



2018

Integrated Community Health Approach Program (ICHAP) Survey:

Behavioral Surveillance from MoH Outreach Programming



Ministry of Health



Integrated Community Health Approach Program Survey (ICHAP) 2017 Report

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Key Findings

Media

- The most common media through which people receive health messages was TV (68%), followed by radio (19.7%), Facebook™ (7%), and newspaper (5.3%).
- Messages regarding **Smoking** and **Exercise** were the most frequently reported type of information received through the media (52.2% and 51.5% respectively)

Alcohol Consumption

- Overall 9.2% of respondents reported binge drinking (having more than 5 alcoholic beverages at a time within the past week).
- Male respondents were more likely to report consuming more than 5 alcoholic beverages at a time (14.6%) compared with females (6.6%).

Tobacco Use

- 35.5% of respondents reported using tobacco within the past year.
- About 45% of men used tobacco in the past 12 months compared only 29% of women.

Fruit and Vegetable Consumption

- Recommended daily fruit and vegetable consumption was very low for all gender and age groups (6.1% of all respondents).

Physical Activity

- 61% of respondents indicated they had at least 30 minutes of physical activity on a daily basis.
- A higher percentage of men (66%) were physically active compared to other gender groups.

Family Planning

- Only 17% of respondents reported using family planning services.

HIV and STI Testing

- HIV testing overall was low, with 14.3% having a test in the past 12 months.
- Fa'afafine and fa'atamaloa had the highest testing rates for HIV out of all gender groups (20.4% and 20% respectively).
- Testing rates for other STI's (including Chlamydia, Syphilis, Gonorrhea or Hepatitis B or C) was even lower than for HIV amongst all groups in the past 12 months (8.8%).
- Fa'afafine and fa'atamaloa had the highest self-reported testing rate (18.5% and 20% respectively).

Condom Use

- 60.8% of respondents reported being sexually active within the past year and only 5% of those people reported using condoms during their last sexual intercourse.

Knowledge of Chlamydia Transmission

- The majority of respondents scored Low (39.4%) to Very Low (32.8%) when it came to knowledge of Chlamydia transmission and prevention.

Knowledge of TB Transmission

- Knowledge of TB transmission and prevention as also commonly Very Low to Low (43.1%).

Acknowledgements

The Ministry of Health would like to express its gratitude to the following organizations and communities for dedicating their time, expertise, and hard work in implementing all of the outreach events in 2018. As partners, you have made these programs the quality events that they are and joined us in our mission of bringing prevention to the village level. We owe you great thanks and hope to further build these relationships in the future. Fa'afetaitele lava mo le fesoasoani!

- *Clinical Services (Ministry of Health)*
- *Samoa Red Cross Society*
- *Samoa Family Health Association*
- *Samoa Fa'afafine Association*
- *Ministry of Women, Community and Social Development*
- *Young Women's Christian Association*

Funded by the Government of Samoa and UNDP/Global Fund to Fight HIV, AIDS, and Malaria



Red Cross presenting Health Awareness Drama Skits

Introduction

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. This report details the findings of the survey that was distributed as part of those programmes in 2018 to improve health surveillance across multiple health indicators. 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.

The program in 2018 was hosted in 5 villages on the island of Upolu and 5 on Savai'i. Respondents that attended this program reside in the following villages and sub-villages;

- | | | | |
|--------------|--------------|--------------|---------------|
| • Alafua | • Lalomalava | • Saina | • Tuasivi |
| • Elise Fou | • Laulii | • Saleimoa | • Vaega |
| • Faala | • Leauvaa | • Salelavalu | • Vaiala |
| • Fagalii | • Letogo | • Salepoa'e | • Vailele |
| • Faleasiu | • Magiagi | • Salelologa | • Vailoa |
| | | • Salua - | |
| • Faleula | • Malie | Manono | • Vaipuna |
| • Fasitoo | • Manono | • Satapuala | • Vaitele |
| • FasitooUta | • Moataa | • Satufia | • VaiteleFou |
| • Fatausi | • Mosula | • Satuiatua | • Vaitele tai |
| • FinauVaega | • Nuufou | • Satupaitea | • VaiteleUta |
| • Foailuga | • Palauli | • Sili | • Vaitoomuli |
| • Fogapoa | • Papa | • Toamua | • Vaiusu |
| • Gataivai | • Puleia | • Tuaeifu | • Vaivaseuta |
| • Gautavai | • Pitonuu | • Tuanai | |
| • Iva | • Safua | • Tuanaimato | |

For 2018, the total estimated attendance of these programs is 700, with 546 agreeing to complete the survey, which comprise the sample for the analysis in this report. The results represent the populations reached by ICHAP in 2018 from targeted villages across the country.

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 opening ceremony 2018

Methods

An 18 item questionnaire was distributed to all attendees of the ICHAP events in villages with the exception of primary school students. Respondents therefore represent only the village committee members, village residents, and specific populations targeted by each program that attended. 546 questionnaires were completed out of a total of 700 attendees, creating a response rate of 78%. This created a convenience sample of n=546. The goal of the survey was to use the ICHAP events as an opportunity to collect case reporting data on national health indicators from rural and low-access communities, youth, and key populations, due to the limited available of random-sampled population based data. The survey was distributed at the beginning of the program to capture baseline health information on a variety of health issues including; NCD risk factors, family planning, HIV and STI testing, sexual health risk factors, TB and Chlamydia knowledge, and reported health problems in rural villages.

