measles Epidemic limited the number of tests done for that year. This revealed that positivity rates of Chlamydia are comparable to rates as far back as 2010 and likely haven't changed in true prevalence since then. From this data we can reasonably conclude that the presumptive treatment protocol has failed, and new interventions are needed to reduce infections. Increasing testing coverage is an essential component of moving forward with any intervention in order to monitor the impact of programs.

In 2019, 23.8% (794) of those tested for Chlamydia were positive. More cases tend to be reported among females. However, this is due to the fact that more female are tested than males through routine antenatal care screening. In terms of age, those 20-24 years of age report the highest number of infections compared to other age groups.

Age	Female	Male	Unknown	All	Tests by age	Percent of tests by
Group					group	age group
0-14 yrs	3	0	0	3	16	18.8%
15-19 yrs	109	1	0	110	317	34.7%

Table 3. Chlamydia Cases by Sex and Age Group 2019

20-24 yrs	260	23	1	284	911	31.2%
25-29 yrs	148	10	0	158	761	20.8%
30-34 yrs	65	2	1	68	506	13.4%
35-39 yrs	25	0	0	25	287	8.7%
40-44 yrs	11	0	0	11	85	12.9%
45-49 yrs	0	0	0	0	15	0.0%
50+ yrs	0	1	0	1	10	10.0%
Unknown	68	51	15	134	430	31.2%
Total	689	88	17	794	3338	23.8%

Syphilis is a comparatively rare infection with rates around 1% in most populations. Since 2010, detected syphilis cases have remained well below 1% positivity. However, in 2015 the number of detected cases more than doubled, despite relative constant number of tests. The number of detected cases more than doubled again in 2016, and has been steadily increasing from 2017-2018, putting the overall positivity rate above 1% (1.11% in 2018). Though this may be partly due to significant increasing in testing, the persistent exponential increase in cases since 2015 is likely due to an outbreak. In 2019, detected syphilis infections significantly decreased, though testing did not decrease to a large extent.





Overall in 2019, 0.7% (77) of individuals tested for syphilis had a positive result. Individuals age 45-49 years and 50 and older more frequently reported a positive result for syphilis. Syphilis infection does not vary much by age. The case reported for age group 0-14 was a neonatal case of syphilis, in-line with previous estimations that project 1-2 cases per year starting 2018 (WHO Estimation Tool).

Age Group	Female	Male	Unknown	All	Tests by age group	Percent of tests by age group		
0-14 yrs	1	0	0	1	42	2.4%		
15-19 yrs	1	0	0	1	784	0.1%		
20-24 yrs	5	3	0	8	2398	0.3%		
25-29 yrs	3	2	0	5	2105	0.2%		

Table 7. Syphilis Cases by Sex and Age 2019

30-34 yrs	5	5	0	10	1655	0.6%
35-39 yrs	3	1	0	4	1110	0.4%
40-44 yrs	2	4	0	6	706	0.8%
45-49 yrs	1	3	0	4	374	1.1%
50+ yrs	10	8	1	19	484	3.9%
Unknown	5	4	10	19	717	2.6%
Total	36	30	11	77	10375	0.7%

Additionally, congenital syphilis (CS) transmission is also on the rise. The transmission of syphilis from a mother to infant during pregnancy is a serious, disabling and often life threatening infection for newborns. Treatment has to occur before birth in order for infants to have the best chances of survival, which means mothers have to be tested and linked to treatment before delivery. This is why antenatal check-up blood screenings are so important. As overall syphilis rates increase across the country, congenital syphilis infections among infants are also rising. There was 1 new CS infection detected during 2019.

Estimated Congenital Syphilis Cases for 2019*	Infants Born with Congenital Syphilis 2019 (confirmed)
2	1

*WHO Congenital Syphilis Estimation Tool (Heath, Hill, & Taylor, 2018)

** Data reported by NHS Laboratory Services, represents all specimens tested nationally in 2018

This reaffirms the need to continue strengthening antenatal care programs and increasing voluntary testing for the general population. Early detection is critical for all people, but especially so with pregnant women to prevent congenital syphilis.

HIV & STI PREVALENCE ESTIMATIONS AND FORECASTS

Based on the number of tests and detected cases for HIV and STI's, the true prevalence of these diseases (detected and undetected) can be estimated for the general population of the country ages 15-49. For HIV in particular, there are too few detected cases to generate reliable estimates of prevalence. However, with two new cases detected in 2018, the number of people living with HIV will only increase as testing coverage expands. With Chlamydia and syphilis, there are enough data to generate estimations of population prevalence as well as forecast incident cases over the next few years.²

Syphilis has shown a steadily increasing trend in positivity, especially between 2017-2018. The estimates of total population prevalence in males and females age 15-49 show a similar trend for 2012- 2022. The syphilis incidence rate (new cases per 100,000 uninfected people) is forecasted to increase from 173 incident cases per 100,000 (LCL 46, UCL 121) to 185 per 100,000 (LCL 42, UCL 909).

²All estimates of prevalence and incidence for chlamydia and syphilis were generated using SPECTRUM v 5, STI modelling software developed by Avenir Health and WHO



Figure 2. Syphilis Prevalence Estimations for Ages 15-49, 2012-2022, Samoa

For Chlamydia, more data was available to estimate population prevalence and incident cases from 2010-2022. Positivity rates for Chlamydia are already very high (23.7% in 2018). Estimations for the actual population prevalence from 2018 onward are therefore higher at more than 30%, which shows a steadily increasing trend through 2022. The incidence rate is projected to increase from an estimated 53,451 in 2018 (LCL 30,434, UCL 122,275) to 53,618 (LCL 29,936, UCL 117,490).



Figure 3. Chlamydia Prevalence Estimations for Ages 15-49, 2010-2022, Samoa

BEHAVIOURAL RISK PROFILE

HIV prevention and knowledge of HIV and AIDS among the population is low. The Demographic Health Survey 2014 found that condom use (of male condoms) is low, although higher in males (14-15%, see Table 6). 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).

