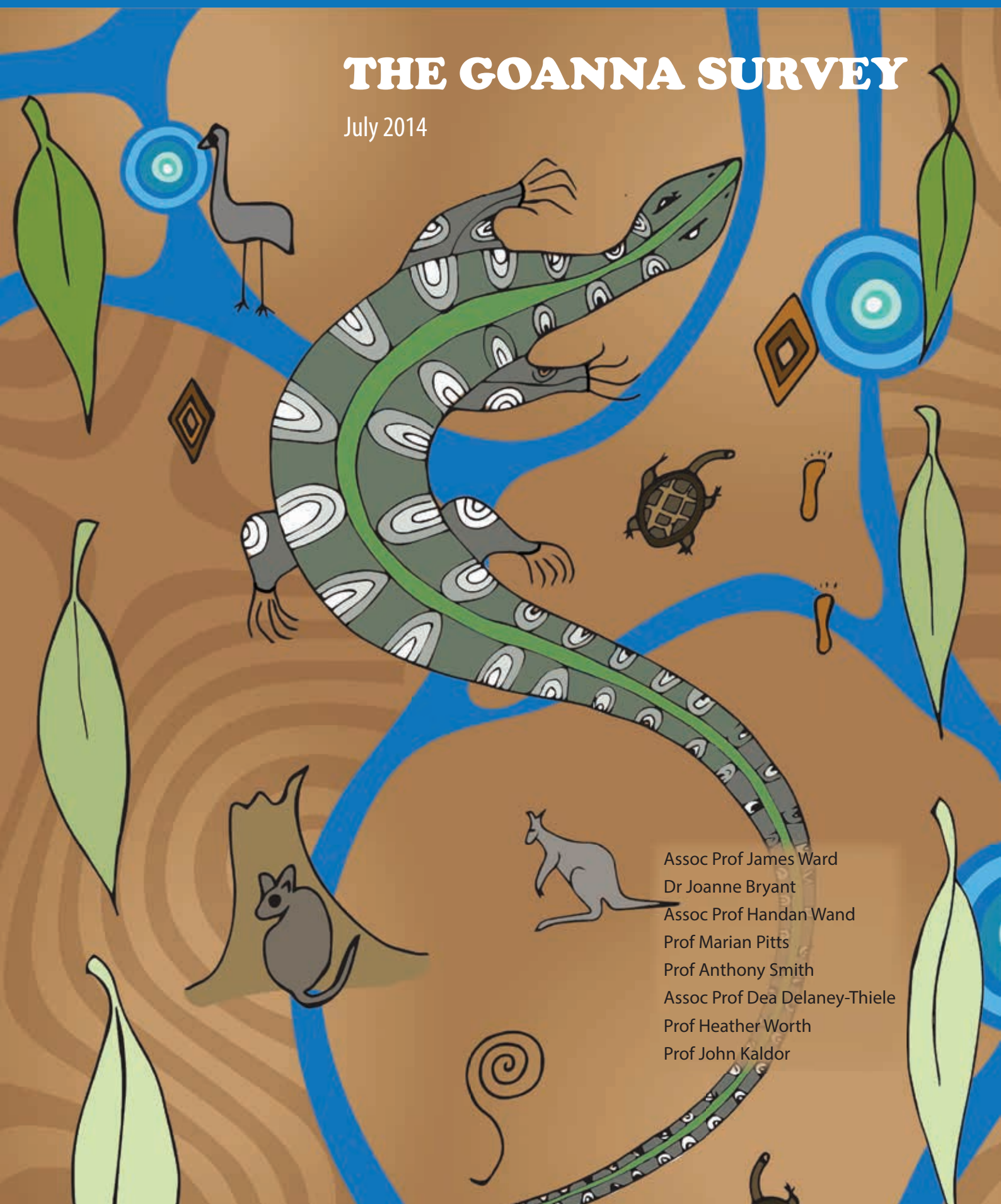


Results of the first Australian study of knowledge, risk practices and health service access for Sexually Transmissible Infections (STIs) and Blood Borne Viruses (BBVs) among young Aboriginal and Torres Strait Islander people.

THE GOANNA SURVEY

July 2014



Assoc Prof James Ward
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Table of Contents

Preface	i
Acknowledgements	ii
List of Tables	vi
List of Figures	vii
EXECUTIVE SUMMARY	1
KEY FINDINGS:	
Demographics	1
Knowledge of STIs and BBVs risk	2
Sexual behaviours	2
Feelings after last sexual act	3
Tobacco and alcohol use	3
Illicit drug use	3
Injecting drugs and practices	4
STI testing and diagnosis	4
Hepatitis C Virus (HCV) testing, diagnosis and treatment	5
Tattoos	
Access to health services	6
CHAPTER 1 - INTRODUCTION	7
Research aims	7
Sexually Transmissible Infections (STIs) and Blood Borne Viruses (BBVs)	8
CHAPTER 2 - STUDY METHODOLOGY	9
Study coordinators	9
Study events	9
Study questionnaire	9
Survey administration	9
Personal Digital Assistants (PDAs)	10
Data management and analysis	10
Efforts to increase communities' participation in the survey whose language is other than English	11
CHAPTER 3 - RESULTS: SURVEYS AND DEMOGRAPHICS	13
Survey events	13
Demographics of study participants	13
CHAPTER 4 - RESULTS: KNOWLEDGE ABOUT BBV AND STI PREVENTION AND TREATMENT	17

CHAPTER 5 - RESULTS: SEXUAL BEHAVIOUR	21
Sexual activity in the past year	25
Condom use	27
Sources of condoms	27
Sexual encounter under the influence of alcohol and other drugs	29
Feelings after last sexual encounter	30
 CHAPTER 6 - ALCOHOL, TOBACCO AND OTHER DRUG USE	 33
Alcohol	33
Tobacco use	35
Illicit drug use	36
Injecting drug use	39
Shared injecting equipment	40
 CHAPTER 7 - HEALTH SERVICE AND OTHER ACCESS	 41
Reported rates of testing and diagnosis of STIs and BBVs	42
STIs	42
HIV testing and diagnosis	44
Hepatitis C Virus (HCV) testing, diagnosis, treatment	45
Source of information for STIs, BBVs and alcohol and other drugs	47
Tattoos	50
 CHAPTER 8 - STRENGTHS AND LIMITATIONS	 51
 CHAPTER 9 - CONCLUSION	 53
 REFERENCES	 55
 APPENDIX	 57
Appendix 1 - Survey	57

LIST OF TABLES:

Table 2-1:	Use of Personal Digital Assistants by gender and age group	11
Table 2-2:	Use of Personal Digital Assistants by regions	11
Table 3-1:	Surveys in each jurisdiction	13
Table 3-2:	Demographics by age group and region	14
Table 3-3:	Demographic characteristics by gender and age group	15
Table 3-4:	Demographic characteristics by region	16
Table 4-1:	BBV and STI questions answered correctly by gender and age group	18
Table 4-2:	BBV and STI questions answered correctly by region	19
Table 4-3:	Participants knowledge score of BBVs and STIs questions by gender and age group	20
Table 4-4:	Participants knowledge score of BBVs and STIs questions by region	20
Table 5-1:	Sexual experience by gender and age group	23
Table 5-2:	Sexual experience by region	24
Table 5-3:	Characteristics of last sexual encounter in last year by gender and age group	25
Table 5-4:	Characteristics of condom use at last sexual encounter in last year by gender and age group	26
Table 5-5:	Characteristics of condom use at last sexual encounter in last year by region	28
Table 5-6:	Characteristics of behaviour at last sexual encounter in last year by gender and age group	30
Table 5-7:	Characteristics of behaviour at last sexual encounter in last year by region	30
Table 5-8:	Feelings after last sexual encounter in last year by gender and age group	31
Table 5-9:	Feelings after last sexual encounter in last year by region	32
Table 6-1:	Alcohol and Tobacco use by gender and age group	34
Table 6-2:	Alcohol and Tobacco use by region	35
Table 6-3:	Illicit drug use by gender and age group	36
Table 6-4:	Illicit drug use by region	37
Table 6-5:	Other illicit drug use by gender and age group	38
Table 6-6:	Other illicit drug use by region	38
Table 6-7:	Injecting drug use by gender and age group	39
Table 6-8:	Injecting drug use by region	40
Table 7-1:	Service access adult health check by gender and age group	41
Table 7-2:	Service access adult health check by region	41
Table 7-3:	STIs by gender and age group	42
Table 7-4:	STIs by region	43
Table 7-5:	STIs by gender and age group	44
Table 7-6:	STIs HIV by region	45
Table 7-7:	Hepatitis C Virus (HCV) by gender and age group	46
Table 7-8:	HCV by region	47
Table 7-9:	Source of information by gender and age group	48
Table 7-10:	Source of information by region	48
Table 7-11:	Best source of information by gender and age group	49
Table 7-12:	Best source of information by region	49
Table 7-13:	Tattoos by gender and age group	50
Table 7-14:	Tattoos by region	50

LIST OF FIGURES:

Figure 4a: Knowledge score of BBV and STIs (in tertiles) by age group	17
Figure 5a: Ever had sexual intercourse (vaginal/anal) by age group	21
Figure 5b: First sexual intercourse before/after 16 years of age by age group	22
Figure 5c: Number of sexual partners in last year by age group	22
Figure 5d: Condom used at last sexual act by age group	27
Figure 5e: Sources of usual places to get condoms by gender	28
Figure 5f: Drunk or high at last sex by gender	29
Figure 5g: Drunk or high at last sex by age group	29
Figure 6a: Alcohol intake by age group	33
Figure 6b: Drinks per day by age group (among reporting alcohol use)	33

EXECUTIVE SUMMARY

The Sexual Health and Relationships Survey is the first national survey of young Aboriginal and Torres Strait Islander people in relation to sexually transmissible infections (STIs) and blood borne viruses (BBVs) undertaken in Australia. The survey involved collection of data comprising four areas;

(i) demographics; (ii) questions assessing knowledge of STIs and BBVs; (iii) questions relating to risk behaviours and (iv) questions related to use of and access to health services. Just under 3 000 Aboriginal and Torres Strait Islander people aged 16-29 were surveyed in every Australian jurisdiction. The project was initiated in 2010, and data collection occurred during 2011-2013. The survey was funded by an Australian Research Council Linkage Grant with contributions from State and Territory Health Departments. The survey was coordinated by peak Aboriginal health organisations in each jurisdiction.

This project was initiated because rates of STIs and BBVs in Aboriginal and Torres Strait Islander communities are recognised as a key area of disadvantage, with rates of infection being much higher than for non-Indigenous Australians except for HIV infection. This is the case even with ongoing efforts in both program delivery and policy implementation aimed at addressing this disadvantage. Further these differentials have been recognised for some time, and there is little understanding of the social and behavioural factors that underpin them. It is plausible that factors such as younger age at sexual debut and less access to appropriate primary health care services have left young Aboriginal and Torres Strait Islander people vulnerable to these infections, but there has been up until now limited systematic investigation of these factors. This study has instigated an understanding of this and has set the foundation for a repeatable and ongoing study to assess changes over time. The study provides evidence to shape policy and programs and contribute to the broader body of knowledge in the area of Aboriginal and Torres Strait Islander sexual health and blood borne viruses.

Key findings:

Demographics

- **Study population** - A total of 2 877 Aboriginal and Torres Strait Islander people aged 16-29 years participated in the survey.
- **The survey was administered at 40 Aboriginal and Torres Strait Islander community events** in every Australian State and Territory between 2011 and 2013.
- **Gender** - 59% of participants were females, 39% male, and <1% transgender.
- **Age** - 43%, 31% and 25% of participants were aged 16-19, 20-24 and 25-29 years respectively at the time of survey.
- **Sexual identity** - The majority of the participants identified as heterosexual (~90%); 6% of males and 3% of the females reported their sexual identity as gay or lesbian respectively.
- **Place of residence** - 51% of participants reported their place of residence in an urban area, 36% in a regional area and 9% in a remote area.
- **Relationship status** - Overall 57% of participants were single at the time of survey (59% and 56% of males and females respectively). Younger participants were more likely to be single compared to those in older age groups (67% for 16-19 years, compared to 45% aged 25-29 years).

- **Parenting - Overall 57% of females and 63% of males reported having no children.** Just over 20% of females aged 25-29 indicated that they had given birth to three or more children; 17% of males aged 25-29 had reported that they had fathered three or more children.
- **Education** - Overall the majority of males and females had less than high school education (56% and 53% respectively). 7% males and 10% females reported having a university degree.
- **Incarceration history - 11% of males reported having ever been incarcerated compared to 4% of females.** Prevalence of incarceration was highest among participants aged 25-29 years with 11% of this age group **reporting having ever been incarcerated.**

Knowledge of STIs and BBVs risk

- **Overall knowledge of STIs and BBV transmission and treatment were good.** Correct answers provided to STIs and BBVs knowledge questions were lower among males compared to females - median score of 9 and 10 respectively out of a possible 12. 26% of participants aged 16-19 years responded correctly to at least 11 of 12 knowledge items, whereas 46% of 25-29 year olds answered the same answers correctly.

Sexual behaviours

- **Sexual Activity - The majority of participants reported being sexually active (>80%).** The youngest age groups were less likely to be sexually active 26% compared to participants aged 25-29 years (5%).
- **Age at Sexual Debut** - The median age of sexual debut was 16 for females and 15 for males. After excluding those who reported never having had sex, 85% of people aged less than 20 years reported their first sexual intercourse before age 16 compared to 64% of those aged 20 years or older.
- **Sexual Partners - Overall 46% of participants reported having only one sexual partner in the previous 12 months.** More than 50% of those aged 16-19 years reported at least 2 or more sexual partners in the past year and 9% of this group reported having 5 or more partners in the year preceding survey.
- A higher proportion of males reported their last sexual partner to be someone who they had just met, compared to females (20% vs. 9%). Compared to younger age groups (i.e. 16-19 and 20-24 years), those aged 25 years or older reported their last sexual contact as their current partner (66%, 68% vs. 75% respectively).
- Females were more likely to report their sexual partner as non-Indigenous compared to males (57% versus 49%).
- **Overall 74%, 67% and 29% of participants aged 16-19, 20-24 and 25-29 years respectively reported the age of their last sexual partner as being in the same age category.** Among the youngest group, 18% reported their last sexual partner being older than themselves; while 46% of the oldest age group (25 years or older) reported their last sexual partner being younger than themselves.

- **Just over a third (37%) of participants reported using a condom always in the last year;** compared to males, females were less likely to use condoms always (35% vs. 41%). Prevalence of using a condom always was highest in the youngest participants (16-19 years) at 50%. Of respondents aged less than 20 years, 69% reported using a condom during their last sexual experience compared to 51% and 38% of those aged 20-24 and 25-29 years respectively.
- 33% of males and 22% of females reported that they were “drunk” or “high” during their last sexual encounter. **Younger participants were more likely than older participants to report having sex when they were “drunk” or “high”** (28%, 29% and 22% among participants aged 16-19, 20-24 and 25-29 years respectively).

Feelings after last sexual act

- Over 90% of participants indicated that they felt positive about their last sexual encounter [i.e. “good” (>90%), “happy” (>90%), “fantastic” (>90%), loved (~90%)]; conversely, less than 10% of participants reported their feelings after last sex as extremely “upset”, “guilty”, “used”, “worried” and “regretful”. This latter proportion was slightly higher among females compared to males and slightly higher for remote residents compared to regional and urban residents.

Tobacco and alcohol use

- **A slightly higher proportion of females reported being a regular smoker compared to males** (40% versus 37%) and this increased with age from 31% among people aged 16-19 years to 47% in 25-29 year olds. Participants from regional and remote areas were more likely to be a smoker compared to those participants from urban areas; 44% and 39% vs. 35% respectively.
- **Alcohol consumption was common among the study population**, (79%, males and females). Alcohol consumption increased with age (70% in 16-19 year olds compared to 85% of 25-29 year olds).

Illicit drug use

- **Just over one third of participants (35%) reported that they had used at least one illicit drug (marijuana, meth/amphetamine or ecstasy) in the past year;** The proportion reporting illicit drug use increased with age (29% of 16-29 year olds vs. 40% of 25-29 year olds).
- **Marijuana was the most commonly reported illicit drug used by participants** (30%), followed by ecstasy (11%) and meth/amphetamine (9%). Poly drug use was more common among males compared to females (14% versus 9%) and increased with age from 9% among people aged 16-19 years to 14% of participants aged 25-29 years.

Injecting drugs and practices

- **A total of 95 (3%) participants reported injecting drug(s) in the last year;** comprising 5% and 2% of all males and females respectively. Among those who reported injecting drug(s) in the past year, meth/amphetamine (37%) and heroin (36%) were the most common drugs injected followed by methadone (26%), morphine (19%) and cocaine (15%). A higher proportion of males reported injecting meth/amphetamine (45%) and heroin (38%) compared to females (29% both); similar proportions of males and females reported injecting methadone and cocaine (25%).
- **Over a third (37%) of participants who reported injecting drugs in the last year reported they had shared needles/syringes in the last year.** This behavior was more common among males compared to females (33% versus 20%); **45% of the same population reported sharing other injecting equipment such as tourniquets, spoons, filters or swabs.**
- By age, sharing needles/syringes was more common among participants aged 25-29 years compared to 30% of participants aged 16-19 years. However 55% of the youngest age group who reported injecting drugs in the last year reported sharing other injecting equipment.
- By region, very low rates of injecting drugs were reported by remote participants. Participants in regional areas were more likely to share needles/syringes compared to those resident in urban areas (44% versus 32%).
- **Meth/amphetamine and methadone (38% both) were the most commonly injected drugs followed by heroin (30%)** among those younger than 20 years of age while injecting heroin was the most common drug (43%) injected among the oldest participants (25+ years).
- **Meth/amphetamine was the most common drug injected in regional areas compared to heroin in urban areas.**

STI testing and diagnosis

- **Overall, 61% of participants reported that they had ever been tested for an STI.** Female participants were more likely to report having ever been tested for STIs compared to males (65% vs. 56%).
- **Reported STI testing rates increased with increasing age groups;** approximately 70% and 80% of people aged 20-24 and 25-29 years respectively reported they had ever been tested for an STI compared to 42% of 16-19 year olds.
- **Aboriginal Medical Services were reported as the most common place where testing occurred (~50%),** followed by private general practice clinics (31%).
- **Overall, 50% of respondents reported having ever been tested for HIV;** males and females reported similar testing rates (48% and 51% respectively).
- Younger participants were less likely to report having been tested for HIV compared to the older groups; 57% of participants aged 16-19 years reported that they have never been tested for HIV compared to 38% and 29% of people aged 20-24 and 25-29 years.

- Overall, 12% of males and 17% of females reported that they had ever been diagnosed with an STI.
- Overall, the proportion of reported diagnoses for an STI increased with age from 8% in those aged less than 20 years, to 17% among people aged 20-24 years and 24% of people aged 25-29 years.
- **Chlamydia was the most common STI, participants self-reported as ever being diagnosed with at 14%;** prevalences of other diagnoses including gonorrhoea, syphilis, trichomoniasis, herpes and genital warts ranged from 1% to 2%.
- **Aboriginal Medical Services were reported as the most common place (44%) to go for STI testing** followed by general practice clinics (24%) and sexual health clinics (7%).
- **A total of 96 (3%) of participants reported their HIV status as positive;** comprising 5% and 2% of all males and females respectively.
- By region; 33% of remote participants reported that they have never been tested for HIV compared to 47% and 46% of participants from urban and regional areas respectively.

Hepatitis C Virus (HCV) testing, diagnosis and treatment

- **Overall, 40% of the study population reported that they had ever been tested for HCV (39% of the males and 41% of the females).** An increasing trend of HCV testing was observed with increasing age; 23%, 46% and 61% of participants aged 16-19, 20-24 and 25-29 years respectively.
- **Aboriginal Medical Service(s) were reported by more than 50% of participants as the most common place to have been tested for HCV.**
- 9% of the males and 6% of the females reported that they had been diagnosed (“ever told”) with HCV. Among those who reported that they have ever had tested for HCV, 10% of 16-19 year olds, 5% of 20-24 year olds and 8% of people aged 25-29 reported they had been diagnosed with HCV.
- Similar proportions of urban (41%), regional (40%) and remote (36%) participants reported that they had ever been tested for HCV.