The survey itself was paper-based and included multiple choice questions, yes/no questions, 1 open ended section, and knowledge scales for Chlamydia and Tuberculosis. These scales were adapted from Centres for Disease Control instruments assessing knowledge of prevention and transmission. Some scale items were omitted due to their lack of relevance or conceptual conflicts when translated into Samoan. For knowledge scales, respondents were given a True/False/Unsure answer quiz through series of statements about the disease (a 7 item scale for TB and 11 item scale for Chlamydia). 7 total points could be scored for TB and 11 total points for Chlamydia. Scores were categorized as Very Low, Low, Moderate, and High.

ICHAP sites were 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).

Limitations

Random sampling was not used due to the nature of the program delivery. Convenience sampling was used as a means to measure the implementation of the program, and provide case-reporting of demographic health factors of the communities that participated. This may cause sample bias and limit the generalizability of the results to the overall population.

Additionally, missing data for only 1 question was high, presenting potential sampling bias for those items. Typically for behavioural descriptive analyses, missing data between 10-20% is acceptable. Missing data for the items below exceeds those values.

Table 1 Missing Data

| Item | Number | Percent |
|------------------|--------|---------|
| Type of exercise | 166 | 34.4% |

There are also multiple factors that may contribute to response bias on the survey. During data collection, it was observed that some respondents had a friend fill out their questionnaire for them. Additionally, there is also an inherent bias in using self-reported measures of health

behaviours. This applies heavily to questions on NCD risk factors, sexual activity or behaviour, and questions about sex work, where respondents are less likely to give an answer that is less socially desirable.

For knowledge scales for Chlamydia and TB, respondents would often only check an item on a scale that they knew the answer to, despite there being an answer field provided for “Do not know”. This was done to reduce missing data. However, checking the answer of “Do not know” is seen as a socially undesirable answer. This led to many blank items on knowledge scales. However, data was only recorded as missing for a knowledge scale if the respondent had not ticked an answer box in the scale. 100% of completed surveys had multiple boxes ticked on knowledge scales. Blank items were therefore coded as incorrect responses instead of missing, as it is assumed the respondent did not know the answer, but did not want to report it.

Knowledge scales for Chlamydia and TB were adapted from prevention knowledge assessments utilized by the Centre for Disease Control. The order and wording had to be adapted to fit the translation and some items were omitted because the translation did not make sense in Samoan.

Sample

A sample of n=546 respondents was obtained, representing 78% of all program attendees. This means that the sample adequately represents the total number of people who participated in the program.

Table 2 Gender Distribution of Sample

| Gender | Number | Sample Percent | Population Distribution | Source |
|-------------|--------|----------------|-------------------------|----------------------------------|
| Female | 257 | 47.1% | 48.6% | Census 2016 |
| Male | 206 | 37.7% | 51.4% | Census 2016 |
| Fa'afafine | 54 | 9.9% | 15.3% | Mapping & Behavioural Study 2016 |
| Fa'atamaloa | 5 | 0.9% | Unknown | - |
| Unknown | 24 | 4.4% | - | - |
| Total | 546 | 100% | | |

The gender distribution of respondents differed from the gender distribution of the population in that males were under-sampled compared to females and fa'afafine. Fa'afafine (transgender women) and Fa'atamaloa (transgender men) represent roughly 10% of the sample and are estimated to be about 15% of Samoa's population according to the estimates of the Pacific Multi-country Mapping and Behavioural Study 2016 (UNDP).

Nearly 13% of all respondents were youth age 15-24, and about 35.4% of respondents were above age 50. This means generally the sample is biased towards older adult age groups. However, an adequate sample was obtained to measure trends in youth. The elderly are also vulnerable to NCD's and TB, so results of this sample would be of particular interest to those areas of programming. Additionally, because the sample is biased towards older age groups, sex health risk factors (which are more common in youth) may be lower than actual rates in the population.

Table 3 Age Distribution of Sample

| Age Group | Number | Percent |
|--------------------|------------|--------------|
| 0-14 | 3 | 0.6% |
| 15-19 | 24 | 4.4% |
| 20-24 | 47 | 8.6% |
| 25-29 | 44 | 8.1% |
| 30-34 | 46 | 8.4% |
| 35-39 | 43 | 7.9% |
| 40-44 | 54 | 9.9% |
| 45-49 | 64 | 11.7% |
| 50+ | 193 | 35.4% |
| Unknown | 28 | 5.1% |
| <i>Youth 15-24</i> | <i>71</i> | <i>13.0%</i> |
| <i>Under 35</i> | <i>164</i> | <i>30.0%</i> |
| <i>35 or older</i> | <i>354</i> | <i>64.8%</i> |
| Total | 546 | 100% |

The majority of respondents resided in villages located on the island of Savai'i (64%). As these villages are more rural, under-served, and under-represented, these areas were targeted by ICHAP this round. Usually Savai'i is underrepresented in samples due to smaller population size and remoteness. Upolu is where the majority of the country's population is concentrated, especially in the Apia Urban Area and North West Upolu. The results for 2018 are therefore more representative of rural areas.

Table 4 Regional Distribution of ICHAP Attendees

| Census Region | Number | Percent |
|------------------|------------|----------|
| Apia Urban Area | 78 | 14.29% |
| North West Upolu | 100 | 18.32% |
| Rest of Upolu | 0 | 0.00% |
| Savai'i | 350 | 64.10% |
| Unknown | 18 | 3.30% |
| Total | 546 | w |

Though the sample overall differs from the general population, all genders and age groups have sufficient sample sizes for analysis and estimations. The sample also adequately represents the populations reached by ICHAP in 2018.