Samoa DHS Findings	2	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	53%	56.3%	63.1%	61.6%
condoms prevent HIV				
Percent of individuals having comprehensive	3.9%	7%	6.5%	6.4%
knowledge of HIV and AIDS transmission and				
prevention				
Percent of individuals expressing acceptance	2.1%	3.4%	2.6%	3.3%
of PLWHA on all 4 indicators				

Table 7. Select Demographic Health Survey 2009 and 2014 Findings

Regarding the acceptance of persons living with HIV or AIDS (PLWHA) only 2.6% of women and 3.3% of men express acceptance of PLWHIV on all 4 indicators. This has remained roughly the same since 2009. This finding illuminates a larger issue of stigma surrounding sex and sexual health within the population.

The population coverage of prevention services and education is also low. The Demographic Health Survey (2014) reveals that only 4% of women and 3% of men have ever been tested for HIV in their lifetime. 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). 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). 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).

Although Samoa has a low prevalence of HIV and good case management of the identified cases of PLWHIV, there are multiple challenges that are risk factors for future outbreaks;

- 1. Youth ages 15-24 account for 67% of all Chlamydia infections in 2018 (MoH STI Surveillance).
- 2. 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.
- 3. Increasing teenage pregnancy rates
- 4. Highly mobile population including seafarers, police engaged in UN operations, residents returning from overseas, and tourists.
- 5. Low access to prevention materials and condoms

Knowledge of Chlamydia transmission and prevention is severely lacking in both general and key populations in Samoa. The ICHAP 2018 Survey tested the knowledge of participants about key misconceptions about Chlamydia. The majority (72%) had low knowledge about Chlamydia. Only 13.6% knew that men with Chlamydia may not have symptoms, only 17.6% knew that you can only get Chlamydia more than once, and only 24.9% knew Chlamydia can cause eye infections. Additionally, only 50.4% were aware that wearing condoms prevents Chlamydia, and only 36.3% knew that birth control will not prevent Chlamydia transmission. This indicates the need for comprehensive sexual reproductive health education programming and interventions

ICHAP 2018 Chlamydia Knowledge Assessment	Answer	Percent Correct Responses
You can catch Chlamydia from toilet seats.	FALSE	31.3%
Men with Chlamydia might not have symptoms.	TRUE	13.6%
Most women will NOT develop symptoms of	TRUE	33.5%
Chlamydia.		
Only women get Chlamydia.	FALSE	57.5%
Chlamydia can affect men's fertility.	TRUE	26.9%
Chlamydia can affect women's fertility.	TRUE	31.5%
Chlamydia can cause eye infections.	TRUE	24.9%
Once you get chlamydia, you can't get rid of it.	FALSE	48.0%
You can get Chlamydia more than once.	TRUE	17.6%
Wearing a condom prevents Chlamydia.	TRUE	50.4%
Birth control pills prevent Chlamydia.	FALSE	36.3%

Table 8. Beliefs about Chlamydia Transmission and Prevention

In addition to these factors, gender violence may also play a role in exacerbating the health burden of HIV and 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%).

Background of Key Populations in Samoa

The main source of population level data for key populations comes from the Pacific Multicountry 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 prison population consists of inmates at Tafaigata Prison Facility on Upolu, and Olomanu Prison Facility on Savai'i. Outside of outreach visits conducted by government and NGO's, inmates have limited access to health and healthcare services. Routine screening programs have not yet been established for inmates. Outreach programmes for inmates have been mobilized by Samoa Family Health Association and the Ministry of Health.

Background of the Multi-sectoral Response to HIV and STI's in Samoa

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 as well due to the deadly nature of co-infection and the structure of funding mechanisms.

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 Fa'afafine 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 key affected populations (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. Samoa AIDS Foundation was revived in 2017, and is rebuilding and reinventing its role within the national response.

In 2017, Teen Challenge Samoa and the Young Christian Women's Association (YWCA) joined the Ministry of Health list of implementing partners. Both are religious organizations that work with youth populations (males with Teen Challenge and women with YWCA).

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 tesilafia", which described the status of the HIV/AIDS epidemic in Samoa is regularly aired on World AIDS Day each year. 2017 marked the launching of the T3 Campaign, aimed at making people aware of prevention and treatment services. This has been continued by the sector in 2018-2019.

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 PLWHIV. Through on-going meetings and conferences, MOH and UNDP/GF have been working to build the capacity of PLWHIV to support the public disclosure of a new PLWHIV spokesperson.

The primary sources of funding for Samoa's HIV programs for this reporting period are from the Global Fund to fight AIDS, TB and Malaria (GF) and the World Health Organization (WHO). The government of Samoa contributes to the National Programme at the Ministry of Health. Global Fund also provides additionally support such as procurement of all TB and ART drugs.

Samoa Family Health Association and Samoa Fa'afafine Association both have individual agreements with UNDP/GF for HIV and STI programming with a special focus on key populations as of the 2018-2020 grant cycle.

The publicly funded former National Health Service (NHS), now merged with the Ministry of Health under the name of Clinical Services, is the main service delivery point for all health care services in Samoa, including for HIV/AIDS care and treatment. The national 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. As all diagnostic technologies are housed within this lab, all processing and reporting are centralized in this facility.

The Communicable Diseases Clinic has historically been the healthcare entity tasked with HIV, STI and TB treatment, screening and care services and is located at the new Primary Healthcare Centre in Apia (opened in November 2016). Treatments of STIs are offered free of charge by this clinic and at all national health centres. Care visits for ART, TB DOTS, and contact tracing are all conducted by the Communicable Disease Clinic.CD4 counts are done consecutively every 4 months for all registered HIV+ cases at the Clinic. CD4 counts and viral load tests are processed at the National Laboratory. ANC care for HIV+ mothers is offered at all healthcare centres.

All ANC visiting mothers both public and private healthcare facilities undergo routine 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.

To date there is no known case of TB/HIV co-infection reported. There is however a noted improvement of TB/HIV co-infection testing in the last reporting period i.e; 100% 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.

III. 2019 NATIONAL RESPONSE TO THE AIDS EPIDEMIC

Prevention

The multi-sectoral activities under the national response in 2019 targeted vulnerable groups and key affected populations with an emphasis on linking people to testing services. This was done to improve public awareness of HIV & STI's as highly relevant health issues and work around stagnating condom use rates by refocusing on the screening process as a mechanism to motivate behavior change. Funding mechanisms were redesigned by multi-lateral organizations to allow local NGO's to enter into direct service agreements for the purposes of focusing specifically on female sex workers, men who have sex with men, and transgender people.