Tattoos

- **60% of male and 53% of female participants reported having a tattoo(s);** with an increasing trend by age; 24% of people aged 16-19 years, 50% and 55% among people aged 20-24 and 25-29 years of age respectively.
- **Overall, the majority of participants indicated that they received their tattoo(s) from a regulated parlour(s) (77%).** By age, a higher proportion of people aged 16-19 years received their tattoos from “unregulated” places including community/home, prison/juvenile justice centre; 37% vs. 14% & 22% of 20-24 and 25-29 year age groups respectively.

- By region, remote participants were more likely to receive their tattoos in “unregulated” places compared to those residing in urban and regional settings.

Access to health services

- Similar proportions of male and female participants reported having a health check-up in the last year (53% and 57% respectively).
- By age, those aged 16-19 years were less likely to have had a health check-up (41%) in the last year compared to those in older age groups (63% among aged 20-24 and 69% among aged 25-29). By region, similar proportions of participants reported they had a health check-up in last year 55%, 57% and 55% in urban, regional and remote areas. The majority of these health checks occurred in AMSs.
- **Overall 42% of participants reported having an STI test in the last year.**
- Lowest reported testing rates for an STI were among people aged 16-19 years.
- AMSs were identified as the most common place ever used for advice about STIs and alcohol and other drug use as well as the single best place to get help for these issues.
- 30% of participants reported having a test for HIV and HCV in the last year with the majority of testing occurring at AMSs.

CHAPTER 1 - INTRODUCTION

This study is the first national study assessing knowledge, risk practices, and health service access in relation to sexually transmissible infections and blood borne viruses among Aboriginal and Torres Strait Islander people (hereafter Aboriginal) aged 16-29 years. Surveys were collected from young people in five rounds of data collection at community and cultural events across Australia between 2011 and 2013. To date, very little social and behavioural research has been conducted with young Aboriginal and Torres Strait Islander people in this field, despite this group being recognised as a key population in national and jurisdictional STI and BBV strategies.

The project has established a national benchmark in the collection of health data for this demographic as well as a set of baseline data for the population. It was clearly the time to address this research area as social and behavioural research in other priority populations e.g. people who inject drugs and men who have sex with men (MSM) have been successful in informing programs and policy to reduce incidence and prevalence of STIs and BBVs. The study is complementary to the current commitment to improving Aboriginal and Torres Strait Islander peoples' health status by all Governments. It is the most significant study conducted with adolescents and those in early adulthood and will enable staff employed in this area access to quality evidence to help shape their roles.

The project had a strong capacity-building component with training provided to Aboriginal people and communities across Australia in research processes, study design and methodology and survey collection and administration. The project was coordinated by the Kirby Institute, based at the University of New South Wales, and Baker IDI Alice Springs and involved each State and Territory Health Department; the National Aboriginal Community Controlled Health Organisation (NACCHO); and each State and Territory NACCHO Affiliate organisation, with the latter organisations taking a lead in administering surveys in each jurisdiction. The project was funded by an Australian Research Council, Linkage Grant with in kind and financial contributions from NACCHO and its jurisdictional based affiliates and State/Territory Health Departments.

Research aims

The specific aims of this project were to:

- Describe the patterns of knowledge, risk practice and access to health services related to STIs and BBVs among young Aboriginal and Torres Strait Islander people;
- Set the foundations for a repeatable monitoring system that can be used to assess changes in knowledge, risk practices and health service usage as a basis for measuring long term trends;
- Establish an evidence base to support policy and program interventions, at a national and jurisdictional level, aimed at the prevention of STIs and BBVs in young Aboriginal and Torres Strait Islander people; and
- Provide research capacity development to Aboriginal and Torres Strait Islander people and communities.

Sexually transmissible infections (STIs) and blood borne viral infections (BBVs)

STIs are a diverse grouping of infections that share a common route of transmission - sexual contact - which has led to them being a subject of shame and stigma in many societies. From the perspective of prevention, infections that are transmitted by blood contact are often grouped with the STIs, because of their association with injecting drug use, and other behaviour that is often concealed because of its illegal status. Due to their personal and often hidden nature, STIs and BBVs are particularly challenging for prevention, both at a personal and population level.

Some STIs are required by law to be notified at diagnosis to public health authorities including the bacterial infections Chlamydia, gonorrhoea and syphilis, and the viral infections caused by the human immunodeficiency virus (HIV), hepatitis B virus (HBV) and hepatitis C virus (HCV) [1]. HIV, HCV and HBV are also transmissible by blood contact. The bacterial STIs are important causes of ill health in that they can be personally distressing and lead to major complications such as pelvic inflammatory disease, infertility and systemic disease [2,3]. STIs also increase people's susceptibility to transmitting and acquiring HIV infection [4]. HIV is a progressive chronic infection that is fatal in the absence of treatment. HBV and HCV are chronic infections that can cause long-term complications if left untreated, including cancer [5,6].

Rates of STIs in many Aboriginal communities are recognised as being the highest of any identifiable population in Australia and in remote communities are among some of the highest rates in the world [7-10]. The differential in diagnosis rates between Aboriginal and the non-Indigenous population ranges from three to four fold for Chlamydia, to 36 fold for gonorrhoea [11]. STIs by their nature, disproportionately affect young people under the age of 30 [11]. Rates of hepatitis B and C infection are reported at four and three times respectively the rate of non Indigenous Australians [11]. While the rate of newly diagnosed HIV appears to be similar between Aboriginal and non-Indigenous people, the demographic patterns of infection are very different; with a higher proportion of HIV cases in Aboriginal people being attributed to heterosexual contact, occurring in women, or associated with injecting drug use [11-13].

CHAPTER 2 - STUDY METHODOLOGY

Study coordinators

State and Territory peak Aboriginal health organisations (NACCHO affiliates) took a lead role in the coordination of survey collection. Each organisation employed a survey coordinator who was responsible for overall coordination of data collection in their jurisdiction. Survey coordinators were provided with training in research methodology, including ethical and other situational events that may arise as part of the research. In addition they were responsible for identifying appropriate events within their jurisdiction and in organising the logistics of each data collection event. At the time of each event survey coordinators identified other personnel who could administer the survey to participants on the day. Training in research methodology, rationale for conducting the survey and in use of the Personal Digital Assistants were provided prior to the event. On the day of the event survey coordinators were responsible for all happenings on the day.

Study events

The study collected surveys from Aboriginal and Torres Strait Islander people aged 16-29 nationally and used methods to gain as much as possible, a representative sample of this population. As such, we sampled the population from Aboriginal and Torres Strait Islander cultural and/or sporting events in every Australian jurisdiction or other events where large numbers of Aboriginal and Torres Strait Islander people from within the age group might be present. Examples of events include Australia Day/Survival Day events, Aboriginal State and Territory sports carnivals, other cultural events, and NAIDOC week (the National Aborigines and Islanders Day Observance Committee) events. Within each jurisdiction, we aimed to collect data from five events; two in 2011 and 2012 and one in 2013. We aimed for as representative sample of the population as much as possible, and events were selected in urban, rural and remote areas. A total of 40 events were selected by State and Territory survey coordinators. Prior to the events, correspondence was sent to event coordinators seeking approval to collect data at the event providing evidence of the type and nature of the survey.

Study questionnaire

A questionnaire was administered to participants and comprised of four main sections, (i) demographic information, (ii) questions aimed to measure participants knowledge of STIs and BBVs, (iii) questions related to risk acquisition for STIs and BBVs and (iv) questions assessing health service access for the population. The questionnaire was tested in a pilot study in NSW and found acceptable for the study population [14,15]. The questionnaire was based on other similar questionnaires such as the Australian Study of Sex Health and Relationships [16] and the Australian Secondary Schools Students Survey [17]. The questionnaire used in this study is attached at Appendix 1.

Survey administration

At each community event survey collectors approached event attendees from a stand or stall and asked if they would like to participate in the survey, after explaining the topics of the survey. Survey collectors then briefly explained information contained in a participant information sheet developed for the project which included information about the survey, who it was targeted at, that no identifying

information would be collected, why the information was being collected, and an explanation of the rights of participants including information pertaining to the relevant ethics committee who approved the survey and its administration. Survey collectors verbally confirmed that participants were aged 16-29 years and Aboriginal or Torres Strait Islander, and ensured that they consented to participation.

Participants were provided with a Personal Digital Assistant (PDA) preloaded with the questionnaire and shown how to move through the survey using the PDA. The questionnaire took on average 7-10 minutes for respondents to complete. Small incentives such as a mobile phone, i-Pad or mini i-Pad were provided for each event and drawn from an anonymous raffle of participants at the end of each event. No information on the PDA was identifiable, nor retrievable by the next user once the participant had logged off at the end of the survey.

At the end of the survey, respondents were provided with a correct answer sheet for knowledge questions. In the second and third year, participants were asked if they had previously completed the survey and a total of 278 (9%) participants answered yes to this question.

Personal Digital Assistants (PDAs)

Surveys were collected using handheld PDAs. The PDAs were loaded with a specialised program to administer the prepared questionnaire for participants. The software programs used for questionnaire design, survey administration, data collection and storage were Questionnaire Development System (QDS) Design Studio (v2.6.1), HAPI (v2.6.1) and Warehouse Manager (v2.6.1) from NOVA Research Company. The PDAs enabled high quality data to be collected electronically, preventing unnecessary delays transferring data from paper for analysis. Audio recordings of the questionnaire were available to participants from the device, however seldom used. The audio recordings were spoken in English by a male and female for acceptability among the population. Audio recordings of three Central Australian Aboriginal languages were also trialled on the device.

Once participants consented, survey collectors set up the PDA and participants navigated their way through the survey. In addition to anonymity and non-dependence on literacy, particular advantages of using PDAs include range checking of responses, ability to program skips in the questionnaire and savings on data entry costs. A number of questions were asked of participants regarding the acceptability of the PDAs and the results of these are included in Tables 2-1 and 2-2.

Data management and analysis

Data was collected using PDAs and transferred into Microsoft Excel spread sheets and other databases. Data was managed centrally at the Kirby Institute, UNSW and at Baker IDI in Alice Springs. Simple statistical measures (frequencies, percentage for the categorical measures and median for continuous measures) were used to summarize the data. Stata 12.0 (College Station, TX, USA) was used to produce the summary statistics.

Table 2-1: *Use of Personal Digital Assistants by gender and age group*

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
PDA USE						
Quick	940 (33)	327 (29)	607 (36)	390 (31)	295 (33)	255 (36)
Fun	1131 (39)	404 (36)	722 (42)	510 (40)	338 (38)	283 (40)
Easy	1265 (44)	485 (43)	772 (45)	505 (40)	412 (46)	348 (49)
Private	313 (11)	101 (9)	209 (12)	146 (12)	91 (10)	76 (11)
Prefer Paper	25 (1)	16 (1)	9 (1)	16 (1)	7 (1)	2 (<10)
Needed Help	187 (7)	90 (8)	93 (5)	92 (7)	60 (7)	35 (5)

Table 2-2: *Use of Personal Digital Assistants by regions*

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
PDA USE				
Quick	940 (33)	484 (33)	357 (35)	70 (29)
Fun	1131 (39)	583 (40)	419 (41)	98 (40)
Easy	1265 (44)	686 (47)	441 (43)	102 (42)
Private	313 (11)	166 (11)	114 (11)	25 (10)
Prefer Paper	25 (1)	10 (1)	11 (1)	2 (1)
Needed Help	187 (7)	95 (7)	56 (5)	24 (10)

Efforts to increase communities' participation in the survey whose language is other than English

The survey team produced the questionnaires in three Central Australian languages; Warlpiri, Anmatjerre, and Arrrente. The translation and oral recording of the survey questions were undertaken by Aboriginal speakers of those languages. Translators were sourced through the local Alice Springs radio station-Central Australian Aboriginal Media Association. The recordings of the surveys were then uploaded to PDAs. Participants at community events in Central Australia who spoke one of these languages as a first language, were then able to listen to the survey questions via headphones connected to the PDA and answer the questions on the PDA.

As a trial we learnt many things for future activities. Firstly, translation requires significant lead in time to translate the questions and work intensely with language speakers to ensure the essence of the question and how it was asked was appropriate. Secondly, we learnt that in many instances there were no words available in a local Aboriginal language for a number of the concepts and terms used in the survey.

Thirdly, participants electing to listen to the questionnaires generally took longer to complete the survey than those who didn't (this was understood to be due in part to; the translators' careful translation and listening to the questions took longer than reading them). Fourth, we would allow more time to ensure validation of the survey by another language speaker once translation was completed, and finally, we need to think carefully about the questions asked from the outset to ensure that the questions were translatable, as opposed to providing an already completed survey for translation. Nevertheless it is an important aspect of the study and one which will be interesting to develop further in future studies.

CHAPTER 3 - RESULTS: SURVEYS AND DEMOGRAPHICS

Survey events

Surveys were collected during the period 2011-2013. Results have been analysed throughout this report by sex (males and females), by age groups as measured by participants self reported age at the time of survey (16-19 years, 20-24 years and 25-29 years) and by regions (urban, regional and remote) assessed by the reported postcode of participants normal place of residence within the survey. The Australian Geographical Standard Classification system was used to classify participants as urban, regional and remote areas. Participants who reported postcodes from an inner or outer regional area were collapsed into a regional category and similarly participants with either a very remote or remote postcode were collapsed into a single remote area category. Table 3-1 presents the number of participants who completed surveys at events in each State and Territory, by year.

Table 3-1: Surveys in each jurisdiction

	2011	2012	2013	TOTAL EVENTS	TOTAL SURVEYS
	n	n	n	n	n (%)
	1267	1026	584	40	2877
STATE					
ACT	21	65	40	4	126 (4)
NSW	220	292	73	5	585 (20)
NT	155	159	0	5	314 (11)
QLD	239	111	113	6	463 (16)
SA	175	116	124	5	415 (14)
TAS	94	84	47	5	225 (8)
VIC	182	49	166	5	397 (14)
WA	181	150	21	5	352 (12)

Demographics of study participants

Overall 2877 surveys were completed by Aboriginal and Torres Strait Islander people aged 16-29. Of these 2588 (90%) identified as Aboriginal, 120 (4%) as Torres Strait Islander and 169 (6%) as both Aboriginal and Torres Strait Islander. 59% of participants were female. (Table 3-2); 13 (<1%) individuals reported being transgender and 26 (1%) participants did not report their gender, and as such, were excluded in gender specific analysis.

By age; 44% of participants were aged less than 20 years, 31% were aged between 20 and 24 years and 25% of participants were aged 25 years or older. Approximately half of the participants reported being a resident in an urban area (53%), 38% from a regional area and 9% from a remote area. A total of 150 participants with a missing postcode were excluded from the region specific analyses. Other characteristics of the survey participants are presented by gender/age and region in Table 3-3 and Table 3-4 respectively.

Most participants reported being “heterosexual” (90%); 6% of males and 3% of the females identified as “homosexual, gay or lesbian”; a slightly higher proportion of females (5%) identified as bisexual compared to males (2%).

Table 3-2: Demographics by age group and region

	TOTAL	AGE			REGION		
	n	16-19 n(%)	20-24 n(%)	25-29 n(%)	Urban n(%)	Regional n(%)	Remote n(%)
	2877	1265	897	715	1460	1023	244
GENDER							
Male	1132 (39)	524 (41)	360 (40)	248 (35)	582 (40)	393 (38)	95 (39)
Female	1705 (59)	726 (57)	523 (58)	456 (64)	875 (60)	627 (61)	131 (54)
Transgender	13 (<1)	4 (<1)	4 (<1)	5 (1)	3 (<1)	2 (<1)	2 (1)
Not Reported	27 (1)	11 (<1)	10 (1)	6 (1)	-	1 (<1)	16 (6)
REGION							
Urban	1460 (51)	606 (48)	472 (53)	382 (53)			
Regional	1023 (36)	486 (38)	288 (32)	249 (35)			
Remote	244 (8)	94 (7)	82 (9)	68 (10)			
Not Reported	150 (5)	79 (6)	55 (6)	16 (2)			

59% of participants reported being single at time of survey and 24% reported they were living with their current partner.

Overall, about a third of the females (32%) reported that they had given birth(s); this proportion increased with age from 10% in youngest group (i.e. <20 years) to 56% in the oldest age group (i.e. ≥25 years). Similar proportions of males reported that they had fathered at least one child, with the lowest proportion (15%) among those less than 20 years of age, and the highest proportion (49%) among the oldest age group (25-29 years).

The majority of males and females had completed less than a high school education (56% and 53% respectively); by age, 32% of the oldest age group (i.e. ≥25 years or older) completed high school and 21% reported that they had a diploma or university degree.

A higher proportion of males compared to females reported having been incarcerated at least once (11% vs. 4%). Prevalence of incarceration was higher among the oldest age group (11%) compared to the younger age groups (5% (<20 years) and 8% (20-24 years).

Overall females who resided in an urban area were less likely to have children compared to those who lived in regional and remote areas (30%, 37% and 33% respectively); consistent with this result, males who resided in urban areas were less likely to report to have fathered a child (or children) compared to those in remote and regional and remote settings (31%, 42% and 38% respectively).

Participants who resided in an urban setting were more likely to have completed higher levels of education (higher than high school) compared to those who lived in regional and remote settings respectively (13%, 5% and 4% respectively). The proportion of participants who reported English as their first language was higher among those who live in urban and regional settings compared to those who live in remote settings (98%, 97% vs. 78% respectively). Incarceration rates were slightly higher among those who resided in urban/regional settings compared to those residing in remote areas (~8% vs. ~2% respectively).