Clinical Service Staff screening attendees for blood pressure and blood glucose 2017



ICHAP Women's Health Seminar 2018

Media

ICHAP attendees were asked about what types of media they regularly access and what health messages appear on the media, in order to gauge the reach of current health promotion campaigns, as well as collect data on which form of media has the largest audience. Overwhelmingly, respondents reported that the most common media through which they receive health messages was TV (68%), followed by radio (19.7%), Facebook™ (7%), and newspaper (5.3%).

Figure 1 Media Platform for Health Messages

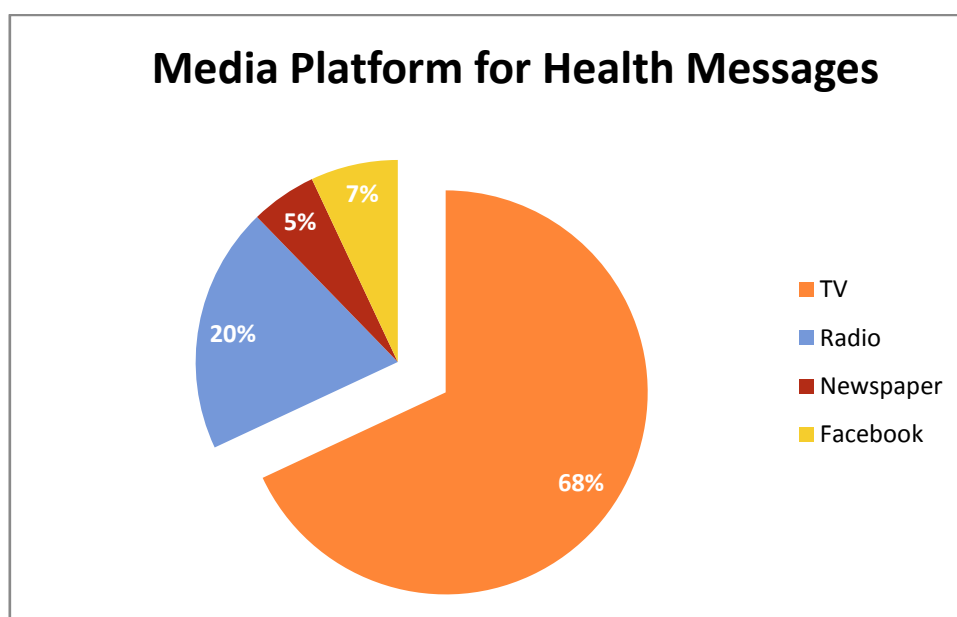
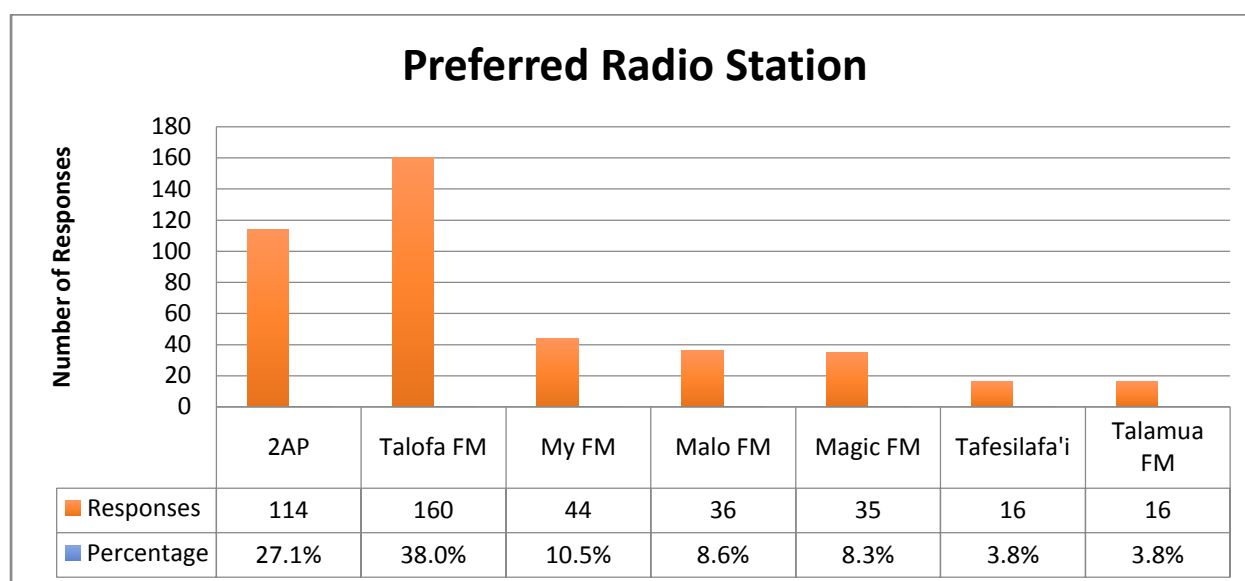


Table 5 Media Platform for Health Messages (Respondents)

| Media Platform | Respondents | Percent |
|----------------|-------------|---------|
| TV | 477 | 68.0% |
| Radio | 138 | 19.7% |
| Newspaper | 37 | 5.3% |
| Facebook | 49 | 7.0% |