T3: Talk it, Test it, Treat it (Siaki, Talanoa, Togafitiga) Multimedia Campaign

The T3 Campaign led by the Ministry of Health continues to serve as the main platform to organize health communications and awareness messages for HIV, STI's and TB. All IEC's of the national programme were designed using the T3 format and have a self-check list of common symptoms of STI infections and a list of phone number of service providers. This has been reported by the public and partners alike as a simple and engaging way of providing important health communications but also linking people to services.

T3 consists of 3 main elements;

- Talk it promoting open dialogue among communities about sexual health and prevention to overcome stigma
- 2. Test it encourage voluntary testing as a mechanism of linking people to services and encouraging behaviour change
- 3. Treat it link people to treatment services earlier to prevent complications and overcome barriers to access

T3 Condom Promotion at the Pacific Games July 2019

In July 7th-20th, the Pacific Games 2019 were hosted in Samoa. The Ministry of Health and partners coordinated multiple health promotion activities and campaigns for sexual reproductive health, one of these being condom promotion. It has been widely documented in mass gathering events (like regional athletic events) that sexually transmitted infections and syndromes significantly increase. Concerning HIV, several countries participating in the Pacific Games 2019 have high HIV prevalence in comparison to Samoa. Additionally, high rates of Chlamydia and low rates of condom use in the country make Samoa particularly vulnerable to HIV transmission, especially in a mass gathering event scenario. Generally, condom promotion by the health sector has been limited in previous years due to cultural stigma and lack of political will.

The objective...

Using the Pacific Games 2019 as an opportunity to both promote condoms and mitigate HIV and STI transmissions attributable to this event, the T3 Campaign was utilized as a platform for marketing condom use and voluntary testing. The idea was to deliver discreet, attractively designed safe sex packages to the public during the Pacific Games which included 5 condoms, 5 lubricants, and a T3 card with the contact info of clinical services and an STI symptom checklist. 10,000 condoms and lubricants were provided by *United Nations Development Program (UNDP)*. The packaging was designed by *Alpha Café and Chemist* (Moto'otua, Apia, Samoa), and was funded by the support of the *World Health Organization (WHO)*. The packages were stocked in woven baskets to reflect the local culture and spirit of the games and consequently obliging the "Greening the Games" as one of the themes promoted. To further strengthen the message of T3, a T3 billboard was erected during the weeks of the Pacific Games, thus giving more emphasis on the message.



T3 Play Safe Packages

The preparation of these packages was done by health sector staff across multiple programs, with officer working after hours in the weeks leading up to the games.



The distribution of these packages to the public was driven by the health sector and partners at multiple locations 1) public restrooms and changing rooms at all athletic venues, 2) Ministry of Health information booths stationed at all events, 3) walk-in Polyclinics for public and athletes set up at all venues, and 4) the Athletes' Village dining hall and restrooms. These sites would provide maximum access to both locals and visiting athlete delegations.



Distribution of T3 packages

The outcome...

The public reception of these packages and their accessibility was predominantly positive. The most common feedback was that 1) the design was discreet and stylish, 2) that condoms and lubricant were very much needed and appreciated by local and foreign attendees, 3) the information provided on the T3 card was very useful (especially clinic numbers), and 4) overall praise of the Ministry of Health for providing these prevention materials. Some officials from Japan and Tonga expressed interest in bringing back the idea to support prevention in their home countries. The Tonga Leitis Association has incorporated T3 into their awareness campaigns, as credited on social media. The T3 packages were also among the most notable health promotion ideas noted by the Pacific Games Committee.



Athletes and medalists from Tahiti and Tonga with their T3 packages

Originally, the 10,000 condoms and lubricants were packaged with the rationale that the remaining stock would be used for World AIDS Day in December, given the lack of resources to produce more packages and that local use of condoms is generally low (Demographic Health Survey 2014). However, the demand for these packages was unexpectedly high. Officers at all distribution sites ran out of their first stock within the first week. After restocking all distribution sites, all remaining T3 packages were distributed (100% stock consumption).



Health promotion materials at MOH Booths

Reported cases of STI's remain low during the period preceding the games, during the games (7-20th July), and the month after when numbers are compared to earlier in the year (especially March 2019). There is a slight rise across STI's in August but cases still remain lower compared to the earlier months of the year (Jan-March 2019). Typically reported cases of STI's increase during mass gathering events. Although this decrease in STI cases may be due to decreased attendance of healthcare services, the absence of an outbreak or significant increase in case volume can be partially attributed to successful condom promotion during the Pacific Games.









Staff at one of the MOH information booths

The way forward...

Given the positive public reception to the design and concept, the T3 campaign plans to continue condom promotion alongside promotion of voluntary testing. A new distribution of T3 packages is being drafted for World AIDS Day Activities, and additional sites for routine condom distribution to the public are being discussed. The main activity going forward will be to secure resources for the additional production of T3 packages and other new innovative ideas that would continue to draw the interest of our local youth/sexually active populations. Further condom promotion needs to be done, as well as financial support to ensure that sustainability of such campaign is fully realized and maintaining the momentum to changing behaviour.

We would like to acknowledge and thank all of the many individuals across the health sector, especially the Sexual Health Partners, volunteers, development partners, EFKS Youth for weaving the baskets, and those at *Alpha Chemist* for their many hours of work, passion, and dedication in helping the HIV, STI, and TB National Programme deliver this initiative successfully.

Response to the Measles Epidemic 2019-2020

On the 16th of October 2019, Samoa Ministry of Health declared an outbreak of Measles. A proclamation of state of emergency would be made 15th November 2019. Throughout the outbreak a Mass Vaccination Campaign was launched, a 2 day lockdown period was mandated, and vaccinations made compulsory by law. The epidemic would continue until declared officially over 3 March 2020. Overall, 5,707 cases of measles were recorded with 83 or more deaths, mostly children between the ages of 0-4 years. All staff of the HIV National Programme were mobilized to support the national efforts through disease surveillance and risk communication.

Additionally 15.4% of people living with HIV were infected with Measles during the outbreak. Thanks to urgent care response, all have recovered and are in good health. ARV treatments were not interrupted due to aggressive patient management by the Communicable Disease Clinic Staff. Assessments are being made of the long term impact of measles infection on PLWHIV treatment and health. With the additional threat of COVID-19 (outbreak declared in Wuhan, China 31st Dec. 2019), the National Programme has liaised with development partners and other disease programs to ensure the safety of HIV and TB patients during times of crisis and protecting vulnerable groups during outbreaks.