Table 3-3: Demographic characteristics by gender and age group

	GENDER		AGE GROUP		
	Male	Female	16-19	20-24	25-29
	1132	1705	1265	897	715
	n (%)	n (%)	n (%)	n (%)	n (%)
SEXUAL IDENTITY					
Heterosexual	1020 (90)	1550 (91)	1156 (91)	792 (88)	641 (90)
Homosexual	72 (6)	48 (3)	30 (2)	55 (6)	42 (6)
Bisexual	22 (2)	87 (5)	45 (4)	34 (4)	31 (4)
Not Reported	18 (2)	20 (1)	34 (3)	16 (2)	1 (<1)
COHABITATION					
Single	668 (59)	963 (56)	848 (67)	477 (53)	321 (45)
Living with partner	275 (24)	448 (26)	134 (11)	285 (32)	311 (43)
In relationship but not living with	183 (16)	289 (17)	271 (21)	126 (14)	82 (11)
Not reported	6 (<1)	5 (<1)	12 (<1)	9 (1)	1 (<1)
NUMBER OF BIRTHS GIVEN*					
	N/A*				
None	-	786 (57)	375 (79)	266 (56)	145 (34)
1	-	198 (14)	29 (6)	96 (20)	73 (17)
2	-	130 (9)	7 (1)	50 (11)	73 (17)
3+	-	127 (9)	13 (3)	18 (4)	96 (22)
Not reported/missing		140 (10)	52 (11)	45 (10)	43 (10)
NUMBER CHILDREN FATHERED**					
	N/A*				
None	582 (63)	-	295 (76)	192 (63)	95 (42)
1	105 (11)	-	17 (4)	49 (16)	39 (17)
2	71 (8)	-	11 (3)	25 (8)	35 (15)
3+	89 (10)	-	30 (8)	20 (7)	39 (17)
Not reported/missing	72 (8)	-	36 (9)	17 (7)	19 (8)
HIGHEST LEVEL OF EDUCATION					
Less than high school	633 (56)	909 (53)	821 (65)	396 (44)	339 (47)
High school completed	408 (36)	604 (35)	393 (31)	402 (45)	226 (32)
Diploma/university	77 (7)	176 (10)	24 (2)	83 (9)	148 (21)
Not reported/missing	14 (1)	16 (1)	27 (2)	16 (2)	2 (<1)
FIRST LANGUAGE					
English	1071 (95)	1628 (95)	1182 (93)	845 (94)	689 (96)
Other	54 (5)	71 (4)	67 (5)	41 (5)	21 (3)
Not reported	7 (<1)	6 (<1)	16 (1)	11 (1)	5 (1)
INCARCERATION					
Never	977 (86)	1604 (94)	1159 (92)	807 (90)	629 (88)
In previous year	72 (6)	41 (2)	43 (3)	35 (4)	38 (5)
More than a year ago	62 (5)	38 (2)	27 (2)	32 (4)	43 (6)
Not reported	21 (2)	22 (1)	36 (3)	23 (3)	5 (<1)

* Among sexually active females; ** Among sexually active males; ° Not Applicable

Table 3-4: Demographic characteristics by region

	REGION		
	Urban 1460 n (%)	Regional 1023 n (%)	Remote 244 n (%)
SEXUAL IDENTITY			
Heterosexual	1319 (90)	951 (93)	231 (95)
Homosexual	71 (5)	35 (3)	6 (2)
Bisexual	68 (5)	35 (3)	3 (1)
Not Reported	2 (<1)	4 (1)	2 (<1)
COHABITATION			
Single	851 (58)	569 (56)	146 (60)
Living with partner	360 (25)	264 (26)	70 (29)
In relationship but not living with	248 (17)	189 (18)	26 (11)
Not reported	1 (<1)	1 (<1)	2 (<1)
NUMBER OF BIRTHS GIVEN[‡]			
None	435 (60)	280 (54)	52 (54)
1	104 (14)	77 (15)	12 (12)
2	48 (7)	63 (12)	15 (15)
3+	63 (9)	52 (10)	6 (6)
Not reported/missing	72 (10)	48 (9)	12 (12)
NUMBER CHILDREN FATHERED^{‡‡}			
None	339 (69)	194 (58)	36 (62)
1	51 (10)	45 (13)	5 (9)
2	27 (5)	34 (10)	7 (12)
3+	37 (7)	37 (11)	7 (7)
Not reported/missing	40 (8)	24 (7)	6 (10)
HIGHEST LEVEL OF EDUCATION			
Less than high school	683 (47)	666 (65)	128 (52)
High school completed	587 (40)	300 (29)	101 (41)
Diploma/university	184 (13)	56 (5)	10 (4)
Not reported/missing	6 (<1)	1 (<1)	5 (2)
FIRST LANGUAGE			
English	1426 (98)	992 (97)	190 (78)
Other	34 (2)	31 (3)	44 (18)
Not reported	-	-	10 (4)
INCARCERATION			
Never	1356 (93)	941 (92)	219 (90)
In previous year	55 (4)	38 (4)	5 (2)
More than a year ago	48 (3)	43 (4)	2 (<1)
Not reported	1 (<1)	1 (<1)	18 (7)

[‡] Among sexually active females; ^{‡‡} Among sexually active males

CHAPTER 4 – RESULTS : KNOWLEDGE ABOUT BBV AND STI PREVENTION AND TREATMENT

Participants' knowledge about the ways in which STIs and BBVs can be transmitted and treated was assessed using 12 questions (Questions 13-24, Appendix 1). Participant scores on each of the knowledge questions were aggregated to form a composite knowledge scale with scores ranging from 0-12. A score of "0" means that no questions were answered correctly and conversely a score of "12" means that all questions were answered correctly. "Don't Know" responses were treated as incorrect. For any questions not answered the score was excluded. Results are presented by gender, age and regions in Table 4-1 and Table 4-2 respectively.

Overall the lowest scoring questions (<70% of participants answering correctly) related to Chlamydia and its complications, treatment for Chlamydia and how hepatitis B is transmitted. Highest scoring questions related to asymptomatic nature of STIs and HIV and hepatitis C risks related to injecting drug use and tattooing.

Additionally, participants' knowledge is further presented in tertiles of the total score by age groups and region in Tables 4-3 and 4-4 respectively. Approximately, one third of the participants (35%) responded correctly to at least 11 questions; females scored higher than males (median knowledge score: 10 vs. 9 respectively). Lower median scores were noted among those aged less than 20 years of age compared to the oldest age group (26% responded correctly to at least 11 questions compared to 46% among people aged 25-29 years). Although the median score was slightly lower among participants from remote areas (9), participants who resided in urban and regional settings were similar with a median score of 10. (Table 4-4).

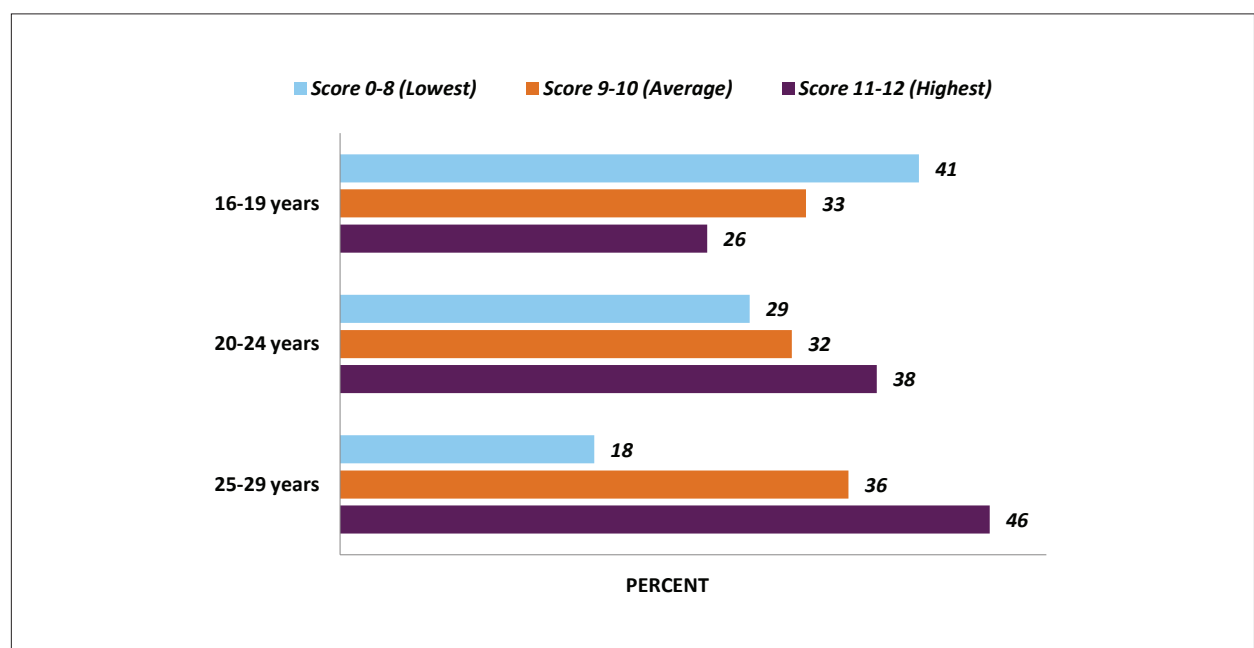


Figure 4a: Knowledge score of BBV and STIs (in tertiles) by age group

Table 4-1: BBV and STI questions answered correctly by gender and age group*

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male	Female	16-19	20-24	25-29
	2877	1132	1705	1265	897	715
		n (%)	n (%)	n (%)	n (%)	n (%)
1. If a woman with HIV is pregnant, her baby can be infected with HIV.	2187 (76)	821 (73)	1351 (79)	922 (73)	694 (77)	571 (80)
Not reported	63 (2)	27 (2)	23 (1)	38 (3)	22(2)	3 (<1)
2. A man can have a STI without any obvious symptoms.	2346 (82)	897 (79)	1440 (84)	947 (75)	751 (84)	648 (91)
Not reported	76 (3)	25 (2)	25 (1)	45 (4)	24(3)	7 (1)
3. People who have injected drugs are at risk of having a hepatitis C infection.	2431 (84)	945 (83)	1472 (86)	983 (78)	774 (86)	674 (94)
Not reported	67 (2)	25 (2)	27 (2)	42 (3)	23(3)	2 (<1)
4. The pill (birth control) doesn't protect a woman from a HIV infection.	2321 (81)	878 (78)	1433 (84)	953 (75)	733 (82)	635 (89)
Not reported	77 (3)	26 (2)	27 (2)	44 (3)	26(3)	7 (1)
5. Chlamydia infections can make women unable to have a baby.	1729 (60)	596 (53)	1120 (66)	678 (54)	530 (59)	521 (73)
Not reported	71 (2)	28 (2)	26 (2)	43 (3)	25(3)	3(<1)
6. Using condoms during sex helps to protect people from contracting HIV.	2186 (76)	885 (78)	1287 (75)	963 (76)	667 (74)	556 (78)
Not reported	78 (3)	28 (2)	26 (2)	44 (3)	27(3)	7 (1)
7. Hepatitis C can be transmitted by tattooing and body piercing.	2290 (80)	891 (79)	1382 (81)	903 (71)	735 (82)	652 (91)
Not reported	69 (2)	26 (2)	26 (2)	41(3)	25(3)	3(<1)
8. Someone who looks very healthy can pass on a HIV infection.	2320 (81)	907 (80)	1399 (82)	957 (76)	727 (81)	636 (89)
Not reported	75 (3)	27 (2)	26 (2)	42 (3)	26(3)	7 (1)
9. People who always use condoms are not safe from all STIs.	1796 (62)	697 (62)	1087 (64)	721 (57)	575 (64)	500 (70)
Not reported	71 (2)	27 (2)	28 (2)	43 (3)	25(3)	3(<1)
10. A woman can have an STI without any obvious symptoms.	2343 (81)	884 (78)	1447 (85)	956 (76)	733 (82)	654 (91)
Not reported	78 (3)	28 (2)	27 (2)	43 (3)	29(3)	6 (1)
11. Hepatitis B can be transmitted sexually.	1635 (57)	640 (57)	984 (58)	718 (57)	508 (57)	409 (57)
Not reported	71 (2)	27 (2)	27 (2)	42(3)	26(3)	3(<1)
12. Chlamydia can be easily treated with antibiotics.	1888 (66)	670 (59)	1208 (71)	717 (57)	603 (67)	568 (79)
Not reported	78 (3)	27 (2)	27 (2)	43(3)	28(3)	7 (1)

*A "Don't Know" response was treated as an incorrect answer.

Table 4-2: BBV and STI questions answered correctly by region[†]

	TOTAL	REGION		
		Urban	Regional	Remote
	2877	1460	1023	244
	n (%)	n (%)	n (%)	n (%)
1. If a woman with HIV is pregnant, her baby can be infected with HIV.	2187 (76)	1153 (79)	781 (76)	185 (76)
Not reported	63 (2)	3 (<1)	6 (1)	7 (3)
2. A man can have STI without any obvious symptoms.	2346 (82)	1267 (87)	837 (82)	168 (69)
Not reported	76 (3)	4 (<1)	7 (1)	16 (7)
3. People who have injected drugs are at risk of having a hepatitis C infection.	2431 (84)	1307 (90)	875 (86)	176 (72)
Not reported	67 (2)	5 (<1)	7 (1)	7 (3)
4. The pill (birth control) doesn't protect a woman from a HIV infection.	2321 (81)	1265 (87)	845 (83)	152 (62)
Not reported	77 (3)	5 (<1)	8 (1)	15 (6)
5. Chlamydia make a woman unable to have a baby.	1729 (60)	893 (61)	625 (61)	145 (59)
Not reported	71 (2)	6 (<1)	7 (1)	8 (3)
6. Using condoms during sex helps to protect people from contracting HIV.	2186 (76)	1143 (78)	789 (77)	182 (75)
Not reported	78 (3)	6 (<1)	6 (1)	16 (7)
7. Hepatitis C can be transmitted by tattooing and body piercing.	2290 (80)	1215 (83)	842 (82)	157 (64)
Not reported	69 (2)	7 (<1)	5 (<1)	8 (3)
8. Someone who looks very healthy can pass on a HIV infection.	2320 (81)	1222 (84)	855 (84)	176 (72)
Not reported	75 (3)	7 (<1)	5 (<1)	15 (6)
9. People who always use condoms are not safe from all STIs.	1796 (62)	995 (68)	663 (65)	91 (37)
Not reported	71 (2)	7 (<1)	7 (1)	8 (3)
10. A woman can have a STI without any obvious symptoms.	2343 (81)	1247 (85)	855 (84)	175 (72)
Not reported	78 (3)	8 (<1)	6 (1)	15 (6)
11. Hepatitis B can be transmitted sexually.	1635 (57)	857 (59)	569 (56)	117 (48)
Not reported	71 (2)	7 (<1)	33 (3)	10 (4)
12. Chlamydia can be easily treated with antibiotics.	1888 (66)	978 (67)	699 (68)	146 (60)
Not reported	78 (3)	7 (<1)	6 (1)	16 (7)

[†] A "Don't Know" response was treated as an incorrect answer.

Table 4-3: Participants knowledge score of BBVs and STIs questions by gender and age group

	TOTAL	GENDER [†]		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
KNOWLEDGE SCORE[‡]						
1 st tertile (score 0-8)	868 (31)	404 (37)	464 (28)	497 (41)	252 (29)	124 (18)
2 nd tertile (score 9-10)	937 (34)	370 (34)	567 (34)	403 (33)	280 (32)	256 (36)
3 rd tertile (score 11-12)	969 (35)	323 (29)	641 (38)	314 (26)	330 (38)	325 (46)
MEDIAN SCORE (IQR)	10 (8-11)	9 (7-11)	10 (8-11)	9 (7-11)	10 (8-11)	10 (9-11)
<i>Not reported</i>	96 (3)	35 (3)	33 (2)	51 (4)	35 (4)	10 (1)

[†]Tertiles; [‡]excludes 40 observations transgender and missing

Table 4-4: Participants knowledge score of BBVs and STIs questions by region

	REGION [†]			
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
KNOWLEDGE SCORE[‡]				
1 st tertile (score 0-8)	873 (31)	414 (29)	312 (31)	102 (46)
2 nd tertile (score 9-10)	939 (34)	481 (33)	364 (36)	63 (28)
3 rd tertile (score 11-12)	969 (35)	555 (38)	335 (33)	57 (26)
MEDIAN SCORE (IQR)	8 (10-11)	10 (8-11)	10 (8-11)	9 (7-11)
<i>Not reported</i>	96 (3)	10 (1)	12 (1)	22 (9)

[†]Tertiles; [‡]exclude 150 observations with missing

CHAPTER 5 – RESULTS: SEXUAL BEHAVIOUR

This chapter presents sexual behaviour information as reported by participants. Results are presented by gender, age (Table 5-1) and regions (Table 5-2).

Overall 81% of males and females reported having ever had sexual intercourse. The youngest age group (16-19 years) were less likely to be sexually active compared to the two older age groups (20-24 and 25-29 years) (Figure 5a: 69% versus 87% and 93% respectively).

The proportion of people from remote areas who reported ever having had sex was lower than residents in urban and regional areas (68% vs. 83% and 84% respectively) (Table 5-2).

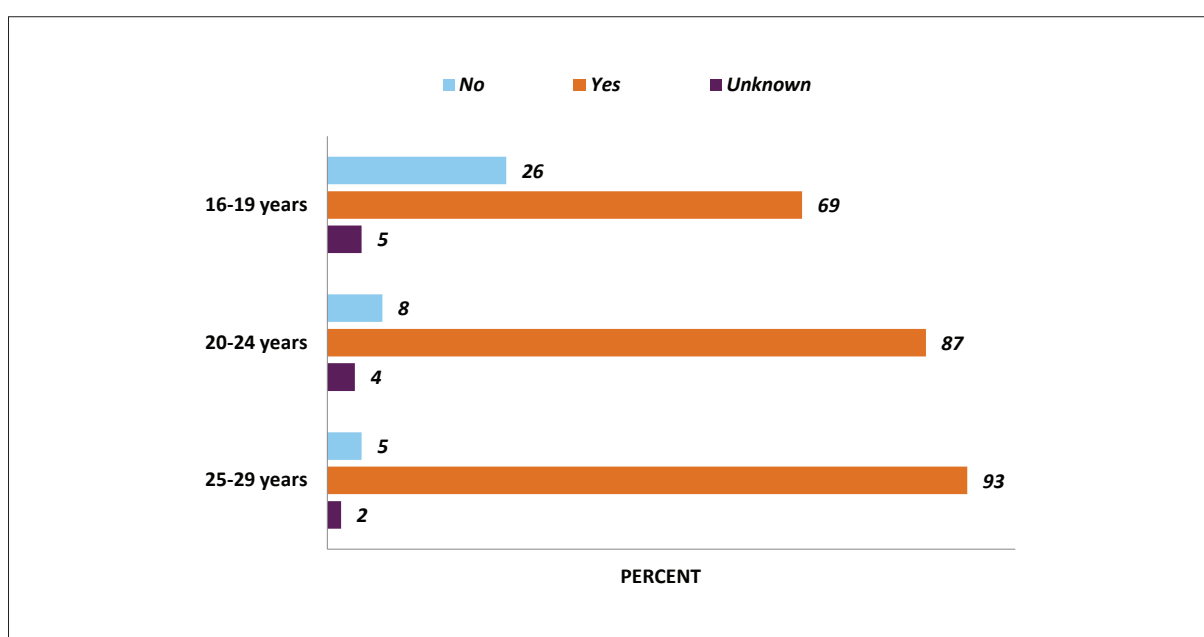


Figure 5a: Ever had sexual intercourse (vaginal/anal) by age group

Participants were asked their age when they first had sexual intercourse (Table 4-1 and Table 4-2). The median age at first sexual intercourse, overall, was 15 years for males and 16 years for females; of these 79% and 67% of males and females respectively reported they were aged less than 16 years when they had their first sexual debut.

The median age at sexual debut was reported at 16 years for remote and urban participants and 15 for regional participants. After excluding those who reported that they had never had sex, 85% of participants aged less than 20 years reported their first sexual intercourse before the age of 16 years, compared to just over 60% of participants aged 20 years or older (Figure 5b).

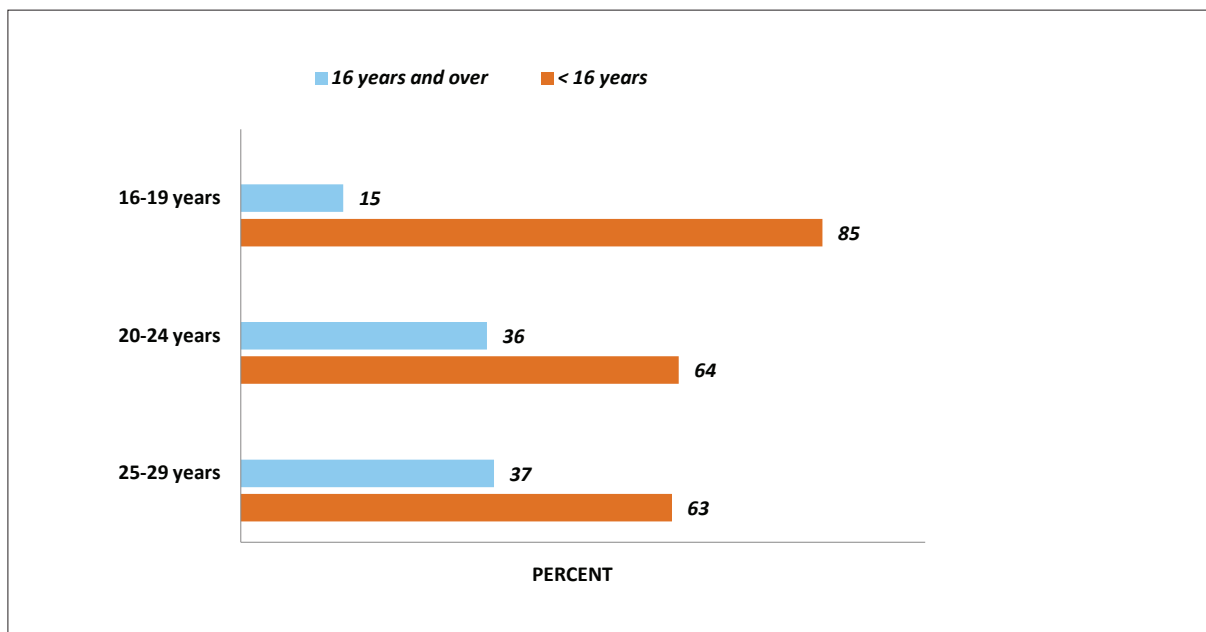


Figure 5b: First sexual intercourse before/after 16 years of age by age group

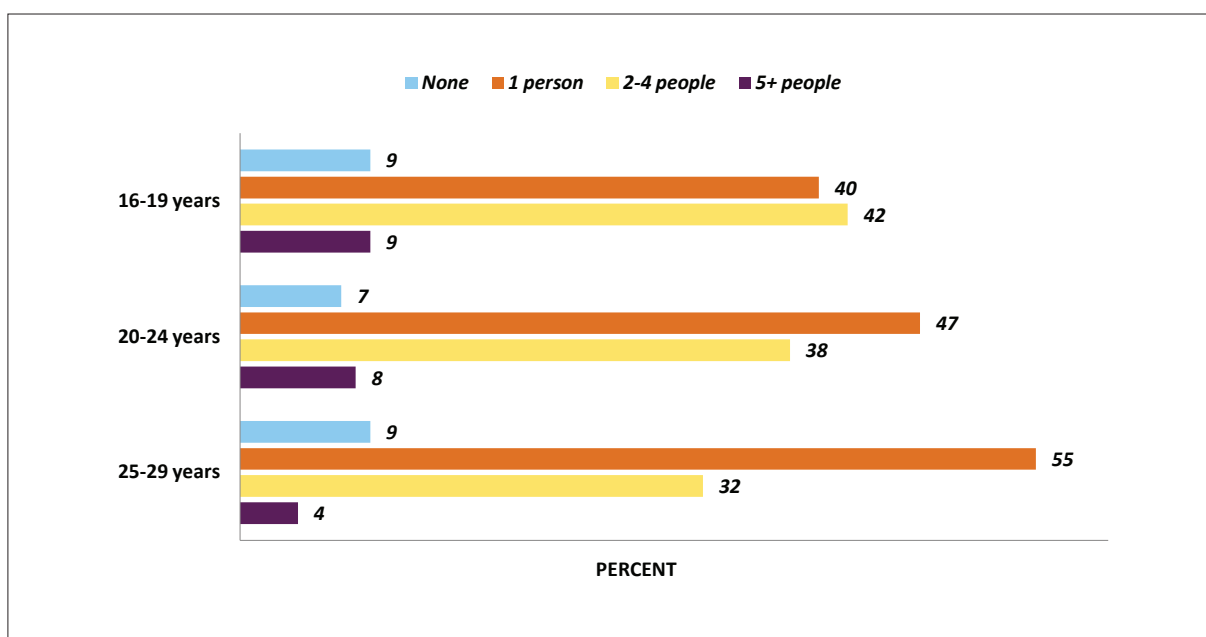


Figure 5c: Number of sexual partners in last year by age group

Overall 46% of participants reported having only one sexual partner and a further 38% reporting between 2 and 4 partners in the previous year. The prevalence of multiple sexual partners (two or more) was highest among the youngest age groups compared to the older participants (51% versus 46% and 36% respectively). 9% of 16-19 year olds reported having five or more partners in the year preceding the survey.