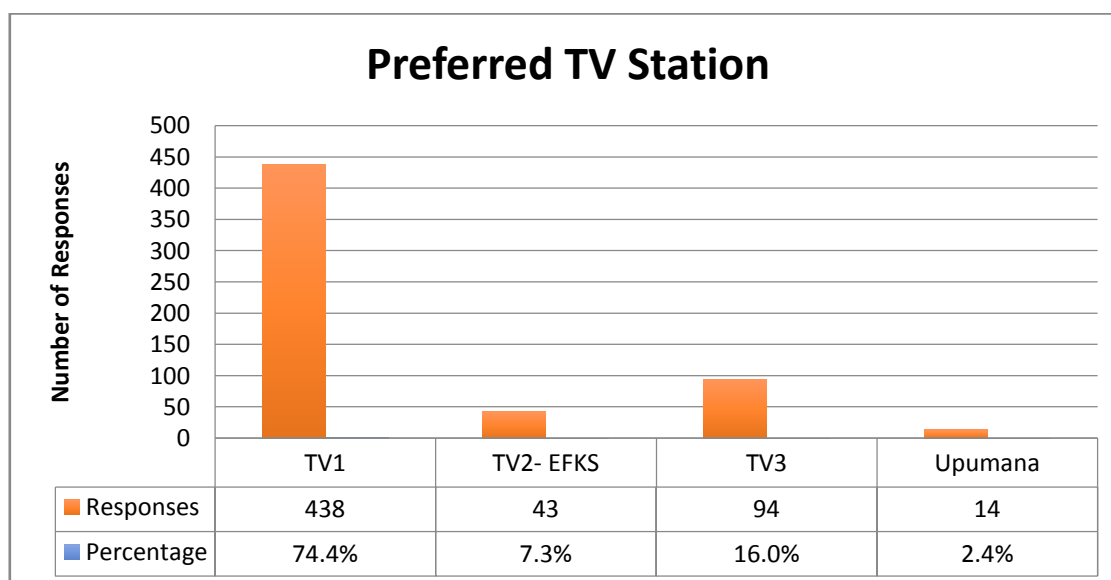
In terms of specific radio or TV service providers, respondents were asked which station or channel they access regularly. Respondents listened to Talofa FM most frequently (29.3% of all responses), followed by 2AP (20.9%), My FM, Malo FM, Magic FM, Tafesilafa'i, and Talamua FM.

Table 6 Preferred Radio Station



Respondents were also asked to indicate which TV network they accessed most regularly. TV1 had the most responses (74.4%).

Table 7 Preferred TV Station



Additionally, respondents were asked to identify which health messages they received through the media. Smoking and Exercise were the most frequently reported type of information received through the media by respondents (52.2% and 51.5% respectively). Almost 32% had received information through the media about mosquito borne illnesses such as dengue. Information on HIV and STI's was received through the media by 26.9% of respondents. Binge drinking health information was less frequently reported amongst respondents (22.9%). Health information on TB was the least reported category by respondents (17.9%).

Table 8 Type of Health Information Received Through Media

| Type of Health Information | Number of Respondents Receiving Information | Percentage of All Respondents |
|---|---|-------------------------------|
| Smoking | 285 | 52.2% |
| Binge Drinking | 125 | 22.9% |
| Exercise | 281 | 51.5% |
| HIV and Sexually Transmitted Infections | 147 | 26.9% |
| TB | 98 | 17.9% |
| Mosquito Transmitted Illnesses | 173 | 31.7% |

Alcohol Consumption

Overall 9.2% of respondents reported binge drinking (having more than 5 alcoholic beverages at a time within the past week). Male respondents were more likely to report consuming more than 5 alcoholic beverages at a time (14.6%) compared with females (6.6%).

Table 9 Binge Drinking by Gender

| Binge Drinking (More than 5 beverages at a time during past week) | Number reporting binge drinking | Percentage (of gender group) |
|--|--|---|
| Female | 17 | 6.6% |
| Male | 30 | 14.6% |
| Fa'afafine | 1 | 1.9% |
| Fa'atamaloa | 0 | 0.0%* |
| Unknown | 2 | 8.3% |
| All Respondents | 50 | 9.2% |

**Percentage is not significant due to small sample size in age/gender group*

Tobacco Use

35.5% of respondents reported using tobacco within the past year. About 45% of men used tobacco in the past 12 months compared only 29% of women. Fa'afafine had significant rates of smoking comparable to females (28%).

Table 10 Tobacco Use by Gender

| Tobacco Use in past 12 months | Number reporting tobacco use | Percentage (of gender group) |
|-------------------------------|------------------------------|------------------------------|
| Female | 74 | 28.8% |
| Male | 93 | 45.1% |
| Fa'afafine | 15 | 27.8% |
| Fa'atamaloa | 3 | 60.0%* |
| Unknown | 9 | 37.5% |
| Total | 194 | 35.5% |

**Percentage is not significant due to small sample size in age/gender group*

Out of the 194 respondents that reported using tobacco within the past 12 months, 88.1% of these individuals have ever attempted to quit tobacco use. The majority of all gender groups reported ever attempting to quit tobacco use (89% of men, 88% of women, 87% of fa'afafine).

Table 11 Ever Cessation Attempt of Tobacco Users by Gender

| Ever cessation attempts among tobacco users | Number reporting cessation attempt | Percentage (of gender group) |
|---|------------------------------------|------------------------------|
| Female | 66 | 89.2% |
| Male | 82 | 88.2% |
| Fa'afafine | 13 | 86.7% |
| Fa'atamaloa | 3 | 100.0%* |
| Unknown | 7 | 77.8% |
| Total | 171 | 88.1% |

**Percentage is not significant due to small sample size in age/gender group*



ICHAP School Programme



Samoa Red Cross Volunteers presenting to primary school students 2017



Fruit and Vegetable Consumption

Recommended daily fruit and vegetable consumption of 5 servings was very low for all gender and age groups (6.1% of all respondents). No significant differences can be determined in age and gender due to the low number of respondents reporting eating at least 5 servings of fruit and vegetables per day. Roughly 26% had 0 daily servings of fruits or vegetables.