Unfortunately, this caused a disruption in implementation of HIV activities, including World AIDS Day 2019 as all mass gathering events were prohibited during the state of emergency. The epidemic also interrupted HIV and STI testing which was halted during this time as the laboratory focused on measles serology.

Samoa Red Cross Society Community Outreach Related to HIV and STI's

Samoa Red Cross Society (SRCS) is a member of the International Red Cross and Red Crescent Movement, which comprises the largest humanitarian organization in the world. SRCS was officially registered in 1982 as a recognized member of IRCS and was admitted into the Red Crescent Movement in 1984. SRCS provides a wide variety of voluntary aid driven services to the community including first aid training to communities and organizations, promoting voluntary non-remunerated blood donation, building community resiliency to disasters and climate change, and health promotion for HIV & STI prevention as well as advocacy for PLWHIV.

SRCS is a longstanding partner of MOH and is funded directly by the health sector. Their community based services and advocacy have been crucial to the national response since the 90's. SRCS also has historically worked directly with PLWHIV and their families in terms of support, but also recruited PLWHIV as volunteers to deliver HIV&STI programs.

By the numbers, in 2019 SRCS have reached....





6,480 males and 1,620 females with Sexual reproductive health, HIV, and STI awareness outreach activities



Distributed 117,244 condoms and 111,744 lubricants, reaching an estimated number of 14,650 people.

Samoa Family Health Association, The Thrive Initiative and Samoa Fa'afafine Association Drive HIV Testing with Key Affected Populations

The CSO's Samoa Fa'afafine Association and Samoa Family Health via the THRIVE Initiative continued in 2019 with up-scaling of programming with key affected populations such as sex workers, men who have sex with men (MSM), fa'atamaloa and fa'afafine (transgender men and women), as well as seafarers. Through the support of UNDP/GF focused on delivering the primary package of prevention services to these groups; specifically 1) HIV and Syphilis testing, 2) counseling relating to testing and prevention, and 3) the distribution of condoms and lubricants. Samoa Family Health Association (SFHA) focused their programming on sea farers. The Thrive Initiative, a special program under SFHA led by clinician Matthew Amituanai, delivered the prevention package of services to fa'afafine (transgender women) and fa'atamaloa (transgender men), along with female sex workers (as of the end of 2018). This is part of the largest and growing effort to date in the country to reach key population groups. For HIV/Syphilis testing, the SD DUO Dual screening kit was used to detect reactive cases and refer them to further diagnostic services.

Samoa Family Health Association (SFHA)

SFHA is an International Planned Parenthood Federation (IPPF) Affiliate organization. As a major sexual reproductive health service provider in the country, SFHA has been a vital partner in addressing HIV and STI's. SFHA patients referred and tested at Clinical Services for HIV and STI's represent roughly 13% of all patients tested nationally in any given year, meaning roughly 1 out of 10 patients screened for STI's in Samoa comes from SFHA. The majority of SFHA referrals are for Routine Antenatal Blood Screening predominantly among women ages 20-29. Nationally, SFHA referrals represent almost 39% of all antenatal mothers screened for HIV and STI's in 2018 (*HIV/STI Database MoH, 2019*).

SFHA conducts regular outreach with national seafarers employed by Samoa Shipping Corporation. All participants that consent to testing receive private testing and counseling sessions, with investigation for HIV & syphilis as well as urinalysis for Chlamydia and gonorrhea. Referrals for follow-up and further services are provided. These services have been well received and SFHA is working with Samoa Shipping Corporation for continued programming.

Seafarers that participated in these events reported significant behavioral risk factors that underscore the need for further programming. About 18% reported engaging in transactional sex in the past 12 months. Additionally, less than 1% reported using condoms during their last high risk sexual intercourse. This shows that seafarer programming may serve as a good potential mechanism for mobilizing sex workers, in addition to the existing networks at MoH and SFA.

The THRIVE Initiative

The THRIVE Initiative is a special program under SFHA that seeks to provide sexually diverse men with access to confidential testing and counseling services for HIV and STI's. Established initially as a grassroots project and driven by a local physiotherapist, Matthew Amituanai, the initiative uses social media apps to mobilize men who have sex with men as well as transgender individuals. The initiative was brought under SFHA in 2018 and supported by UNDP/GF. Participants receive the full package of prevention programming and are referred to the Communicable Disease Clinic for follow-up.

The MSM population in Samoa is an incredibly difficult population to reach due to same-sex sexual relations being highly stigmatized, and the fact that many MSM's sexual activity is extramarital. Almost 6% of THRIVE clients reported engaging in transactional sex in the past 12 months. Additionally, only 4.4% reported using a condom during their last sex. The THRIVE initiative works to unpack these complicated issues during counseling and minimize the risk of gender-based violence for female partners of MSM. THRIVE is the only mechanism for reaching this population at this time, and is therefore crucial for engaging MSM in prevention.

Samoa Fa'afafine Association (SFA)

As both a long-time community partner of the Ministry of Health and the national human rights champion of the fa'afafine (transgender) community in Samoa, Samoa Fa'afafine Association has also been a major entity in the mobilization of key populations in 2018. Throughout the year, SFA had numerous testing drives which mobilized the local district fa'afafine clubs to bring HIV and syphilis testing and counseling services to both urban and rural fa'afafine. In recent years, SFA has advocated for fa'atamaloa (Samoan transgender men) communities and issues, which have been less visible historically. Fa'atamaloa were also part of the national drive for testing by SFA.

Overall, 1,685 people (mostly from key affected populations), were screened by these community based outreach activities by NGO's in 2019. The MoH collated the patient registers from each of these partner organizations in order to calculate the reach of this programming.³



Figure 4. People Reached by Community-based Testing in 2018 vs. 2019

³All results in this section were produced from the MoH collated register of NGO clients for 2019

The populations that participated in the outreach events came from diverse backgrounds such as men who have sex with men that may identify as either gay or heterosexual, transgender men and women that known in the local culture as distinct non-Western gender categories (fa'afafine & fatamaloa), seafarers of various gender and sexual identities, people who engaged in transactional sex in the past 12 months, and sexual partners of these individuals who were members of the general population. Some individuals can encompass multiple categories. Sex workers are defined by any individual (male, female, transgender or MSM) who reported engaging in transactional sex any time during the previous 12 months. A total of 1,685 people were reached by these services overall in 2019.