Overall 76% of participants reported that they had ever had oral sex, (80% of males and 74% of females). Although oral sex was more common among the older participants, those aged less than 20 years were more likely to report multiple partners (two or more) compared to the older age groups (44% versus 33%

and 25% respectively). A higher proportion of urban and regional participants reported that they had ever had oral sex compared to remote participants (78% vs. 68%) respectively.

When compared to remote area residents, participants who resided in urban and regional areas were more likely to be sexually active (83%, 84% versus 68% respectively) (Table 5-2). However, there was no apparent difference in the proportion of multiple sexual partners by the regions; approximately 45% of the urban, regional and remote participants reported having multiple sexual partners (two or more) in past year.

Table 5-1: Sexual experience by gender and age group

	GENDER [†]			AGE GROUP		
	Total n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
EVER HAD SEXUAL INTERCOURSE (VAGINAL OR ANAL)						
Yes	2320 (81)	919 (81)	1381 (81)	871(69)	783 (87)	666 (93)
No	445 (15)	171 (15)	272 (16)	333 (26)	75 (8)	37 (5)
No response	112 (4)	42 (4)	52 (3)	61 (5)	39 (4)	12 (2)
Median age at first intercourse	15	15	16	15	16	16
<16 years	1661 (72)	729 (79)	920 (67)	743 (85)	499 (64)	419 (63)
EVER HAD ORAL SEX						
Yes	2188 (76)	911 (80)	1259 (74)	815 (64)	740 (83)	633 (89)
No oral sex	585 (20)	181 (16)	399 (23)	391 (31)	120 (13)	74 (10)
No response	104 (4)	40 (4)	47 (3)	59 (5)	37 (4)	8 (1)
Median age at first oral sex	16	15	16	15	16	16
<16 years	1660 (72)	759 (83)	888 (64)	754 (87)	507 (65)	399 (60)
OF THOSE WHO HAVE EVER HAD SEX (n=2320), NUMBER OF PARTNERS IN LAST YEAR						
None	191 (8)	62 (7)	126 (9)	78 (9)	55 (7)	58 (9)
One	1075 (46)	364 (40)	709 (51)	346 (40)	366 (47)	363 (55)
2-4 people	869 (38)	376 (41)	489 (35)	367 (42)	292 (38)	210 (32)
5 or more people	167 (7)	116 (13)	49 (4)	76 (9)	64 (8)	27 (4)
No response	18 (1)	1 (<1)	8 (<1)	4 (<1)	6 (<1)	8 (<1)
OF THOSE WHO HAVE EVER HAD ORAL SEX (n=2188), NUMBER OF PARTNERS WITH WHOM HAD ORAL SEX BUT NOT INTERCOURSE IN LAST YEAR						
None	539 (25)	173 (19)	365 (29)	146 (18)	190 (26)	203 (32)
One	885 (40)	333 (37)	547 (43)	314 (39)	302 (41)	269 (43)
2-4 people	631(29)	313 (34)	308 (24)	291 (36)	198 (27)	142 (22)
5 or more people	121 (6)	87 (10)	32 (3)	62 (8)	43 (6)	16 (3)
No response	12 (<1)	5(<1)	7(<1)	2 (<1)	7 (1)	3(<1)

[†]Excludes 40 observations transgender and missing

Table 5-2: Sexual experience by region

	TOTAL	REGION [*]		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
EVER HAD SEXUAL INTERCOURSE (VAGINAL OR ANAL)				
Yes	2320 (81)	1219 (83)	857 (84)	166 (68)
No	445 (15)	217 (15)	149 (15)	59 (24)
No response	112 (4)	24 (2)	17 (2)	19 (8)
Median age at first intercourse	15	16	15	16
<16 years	1661 (72)	831 (68)	665 (78)	105 (63)
EVER HAD ORAL SEX				
Yes	2188 (76)	1141 (78)	799 (78)	165 (68)
No	585 (20)	297 (20)	213 (21)	59 (24)
No response	104 (4)	22 (2)	11 (1)	20 (8)
Median age at first oral sex	(16,2.8)	(16,2.6)	(15,2.7)	(16,2.6)
<16 years	1660 (72)	856 (70)	646 (75)	103 (62)
OF THOSE WHO HAVE EVER HAD SEX (n=2320), NUMBER OF PARTNERS IN LAST YEAR				
None	191 (8)	101 (8)	66 (8)	15 (9)
One	1075 (46)	570 (47)	407 (48)	66 (40)
2-4 people	869 (38)	458 (38)	322 (37)	64 (39)
5 or more people	167 (7)	89 (7)	58 (7)	9 (5)
No response	18 (1)	1 (<1)	4 (<1)	12 (7)
OF THOSE WHO HAVE EVER HAD ORAL SEX (n=2188), NUMBER OF PARTNERS WITH WHOM HAD ORAL SEX BUT NOT INTERCOURSE IN LAST YEAR				
None	539 (25)	279 (24)	194 (24)	49 (30)
One	885 (40)	466 (41)	317 (40)	68 (41)
2-4 people	631 (29)	321 (28)	244 (31)	42 (25)
5 or more people	121 (6)	72 (6)	41 (5)	4 (2)
No response	12 (<1)	3 (<1)	3 (<1)	2 (<1)

*150 of the observations with missing region were not included

Sexual activity in the past year

Participants were asked about their last sexual encounter (Table 5-3). 63% of males and 74% of females reported their last sexual partner as their current partner. A greater proportion of male respondents reported their last sexual partner as someone they had just met compared to females (20% vs. 9% respectively). Compared to younger age groups (i.e. 16-19 and 20-24 years), those aged 25 years or older were more likely to report their last sexual partner as their current partner (66%, 68% and 75% respectively). Participants were asked whether their last partner was Aboriginal or Torres Strait Islander. Females reported their last sexual partner as someone being non-Indigenous more commonly than males (57% versus 49%).

Table 5-3: Characteristics of last sexual encounter in last year by gender and age group

	TOTAL	GENDER [†]		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
THOSE WHO HAVE EVER HAD SEX	2,320	919	1,381	871	783	666
Number who reported sex in last year	2113 (91)	857 (93)	1,248 (90)	790 (91)	724 (92)	599 (90)
RELATIONSHIP WITH LAST PARTNER						
Current partner	1465 (69)	539 (63)	924 (74)	526 (66)	490 (68)	449 (75)
Just met	291 (14)	171 (20)	116 (9)	107 (13)	103 (14)	81 (13)
Known but no previous sexual relationship	175 (8)	81 (9)	93 (7)	107 (13)	46 (6)	22 (4)
Known with previous sexual relationship	182 (9)	66 (8)	115 (9)	50 (6)	85 (12)	47 (8)
INDIGENOUS STATUS OF LAST PARTNER						
Indigenous	1127 (53)	350 (41)	465 (37)	432 (55)	372 (51)	323 (54)
Not Indigenous	816 (39)	419 (49)	705 (57)	279 (35)	299 (41)	238 (40)
Don't know/Not reported	170 (8)	88 (10)	78 (6)	79 (10)	53 (7)	38 (6)
AGE OF LAST PARTNER						
<16 years	69 (3)	46 (5)	23 (2)	61 (8)	6 (1)	2 (<1)
16-17	337 (16)	195 (23)	138 (11)	313 (40)	16 (2)	8 (1)
18-19	395 (19)	184 (21)	208 (17)	265 (34)	111 (15)	19 (3)
20-24	860 (41)	313 (37)	546 (44)	130 (16)	487 (67)	243 (41)
25-29	246 (12)	76 (9)	170 (14)	11 (1)	61 (8)	174 (29)
30 or older	192 (9)	34 (4)	158 (13)	7 (1)	37 (5)	148 (25)
Not reported	14 (1)	9 (1)	5 (<1)	3 (<1)	6 (1)	5 (1)
GENDER OF LAST PARTNER						
Male	1236 (59)	74 (9)	1158 (93)	417 (53)	439 (61)	380 (63)
Female	871 (41)	780 (91)	87 (7)	369 (47)	283 (39)	219 (37)
Not reported	6 (<1)	3 (<1)	3 (<1)	4 (<1)	2 (<1)	-

[†]Excludes 20 observations with missing gender

The majority of participants reported their last sexual partner as someone around their same age. Among people aged 16-19 years, 74% reported their last sexual partner as someone aged 16-19 years; among people aged 20-24 years, 67% of participants reported their last sexual partner as someone aged 20-24 years while approximately 45% of the oldest age group (25 or older) reported their last sexual partner as someone younger than themselves (Table 5-3). Participants were asked to report the gender of their last sexual partner. A total of 74 (9%) males and 87 (7%) females reported their last sexual partner as someone of the same sex.

Table 5-4: Characteristics of condom use at last sexual encounter in last year by gender and age group

	TOTAL	GENDER [†]		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
NUMBER WHO EVER HAD SEX	2320	919	1381	871	783	666
NUMBER WHO REPORTED SEX IN LAST YEAR	2113 (91)	857 (93)	1248 (90)	790 (91)	724 (92)	599 (90)
CONDOM FREQUENCY USE IN THOSE WHO REPORTED SEX IN THE LAST YEAR						
Always	791 (37)	352 (41)	438 (35)	398 (50)	235 (32)	158 (26)
Sometimes	854 (40)	346 (40)	503 (40)	302 (38)	337 (47)	215 (36)
Never	463 (22)	158 (18)	304 (24)	89 (11)	149 (21)	225 (38)
Not reported	5 (<1)	1 (<1)	3 (<1)	1 (<1)	3 (<1)	1 (<1)
HAD A CONDOM AT LAST SEX						
Yes	1165 (55)	516 (60)	643 (52)	544 (69)	363 (50)	258 (43)
No	945 (45)	341 (40)	603 (48)	245 (31)	359 (50)	341 (57)
Not reported	3 (<1)	-	2 (<1)	1 (<1)	2 (<1)	-
USED A CONDOM AT LAST SEX						
Yes	1136 (54)	503 (59)	626 (50)	541 (68)	368 (51)	227 (38)
No	972 (46)	351 (41)	620 (50)	245 (31)	355 (49)	372 (62)
Not reported	5 (<1)	3 (<1)	2 (<1)	4 (1)	1 (<1)	-
USUAL PLACE TO GET CONDOMS						
Never use	186 (9)	59 (7)	126 (10)	51 (6)	50 (7)	85 (14)
Chemist/Store	919 (43)	374 (44)	544 (44)	355 (45)	354 (49)	210 (35)
Aboriginal Medical Service	730 (35)	307 (36)	420 (34)	248 (31)	243 (34)	239 (40)
GP [*] /FP ^{**} /SHC ^{***}	153 (7)	71 (8)	81 (6)	76 (10)	35 (5)	42 (7)
Friend/Family	99 (5)	35 (4)	63 (5)	49 (6)	32 (4)	18 (3)
Vending Machine	8 (<1)	3 (<1)	4 (<1)	2 (<1)	3 (<1)	3 (1)
Not reported	18 (<1)	8 (1)	10 (1)	9 (1)	7 (1)	2 (<1)

[†]Excludes 20 observations with missing gender

^{*}General Practice Clinic; ^{**}Family Planning Clinic; ^{***}Sexual Health Clinic

Condom use

Condom promotion has been one of the most important components of BBV and STI awareness campaigns. Just over a third of participants (37%) reported using condoms always, 40% sometimes and 22% never. 41% of males reported using a condom always compared to 35% of females (Table 5-4). Always using a condom in the last year was reported at highest levels by people aged 16-19 years (50%) compared to 32% and 26% of 20-24 and 25-29 year age groups respectively. There was little variation in the use of condoms (always, sometimes or never) by regions (Table 5-5).

Among males, 60% reported they had a condom at last sex and 59% reported using a condom at last sex. Among females 52% reported having a condom at last sex and 50% reported using a condom at last sex (Table 5-4).

Overall, a relatively high proportion of participants younger than 20 years of age (68%) reported using condoms during their last sexual encounter compared to those aged 20-24 years (51%) and 25-29 years (38%), (Figure 5d).

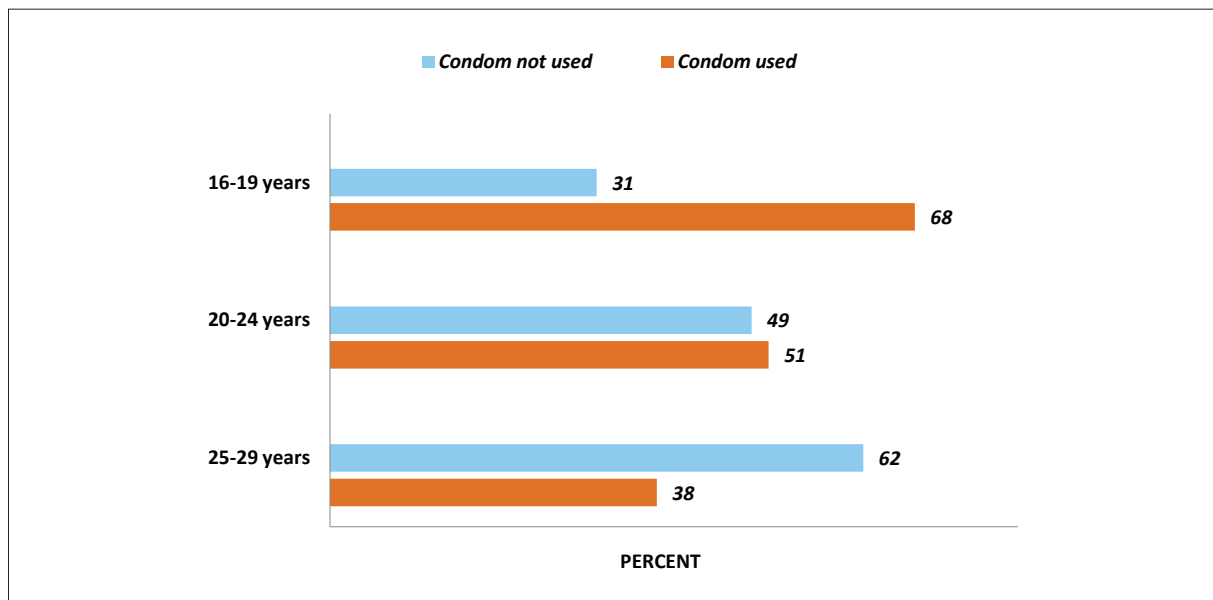


Figure 5d: Condom used at last sexual act by age group

Sources of condoms

Survey participants were asked where they normally obtained condoms from (Table 5-4). The most common sites where condoms were accessed were in chemists and stores (43%) followed by Aboriginal Medical Services (35%).

Although, there were no apparent differences between males and females (Figure 5e) regarding the places where condoms were accessed from, younger participants (16-19 and 20-24 years) were more likely to obtain condoms from chemists/stores compared to those older than 25 years old who reported Aboriginal Medical Services as being the primary source of condoms (45%, 49% and 40% respectively) (Table 5-4).

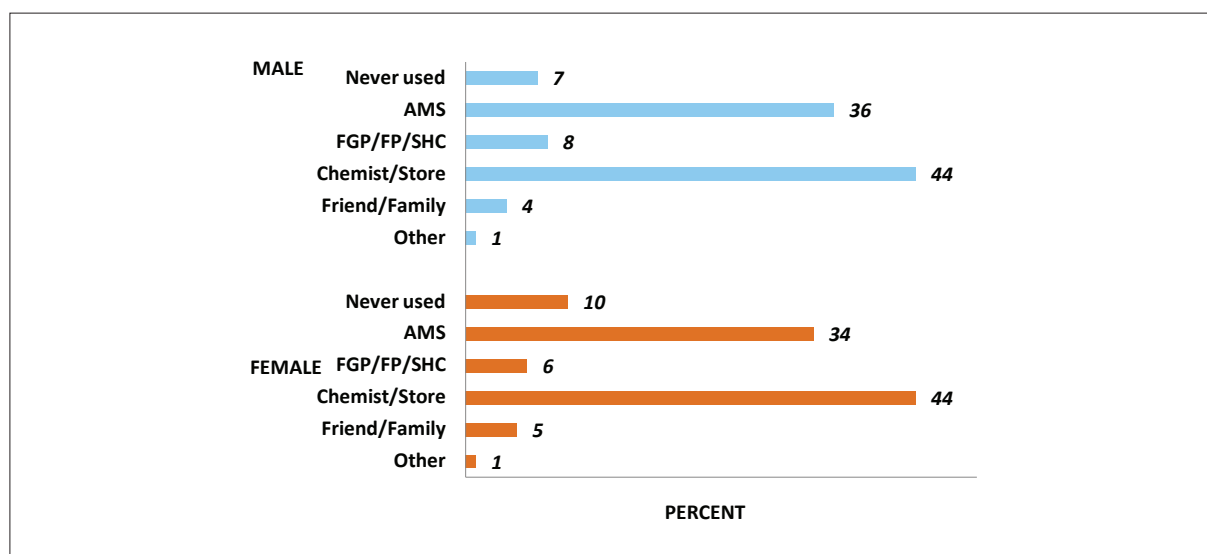


Figure 5e: Sources of usual places to get condoms by gender

Table 5-5: Characteristics of condom use at last sexual encounter in last year by region

	TOTAL	REGION [*]		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
NUMBER WHO EVER HAD SEX	2320	1219	857	166
NUMBER WHO REPORTED SEX IN LAST YEAR	2113 (91)	1116 (92)	789 (92)	140 (84)
CONDOM FREQUENCY USE IN THOSE WHO REPORTED SEX IN THE LAST YEAR				
Always	791 (37)	421 (38)	295 (37)	49 (35)
Sometimes	854 (40)	455 (41)	310 (39)	59 (42)
Never	463 (22)	238 (21)	183 (23)	30 (21)
Not reported	5 (<1)	2 (<1)	1 (<1)	2 (1)
HAD A CONDOM AT LAST SEX				
Yes	1165 (55)	609 (55)	438 (56)	72 (51)
No	945 (45)	506 (45)	350 (44)	67 (48)
Not reported	3 (<1)	1 (<1)	1 (<1)	1 (<1)
USED A CONDOM AT LAST SEX				
Yes	1136 (54)	581 (52)	440 (56)	71 (51)
No	972 (46)	531 (48)	348 (44)	69 (49)
Not reported	5 (<1)	4 (<1)	1 (<1)	-
USUAL PLACE TO GET CONDOMS				
Never use	186 (9)	108 (10)	65 (8)	9 (6)
Chemist/Store	919 (43)	584 (52)	285 (36)	25 (18)
Aboriginal Medical Service	730 (35)	302 (27)	338 (43)	60 (49)
GP/FP/SHC ^o	153 (7)	66 (6)	54 (7)	22 (16)
Family/Friends	99 (5)	42 (4)	40 (5)	12 (9)
Vending Machine	8 (<1)	3 (<1)	2 (<1)	3 (<1)
Not reported	18 (<1)	11 (1)	5 (1)	-

^{*}150 of the observations with missing region were not included; ^ogeneral practice/family planning/sexual health clinic

By regions, 52% of urban participants reported chemists/stores as being their primary source for accessing condoms while Aboriginal Medical Services were reported as being the most common source for access to condoms by regional and remote setting residents (43% and 49% respectively). General practice (GP), family planning (FP) and sexual health clinics were the third common sources for the condoms across the regional settings (Table 5-5).