Table 12 Daily Fruit and Vegetable Consumption

| Number of fruits or vegetables consumed per day | Number | Percent |
|---|-----------|-------------|
| 0 | 98 | 25.8% |
| 1 | 97 | 25.5% |
| 2 | 78 | 20.5% |
| 3 | 64 | 16.8% |
| 4 | 20 | 5.3% |
| 5 | 13 | 3.4% |
| 6 | 4 | 1.1% |
| 7 | 1 | 0.3% |
| 8+ | 5 | 1.3% |
| 5 or more | 23 | 6.1% |

Though few respondents reported the recommended servings, the majority of respondents had between 1-4 servings (68.2%). This suggests that respondents have regularly incorporated fruits and vegetables into diet, but just may need more awareness to increase their servings.



ICHAP Men's Health Seminar 2018

Physical Activity

Overall, 61% of respondents indicated they had at least 30 minutes of physical activity on a daily basis. A higher percentage of men (66%) were physically active compared to other gender groups. Fa'afafine had the lowest percentage of reported physical activity (52%).

Table 13 Physical Activity by Gender

| Physical Activity (30 min. per day) | Number | Percentage (of gender group) |
|-------------------------------------|------------|------------------------------|
| Female | 152 | 59.1% |
| Male | 136 | 66.0% |
| Fa'afafine | 28 | 51.9% |
| Fa'atamaloa | 2 | 40.0% |
| Unknown | 15 | 62.5% |
| Total | 333 | 61.0% |

**Percentage is not significant due to small sample size in age/gender group*

Family Planning

Only 17% of respondents reported using family planning services. Female and fa'afafine were more likely to report using family planning services (19.8% and 16.7% respectively). Men had lower rates of family planning utilization (13.6%).

Table 14 Family Planning Use by Gender

| Family Planning | Number | Percentage (of gender group) |
|-----------------|-----------|------------------------------|
| Female | 51 | 19.8% |
| Male | 28 | 13.6% |
| Fa'afafine | 9 | 16.7% |
| Fa'atamaloa | 0 | 0.0% |
| Unknown | 5 | 20.8% |
| Total | 93 | 17.0% |

The respondents that indicated they use family planning services (93) were then asked to identify their most common source of family planning if they have ever used a family planning service. The most common source of family planning was overwhelmingly hospitals or health centres.

Table 15 Source of Family Planning

| Source of family planning | Number | Percent |
|---------------------------|--------|---------|
| Hospital | 76 | 81.7% |
| Private Doctor | 5 | 5.4% |

| Source of family planning | Number | Percent |
|---------------------------|--------|---------|
| Overseas | 2 | 2.2% |
| Other | 1 | 1.1% |
| Friend or family member | 1 | 1.1% |

HIV and STI Testing

HIV testing overall was low. Only 14.3% had a test in the past 12 months. Fa'afafine and fa'atamaloa had the highest testing rates for HIV out of all gender groups (20.4% and 20% respectively). Testing rates were lower for men and women (15.5% and 11.3% respectively).

Table 16 HIV Testing in Past 12 Months by Gender

| Tested for HIV in past 12 months | Number | Percentage (of gender group) |
|----------------------------------|--------|------------------------------|
| Female | 29 | 11.3% |
| Male | 32 | 15.5% |
| Fa'afafine | 11 | 20.4% |
| Fa'atamaloa | 1 | 20.0%* |
| Unknown | 5 | 20.8% |
| Total | 78 | 14.3% |

**Percentage is not significant due to small sample size in age/gender group*

Testing rates for other STI's (including Chlamydia, Syphilis, Gonorrhea or Hepatitis B or C) was even lower than for HIV amongst all groups in the past 12 months (8.8%). Fa'afafine and fa'atamaloa had the highest self-reported testing rate (18.5% and 20% respectively) followed by men (7.8%), then women (7%).

Table 17 STI Testing in Past 12 Months by Gender

| Tested for STI's in past 12 months | Number | Percentage (of gender group) |
|------------------------------------|--------|------------------------------|
| Female | 18 | 7.0% |
| Male | 16 | 7.8% |
| Fa'afafine | 10 | 18.5% |
| Fa'atamaloa | 1 | 20.0%* |
| Unknown | 3 | 12.5% |
| Total | 48 | 8.8% |

**Percentage is not significant due to small sample size in age/gender group*

Respondents were asked what factors make it difficult to test for HIV. The most common response was that it's not difficult for respondents they are just unwilling (22.5%), and not having enough money to access testing services (22%). A significant number of people reported simply not wanting to access the service. The unwillingness was further explored with other questions. Additionally, although HIV testing is offered for free at all national hospitals and health centres, transport and service fees may be a barrier to access in those cases. Physician fees required to see the doctor and then receive the referral to testing services may also prevent people from accessing testing through primary care pathways.

Table 18 Barriers to HIV Testing Services

| Barrier to HIV Testing | Number | Percent |
|---|--------|---------|
| No money | 120 | 22.0% |
| No time | 80 | 14.7% |
| No barriers just don't want to | 123 | 22.5% |
| Don't know where services are available | 60 | 11.0% |
| Other | 73 | 13.4% |
| Fear people will find out | 16 | 2.9% |

Respondents were also asked if they were planning on getting an HIV test. A follow-up question to "No" responses was used to determine the reasons why a person would be unwilling to get testing. Overall 46% of respondents indicated they were planning to get HIV tested. About 52% conversely indicated that they were not planning to get tested. Males were the most frequent respondents that planned on seeking HIV testing, with fa'afafine being the lowest (as most of them had already been tested).