Figure 5. People Screened by CSO's in 2018 and 2019 by Population Group

Outcome

Overall, the delivery of prevention services by CSO's to key population contributed to the rise in voluntary testing through referrals, and more people were reached with these services than in 2018. This is a sign that coordination and community engagement is improving. SFA and SFHA have made enormous contributions to reaching national and international targets for the region for reaching key affected populations in 2019. The UNDP / Global Fund have acknowledged their work in reaching key populations and meeting regional targets for the Pacific. More work still remains to be done, especially reaching key populations in rural communities, and establishing long term consistent mechanisms to deliver services. <hr/>

Status of Key Affected Populations in Samoa 2019

1,109 *Transgender men and women reached with safe sex counselling*



982 *Transgender men and women given free condoms and lubricants, and received HIV & syphilis testing*



442 People who engaged in transactional sex in the past 12 months reached with safe sex counselling, free HIV & syphilis testing, and given free condoms and lubricants



250 *Men who have sex with men reached with free condoms and lubricants, safe sex counselling and given free HIV & syphilis testing*



Treatment, Care and Support



Implementation of TST (Tuberculin Skin Testing) February 2019

Dr. Sarah Brown, Medical Officer of the Communicable Disease Clinic, presenting an overview of TB

In preparation for the 2019 implementation of TST, a "Training for Clinicians on Control and Management of TB, and Application of Tuberculin Skin rapid Test kit" wasconducted by a WHO TB Consultant Dr Subhash Yadav to upgrade the knowledge and skills of clinicians on TB diagnosis, treatment and care. One of the most important discussions during the training evolved around the aspects of effective DOTS Program for all offered to all TB cases, follow up and reminders. There was also a practical training on how to apply the Tuberculin Test for all members of the family once a case is detected and confirmed.



Training attendees

TB MANAGEMENT VISITS



From 24th-28th September and 1st-4th October 2019, TB management visits were conducted to all national health facilities (10) and directly with all households of TB and TB/Leprosy co-infection patients. As well as to continue program M&E the visits were to address key management issues. The objectives were;

- 1. Visiting families of TB cases, who refused treatment, counsel and put them back on treatment.
- 2. Provide health education sessions on the negative impact of untreated TB to other members of the family and close relatives.
- 3. Administer TB tuberculin skin test to all members of the family in order to rule out any latent TB cases while there is time to treat and cured.
- 4. Advise nurses in Community Health Centres on the importance of proper data management of TB cases, follow up, offer treatment and care from time to time as part of DOTs during their home care and community visits.

The National Programme together with the nurses from the CDC managed to test all close relatives and members of the families of TB cases using TB Tuberculin skin test. Counselling and referral assistance was offered once a test came out positive, however, all the tests conducted came out negative.



TST being delivered to communities



Nurse Serafi and Nurse Mila meeting with District Health Centres

Knowledge and behavior change

Integrated Community Health Approach Program (ICHAP) 17-25th March-2019

Integrated Community Health Approach Program (ICHAP) is an ongoing series of health outreach programs conducted by the Ministry of Health (first in 2016) with various partners. Originally, ICHAP was first implemented in September 2016. The Samoa Red Cross Society (SRCS), the National Health Service (NHS), and the Ministry of Women, Community and Social Development (MWCSD) led by the HIV,STI, and TB National Programme, staff of the Communicable Disease Clinic and the Health Education and Promotion team at the Ministry of Health. The goal was to bring prevention education out into the communities on infectious diseases, climate change resilience, maternal and child health, sexual health, and family wellness. All of these areas of health were integrated into one programme to overcome the challenges posed by cultural and religious stigma of sensitive health issues which if delivered alone would not be as effectively received by the communities. Prevention and wellness messages were delivered together as a holistic approach to as a non-partisan way of uniting individuals and community structures in improving the health of villages. Additionally, the rationale was to unify and consolidate outreach programming and resources amongst government and NGO's to deliver more impactful programs. Between 2016 and 2018, the ICHAP outreach events are estimated to have reached 30 villages, 25 Primary schools and colleges, 2 prison facilities, 2 youth organizations. The estimated attendance for the programme is 1,400 for community members and 2,500 for school students. The ICHAP programme has been well received by all participating communities and organizations. All communities and institutions that participated have requested similar programmes in the future for continued awareness and education. MoH staff with the assistance of Ministry of Women, Community and Social Development have also identified a large number of new villages that want to participate in the programme. Samoa Red Cross Society was the first NGO to partner with MoH on the delivery of ICHAP, but multiple others have since joined the partnership. These NGO's are Samoa Fa'afafine Association, Young Women's Christian Association, Teen Challenge Samoa (for high risk youth), Samoa AIDS Foundation, and Samoa Family Health Association. The ICHAP programme has been a key opportunity for the MoH to improve its monitoring data and case reporting on multiple health issues (NCD's, TB, STI's, HIV, etc). ICHAP plans to continue implementation in the coming years with new villages and primary schools targeted, as well as routine programming with prisons.

ICHAP sites are chosen based on whether the village had received previous Ministry of Health programming before, remoteness of the village to healthcare service centres, the village authorities demonstrated consensus regarding the community need for the program and village support, or were located in high case areas of notifiable infectious diseases (Typhoid and TB).

This program targets the general population but mobilizes community advocates for key populations to use the event as a platform for engage key populations (transgender, MSM, and sex worker) that reside in rural villages. In 2019;



76 transgender women (fa'afafine)

Were reached with 1) IEC's and counselling for HIV and STI's, 2) given referrals for HIV and STI testing services through the ICHAP program in rural villages.

COMMITMENT 1: ENSURE THAT 30 MILLION PEOPLE LIVING WITH HIV HAVE ACCESS TO TREATMENT THROUGH MEETING THE **90–90** TARGETS BY **2020**

The 90-90-90 UNAIDS targets sets an ambitious goal that Samoa is determined to achieve. Samoa has a few factors working in its favor to reach these goals by 2020; 1) low prevalence of detected cases makes for a more manageable caseload for adherence to ART and resourcing, 2) the Communicable Disease Clinic staff have strong relationships with PLWHIV that has been an advantage in ensuring good treatment outcomes, 3) the current community of PLWHIV are comparatively very health and treatment literate as well as having great capacity to mobilize around priority issues and 4) with the support of multi-lateral development partners, ART has always been offered to any detected HIV case free of cost.