Sexual encounter under the influence of alcohol and other drugs

One third of males (33%) and 22% of the females reported that they were “drunk” or “high” during the last sexual encounter (Figure 5f and Table 5-6).

Younger participants were more likely than older participants to report having had sex when they were “drunk” or “high”; 28%, 29% and 22% of people aged 16-19, 20-24 and 25-29 years respectively, (Figure 5g and Table 5-6). A slightly higher proportion of the regional and remote participants reported that they were “drunk” or “high” at last sex compared to urban participants; 28% and 31% vs. 24% respectively) (Table 5-7).

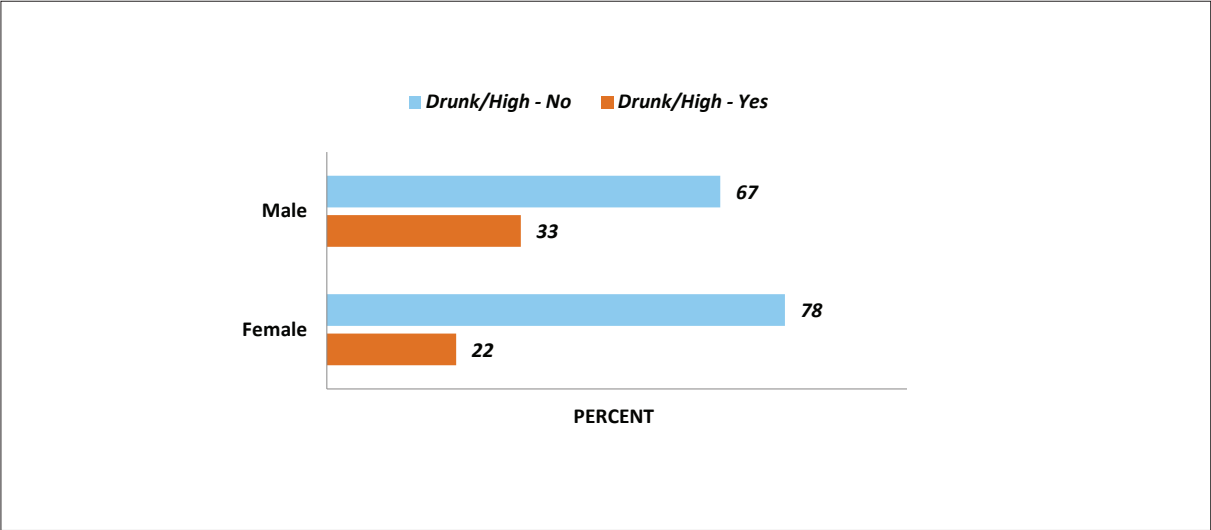


Figure 5f: Drunk or high at last sex by gender

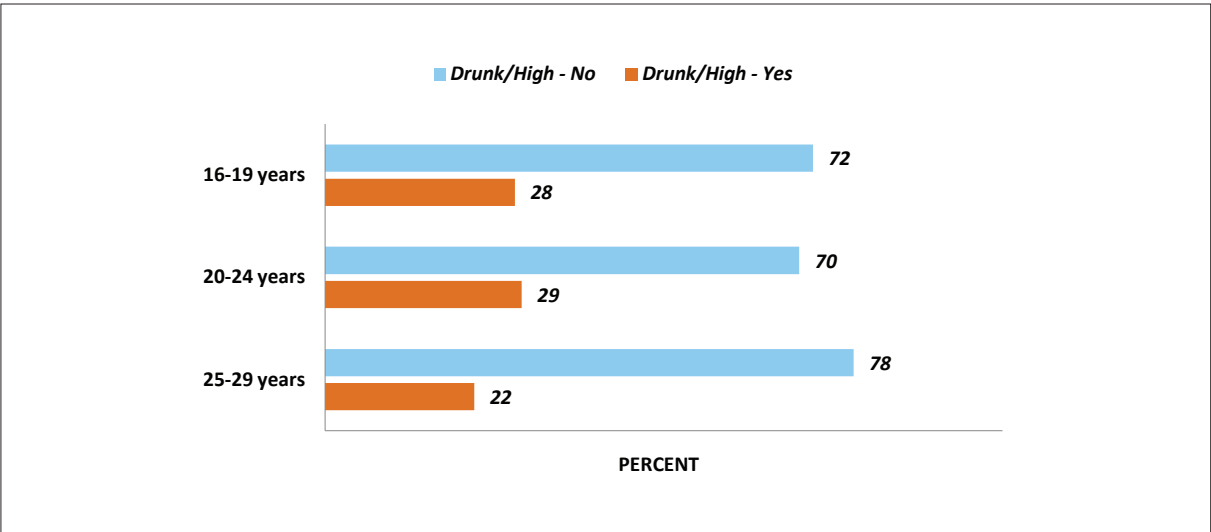


Figure 5g: Drunk or high at last sex by age group

Table 5-6: Characteristics of behaviour at last sexual encounter in last year by gender and age group

	TOTAL	GENDER [†]		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
NUMBER WHO REPORTED SEX IN LAST YEAR	2113	857 (93)	1248 (90)	790 (91)	724 (92)	599 (90)
DRUNK OR HIGH AT LAST SEX						
Yes	564 (27)	281 (33)	276 (22)	220 (28)	213 (29)	131 (22)
No	1543 (73)	573 (67)	969 (78)	566 (72)	509 (70)	468 (78)
Not reported	6 (<1)	3 (<1)	3 (<1)	4 (<1)	2 (<1)	-
LAST SEX WANTED						
Yes	2003 (95)	812 (95)	1185 (95)	751 (95)	689 (95)	563 (94)
No	103 (5)	42 (5)	60 (5)	35 (4)	32 (4)	36 (6)
Not reported	7 (<1)	3 (<1)	3 (<1)	4 (1)	3 (1)	-

[†]Excludes 20 observations with missing gender

Table 5-7: Characteristics of behaviour at last sexual encounter in last year by region

	TOTAL	REGION [†]		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
NUMBER WHO REPORTED SEX IN LAST YEAR	2113	1116 (92)	789 (92)	140 (84)
DRUNK OR HIGH AT LAST SEX				
Yes	564 (27)	267 (24)	218 (28)	44 (31)
No	1543 (73)	845 (76)	570 (72)	96 (69)
Not reported	6 (<1)	4 (<1)	1 (<1)	-
LAST SEX WANTED				
Yes	2003 (95)	1061 (95)	758 (96)	123 (88)
No	103 (5)	51 (5)	30 (4)	16 (11)
Not reported	7 (<1)	4 (<1)	1 (<1)	1 (1)

[†]150 of the observations with missing region were not included

Feelings after last sexual encounter

Participants were asked a series of questions and to rate their feelings after their last sexual encounter using a scale from 1-5 with 1 being not at all and 5 very or extremely. The responses were combined into three groups 1 (not at all), 2 & 3 (somewhat) and 4 & 5 (very /extremely). Non respondents are shown for each question. Results are presented by gender and age groups in Table 5-8 and by regions in Table 5-9. Overall, less than 10% of participants felt very or extremely “regretful”, “worried”, “used”, “guilty” or “upset” after their last sexual encounter. Similar trends were observed by gender and age groups (Table 5-8). Conversely around 45% of participants felt very extremely “good”, “happy”, “fantastic” or “loved” after last sex. When compared to urban and regional participants, participants who lived in remote areas were less likely to report their feeling after their last sexual act as a positive one (Table 5-9).

Table 5-8: Feelings after last sexual encounter in last year by gender and age group

		TOTAL	GENDER [†]		AGE GROUP		
		n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
NUMBER WHO REPORTED SEX IN LAST YEAR		2113	857 (93)	1248 (90)	790 (91)	724 (92)	599 (90)
GOOD	Not at all	26 (1)	9 (1)	17 (1)	11 (1)	10 (1)	5 (1)
	Somewhat	1190 (56)	467 (54)	717 (57)	482 (61)	406 (56)	302 (50)
	Very/Extremely	885 (42)	376 (44)	507 (41)	291 (37)	304 (42)	290 (48)
	No response	12 (1)	5 (1)	7 (1)	6 (1)	4 (1)	2 (<1)
UPSET	Not at all	1216 (58)	493 (57)	721 (58)	422 (53)	411 (57)	383 (64)
	Somewhat	702 (33)	276 (32)	421 (34)	284 (36)	244 (34)	174 (29)
	Very/Extremely	182 (9)	83 (10)	98 (8)	78 (10)	63 (9)	41 (7)
	No response	13 (<1)	5 (1)	8 (<1)	6 (1)	6 (1)	1 (<1)
GUILTY	Not at all	1227 (58)	481 (56)	744 (60)	426 (54)	405 (56)	396 (66)
	Somewhat	708 (34)	304 (35)	399 (32)	294 (37)	257 (36)	157 (26)
	Very/Extremely	164 (8)	67 (8)	96 (8)	64 (8)	56 (8)	44 (7)
	No response	14 (1)	5 (1)	9 (1)	6 (1)	6 (1)	2 (<1)
HAPPY	Not at all	94 (4)	32 (4)	59 (5)	34 (4)	29 (4)	31 (5)
	Somewhat	1058 (50)	423 (49)	633 (51)	443 (56)	360 (50)	255 (43)
	Very/Extremely	948 (45)	398 (46)	547 (44)	307 (39)	330 (46)	311 (52)
	No response	13 (1)	4 (1)	9 (<1)	6 (1)	5 (<1)	2 (<1)
USED	Not at all	1247 (59)	496 (58)	749 (60)	422 (53)	419 (58)	406 (68)
	Somewhat	663 (31)	276 (32)	384 (31)	281 (36)	239 (33)	143 (24)
	Very/Extremely	186 (9)	79 (9)	104 (8)	79 (10)	60 (8)	47 (8)
	No response	17 (1)	6 (1)	11 (1)	8 (1)	6 (1)	3 (<1)
FANTASTIC	Not at all	112 (5)	40 (5)	70 (6)	42 (5)	39 (5)	31 (5)
	Somewhat	1092 (52)	433 (51)	655 (53)	450 (57)	357 (49)	285 (48)
	Very/Extremely	891 (42)	378 (44)	511 (41)	291 (37)	321 (44)	279 (47)
	No response	18 (1)	6 (<1)	12 (1)	7 (1)	7 (1)	4 (<1)
WORRIED	Not at all	1187 (56)	464 (54)	719 (58)	388 (49)	412 (57)	387 (65)
	Somewhat	748 (35)	322 (38)	422 (34)	326 (41)	256 (35)	166 (28)
	Very/Extremely	160 (8)	66 (8)	94 (8)	67 (8)	51 (7)	42 (7)
	No response	18 (1)	5 (1)	13 (1)	9 (1)	5 (1)	4 (1)
LOVED	Not at all	210 (10)	92 (11)	117 (9)	85 (11)	79 (11)	46 (8)
	Somewhat	1008 (48)	446 (52)	558 (45)	410 (52)	334 (46)	264 (44)
	Very/Extremely	874 (41)	311 (36)	560 (45)	285 (36)	305 (42)	284 (47)
	No response	21 (1)	8 (1)	13 (1)	10 (1)	6 (1)	5 (1)
REGRETFUL	Not at all	1186 (56)	449 (52)	733 (59)	393 (50)	398 (55)	395 (66)
	Somewhat	718 (34)	323 (38)	392 (31)	304 (38)	259 (36)	156 (26)
	Very/Extremely	188 (9)	79 (9)	108 (9)	83 (11)	61 (8)	44 (7)
	No response	21 (1)	6 (1)	15 (1)	10 (1)	7 (1)	4 (1)

[†]Excludes 40 observations transgender or missing gender

Table 5-9: Feelings after last sexual encounter in last year by region

		TOTAL	REGION		
		n (%)	Urban n (%)	Regional n (%)	Remote n (%)
NUMBER WHO REPORTED SEX IN LAST YEAR		2113	1116 (92)	789 (92)	140 (84)
GOOD	Not at all	26 (1)	6 (1)	14 (2)	4 (3)
	Somewhat	1190 (56)	610 (55)	446 (57)	89 (64)
	Very/Extremely	885 (42)	494 (44)	325 (41)	47 (34)
	No response	12 (1)	6 (1)	4 (1)	-
UPSET	Not at all	1216 (58)	668 (60)	455 (58)	73 (52)
	Somewhat	702 (33)	351 (32)	255 (32)	47 (34)
	Very/Extremely	182 (9)	81 (7)	75 (10)	19 (14)
	No response	13 (<1)	6 (1)	4 (1)	1 (1)
GUILTY	Not at all	1227 (58)	681 (61)	459 (58)	67 (48)
	Somewhat	708 (34)	356 (32)	259 (33)	55 (39)
	Very/Extremely	164 (8)	72 (6)	67 (8)	17 (12)
	No response	14 (1)	7 (1)	4 (1)	1 (1)
HAPPY	Not at all	94 (4)	43 (4)	41 (5)	7 (5)
	Somewhat	1058 (50)	540 (48)	393 (50)	84 (60)
	Very/Extremely	948 (45)	526 (47)	350 (44)	49 (35)
	No response	13 (1)	7 (1)	5 (1)	-
USED	Not at all	1247 (59)	684 (61)	465 (59)	76 (54)
	Somewhat	663 (31)	330 (30)	251 (32)	46 (33)
	Very/Extremely	186 (9)	93 (8)	69 (9)	16 (11)
	No response	17 (1)	9 (1)	4 (1)	2 (1)
FANTASTIC	Not at all	112 (5)	55 (5)	44 (6)	10 (7)
	Somewhat	1092 (52)	550 (49)	417 (53)	83 (59)
	Very/Extremely	891 (42)	499 (45)	324 (41)	46 (33)
	No response	18 (1)	12 (1)	4 (1)	1 (1)
WORRIED	Not at all	1187 (56)	641 (57)	442 (56)	82 (59)
	Somewhat	748 (35)	388 (35)	282 (36)	43 (31)
	Very/Extremely	160 (8)	75 (7)	61 (8)	15 (11)
	No response	18 (1)	12 (1)	4 (1)	-
LOVED	Not at all	210 (10)	116 (10)	81 (10)	10 (7)
	Somewhat	1008 (48)	530 (47)	352 (45)	75 (56)
	Very/Extremely	874 (41)	455 (41)	353 (45)	50 (36)
	No response	21 (1)	15 (1)	3 (<1)	1 (1)
REGRETFUL	Not at all	1186 (56)	651 (58)	439 (56)	76 (54)
	Somewhat	718 (34)	366 (33)	267 (34)	45 (32)
	Very/Extremely	188 (9)	87 (8)	78 (10)	17 (12)
	No response	21 (1)	12 (1)	5 (1)	2 (1)

CHAPTER 6 – ALCOHOL, TOBACCO AND OTHER DRUG USE

An understanding of current risk practices associated with alcohol and other drugs will potentially help shape policy and programs to help reduce risk of transmission of STIs and BBVs. This chapter reports, alcohol tobacco and other drug use of participants, by gender, age groups and regions (Tables 6-1 and 6-2).

Alcohol

Alcohol consumption was common among the study population with 78% reported drinking alcohol in the last year. Drinking alcohol once weekly or more often was reported by 36% of participants overall; 41% of males and 33% of females. Prevalence of alcohol consumption increased with age (70%, 84% and 85% among <20, 20-24 years and 25 years or older respectively) (Figure 6a).

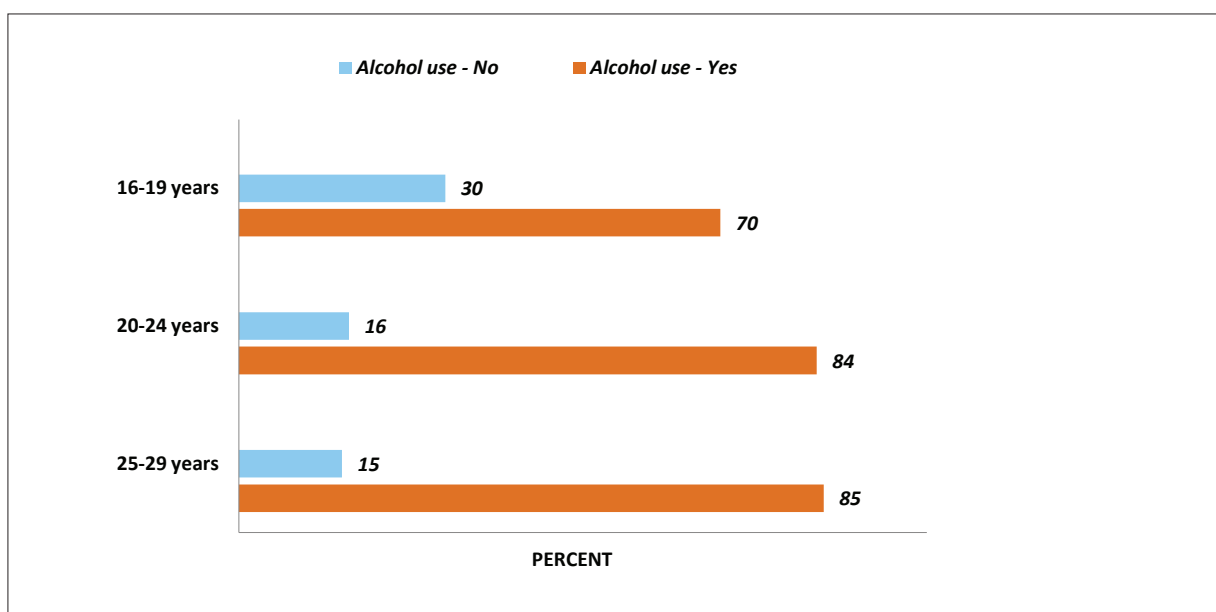


Figure 6a: Alcohol intake by age group

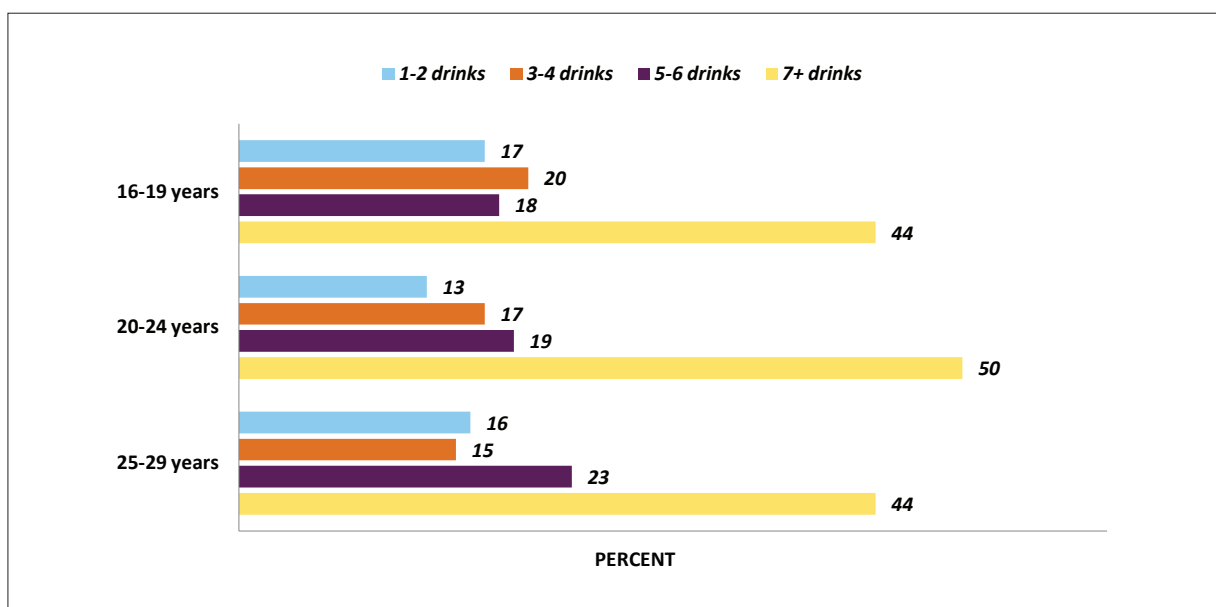


Figure 6b: Drinks per day by age group (among reporting alcohol use)

Among those who reported drinking alcohol 54% of males and 41% of females reported drinking 7 or more alcoholic drinks (risky drinking levels) on days when consuming alcohol (Table 6-1). By age 50% of participants in the age group 20-24 years reported risky drinking levels compared to 44% of participants aged less than 20 and older than 25 years of age (Figure 6b).