Table 19 Public Interest in HIV Testing Services

| Planning to test for HIV | Number | Percentage (of gender group) |
|--------------------------|------------|------------------------------|
| Female | 113 | 44.0% |
| Male | 103 | 50.0% |
| Fa'afafine | 21 | 38.9% |
| Fa'atamaloa | 2 | 40.0%* |
| Unknown | 12 | 50.0% |
| Total | 251 | 46.0% |

**Percentage is not significant due to small sample size in age/gender group*

286 people were not planning to test for HIV. 127 (66.8%) of those people provided a response as to why they were not accessing testing services. From these respondents, the most common reasons for not planning to test for HIV were that 1) they don't believe they currently are at risk or could be affected by HIV, or 2) they have 1 or few sexual partners and therefore not at risk. The attitude that a person is simply not at risk of HIV or couldn't, or cannot contract HIV from limiting sex to one partner (without condom use) indicates a knowledge gap for people's perception about HIV transmission. All sexually active people are at risk, and it only takes one infected sexual partner to be exposed to the virus. Future education interventions need to emphasize that HIV and some STI's often have no symptoms for long periods of time.

Table 20 Reasons for Declining HIV Testing

| Reason for not wanting an HIV test | Number | Percentage (of those not planning to test for HIV) |
|---|--------|--|
| Don't believe they are or could be affected by it | 71 | 24.8% |
| Have only 1 or few partners | 53 | 18.5% |
| No money or no time | 14 | 4.9% |
| No symptom or are currently in good health | 11 | 3.8% |
| Not having sex | 9 | 3.1% |
| Other | 1 | 0.3% |

*Programme with village committee members 2017*

Condom Use and Sexual Partnerships

Respondents were asked if they used a condom at their last sexual intercourse. 60.8% of respondents reported being sexually active within the past year (n=322 having at least 1 sexual partner). 127 (23%) respondents reported that they were not currently having sex and only 4.8% reported have more than 1 sexual partner within the past year. This is low, and likely due to the fact that sexual activity with more than one partner is taboo, with respondents less likely to report this behaviour on a survey. Multiple sexual partnerships often occur in the context of infidelity in Samoa, which further biases these self-reported measures. The actual rate of multiple sexual partnerships is therefore likely higher.

Additionally, condom use was low amongst those that reported having at least 1 sexual partner in the past year. Respondents were asked if they used a condom during their last sexual intercourse. Only 5% indicated that they used condoms. This is consistent with previous surveys and studies. The prevailing belief is that condoms are for sexually promiscuous behaviour, and that people in relationships do not need to wear condoms during intercourse. Condoms are also difficult to access in rural areas as well.

Table 21 Sexual Partnerships and Condom Use in Past Year

| Sexual Partnerships and Condom Use in Past Year | Number | Percent |
|--|---------------|----------------|
| No sexual partners | 127 | 23.3% |
| 1 sexual partner | 296 | 54.2% |
| Multiple sexual partners (>1) | 26 | 4.8% |
| Unspecified | 97 | 17.8% |
| Condom Use at Last Sexual Intercourse* | 16 | 5.0% |

**amongst those that reported at least 1 sexual partner in the past year (n=322)*

Chlamydia Knowledge

Chlamydia is the most prevalent STI in the country (22.9% in 2018), particularly amongst those ages 20-29. The survey therefore wanted to measure population knowledge of proper prevention. Knowledge of Chlamydia transmission and health effects was measured using an 11 question scale. The average score of all respondents (3.7) was “Low”. The majority of respondents scored Low (39.4%) to Very Low (32.8%) on these scales. Only 2% achieved a high knowledge score.

Table 22 Levels of Chlamydia Knowledge

| Chlamydia Knowledge Scores | Number | Percent |
|----------------------------|--------------------|----------|
| Very Low (0-2) | 179 | 32.8% |
| Low (3-5) | 215 | 39.4% |
| Moderate (6-8) | 144 | 26.4% |
| High (9-11) | 8 | 1.5% |
| Total | 546 | 100% |
| Mean | Standard Deviation | Variance |
| 3.7 | 2.6 | 6.8 |

By analyzing each scale item, there were items that respondents consistently scored lower on, which revealed common misconceptions respondents had about Chlamydia transmission and prevention. The number of correct responses was notably low across all questions. For example, 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.

Table 23 Beliefs about Chlamydia Transmission and Prevention

| Item | Answer | Correct Responses | Percent |
|--|--------|-------------------|---------|
| You can catch Chlamydia from toilet seats. | FALSE | 171 | 31.3% |
| Men with Chlamydia might not have symptoms. | TRUE | 74 | 13.6% |
| Most women will NOT develop symptoms of Chlamydia. | TRUE | 183 | 33.5% |
| Only women get Chlamydia. | FALSE | 314 | 57.5% |
| Chlamydia can affect men's fertility. | TRUE | 147 | 26.9% |
| Chlamydia can affect women's fertility. | TRUE | 172 | 31.5% |
| Chlamydia can cause eye infections. | TRUE | 136 | 24.9% |
| Once you get chlamydia, you can't get rid of it. | FALSE | 262 | 48.0% |
| You can get Chlamydia more than once. | TRUE | 96 | 17.6% |
| Wearing a condom prevents Chlamydia. | TRUE | 275 | 50.4% |
| Birth control pills prevent Chlamydia. | FALSE | 198 | 36.3% |

TB Knowledge

TB knowledge scores were also commonly Very Low to Low (43.1%). More respondents were able to obtain a high knowledge score for TB (17.9%) than Chlamydia where only 2% achieved a High score. A significant number of respondents scored a moderate level of knowledge of TB (about 39%). Although TB scores are relatively higher, the average score was still “Low”, indicating the need for further progress with TB education interventions.