However these are also a few factors that are proving to be challenges for the national response in meeting the 90-90-90 targets by 2020; 1) low numbers of cases detected means there is not enough data to generate reliable population based estimates of true prevalence of HIV, therefore making it hard to quantify the first 90 target, 2) a few patients in 2018 prescribed regimens began to fail and there was a delay in the procurement of their updated regimens, which resulted in lower viral loads, and 3) as Samoa moves to middle-income country status, previously reliable streams of donor funding will expire, and there has been challenges in promoting the prioritization of HIV and STI's (and other tropical diseases) as the health sector focuses more on non-communicable illnesses.

Given this context, Samoa's 90-90-90 status is;



Samoa 2019 Progress:

All who have tested positive know their status

By 2020, 90% of estimated people with HIV will know their status: No reliable population based estimates of prevalence. All detected cases know their HIV status



Samoa 2019 Progress:

100% of all people living with HIV receive antiretroviral therapy, free of cost.

By 2020, 90% of people diagnosed with HIV, will receive treatment: 100% of people diagnosed with HIV in Samoa are receiving treatment, with procurement support by the WHO and UNDP/GF.

> 90% of all **T T T T**

receiving antiretroviral therapy will have viral suppression Samoa 2019 Progress:

55% of people receiving ART have suppressed viral loads

By 2020, 90% of people living with HIV on treatment will have suppressed viral loads: Between 2018 and 2019, the percentage of enrolled in ART who have suppressed viral loads increased from 31% to 55% of people living with HIV in Samoa. This was achieved by improving the ART regimens for some patients and up-scaled patients management strategies implemented by the Communicable Disease Clinic.

Out of 26 cumulative cases of detected HIV infections, 13 are currently deceased. There are currently 13 living cases of PLWHIV, with 2 cases in 2018 being the most recent ART registrations. Two previously detected cases have transferred to other health systems overseas leaving 11 people with HIV living in Samoa, enrolled on antiretroviral therapy (ART). ART is coordinated through the Communicable Disease Clinic, with procurement and negotiation handled through the Ministry of Health National Programme.

Age Group	Males	Females	Total	
5-9	0	0	0	\$
10-14	2	0	2	
15-19	0	0	0	A
20-24	0	0	0	
25-29	0	0	0	A
30-34	0	1	1	
35-39	2	0	2	A
40-44	1	2	3	
45-49	2	0	2	
50-54	0	0	0	
55-59	1	0	1	A
Total	6	3	11	

Table 18. Public ART Enrolment by Age and Sex

ART regimens are subject to availability and regional procurement processes. Clinical equivalents are always used in stock-out situations or lack of availability. Through the Communicable Disease Clinic based at TTM Hospital in Apia, ART treatment is provided to all PLWHIV free of cost. Treatment visits are coordinated by the Senior Nurse of the clinic to ensure adherence and access. 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 have 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.

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 2016.⁴ This

⁴This 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).

increased significantly in 2017 to 50.2% and to 59.2% in 2018. This is tremendous progress but more work remains to be done with access to antenatal care and birth services. 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.

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

Both logistical limitations around prevention resourcing and a pervasive culture of shame and stigma surrounding sexual health have always limited the range of prevention options for Samoa as a developing Pacific Island nation. With a small population, many pharmaceutical interventions are not feasible at the population level, given the low demand and the tendency of suppliers to set minimum quantities for orders that cater to larger populations. PreP and PEP are therefore not recommended for Samoa, due to the high cost and low prevalence. Harm reduction programs more for injection-based drug use, which is not the most common form of substance abuse in the country. Voluntary male circumcision is also practiced regularly. Therefore, options for prevention have focused on prevention packages for general and key affected populations that have most impact for cost in low resource setting; 1) promoting voluntary testing at the community level, 2) health education and pre-post-test counseling, and 3) the distribution of condoms and lubricants.

Before 2018, key affected populations like sex worker, MSM, and transgender individuals had to be covertly engaged by prevention services in the community. At the government level, this was done through the Integrated Community Health Approach Program (ICHAP), launched in 2016. To work around stigma, sexual health prevention was packaged with a holistic range of health topics, to increase the receptivity of communities and minimize political backlash. Key affected populations were then accessed through this mechanism with the program advertised a general population health event, with staff aware of key population issues who were able to counsel key population groups and make referrals confidentially. Additionally, since 2017 the National Programme at MOH would offer walk in sessions for sex workers delivering condoms and lubricants, IEC's and counselling, and referrals to testing and social services. These services were transferred to Samoa Fa'afafine Association in 2018.

Clinical staff at the Communicable Disease Clinic would make similar referrals as key population status would be revealed throughout the patient intake process and reveal the need to

tailor the service package to the individual. Clinicians and case workers at the NGO level had also engaged key affected populations in similar ways. It was in 2017 that funding for prevention programming specifically catering to key affected population became available through UNDP/GF. By 2018, work plans were fully mobilized to begin formally engaging key populations with the priority packages of prevention services.

The NGO's really led this drive of linking key affected populations to prevention services with the coordination and support of the Ministry of Health and UNDP/GF. As part of their advocacy, SFA served as the primary public voice for key population advocacy with their, "Movement to End Discrimination and Stigma" which linked HIV & STI's to larger issues of human rights.

Though this communicated advocacy messages on a unprecedented scale, there was also backlash from conservative factions of the public. There is still the challenge of creating access for the populations to prevention in the face of political opposition. Public opinion and therefore political will are needed by the MoH to support the coordination of resources services to these populations. This has proven to be challenge and difficult to advocate for unless under the holistic label of ICHAP. It is therefore an advantage that the NGO's have direct agreements with UNDP/GF so resources can be more easily allocated and mobilized for key affected populations.

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 2019, Youth ages 15-24 have higher positivity rates for chlamydia (30.1% compared to 23.8% across all age groups) and gonorrhoea infections (7.6% compared to 6.8% across all age groups) and 70.4% of routine HIV & STI testing occurs in young women ages 15-24. This highlights a double burden of bacterial STI infections and teen pregnancy. This alone emphasizes the need for health promotion, comprehensive sexual reproductive health education and access to prevention services and family planning.