Table 6-1: Alcohol and Tobacco use by gender and age group

	TOTAL	GENDER [†]		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
CIGARETTES SMOKED/DAY (overall)	1106 (38%)	420 (37%)	675 (40%)	386 (31%)	382 (43%)	338 (47%)
Not a smoker	1627 (57)	652 (58)	965 (57)	801 (63)	465 (52)	361 (50)
1-10	685 (24)	242 (21)	436 (26)	271 (21)	225 (25)	189 (26)
11-20	293 (10)	109 (10)	182 (11)	84 (7)	105 (12)	104 (15)
More than 20	128 (4)	69 (6)	57 (3)	31 (2)	52 (6)	45 (6)
No response/missing	144 (5)	60 (5)	65 (4)	78 (6)	50 (6)	16 (2)
ALCOHOL USE IN LAST YEAR (overall)**	2244 (78%)	889 (79%)	1342 (79%)	889 (70%)	750 (84%)	605 (85%)
Never	494 (17)	189 (17)	298 (17)	303 (24)	96 (11)	95 (13)
Once a month	787 (27)	271 (24)	513 (30)	348 (28)	219 (24)	220 (31)
2-3 days/month	423 (15)	158 (14)	264 (15)	172 (14)	139 (16)	112 (16)
Weekly	689 (24)	291 (26)	392 (23)	257 (20)	264 (29)	168 (24)
> once/week	345 (12)	169 (15)	173 (10)	112 (9)	128 (14)	105 (15)
No response/missing	139 (5)	54 (5)	65 (4)	73 (6)	51 (6)	15 (2)
DRINKS/DAY ON OCCASIONS WHEN CONSUMING ALCOHOL (among those who reported using alcohol)						
1-2 drinks	349 (16)	121 (14)	227 (17)	150 (17)	101 (13)	98 (16)
3-4 drinks	393 (18)	129 (15)	263 (20)	176 (20)	125 (17)	92 (15)
5-6 drinks	444 (20)	148 (17)	294 (22)	162 (18)	142 (19)	140 (23)
7+ drinks	1038 (46)	484 (54)	549 (41)	396 (44)	375 (50)	267 (44)
No response/missing	20 (1)	7 (1)	9 (1)	5 (1)	7 (1)	8 (1)
WEEKS WITH 2 ALCOHOL FREE DAYS IN THE LAST MONTH (among those who reported using alcohol)						
1 week or less	813 (36)	339 (38)	467 (35)	359 (40)	259 (35)	195 (32)
2 weeks	418 (19)	186 (21)	230 (17)	163 (18)	152 (20)	103 (17)
3 weeks	340 (15)	130 (15)	230 (16)	132 (15)	110 (15)	98 (16)
4 weeks	653 (29)	229 (26)	423 (32)	226 (25)	223 (30)	204 (34)
No response/missing	20 (1)	5 (1)	13 (1)	9 (1)	6 (1)	5 (1)

[†]Excludes 40 observations transgender or missing gender

^{**}Once a month, 2-3 days/month, Weekly, > once/week

Table 6-2: Alcohol and Tobacco use by region

	TOTAL	REGION [‡]		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
CIGARETTES SMOKED/DAY (overall)	1106 (38%)	508 (35%)	451 (44%)	95 (39%)
Not a smoker	1627 (57)	912 (62)	553 (54)	121 (50)
1-10	685 (24)	313 (21)	267 (26)	68 (28)
11-20	293 (10)	141 (10)	128 (13)	20 (8)
More than 20	128 (4)	54 (3)	56 (5)	7 (3)
No response/missing	144 (5)	40 (3)	19 (2)	28 (11)
ALCOHOL USE IN LAST YEAR (overall)[†]	2244 (78%)	1166 (80%)	855 (84%)	165 (68%)
Never	494 (17)	254 (17)	149 (15)	56 (23)
Once a month	787 (27)	402 (28)	313 (31)	55 (23)
2-3 days/month	423 (15)	224 (15)	160 (16)	25 (10)
Weekly	689 (24)	363 (25)	253 (25)	58 (24)
> once/week	345 (12)	177 (12)	129 (13)	27 (11)
No response/missing	139 (5)	40 (3)	19 (2)	23 (9)
DRINKS/DAY ON OCCASIONS WHEN CONSUMING ALCOHOL (among those who reported using alcohol)				
1-2 drinks	349 (16)	184 (16)	129 (15)	19 (12)
3-4 drinks	393 (18)	230 (20)	131 (15)	22 (13)
5-6 drinks	444 (20)	245 (21)	166 (19)	25 (15)
7+ drinks	1038 (46)	501 (43)	424 (50)	90 (55)
No response/missing	20 (1)	6 (1)	5 (1)	9 (5)
WEEKS WITH 2 ALCOHOL FREE DAYS IN THE LAST MONTH (among those who reported using alcohol)				
1 week or less	813 (36)	407 (35)	319 (37)	65 (39)
2 weeks	418 (19)	205 (18)	174 (20)	27 (16)
3 weeks	340 (15)	185 (16)	124 (15)	23 (14)
4 weeks	653 (29)	360 (31)	233 (27)	47 (28)
No response/missing	20 (1)	9 (1)	5 (1)	3 (2)

[†]Once a month, 2-3 days/month, Weekly, > once/week

[‡]150 of the observations with missing region were not included

By regions, a higher proportion of remote participants reported never drinking alcohol 23% compared to 17% and 15% of urban and regional participants respectively. However participants from remote areas reported more frequently consuming 7 or more drinks on occasions of drinking, compared to 50% and 43% of regional and urban participants respectively (Table 6-2).

Tobacco use

Overall, 38% of the study population reported smoking at least one cigarette a day; cigarette smoking was slightly more common among females compared to males (40% versus 37%). Reports of smoking cigarettes increased with age (31%, 43% and 47% among participants aged <20, 20-24 and >25 years

respectively) (Table 6-1). Participants from regional and remote areas were relatively more likely to be a smoker compared to those participants from urban areas (44% and 39% versus 35% respectively) (Table 6-2).

Illicit drug use

Overall, 35% of participants reported they had used at least one illicit drug (marijuana, meth/amphetamine or ecstasy) in the past year comprising 39% of males and 32% of females. By age, any illicit drug used in the last year increased with age from 29% of participants aged less 20 years to 39% and 40% of people aged 20-24 and 25-29 years (Table 6-3).

Table 6-3: *Illicit drug use by gender and age group*

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
MARIJUANA USE IN LAST YEAR (overall)	874 (30%)	372 (33%)	496 (29%)	335 (26%)	300 (33%)	239 (33%)
None	1825 (63)	692 (61)	1124 (66)	841 (66)	532 (59)	452 (63)
Every day	322 (11)	144 (13)	174 (10)	117 (9)	107 (12)	98 (14)
Once a week or more	209 (7)	97 (9)	111 (7)	82 (6)	77 (9)	50 (7)
Once a month	210 (7)	82 (7)	128 (8)	83 (7)	70 (8)	57 (8)
Every few months/once/twice a year	133 (5)	49 (4)	83 (5)	53 (4)	46 (5)	34 (5)
No response/missing	178 (6)	68 (6)	185 (5)	89 (7)	67 (7)	24 (3)
METH/AMPHETAMINE USE IN LAST YEAR (overall)	272 (9%)	137 (12%)	130 (8%)	85 (7%)	94 (10%)	93 (13%)
None	2441 (85)	934 (83)	1495 (88)	1094 (86)	744 (83)	603 (84)
Every day	119 (4)	58 (5)	59 (3)	54 (4)	39 (4)	26 (4)
Once a week or more	24 (1)	15 (1)	8 (<1)	9 (1)	6 (1)	9 (1)
Once a month	41 (1)	25 (2)	15 (1)	6 (<1)	17 (2)	18 (3)
Every few months/once/twice a year	88 (3)	39 (3)	48 (3)	16 (1)	32 (4)	40 (6)
No response	164 (6)	61 (5)	80 (5)	86 (7)	59 (7)	19 (3)
ECSTASY USE IN LAST YEAR (overall)	307 (11%)	161 (14%)	141 (8%)	100 (8%)	122 (14%)	85 (12%)
None	2393 (83)	904 (80)	1479 (87)	1078 (85)	711 (79)	604 (84)
Every day	63 (2)	33 (3)	29 (2)	29 (2)	22 (2)	12 (2)
Once a week or more	53 (2)	28 (2)	22 (1)	26 (2)	22 (2)	5 (1)
Once a month	80 (3)	45 (4)	34 (2)	22 (2)	34 (4)	24 (3)
Every few months/once/twice a year	111 (4)	55 (5)	56 (3)	23 (2)	44 (5)	44 (6)
No response	177 (6)	67 (6)	85 (5)	87 (7)	64 (7)	26 (4)
ANY DRUG IN LAST YEAR	1005 (35%)	444 (39%)	553 (32%)	369 (29%)	351 (39%)	285 (40%)
POLY DRUG USE IN LAST YEAR						
None	1725 (60)	633 (56)	1080 (63)	819 (65)	492 (55)	414 (58)
One	685 (24)	286 (25)	396 (23)	264 (21)	235 (26)	186 (26)
Two	192 (7)	90 (8)	100 (6)	59 (5)	67 (7)	66 (9)
Three	128 (4)	68 (6)	57 (3)	46 (4)	49 (5)	33 (5)
No response/missing	147 (5)	55 (5)	72 (4)	77 (6)	54 (6)	16 (2)

A higher proportion of male participants reported using illicit drugs in the last year compared to the females (39% versus 32%). Of illicit drugs used, marijuana was the most common drug 30% overall- 33% of males and 29% of females. Meth/amphetamine use was reported as used by 9% of participants overall and 12% of males and 8% of females. Ecstasy use was reported by 11% participants overall and 14% of males and 8% of females. Poly drug use in the previous year was reported by 11% of participants overall and 14% and 9% of males and females respectively (Table 6-3). Reported poly drug use also increased with age of participants from 9% in the youngest age group (<20 years) to 14% in the oldest age group (25-29 years).

Table 6-4: Illicit drug use by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
MARIJUANA USE IN LAST YEAR (overall)	874 (30%)	437 (30%)	339 (33%)	61 (25%)
None	1825 (63)	967 (66)	658 (64)	144 (59)
Every day	322 (11)	155 (11)	136 (13)	15 (6)
Once a week or more	209 (7)	99 (7)	83 (8)	13 (5)
Once a month	210 (7)	114 (8)	77 (8)	17 (7)
Every few months/once/twice a year	133 (5)	69 (5)	43 (4)	16 (7)
No response/missing	178 (6)	56 (4)	26 (3)	39 (16)
METH/AMPHETAMINE USE IN LAST YEAR (overall)	272 (9%)	144 (10%)	92 (9%)	14 (6%)
None	2441 (85)	1268 (87)	905 (88)	200 (82)
Every day	119 (4)	56 (4)	41 (4)	5 (2)
Once a week or more	24 (1)	14 (1)	7 (1)	2 (1)
Once a month	41 (1)	24 (2)	13 (1)	3 (1)
Every few months/once/twice a year	88 (3)	50 (3)	31 (3)	4 (2)
No response	164 (6)	48 (3)	26 (3)	30 (12)
ECSTASY USE IN LAST YEAR (overall)	307 (11%)	166 (11%)	106 (10%)	10 (4%)
None	2393 (83)	1244 (85)	888 (87)	196 (80)
Every day	63 (2)	26 (2)	22 (2)	1 (<1)
Once a week or more	53 (2)	30 (2)	16 (2)	1 (<1)
Once a month	80 (3)	42 (3)	31 (3)	5 (2)
Every few months/once/twice a year	111 (4)	68 (5)	37 (4)	3 (1)
No response	177 (6)	50 (3)	29 (3)	38 (16)
ANY DRUG IN LAST YEAR	1005 (35%)	514 (35%)	376 (37%)	67 (27%)
TOTAL DRUGS IN LAST YEAR				
None	1725 (60)	903 (62)	625 (61)	152 (62)
One	685 (24)	347 (24)	258 (25)	55 (22)
Two	192 (7)	101 (7)	75 (7)	6 (2)
Three	128 (4)	66 (5)	43 (4)	6 (2)
No response/missing	147 (5)	43 (3)	22 (2)	25 (10)

By region; prevalence of using at least one of the following illicit drugs in the past year (marijuana, meth/ amphetamine or ecstasy) decreased with remoteness; 35%, 37% and 27% of urban, regional and remote participants respectively. Marijuana was the most common drug used across the regions and its use was reported highest among those living in regional areas (33%) and lowest among people living in remote areas (25%). Meth/amphetamine use was reported highest among participants from urban and regional areas 10% and 9% respectively compared to participants from remote areas (6%). Poly drug use was relatively higher among urban and regional participants (12% and 11%) compared to those living in remote areas (4%) (Table 6-4).

Tables 6-5 and 6-6 show reported data for all other illicit drug use as well as inhalants. Cocaine was the next most common other drug used with overall prevalence of 4% while prevalences of using other drugs ranged from 1-3%.

Table 6-5: Other illicit drug use by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male	Female	16-19	20-24	25-29
		n (%)	n (%)	n (%)	n (%)	n (%)
	2877	1132	1705	1265	897	715
OTHER DRUGS USED IN THE PAST YEAR[†]						
None	2421 (84)	921 (81)	1485 (87)	1083 (86)	742 (83)	596 (83)
Cocaine	128 (4)	69 (6)	56 (3)	39 (3)	54 (6)	35 (5)
Heroin	55 (2)	34 (3)	9 (1)	24 (2)	16 (2)	15 (2)
Petrol/Paint/Glue	44 (2)	20 (2)	22 (1)	18 (1)	14 (2)	12 (2)
Fantasy/GHB/GBH/G	52 (2)	32 (3)	20 (1)	18 (1)	21 (2)	13 (2)
Benzos/Rhoies	25 (1)	12 (1)	13 (1)	9 (1)	3 (<1)	13 (2)
Ketamine	18 (1)	12 (1)	6 (<1)	9 (1)	4 (<1)	5 (1)
LSD/Acid/Mushrooms	57 (2)	24 (2)	33 (2)	16 (1)	16 (2)	25 (4)
Other	100 (3)	46 (4)	52 (3)	38 (3)	25 (3)	37 (5)
No response	159 (5)	64 (6)	75 (4)	81 (6)	59 (7)	19 (3)

[†]Drugs were not mutually exclusive

Table 6-6: Other illicit drug use by region

	TOTAL	REGION		
	n (%)	Urban	Regional	Remote
		n (%)	n (%)	n (%)
	2877	1460	1023	244
OTHER DRUGS USED IN THE PAST YEAR[†]				
None	2421 (84)	1246 (85)	905 (88)	203 (83)
Cocaine	128 (4)	80 (5)	32 (3)	2 (1)
Heroin	55 (2)	28 (2)	18 (2)	1 (<1)
Petrol/Paint/Glue	44(2)	23(2)	14 (1)	2 (1)
Fantasy/GHB/GBH/G	52 (2)	27 (2)	20 (2)	3 (1)
Benzos/Rhoies	25 (1)	13 (1)	9 (1)	1 (<1)
Ketamine	18 (1)	11 (1)	5 (<1)	0 (<1)
LSD/Acid/Mushrooms	57 (2)	25 (2)	26 (3)	5 (2)
Other	100 (3)	57 (4)	30 (3)	8 (3)
No response	159 (6)	47 (3)	28 (3)	24 (10)

[†]Drugs were not mutually exclusive

Injecting drug use

A total of 95 (3%) participants reported injecting drug(s) in the last year (Table 6-7); comprising 5% and 2% of male and females. By age; 3% of participants aged 16-19 and 20-24 years and 4% of people aged 25-29 years reported injecting drugs in the last year.

Among those who reported injecting drug(s) in the past year, meth/amphetamine (37%) and heroin (36%) were the most common drugs injected by participants followed by methadone (26%), morphine (19%) and cocaine (15%). A higher proportion of males reported injecting meth/amphetamine (45%) and or heroin (38%) compared to females (29% both); similar proportions of males and females reported injecting methadone and cocaine (~25%). 11% of male participants reported injecting steroids compared to 3% of females.

Injecting meth/amphetamine and methadone (38% both) were the most commonly injected drugs followed by heroin (30%) among participants aged less than 20 years while heroin was the most common drug (43%) injected among the oldest participants (25+ years) (Table 6-7).

Table 6-7: Injecting drug use by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
Total	2877	1132	1705	1265	897	715
INJECTING DRUG USE IN THE LAST YEAR (overall)						
Yes	95 (3%)	56 (5%)	35 (2%)	40 (3%)	25 (3%)	30 (4%)
No	2647 (92)	1022 (90)	1608 (94)	1155 (91)	821 (92)	671 (94)
No response/missing	135 (5)	54 (5)	62 (4)	70 (6)	51 (6)	14 (2)
DRUGS INJECTED IN THE LAST YEAR[†] (they are not mutually exclusive)						
Meth/amphetamine	35 (37)	25 (45)	10 (29)	15 (38)	11 (44)	9 (30)
Heroin	34 (36)	21 (38)	10 (29)	12 (30)	9 (36)	13 (43)
Methadone	25 (26)	14 (25)	9 (26)	15 (38)	7 (28)	3 (10)
Morphine	18 (19)	13 (23)	3 (9)	8 (20)	5 (20)	5 (17)
Cocaine	14 (15)	8 (14)	5 (14)	8 (20)	4 (16)	2 (7)
LSD/hallucinogens	5 (5)	4 (7)	1 (3)	2 (5)	3 (12)	-
Benzodiazepines	5 (5)	3 (5)	2 (6)	2 (5)	2 (8)	1 (3)
Steroids	7 (7)	6 (11)	1 (3)	2 (5)	4 (16)	1 (3)
Other	15 (16)	9 (16)	6 (17)	4 (10)	4 (16)	7 (23)
SHARED INJECTING EQUIPMENT IN THE LAST YEAR[†]						
Needle/Syringe	35 (37)	14 (33)	7 (20)	12 (30)	10 (40)	13 (43)
Other equipments ^{**}	43 (45)	24 (43)	17 (49)	22 (55)	9 (36)	12 (40)

[†]Among those who reported injected in the last year

^{**}Shared other equipments including tourniquet, spoon, filter or swab among those who reported injected in the last year

Table 6-8: Injecting drug use by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
INJECTING DRUG USE IN THE LAST YEAR (OVERALL)				
Yes	95 (3%)	43 (3%)	32 (3%)	4 (2%)
No	2647 (92)	1379 (94)	968 (95)	219 (90)
No response	135 (5)	38 (3)	23 (2)	21 (9)
DRUGS INJECTED IN THE LAST YEAR† (they are not mutually exclusive)				
Meth/amphetamine	35 (37)	15 (35)	16 (50)	1 (25)
Heroin	34 (36)	19 (44)	10 (31)	1 (25)
Methadone	25 (26)	8 (19)	11 (35)	-
Morphine	18 (19)	8 (19)	4 (13)	1 (25)
Cocaine	14 (15)	7 (16)	5 (16)	-
LSD/hallucinogens	5 (5)	2 (5)	3 (9)	-
Benzodiazepines	5 (5)	2 (5)	3 (9)	-
Steroids	7 (7)	5 (12)	2 (6)	-
Other	15 (16)	7 (16)	7 (22)	1 (25)
SHARED INJECTING EQUIPMENT IN THE LAST YEAR				
Needle/Syringe*	35 (37)	14 (32)	14 (44)	1 (25)
Other equipments**	43 (45)	19 (44)	13 (41)	-

**Shared other equipments including tourniquet, spoon, filter or swab among those who reported injected in the last year

*Among those who reported injected in the last year

Shared injecting equipment

Sharing of injecting equipment is a risk factor for BBV transmission. Of participants who reported injecting drugs in the last 12 months 37% reported sharing needles/ syringes and 45% of the same participants shared other injecting equipment such as tourniquets, spoons, filters or swabs. A higher proportion of males reported sharing needles and syringes compared to females (33% vs. 20%).