Table 24 Levels of TB Knowledge

| TB Knowledge Scores | Number | Percent |
|-----------------------|---------------------------|-----------------|
| Very Low (0-1) | 126 | 23.1% |
| Low (2-3) | 109 | 20.0% |
| Moderate (4-5) | 213 | 39.0% |
| High (6-7) | 98 | 17.9% |
| Total | 546 | 100.0% |
| Mean | Standard Deviation | Variance |
| 3.4 | 2.1 | 4.2 |

The common misconception about TB that respondents reported was that all people that get infected with TB will get sick or show symptoms. Only 11.2% knew that not everyone who gets infected with TB will get sick. Additionally only 37.4% knew that TB bacteria don't survive well in environments with fresh air and sunlight. In terms of treatment, only 64% were aware that even if an infected person doesn't feel sick, they still have to take medicine for TB

Table 25 Beliefs about Tuberculosis Transmission and Prevention

| Item | Answer | Correct Responses | Percent |
|--|--------|-------------------|---------|
| TB is spread by one person to another through the air | TRUE | 371 | 67.9% |
| Everyone who gets infected with TB will get sick. | FALSE | 61 | 11.2% |
| Some people can get TB disease easier than others | TRUE | 273 | 50.0% |
| TB disease can be cured | TRUE | 372 | 68.1% |
| TB can affect other parts of the body besides the lungs | TRUE | 244 | 44.7% |
| TB bacteria have a hard time living in fresh air and sunlight | TRUE | 204 | 37.4% |
| If you have TB infection you may have to take medicine, even if you don't feel sick | TRUE | 349 | 63.9% |

Key Population Characteristics

The survey also asked questions that would allow respondents to be identified by key population group. A key population is defined as a group that is vulnerable to certain diseases due to behavioural factors and have unique needs of prevention programming. With regards to HIV and STI's key population groups include fa'afafine (transgender), sex workers, prisoners, people who have sex with members of the same sex, and people with multiple sexual partnerships.

Table 26 Representation of Key Populations in ICHAP 2018

| Key Population Group | Number | Percent of Sample | Estimated population (number) | Estimated population (percent) |
|--|--------|-------------------|--|--------------------------------|
| Multiple Sexual Partnerships | 322 | 59.0% | No estimate | No estimate |
| • Sexually Active Females age 15-49 | 155 | 28.3% | 43,904 (Census 2016) | 22.4% |
| Ever engaged in sex work | 6 | 1.1% | 400 (Behavioral Mapping Study 2016) | 0.20% |
| Had sex with member of the same sex | 10 | 1.8% | No estimate | No estimate |
| Men reporting ever having sex with men (MSM) | 1 | 0.2% | No estimate | No estimate |
| Fa'afafine | 54 | 9.9% | 30,000 (Behavioral Mapping Study 2016) | 15% |
| Fa'afafine and MSM | 55 | 10.1% | 30,000 | 15% |

The respondents and participants of ICHAP reflect accurately the distribution of key populations in the population. For the estimates that are available, the ICHAP sample is comparable to the general population. The population that engages in multiple sexual partnerships is not currently known. In place of this estimate, we can compare the ICHAP respondents to the general population estimates in the Census 2016 based on how many sexually active females age 15-49 are in each samples. Sexually active females age 15-49 represent 22% of the population according to the Census. The same group represents 28% of the respondents to the ICHAP Survey 2018. Therefore we can infer that the results of the ICHAP survey with regards to sexual partnerships (and therefore sexual risk factors) are adequately representative of the Samoan population. Additionally, sex workers and fa'afafine are also adequately represented. These numbers from the ICHAP sample are also provided for reference for other reporting to estimate coverage of health education and testing services by key population group.

Appendix A. ICHAP Survey 2018

Ministry of Health Integrated Health Questionnaire
Pepa Fesili Tu'ufa'atasi mo le Soifua Maloloina (Fa'alilolilo)

Tausaga: _____ **Nu'u:** _____

Ituaiga: ☐ Alii ☐ Tama'ita'i ☐ Fa'afafine ☐ Fa'atama

VAEGA 1: Iloiloga o auala e maua ai fa'amatalaga fa'a-le-soifua maloloina

1. O a vaega o feso'otaiga e masani na e iloa ai feau fa'asoifua maloloina?(Togi le li'o sa'o)

☐ TV ☐ Leitio ☐ Nusipepa ☐ Facebook

2. O le a le leitio po'o le TV e masani na e maua ai feau fa'asoifua maloloina?(Togi le li'o o tali sa'o)

| Leitio | TV |
|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> 2 AP | <input type="checkbox"/> TV 1 |
| <input type="checkbox"/> Talofa FM | <input type="checkbox"/> TV 2 - EFKS |
| <input type="checkbox"/> My FM | <input type="checkbox"/> TV 3 |
| <input type="checkbox"/> Malo FM | <input type="checkbox"/> Upumana |
| <input type="checkbox"/> Magic FM | |
| <input type="checkbox"/> Tafesilafa'i | |
| <input type="checkbox"/> Talamua FM | |

3. O a feau fa'asoifua maloloina e masani ona e matamata ma fa'alologologo ai? (Li'o le tali sa'o)

☐ Taofi le ulaula tapa'a ☐ Faaititia le inu ava malos ☐ Fa'amositino
☐ Fa'amai o le HIV/AIDs Siam o STI's ☐ TB ☐ Fa'ama'i e feavea'i e Namu

4. Na fai sau siaki o le HIV i totonu o le 12 masina ua tuana'i?

☐ Ioe ☐ Leai

5. O e fuafua e fai sau siaki mo le HIV?

☐ Ioe ☐ Leai

Afai o lau tali o le 'Leai', aisea?