These high rates of Chlamydia are directly related to knowledge and prevention capacity of Samoa's youth. 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. However, that knowledge was still low.

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		

Table 22. Youth Knowledge of HIV/AIDs and Prevention

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%).

Tahle 23	Vouth		of Contrace	ntion	(DHS 1	2014)
I able ZS	. routh	Awareness	UI CUIILI ace	μισπ	(DD3 4	2014)

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

The ICHAP Survey 2018 and the Outreach Registers of the NGO's Key Population Programs 2018 also capture data on youth behavioural risk factors. Condom use is low for both general and key population groups (8% and 25% respectively). Key populations ages 14-24 were also significantly more likely to report engaging in transactional sex. Additionally, the majority of youth age 13-24 (78%) had low knowledge of Chlamydia transmission.

Table 24. Key Findings of Youth Ages 13-24 from Community Surveys

Risk factors	General Population 13-24 ¹	Key Populations 14-24 ²
Condom use at last sex	8.2%	24.9%
Tested for HIV	19.2%	100%
Tested for STI's	4.1%	100%
Sold sex in past 12 months	1.4%	11.6%
Use family planning	12.3%	Not assessed
More than one sexual partner in the past year	87.7%	Not assessed
Not planning to test because they don't feel they are at risk for HIV	13.7%	Not assessed
Low knowledge of Chlamydia Transmission	78.1%	Not assessed

¹ICHAP Survey 2018 n=73, ²Samoa SR Outreach Testing Register 2018 n=346

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 social 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 Minister of Education however has been very vocal about having sexual reproductive health education not taught in schools. 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 centre could easily be seen by a relative or village member, who may also work at the district health centre. So while youth awareness of contraception (including condoms) is high, youth utilization is low.

	Fe	male	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	

Table 25. Youth Use of Contraception from DHS 2014

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 A, B&C

To date there are no co-infections of viral hepatitis with HIV detected in Samoa. The majority of screening for Hepatitis B comes from routine antenatal care blood testing, blood bank and blood donor screening, and immigration routine screening. Roughly 11% of the population was screened for at least 1 form of Hepatitis in 2019.

2019 Testing	ANC	Blood Donor	Immigration	Patient Consultation	Unknown	Total
Hepatitis A	16	0	39	159	0	214
Hepatitis B	5,455	3011	1,940	1,190	1	11,597
Hepatitis C	4,746	2,963	1,728	941	0	10,378
Total	10,217	5,974	3,707	2,290	1	22,189

Table X. Hepatitis Testing by Surveillance Mechanism 2019

Case detection for Hepatitis B is highest in January-February and August-September when testing is at its highest. Case detection for Hepatitis A and C peaks in July.



Figure 6. Hepatitis A, B, and C Case Detection by Month Specimen Registered 2019

Hepatitis B&C testing and case detection have remained constant over the past 8 years. Cases were at an all-time low in 2013 but have since been increasing. Cases peaked in 2017 but have since decreased, while testing has remained at consistent numbers.



Figure X. Hepatitis B & C Cases by Year Specimen Registered 2011-2019

In 2019 overall, 1.9% (4) of individuals tested for Hepatitis A had a positive result. Hepatitis A is more frequently reported in males, however testing is too limited to observe trends. 1.9% (221) of individuals tested for Hepatitis B had a positive result. Hepatitis B is more common in males, with age groups 30-34 years, 44-49 years, and 50+ years reported the highest number of infections for both sexes. This may be related to generational differences in vaccination coverage. Hepatitis C is too infrequent to determine age and sex trends with 0.1% (8) of those screened (10,378) testing positive.

Hepatitis A						
Age Group	Female	Male	Unknown	All	Tests by age group	Percent of positive tests by age
						group
0-14 yrs	0	0	0	0	16	0.0%
15-19 yrs	0	1	0	1	15	6.7%
20-24 yrs	0	0	0	0	22	0.0%
25-29 yrs	1	0	0	1	13	7.7%
30-34 yrs	0	0	0	0	21	0.0%
35-39 yrs	0	0	0	0	10	0.0%
40-44 yrs	0	0	0	0	13	0.0%
45-49 yrs	0	0	0	0	8	0.0%
50+ yrs	0	0	0	0	27	0.0%
Unknown	0	1	1	2	69	2.9%
Total	1	2	1	4	214	1.9%
				Нер	atitis B	
Age Group	Female	Male	Unknown	All	Tests by age group	Percent of positive tests by age
	-	•			101	group
0-14 yrs	0	0	1	1	104	1.0%
15-19 yrs	1	1	0	2	882	0.2%
20-24 yrs	3	8	2	13	2,627	0.5%
25-29 yrs	10	15	1	26	2,270	1.1%
30-34 yrs	21	28	1	50	1,809	2.8%
35-39 yrs	10	23	2	35	1,225	2.9%
40-44 yrs	10	29	2	41	765	5.4%
45-49 yrs	5	14	0	19	414	4.6%
50+ yrs	7	11	0	18	594	3.0%
Unknown	0	2	14	16	907	1.8%
Total	67	131	23	221	11,597	1.9%
				Нер	atitis C	
Age Group	Female	Male	Unknown	All	Tests by age group	Percent of positive tests by age
0-14 yrs	0	0	0	0	96	
15-19 vrs	0	1	0	1	803	0.0%
20-24 vrs	0	0	0	0	2 371	0.0%
25-29 yrs	1	0	0	1	2,371	0.0%
20-24 yrs	0	0	0	0	1 632	0.0%
35-39 yrs	0	0	0	0	1,052	0.0%
40-44 yrs	0	0	0	0	705	0.0%
45-49 vrs	0	0	0	0	377	0.0%
50+ yrs	0	2	0	3	545	0.6%
	0	0	4	4	709	0.6%
	1	2	4	2	10 378	0.0%
TUtar	T	3	4	0	10,378	0.1%

Table 5. Hepatitis A, B and C Cases by Sex and Age 2019

Tuberculosis (TB)

To date there are no cases of HIV/TB co-infection ever detected in Samoa. Tuberculosis in Samoa has declined over the past two decades, with pulmonary infections confirmed by sputum smear tests being the most common. In 2017, the annual number of new TB cases more than doubled since 2016. This was partly due to improved screening and contact tracing by healthcare providers. Less cases were detected in 2018, but active case finding was also reduced during this year. The introduction of GeneXpert testing in 2018 and Tuberculin Skin Testing (TST) (from support of the UNDP Global Fund) in early 2019 allowed for improved detection of more TB cases in earlier stages of infection with negative sputum smear results, increasing the total number of registered cases from the previous year. The continuing challenge is ensuring the completeness of contact tracing and active case finding to ensure reduction in case detection reflects a reduction in population transmissions.