By age, sharing needles/syringes was more commonly reported by people in the age groups 20-24 and 25-29 years 40% and 43% respectively compared to 30% of participants aged less than 20 years. However, of the age group 16-19 years who reported injecting drugs in the last year, 55% reported sharing other injecting equipment (Table 6-7). By regions, participants in regional areas were more likely to share needles/syringes compared to those resident in urban areas (44% versus 32%) (Table 6-8).

CHAPTER 7 – HEALTH SERVICE AND OTHER ACCESS

Health service access and appropriate testing and treatment are recognised as an important factor in reducing STI and BBV incidence prevalence in Aboriginal and Torres Strait Islander communities. In this Chapter participants reported histories of STI and BBV testing and diagnosis for STIs and BBVs, as well as access to services for the diagnosis and treatment of STIs and BBVs and alcohol and other drug issues are presented by gender, age and regions.

Participants were asked if they had a “health check” in the last year and at what type of service this occurred. The data is presented in Tables 7-1 and 7-2 by gender/age groups and regions respectively. Similar proportions of male and female participants reported having a “health check” in the last year (53% and 57% respectively). By age; those aged 16-19 were less likely to report having had a health check (41%) in the last year compared to those aged 20-24 and 25-29 years, (63% and 69% respectively) (Table 7-1). By region similar proportions of participants reported that they had a health check in the last year 55%, 57% and 55% of urban, regional and remote participants (Table 7-2). Overall 66% of health checks were reported as being conducted at Aboriginal Medical Services, followed by 32% at general practice clinics.

Table 7-1: Service access adult health check by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
AN ADULT HEALTH CHECK IN THE LAST YEAR						
Yes	1573 (55)	598 (53)	965 (57)	518 (41)	563 (63)	492 (69)
No	1109 (39)	462 (41)	644 (38)	652 (52)	263 (29)	194 (27)
No response/missing	195 (7)	72 (6)	96 (6)	95 (8)	71 (8)	29 (4)
WHERE DID YOU GET YOUR LAST ADULT HEALTH CHECK*						
Aboriginal Medical Service	1043 (66)	410 (69)	627 (65)	337 (65)	360 (64)	346 (70)
Local Dr at General Practice Clinic	509 (32)	185 (31)	321 (33)	180 (35)	188 (33)	141 (29)
No response/missing	21 (1)	3 (<1)	17 (2)	1 (<1)	15 (3)	5 (1)

*Among those who had the check up

Table 7-2: Service access adult health check by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
AN ADULT HEALTH CHECK IN THE LAST YEAR				
Yes	1573 (55)	799 (55)	586 (57)	133 (55)
No	1109 (39)	603 (41)	400 (39)	72 (30)
No response/missing	195 (7)	58 (4)	37 (4)	39 (16)
WHERE DID YOU GET YOUR LAST ADULT HEALTH CHECK*				
Aboriginal Medical Service	1043 (66)	511 (64)	415 (71)	85 (64)
Local Dr at General Practice Clinic	509 (32)	288 (36)	155 (26)	44 (33)
No response/missing	21 (1)	-	16 (3)	4 (3)

*Among those who had the check up

Reported rates of testing and diagnosis of STIs and BBVs

In this section participants self-reported history of testing and diagnosis for STIs and BBVs, is presented by gender, age and regions in Tables 7-3 to Tables 7-8 .

STIs

Overall, 61% of the study population reported that they had ever been tested for STIs. A higher proportion of females reported having ever been tested for STIs compared to male participants (65% vs. 56%). By age; 42%, 71% and 81% of 16-19, 20-24 and 25-29 year age groups respectively reported that they had ever been tested for an STI. Annual testing for STIs is recommended for young Aboriginal and Torres Strait Islander people. 42% of participants reported that they had been tested for an STI in the previous year; 39% of males and 44% of females. By age; STI testing in the last year was reported by 29%, 51% and 52% of 16-19, 20-24 and 29 year old participants respectively. Aboriginal Medical Services were reported as the most common place where STI testing occurred (49%) followed by private general practice clinics (31%).

Table 7-3: STIs by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
EVER TESTED FOR STIS (OVERALL) #	1749 (61%)	631 (56%)	1101 (65%)	533 (42%)	637 (71%)	579 (81%)
Never Tested	968 (34)	440 (39)	525 (31)	649 (51)	203 (23)	116 (16)
Yes, last year	1204 (42)	445 (39)	753 (44)	370 (29)	459 (51)	375 (52)
Yes, over a year	359 (12)	104 (9)	246 (14)	60 (5)	122 (14)	177 (25)
Don't know when	186 (6)	82 (7)	102 (6)	103 (8)	56 (6)	27 (4)
No response/missing	160 (6)	61 (5)	79 (5)	83 (7)	57 (6)	20 (3)
LAST TEST LOCATION ##						
Aboriginal Medical Service	865 (49)	315 (50)	545 (50)	238 (45)	325 (51)	302 (52)
General Practice Clinic	534 (31)	177 (28)	354 (32)	143 (27)	203 (32)	188 (32)
Family Planning/Sexual Health Centre	124 (7)	49 (8)	73 (7)	33 (6)	40 (6)	51 (9)
No response/missing	226 (13)	90 (14)	129 (12)	119 (22)	69 (11)	38 (7)
DIAGNOSED WITH AN STI (overall)	426 (15%)	138 (12%)	282 (17%)	101 (8%)	153 (17%)	172 (24%)
DIAGNOSED WITH AN STI ##	426 (24%)	128 (22%)	282 (26%)	101 (19%)	153 (24%)	172 (30%)
TYPE OF DIAGNOSES ##						
Chlamydia	237 (14)	66 (10)	169 (15)	49 (9)	92 (14)	96 (17)
Gonorrhea	41 (2)	21 (3)	20 (2)	12 (2)	12 (2)	17 (3)
Syphilis	24 (1)	13 (2)	10 (1)	11 (2)	3 (<1)	10 (2)
Trichomoniasis	16 (1)	6 (1)	10 (1)	11 (2)	3 (<1)	2 (<1)
Herpes	26 (1)	10 (2)	16 (1)	6 (1)	9 (1)	11 (2)
HPV(Genital Warts)	17 (1)	3 (<1)	14 (1)	-	6 (1)	11 (2)
Other	43 (3)	21 (3)	21 (2)	17 (3)	16 (3)	10 (2)

#Tested last year, more than a year, don't remember when

##Among those who have reported ever tested (i.e. last year, more than a year or don't remember when)

Overall, 15% of participants reported that they had been ever diagnosed with an STI, however when analysed by those who reported that they had ever been tested for an STI, overall 24% of participants reported having ever been diagnosed with an STI comprising 22% of males and 26% of females. By age the reported diagnosis of STIs among those who reported ever being tested for an STI increased with age; with 19%, 24% and 30% of participants in age groups 16-19 20-24 and 25-29 years respectively (Table 7-3).

Overall 14% of participants who had ever been tested for STIs reported that they had ever been diagnosed with Chlamydia; prevalences of other diagnoses including gonorrhea, syphilis, trichomonas, herpes and genital warts ranged from 1% to 2%. Females and older age groups reported the highest proportion of STI diagnosis.

Table 7-4: STIs by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
EVER TESTED FOR STIS (OVERALL)[#]	1749 (61%)	875 (60%)	638 (62%)	168 (69%)
Never Tested	968 (34)	534 (37)	357 (35)	53 (22)
Yes, last year	1204 (42)	594 (41)	448 (44)	118 (48)
Yes, over a year	359 (12)	202 (14)	115 (11)	29 (12)
Don't know when	186 (6)	79 (5)	75 (7)	21 (9)
No response/missing	160 (6)	51 (3)	28 (3)	23 (9)
LAST TEST LOCATION^{##}				
Aboriginal Medical Service	865 (49)	403 (46)	342 (54)	89 (53)
Doctor/General Practice Clinic	534 (31)	318 (36)	162 (25)	36 (21)
Family Planing/Sexual Health Clinic	124 (7)	72 (8)	39 (6)	11 (7)
No response/missing	226 (13)	82 (9)	95 (15)	32 (19)
Diagnosed with an STI (overall)	426 (15%)	195 (13%)	154 (15%)	40 (16%)
Diagnosed with an STI^{##}	426 (24%)	195 (22%)	154 (24%)	40 (24%)
TYPE OF DIAGNOSES^{##}				
Chlamydia	237 (14)	98 (11)	100 (16)	24 (14)
Gonorrhea	41 (2)	15 (2)	9 (1)	9 (5)
Syphilis	24 (1)	8 (1)	6 (1)	7 (4)
Trichomonas	16 (1)	5 (1)	4 (1)	2 (1)
Herpes	26 (1)	6 (1)	9 (1)	11 (2)
HPV (Genital Warts)	17 (1)	7 (1)	9 (1)	-
Other	43 (2)	30 (3)	9 (1)	1 (1)

[#]Tested last year, more than a year, don't remember when

^{##}Among those who have reported ever tested (i.e. last year, more than a year or don't remember when)

Across the regions, a higher proportion of remote participants reported that, they had ever tested for an STI compared to urban and regional participants (69% versus 60% and 62% respectively). More than 50% of the regional (54%) and remote (53%) participants reported that they had been tested in an Aboriginal Medical Service compared to 46% of urban participants. Chlamydia was the most common

reported STI diagnosis among those who had ever been tested for an STI, regardless of region and ranged from 11%, 16% and 14% of participants in urban, regional and remote areas (Table 7-4).

HIV testing and diagnosis

Participants were asked about their history of HIV testing and diagnosis (Table 7-5). Overall, 50% of the respondents reported having ever been tested for HIV; reported testing were similar among males and females (48% and 51% respectively). By age; 36%, 55% and 67% of participants aged 16-19 20-24 and 25-29 years respectively, reported having ever had a HIV test. Overall 30% of participants reported having a HIV test in the previous year, with similar proportions among males and females. By age 20%, 37% and 40% of participants aged 16-19 20-24 and 25-29 years respectively reported having a HIV test in the previous year. HIV testing occurred most commonly at Aboriginal Medical Services (44%), followed by private general practice clinics (24%) and sexual health services (7%).

Table 7-5: HIV testing by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
EVER TESTED FOR HIV (overall)[#]	1424 (50%)	546 (48%)	869 (51%)	453 (36%)	490 (55%)	481 (67%)
Never tested	1275 (44)	518 (46)	752 (44)	722 (57)	344 (38)	209 (29)
Yes, last year	865 (30)	339 (30)	522 (31)	248 (20)	329 (37)	288 (40)
Yes, over a year ago	268 (9)	86 (8)	179 (11)	55 (4)	72 (8)	141 (20)
Don't know when	291 (10)	121 (11)	168 (10)	150 (12)	89 (10)	52 (7)
No response/missing	178 (6)	68 (6)	84 (5)	90 (7)	63 (7)	25 (4)
LAST TEST LOCATION^{##}						
Aboriginal Medical Service	624 (44)	242 (44)	380 (44)	171 (38)	217 (44)	236 (49)
General Practice Clinic	345 (24)	119 (22)	225 (26)	80 (18)	130 (27)	125 (28)
Sexual Health Clinic	100 (7)	46 (8)	51 (6)	33 (7)	34 (7)	33 (7)
Family planning Clinic	38 (3)	10 (2)	28 (3)	12 (3)	14 (3)	12 (2)
Hospital	8 (1)	2 (<1)	6 (1)	2 (<1)	2 (<1)	4 (1)
Prison/Juvenile Justice Centre	3 (<1)	2 (<1)	1 (<1)	-	1 (<1)	2 (<1)
Other	4 (<1)	1 (<1)	3 (<1)	2 (<1)	1 (<1)	1 (<1)
No response	302 (21)	124 (23)	175 (20)	2 (<1)	1 (<1)	1 (<1)
DIAGNOSED WITH HIV (overall)	96/2877(3%)	57/1132 (5%)	38/1705 (2%)	42/1265(3%)	34/897(4%)	20/715 (3%)
Diagnosed with HIV ^{##}	96/1424 (7%)	57/546 (10%)	38/869 (4%)	42/453 (9%)	34 /490(7%)	20/715 (4%)
HIV POSITIVE NUMBERS BY SEXUAL IDENTITY[†]						
Among Heterosexual ¹	71/2589 (3%)	42/1020 (4%)	29/1550 (2%)	31/1156 (3%)	25/792 (3%)	15/641 (2%)
Among Gay/Lesbian/Homosexual ²	17/127 (13%)	12/72 (17%)	4/48 (8%)	6/30 (20%)	7/55 (13%)	4/42 (10%)
Among Bisexual ³	8/110 (7%)	3/22 (14%)	5/87 (6%)	5/45 (11%)	2/34 (6%)	1/31 (3%)
Among No response/missing	0/51 (0%)	0/18 (0%)	0/20 (0%)	0/34 (0%)	0/16 (0%)	0/1 (0%)

^{##} Among those who have reported ever tested (i.e. last year, more than a year or don't remember when)

[#] Tested last year, more than a year, don't remember when

¹ Total heterosexual = 2589, ² Total Gay/lesbian/Homosexual = 127, ³ Total Bisexual = 110,

[†] Numerators are the number of self reported HIV positive cases by participants, denominators are the number of subjects in that particular cell; for example, there were a total of 48 females who identified themselves as gay/lesbian/homosexual, of these 4 (8%) reported that they were HIV seropositive; therefore % represents "row percentages".

A total of 96 (3%) participants reported their HIV status being positive; comprising 5% of all males and 2% of all females in the study group. By region, 33% of remote area participants reported that they had never been tested for HIV compared to 47% and 46% of participants in urban and regional areas.

Table 7-6: HIV testing by region

	TOTAL		REGION	
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
EVER TESTED FOR HIV (OVERALL)[#]1424 (50%)		716 (49%)	520 (51%)	130 (53%)
Never tested	1275 (44)	691 (47)	474 (46)	80 (33)
Yes, last year	865 (30)	432 (30)	325 (32)	75 (31)
Yes, over a year ago	268 (9)	155 (11)	87 (9)	15 (6)
Don't know when	291 (10)	129 (9)	108 (11)	40 (16)
No response/missing	178 (6)	53 (4)	29 (3)	34 (14)
LAST TEST LOCATION^{##}				
Aboriginal Medical Service	624 (44)	289 (40)	262 (50)	52 (40)
General Practice Clinic	345 (24)	218 (30)	90 (17)	28 (22)
Sexual Health Clinic	100 (7)	56 (8)	31 (6)	6 (5)
Family planning Clinic	38 (3)	15 (2)	20 (4)	1 (1)
Hospital	8 (1)	5 (1)	3 (1)	-
Prison/Juvenile Justice Centre	3 (<1)	2 (<1)	1 (<1)	-
Other	4 (<1)	1 (<1)	1 (<1)	-
No response	302 (21)	130 (18)	112 (22)	43 (33)
DIAGNOSED WITH HIV (overall)	96/2877 (3%)	40/1460 (3%)	30/1023 (3%)	7/244 (3%)
Diagnosed with HIV ^{##}	96/1424 (7%)	40/716 (6%)	30/520 (6%)	7/130 (5%)
HIV POSITIVE NUMBERS BY SEXUAL IDENTITY[†]				
Among Heterosexual ¹	71/2589 (3%)	25/1319 (2%)	25/951 (3%)	7/231 (3%)
Among Gay/lesbian/Homosexual ²	17/127 (13%)	9/71 (13%)	4/35 (11%)	0/6 (0%)
Among Bisexual ³	8/110 (7%)	6/68 (9%)	1/35 (3%)	0/3 (0%)
Among No response/missing	0/51 (0%)	0/2 (0%)	0/2 (0%)	0/4 (0%)

[#]Tested last year, more than a year, don't remember when

^{##}Among those who have reported ever tested (i.e. last year, more than a year or don't remember when)

¹Total heterosexual = 2589, ²Total Gay/lesbian/Homosexual = 127, ³Total Bisexual = 110

[†]Numerators are the number of HIV positivity reported by participants, denominators are the number of subjects in that particular cell; therefore % represents "row percentages".

Hepatitis C Virus (HCV) testing, diagnosis, treatment

Participants reported their history of HCV testing, diagnosis and treatment. Overall, 40% of participants reported that they had ever been tested for HCV (39% of the males and 41% of the females). In the last year 30% of participants reported having had a test for HCV. By age; 23%, 46% and 61% of participants aged 16-19, 20-24 and 25-29 years respectively reported ever having a test for HCV. Aboriginal Medical Services were cited as the most common place consistently across the gender, age groups as well as regions where testing occurred (>50%) (Table7-7).

Table 7-7: Hepatitis C Virus testing (HCV) by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
EVER TESTED FOR HCV[#]	1138 (40%)	436 (39%)	693 (41%)	289 (23%)	411 (46%)	438 (61%)
Never tested	932 (32)	375 (33)	552 (32)	543 (43)	242 (27)	147 (21)
Yes, last year	864 (30)	337 (30)	523 (31)	240 (19)	322 (36)	302 (42)
Yes, over a year ago	274 (10)	99 (9)	170 (10)	49 (4)	89 (10)	136 (19)
Don't know	628 (22)	256 (23)	369 (22)	344 (27)	178 (20)	106 (15)
<i>No response/missing</i>	<i>179 (6)</i>	<i>65 (6)</i>	<i>91 (5)</i>	<i>89 (7)</i>	<i>66 (7)</i>	<i>24 (3)</i>
LAST TEST LOCATION^{##}						
Aboriginal Medical Service	641 (56)	245 (56)	391 (56)	171 (59)	222 (54)	248 (57)
General Practice Clinic	343 (30)	121 (28)	220 (32)	71 (25)	134 (33)	138 (32)
Sexual Health Clinic	102 (9)	47 (11)	53 (8)	31 (11)	38 (9)	33 (8)
Family planning Clinic	13 (1)	3 (1)	10 (1)	4 (1)	5 (1)	4 (1)
Hospital	13 (1)	6 (1)	7 (1)	3 (1)	5 (1)	5 (1)
Prison/Juvenile Justice Centre	10 (<1)	9 (2)	1 (<1)	2 (1)	1 (<1)	7 (2)
Other	11 (<1)	4 (1)	7 (1)	3 (1)	5 (1)	1 (<1)
<i>No response/missing</i>	<i>5 (<1)</i>	<i>1 (<1)</i>	<i>4 (1)</i>	<i>2 (1)</i>	<i>1 (<1)</i>	<i>2 (<1)</i>
TOLD INFECTED WITH HCV^{##}	86 (8%)	41 (9%)	41 (6%)	30 (10%)	21 (5%)	35 (8%)

[#]Yes, last year or Yes, over a year^{##}Among those who tested for HCV

Overall 8% of participants reported being diagnosed with HCV, comprising 9% and 6% of males and females respectively. Among those participants who reported that they had ever been tested for HCV, in the age groups 16-19, 20-24 and 25-29 years, 10%, 5% and 8% respectively, reported they had been diagnosed with HCV. Similar proportions of urban (41%), regional (40%) and remote (36%) participants reported that they had ever been tested for HCV. Further similar proportions of urban regional and remote participants reported that they had been diagnosed with HCV. (Table 7-8).