VAEGA 2: Iloiloga o le malamalama i fa'ama'i pipisi e mafua o feusua'iga

6. Na siaki oe i siama o le ma'i afi? (siama o le Chlamydia, Syphilis, Gonorrhea or Hepatitis B or C) i totonu o le 12 masina talu ai?

☐ Ioe ☐ Leai

7. E to'afia au pa'aga na lua feusua'i i le tausaga ua tuana'i? _____

8. Na e fa'aaogaina se pa'u fai usuga i au feusua'iga mulimuli?

☐ Ioe ☐ Leai ☐ e le'i feusua'i

9. Ua e faia ni feusua'iga e tologi ai oe i tupe, nisi oloa po'o fuala'au fa'asaina?

☐ Ioe ☐ Leai

10. Ua e faia ni feusuaiga ma se tagata o lou lava ituaiga (ft – teine i le teine/tama i le tama)
☐ Ioe ☐ Leai
11. Aiseā e faigata ai le fai o sau siaki mo fa'ama'i e pipisi o feusua'iga po'o le HIV?
☐ leai se tupe ☐ musu ne'i iloa e nisi tagata ☐ e leai se faigatā, ou te le mana'o ai lava
☐ ou te leiloa nofoaga e fai ai ☐ leai se taimi e alu ai e vaai se foma'i ☐ nisi mafuaaga

| 12. Malamalama I le siama o le Chlamydia (Ma'I Afi): Sa'o pe Sese? Fa'amolemole tu'u le 'x' I lau tali sa'o | | | |
|--|------------|-------------|---------------|
| | SAO | SESE | LEILOA |
| E mafai ona e pesia i le siama o le Chlamydia (ma'i afi) mai luga o le ipu o le faleui | | | |
| E leai ni auga o ali'i pe a a'afia i le siama (Chlamydia) o le ma'i afi | | | |
| E le iloa ni auga o le to'atele o tama'ita'i e a'afia i le siama o le (Chlamydia) ma'i afi | | | |
| Na'o tama'ita'i e a'afia i le siama o le ma'i afi (Chlamydia) | | | |
| O le siama o le ma'i afi (Chlamydia) e le mafai ona fananau ai ali'i | | | |
| O le siama o le ma'i afi (Chlamydia) e le mafai ona fananau ai tama'ita'i | | | |
| O le siama o le ma'i afi (Chlamydia) e a'afia ai mata ma l'u ai ina tauaso | | | |
| E le mafai ona togafitia oe pe a e a'afia i le siama o le ma'i afi (Chlamydia) | | | |
| E mafai ona maua so'o oe i le siama o le ma'i afi | | | |
| E puipui oe mai le siama/ ma'i afi pe a e fa'aogaina pa'u fai usuga | | | |
| E puipui oe mai le siama/ ma'i afi pe a e fa'aogaina fualaa'u mo aiga fuafuaina | | | |

VAEGA 3: Iloiloga o le malamalama i le fa'ama'i o le fatafata vaivai/māmā pala po'o le TB

| 13. Malamalama i le fa'ama'i o le Fatafata Vaivai (TB): Sa'o pe sese? Fa'amolemole fa'atumu I le 'x' lau tali sa'o | | | |
|---|-------------|-------------|---------------|
| | SA'O | SESE | LEILOA |
| O le TB po'o le fatafata vaivai e pipisi mai le si tagata i le isi ona e feaveai e le ea | | | |
| O tagata uma e a'afia i le siama o le TB/fatafata vaivai o le a mama'i | | | |
| O isi tagata e faigofie ona a'afia i le fa'ma'l o le Tb nai lo isi tagata | | | |
| E mafai ona togafitia le fa'ama'l o le TB/Fatafata vaivai | | | |
| E mafai ona a'afia isi vaega o le tino I le siama o le TB/fatafata vaivai e ese mai mama | | | |
| E faigata ona ola le siama o le TB i le ea mama ma le la | | | |
| Afai ua e a'afia I le siama o le TB, e tataua ona togafitia e ala i le inuina o ni fualaau mai le foma'l, e tusa lava pe e te fa'alogoia o na e malosi | | | |

VAEGA 4: Iloiloga o isi mataupu soifua maloloina**14. O fai sau aiga fuafuaina?**
☐ Ioe ☐ Leai

Afai o lau tali o le 'Ioe', o fea na mulimuli fai ai lau aiga fuafuaina? Filifili na'o le tasi

☐ Falema'i ☐ Foma'l Tumaoti ☐ Atunu'u i fafo ☐ Uo/Sui o le Aiga ☐ Nisi

15. Inu ava malosi ova atu ma le lima fagu laiti, pe inu ava malosi i aso uma o le vaiaso?

☐ loe ☐ Leai

16. Sa e ulaula tapa'a i totonu o le 12 masina ua tuana'i?

☐ loe ☐ Leai

Afai - "loe", O fuafua e taofi le ulaula tapaa?

☐ loe ☐ Leai

17. E fia ni ituaiga fualaaauaina eseese na e taumafaina ananafi? _____

18. O e faia ni faamalositino mo le lima aso o le vaiaso mo le 30 minute pe sili atu?

☐ loe ☐ Leai

O le a le ituaiga fa'amalositino o lo'o e fa'atinoa?