Figure 12. Incident Active Tuberculosis Infections by Case Classification 2000-2019

After exposure, Tuberculosis incubates within the body allowing it to be detectable, but not causing outward signs and symptoms. This is called latent TB infection (LTBI). Active TB disease is when signs and symptoms occur, and can be classified as pulmonary (affecting the lungs) or extrapulmonary (affecting areas outside the lungs). TB (active and latent) primarily affects individuals over the age of 50 years with younger family members being the primary contacts of these cases registered for TB prophylaxis or latent TB infection.



Figure 13. Incident Latent and Active Tuberculosis Cases by Classification and Age Group 2019

Deaths from active TB disease have declined over the years. Additionally the number of patients enrolled in treatment has increased. This is due to improved detection and case management of the TB Control Programme in the past 10 years. In 2019, 3 adult cases of active pulmonary TB died (1 died before diagnosis, and 1 was a registered cancer patient). All cases had late detection and enrolment in treatment.



Figure 14. Active TB Treatment Outcomes by Year Outcome Reported 2000-2019

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 Asia Development Bank has developed a program to implement the HPV vaccine (in addition to 3 others) for the project years 2018-2023. 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. A national screening program, paired with universal access to treatment has not yet been realized. However the shift in the health sector's focus to primary healthcare as a means of combating NCD's has become a national priority and is the impetus behind the current health sector reforms and restructuring in 2017-2018. All types of cancer are a part of this initiative and will likely see more developments in the coming years.

THE STATUS OF 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 2018-2022 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 has laws and policies in place for protection of 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", where-areas malintent must be established. There is also no specific legislation regarding blood safety and accountability for such transmissions.

Criminalization of sex work and pervasive negative cultural attitudes towards those who engage in sex work are the most difficult challenges for health workers to reach commercial sex workers. It prevents sex workers from going to providers for fear of discrimination or legal action.

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 are essential elements of 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

2019 was a year of great public health challenges in meeting the national and international goals of reaching key populations in addition to responding to the Measles Epidemic 2019-2020. It was also an opportunity to integrate the Program's work plan with other health programs to fortify a more holistic approach to both HIV and TB intervention. Programme staff also learned of the strengths and weaknesses of the health system and what must be done to secure interventions for HIV, STI's and TB moving forward.

i. Condom promotion focusing on discretion and style is well received

- Using the T3 Campaign branding, playing card style boxes with the T3 logo with condoms, lubes, and a contact card for HIV/STI testing services was distributed during the Pacific Games July 2019 in order to prevent increased transmission often associated with mass gathering events. Over 10,000 condoms and lubes were distributed exceeding the estimated stock needed
- The feedback was overwhelmingly positive from local and international communities alike.
- Future condom promotions are planned given the positive public reception, especially amongst youth.

ii. Integrating HIV and STI risk communication and health promotion with diseases with similar transmission and prevention strategies

- Tuberculosis, Measles and COVID-19 all share similarities in transmission in terms of airbourne droplet transmission and through infected surfaces. This means promoting prevention strategies that target the same behaviours (like handwashing, cough hygiene, isolation, airflow in rooms to reduce airbourne transmission) especially amongst those affected by TB and HIV, would achieve results across all program areas
- The stigma around HIV and TB is the same that occurs in communities regarding COVID-19. The reduction of fear around these illnesses achieves a common goal of engaging communities in promoting community support for those affected
- Both measles and COVID-19 are deadly comorbidities that threaten PLWHIV and arrangements must be made at the level of clinical and public health services to protect these populations

(a) progress of key challenges reported in 2018

The challenges identified in the 2017 reporting period have seen much progress through the mainstreaming of prevention services for HIV and STI's in community outreach programmes, as funding shifts across the sector to non-communicable diseases.

Table 29. Key Challenges and Progress

2018 Challenge	Progress in 2019
1. Outreach programming for sex workers cannot be sustained by the Ministry of Health and needs to be outsourced	This initiative was successfully transferred to Samoa Fa'afafine Association who have carried it forward with passion and success.
2. Timeliness of funds from donor to the National Program delayed implementation despite timely reporting by the Ministry of Health	The Ministry has reduced implementation and shifted activities into other work plans
3. Collating the data from NGO's	NGO's have shared their final testing registers to support national reporting on HIV targets
4. Diminishing of funds for MOH programs and lack of prioritization of HIV and STI's at the national level.	HIV/TB activities have been incorporated into activities funding under local and development partner projects. Other development partners have been approached for HIV and STI prevention proposals.

(b) challenges in 2019 and concrete remedial actions in 2020

Challenge 2019	Action 2020
 Testing for HIV and STI's was greatly decreased during the Measles Epidemic 2019-2020 and services for HIV and TB were interrupted during the state of emergency 	Ensure stock for all treatments is forecasted according to emergency scenarios and increase engagement of testing through multimedia campaigns
2. Lack of capacity for contact tracing and laboratory testing for Tuberculosis and HIV & BBV's	Engage regional opportunities for training and technical support and evaluate procurement of a third GeneXpert machine
3. HIV and STI's community outreach programming not integrated with UNFPA funded SRH programming in communities	Approach UNFPA to align implementation and establish partnerships with local and development partner focal points. Additionally, mobilize partnership with YWCA to address GBV component.

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. UNDP/Global Fund also provides the procurement of ARV drugs for PLWHIV as well as anti-biotic regimens for Tuberculosis.

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, or require more advanced investigations.

Programming through HIV, STI and TB National Programme always involves an NGO or government ministry as implementing partner. In 2018, MoH partnered extensively with;

- Clinical Services: Communicable Disease Clinic- Laboratory Services Pharmaceutical Services
- Samoa Fa'afafine Association
- Samoa Family Health Association
- Samoa Red Cross Society

Both national surveillance data and sentinel surveillance on key populations have improved greatly in 2018, as reporting procedures have been improved and data standardized.

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 launched 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;

- 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;

- 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 identify 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 2018-2020 period;

 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.

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