Table 7-8: Hepatitis C Virus testing by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
EVER TESTED FOR HCV[#]	1138 (40%)	598 (41%)	410 (40%)	89 (36%)
Never tested	932 (32)	481 (33)	357 (35)	58 (24)
Yes, last year	864 (30)	444 (30)	316 (31)	73 (30)
Yes, over a year ago	274 (10)	154 (11)	94 (9)	16 (7)
Don't know when	628 (22)	321 (22)	225 (22)	70 (29)
<i>No response/missing</i>	<i>179 (6)</i>	<i>60 (4)</i>	<i>31 (3)</i>	<i>27 (11)</i>
LAST TEST LOCATION^{##}				
Aboriginal Medical Service	641 (56)	297 (50)	263 (64)	55 (62)
General Practice Clinic	343 (30)	217 (36)	92 (22)	23 (26)
Sexual Health Clinic	102 (9)	66 (11)	27 (7)	7 (8)
Family planning Clinic	13 (1)	-	11 (3)	2 (2)
Hospital	13 (1)	7 (1)	6 (1)	-
Prison/Juvenile Justice Centre	10 (<1)	4 (1)	6 (1)	-
Other	11 (<1)	5 (1)	4 (1)	1 (1)
<i>No response/missing</i>	<i>5 (<1)</i>	<i>2 (<1)</i>	<i>1 (<1)</i>	<i>1 (1)</i>
TOLD INFECTED WITH HEPATITIS C^{##}	86/1138 (8%)	36/598 (6%)	32/410 (8%)	5/89 (6%)

[#]Yes, last year or Yes, over a year

^{##}Among those who tested for HCV

Source of information for STIs, BBVs and alcohol and other drugs

Aboriginal Medical Services were reported as the most common place that participants had ever used for accessing information regarding STIs (58%), followed by general practice clinics (26%) and family planning/ sexual health clinics (12%); 11% of the participants reported their friends and families as sources of information and for advice about STIs; 9% of participants also reported the internet and or

magazines as a source of advice; there were no obvious variations by gender, age groups except for health services for age, nor by region (Table 7-9 and Table 7-10).

Table 7-9: Source of information by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
EVER USED FOR ADVICE ABOUT STIS*						
Aboriginal Medical Service	1682 (58)	657 (58)	1017 (60)	663 (52)	537 (60)	482 (67)
General Practice Clinic	742 (26)	255 (23)	482 (28)	237 (19)	265 (30)	240 (34)
Family Planning/Sexual Health	342 (12)	103 (9)	236 (14)	121 (10)	105 (12)	116 (16)
Friend/Family	305 (11)	97 (9)	207 (12)	152 (12)	94 (10)	59 (8)
Internet/Magazine	260 (9)	84 (7)	175 (10)	115 (9)	84 (9)	61 (9)
EVER USED FOR ADVICE ABOUT ALCOHOL AND/OR DRUG USE*						
Aboriginal Medical Service	1459 (51)	583 (52)	870 (51)	583 (46)	469 (52)	407 (57)
Drug and Alcohol Service	379 (13)	151 (13)	222 (13)	178 (14)	123 (14)	78 (11)
General Practice Clinic	518 (18)	191 (17)	325 (19)	180 (14)	188 (21)	150 (21)
Friend/Family	702 (24)	262 (23)	436 (26)	359 (28)	207 (23)	136 (19)
Internet/Magazine	470 (16)	170 (15)	295 (17)	199 (16)	150 (17)	121 (17)

*Multiple responses allowed

Table 7-10: Source of information by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
EVER USED FOR ADVICE ABOUT STIS*				
Aboriginal Medical Service	1682 (58)	833 (57)	655 (64)	142 (58)
General Practice Clinic	742 (26)	427 (29)	230 (22)	56 (23)
Family Planning/Sexual Health	342 (12)	167 (11)	133 (13)	26 (11)
Friend/Family	305 (11)	143 (10)	120 (12)	35 (14)
Internet/Magazine	260 (9)	128 (9)	98 (10)	26 (11)
EVER USED FOR ADVICE ABOUT ALCOHOL AND/OR DRUG USE*				
Aboriginal Medical Service	1459 (51)	735 (50)	566 (55)	112 (46)
Drug and Alcohol Service	379 (13)	138 (14)	129 (13)	32 (13)
General Practice Clinic	518 (18)	288 (20)	168 (16)	43 (18)
Friend/Family	702 (24)	368 (25)	263 (26)	49 (20)
Internet/Magazine	470 (16)	256 (18)	162 (16)	30 (12)

*Multiple responses allowed

Consistent with all these results, Aboriginal Medical Services were cited as the single best way for a person to get help for an STI (52%) and for help with alcohol and other drug use issues. (47%). There were no obvious variations by gender, age groups and the regions (Table 7-11 and Table 7-12).

Table 7-11: Best source of information by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	Male n (%)	Female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
SINGLE BEST WAY FOR A PERSON TO GET HELP FOR AN STI						
Aboriginal Medical Service	1499 (52)	586 (52)	907 (53)	590 (47)	487 (54)	422 (59)
Sexual Health Clinic	685 (24)	294 (26)	387 (23)	397 (31)	170 (19)	118 (17)
General Practice Clinic	383 (13)	148 (13)	232 (14)	122 (10)	145 (16)	116 (16)
Family Planning	96 (3)	24 (2)	71 (4)	44 (3)	25 (3)	27 (4)
Others/No response	214 (7)	80 (7)	108 (6)	112 (9)	70 (8)	32 (40)
SINGLE BEST WAY FOR A PERSON TO GET HELP FOR ALCOHOL AND/OR DRUGS						
Aboriginal Medical Service	1342 (47)	536 (47)	799 (47)	526 (42)	434 (48)	382 (53)
Drug and Alcohol Service	834 (29)	307 (27)	521 (31)	386 (31)	253 (28)	185 (27)
General Practice Clinic	286 (1)	117 (10)	167 (10)	112 (9)	97 (11)	77 (11)
Hospital	157 (5)	69 (6)	87 (5)	110 (9)	30 (3)	17 (2)
Others*/No response	258 (10)	103 (9)	131 (8)	131 (10)	83 (9)	44 (6)

*Others includes family friends internet magazine and non-identified others

Table 7-12: Best source of information by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
SINGLE BEST WAY FOR A PERSON TO GET HELP FOR AN STI				
Aboriginal Medical Service	1499 (52)	743 (51)	581 (57)	127 (52)
Sexual Health Clinic	685 (24)	380 (26)	236 (23)	45 (18)
General Practice Clinic	383 (13)	232 (16)	112 (11)	25 (10)
Family Planning	96 (3)	32 (2)	49 (5)	11 (5)
Others/No response	214 (7)	71 (5)	45 (4)	36 (15)
SINGLE BEST WAY FOR A PERSON TO GET HELP FOR ALCOHOL AND/OR DRUGS				
Aboriginal Medical Service	1342 (47)	66 (46)	523 (51)	110 (45)
Drug and Alcohol Service	834 (29)	456 (31)	297 (29)	59 (24)
General Practice Clinic	286 (1)	173 (12)	76 (7)	23 (9)
Hospital	157 (5)	66 (5)	69 (7)	14 (6)
Others*/No response	258 (10)	99 (7)	58 (6)	38 (16)

*Others includes family friends internet magazine and non-identified others

Tattoos

Acquiring tattoos in unregulated settings such as in the community or prison is recognised as a risk factor for BBVs because of unsterile environments this normally occurs in and for the potential transfer of infected blood from one person to another. Participants were asked if they had tattoos and where they acquired them. Overall 39% of participants reported having a tattoo 43% and 35% of male and female participants respectively reported having tattoos; there was an increasing trend by age, ranging from 24%, 50% and 54% among people aged 16-19, 20-24 and 25-29 years respectively. Overall, the majority of participants acquired their tattoo(s) from regulated parlour(s) (77%). There were variations by age groups; compared to the older age groups, a higher proportion of those aged 16-19 reported they received their tattoos from “unregulated” sites including community/home, prison/juvenile justice centre (37% versus 14% and 22% respectively).

Table 7-13: Tattoos by gender and age group

	TOTAL	GENDER		AGE GROUP		
	n (%)	male n (%)	female n (%)	16-19 n (%)	20-24 n (%)	25-29 n (%)
	2877	1132	1705	1265	897	715
ANY TATTOOS						
Yes	1136 (39)	674 (60)	905 (53)	300 (24)	444 (50)	392 (55)
No	1591 (55)	399 (35)	730 (43)	886 (70)	399 (44)	306 (43)
No response/missing	150 (5)	59 (5)	70 (4)	79 (6)	54 (6)	17 (2)
PLACES TO GET TATTOOS*						
Regulated*	876 (77)	294 (74)	580 (79)	190 (63)	381 (86)	305 (78)
Unregulated**	260 (23)	105 (26)	150 (21)	110 (37)	63 (14)	87 (22)

*Among those who reported to have tattoos

*Parlour

**Including community/home, park, prison/juvenile justice centre, other, or unknown/missing

Table 7-14: Tattoos by region

	TOTAL	REGION		
	n (%)	Urban n (%)	Regional n (%)	Remote n (%)
	2877	1460	1023	244
ANY TATTOOS				
Yes	1136 (39)	593 (41)	448 (44)	59 (24)
No	1591 (55)	823 (56)	551 (54)	161 (66)
No response	150 (5)	44 (3)	24 (2)	24 (10)
PLACES TO GET TATTOOS*				
Regulated*	876 (77)	474 (80)	351 (78)	36 (61)
Unregulated**	260 (23)	119 (20)	97 (22)	23 (39)

*Among those who reported to have tattoos

*Parlour

**Including community/home, park, prison/juvenile justice centre, other, or unknown/missing

Across the regions, participants from remote areas were more likely to receive their tattoos in “unregulated” site(s) compared to those residing in urban and regional settings 39% vs. 20% and 22% respectively (Table 7-14).

CHAPTER 8 - STRENGTHS AND LIMITATIONS

This study represents the first national survey examining the STI and BBV-related risks for young Aboriginal and Torres Strait Islander people. While the study was designed by the Chief Investigators, who also provided ongoing research advice and capacity building opportunities throughout, a notable strength of the project was that it was largely administered and controlled by the Aboriginal Community Controlled Health Organisations (ACCHOs).

Coordinators at each peak ACCHO were appointed and provided with training in research methodology. Their roles included identifying appropriate community events to collect data and worked closely with local Aboriginal organisations to negotiate entry to events. They organised and trained local Aboriginal research staff to collect surveys and managed the return of all electronic data to the Kirby Institute. The use of personal hand held computers were an additional strength to the study. They were a highly effective way of collecting sensitive data in a timely manner because of the inbuilt autoskip functions within PDAs and they reduced the perceived fear of anyone else seeing their information as is often the case in paper surveys.

Finally, although there are known limitations to the convenience sampling method used in this study (discussed in more detail below) we believe this study has allowed us to assemble the largest sample of young Aboriginal Australians ever collected, at nearly 3000 respondents. We made a deliberate decision to employ this type of sampling method recognising that other strategies such as household or institution-based sampling have yielded very few young Aboriginal participants. Moreover, we know from the experience of other behavioural surveillance surveys that a convenience-sampling approach is replicable and robust as long as the methodology is used consistently over time.

The study has some limitations. Convenience sampling is a non-probability sampling method and by consequence we do not know how generalisable the findings are to other Aboriginal young people in Australia. Nevertheless, we were successful in assembling a sample with a range of demographic characteristics – from all targeted age groups, the range of sexual identities, and from urban, regional and remote areas. There was an over-representation of women in the sample and although this is typical of a voluntary survey of this type, we expect some bias in the sample because of this. We also expect some bias relating to our recruiting from community events. Young people who attend these events may be different in significant ways to those who do not, including that they might be more connected to their communities, have better knowledge about STIs and BBVs, and use health services to a greater extent than other Aboriginal young people.

While the sample size is very robust, some smaller jurisdictions such as the Australian Capital Territory (ACT) and Tasmania had smaller samples. In future we may consider combining these smaller populations with nearby jurisdictions and comment on the young people in these combined areas more generally. For example, the ACT, New South Wales and Victorian populations could be combined to make comment about young Aboriginal people on the Eastern seaboard of Australia.

There were issues with the ambiguity of some survey questions. This relates to a larger challenge of developing a survey that is relevant and accessible to all Aboriginal young people, especially when there are varying levels of health literacy among population groups. Moreover, all data are self-reported which can lead to bias. This limitation perhaps most evident in the self-reported diagnosis data: for example,

over half of respondents who had been tested for hepatitis C reported that they had hepatitis C, and almost two-thirds reported that they had received treatment. This is obviously unlikely in that only 2-3% of the Australian population of hepatitis C positive people receive treatment each year, and is more likely due to a misunderstanding by participants about their diagnosis.

CHAPTER 9 - CONCLUSION

This is the first study of young Aboriginal and Torres Strait Islander people aged 16-29 related to STIs and BBVs. With a study population of 2,877 this represents 2.6% of the total estimated resident Aboriginal and Torres Strait Islander population in these age groups [19].

The findings set the baseline for further work to occur in this area, and will help to shape program and policy into the future. Further work will be required to monitor trends in behaviour, knowledge and health service access, as is done in other priority population groups such as men who have sex with men and people who inject drugs.

In regards to knowledge - overall we noted a generally good level of knowledge in the study population, however responses to knowledge questions were generally lower in males compared to females, in the youngest age groups (16-19) compared to people aged 20-24 and 25-29 and among remote participants. There are some important questions worth considering for targeted work arising from this study, the first being about improving knowledge of Chlamydia - its transmission, the importance of testing early, its treatment and outcomes if left untreated; given that Chlamydia is the most notified condition in Australia. Further work is also required to differentiate risks and knowledge between the different strains of viral hepatitis.

The study does help to dispel some common myths that exist in this area, including age of sexual debut, condom use, high rates of sexual partner change, differentials in age of sexual partners and levels of unwanted sex in communities. The median age of sexual debut overall was 15 years with an interquartile range of 13-17. Approximately 40% of people reported always using condoms in the previous year and if people reported they had a condom at last sex they usually used them. Condoms were accessed mostly from Aboriginal Medical Services and Chemists. Most peoples' last sexual experience was with a person of a similar age. Men reported more sexual partners in the last year compared to women and about 25% of our sample reported being drunk or high at last sex, highlighting the need for holistic and comprehensive health promotion and education. 95% of our sample reported their last sex as "wanted" again dispelling some concern about levels of abuse and unwanted sex in communities.

With regards to alcohol and other drug use; 20% of our sample did not drink at all, however as has been reported in other studies, a significant portion of those who reported drinking (46%) did so at risky levels (>7 drinks). Around a third of participants reported using illicit drugs in the last year, with marijuana being reported as the most common illicit drug used. Meth/amphetamine drug use was reported by 9% of participants in the previous year and 3% of participants reported injecting drugs in the last year. The most commonly injected drugs were meth/amphetamine and heroin. Of those who reported injecting drugs, the sharing of needles was reported by 37% of participants, a much higher rate than reported in other Australian studies of people who inject drugs. Patterns of injecting were different in regional areas; in that meth/amphetamine and methadone were the most commonly injected drugs and sharing of needles and other equipment was higher than among other participants in urban areas, calling for a need to improve sterile equipment use in regional areas.

Finally this study has highlighted the crucial role AMSs in providing health service access for this population; 42% of participants reported having an STI test in the last year and of these participants over half reported having their test at an Aboriginal Medical Service. Lowest self reported testing rates

for an STI were among people aged 16-19 years. AMSs were identified as the most common place ever used for advice about STIs and alcohol and other drug use as well as the single best place to get help for these by study participants. Chlamydia was the most common STI that participants reported ever being diagnosed with, and 30% of participants reported having had a test for HIV and HCV in the last year with the majority of testing occurring at AMSs. Further 55% of participants have had a “health check up” in the last year and the majority of these checks occurred also in AMSs. This suggests that one of the most productive ways forward with regards to improving knowledge and increasing safe sex practice among young Aboriginal people is through community controlled organisations. Finally we will continue to source ongoing resources to systematically collect this data to monitor longer term trends with this population, including efforts to collect this information from remote communities whose first language is not English.

REFERENCES

1. Department of Health and Ageing. Third National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2010-2013. Canberra, Australia 2010.
2. NNDSS Annual Report Writing Group. Australia's notifiable diseases status, 2007: Annual report of the National Notifiable Diseases Surveillance System. Communicable Diseases Intelligence 2009;33: 89-154.
3. Katz B, Thom S, et al. Fertility in adolescent women previously treated for genitourinary chlamydial infection. *Adolesc Pediatr Gynecol* 1994;7:147-52.
4. Low N, Egger M, et al. Incidence of severe reproductive tract complications associated with diagnosed genital chlamydial infection: the Uppsala Women's Cohort Study. *Sex Transm Infect* 2006;82(3):212-8.
5. Wasserheit JN. Epidemiological synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. *Sex Transm Dis* 1992;19(2):61-77.
6. McClelland RS, Sangare L, et al. Infection with *Trichomonas vaginalis* increases the risk of HIV-1 acquisition. *J Infect Dis* 2007;195(5):698-702.
7. MacLachlan JH, Allard N, Towell V, Cowie BC. The burden of chronic hepatitis B virus infection in Australia, 2011. *Australian and New Zealand Journal of Public Health*. 2013. 17. Hepatitis Australia. Fast Facts Hepatitis B, Canberra ACT 2013.
8. MacLachlan JH, Cowie BC. Liver cancer is the fastest increasing cause of cancer death in Australians. *Med J Aust*. 2012;197(9):492.
9. Ward J. What's required to make a difference - the need to upscale strategies to address sexually transmitted infections in Australian Aboriginal and Torres Strait Island communities. International Union against Sexually Transmitted Infections World Congress. Melbourne, Australia, 2012.
10. Graham S, Guy RJ, Donovan B, McManus H, Su JY, et al. Epidemiology of chlamydia and gonorrhoea among Indigenous and non-Indigenous Australians, 2000-2009. *Med J Aust*. 2012 Dec 10;197(11):642-6.
11. Ward JS, Guy RJ, et al. Epidemiology of syphilis in Australia: moving toward elimination of infectious syphilis from remote Aboriginal and Torres Strait Islander communities? *Med J Aust*. 2011;194(10):525-9.
12. Kirby Institute. HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia: Annual Surveillance Report 2012. Sydney: University of New South Wales.
13. Kirby Institute. (2012) Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander people: surveillance and evaluation report. Sydney: The Kirby Institute, The University of New South Wales.
14. Wright MR, Giele CM, Dance PR, Thompson SC. Fulfilling Prophecy? Sexually transmitted infections and HIV in Indigenous people in Western Australia. *Med J Aust*. 2005 Aug 1; 183 (3):124-8.
15. Guthrie, J.A., Dore, G.J., McDonald, A.M., Kaldor, J.M. HIV and AIDS in Aboriginal and Torres Strait Islander Australians: 1992-1998. The National HIV Surveillance Committee. *Med J Aust*. 2000; 172(6), 266-9.
16. Ward J, Bryant J, Worth H, Hull P, Solar S, Bailey S. Use of health services for sexually transmitted and blood-borne viral infections by young Aboriginal people in New South Wales. *Aust. J Prim Health*. 2012 Apr 3.
17. Bryant, J., Ward, J., Worth H, Hull P, Solar S, Bailey S. Safer sex and condom use: a convenience sample of Aboriginal young people in New South Wales. *Sex Health*. 2011 Sep;8(3):378-83.
18. Anthony M.A. Smith, Chris E. Rissel, Juliet Richters, Andrew E. Grulich, Richard O. de Visser. Sex in Australia: The rationale and methods of the Australian Study of Health and Relationships *Aust N Z J Public Health*. 2003; 27:106-17.

19. Smith A, Agius P, Mitchell A, Barrett C, Pitts M. (2009). Secondary Students and Sexual Health 2008, Monograph Series No. 70, Melbourne: Australian Research Centre in Sex, Health & Society, La Trobe University.
20. Australian Bureau of Statistics. (2013). Estimates of Aboriginal and Torres Strait Islander Australians June 2011. Canberra Retrieved September, 26th 2013 from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>.

APPENDIX 1 - SURVEY

Sexual health and relationships in young Aboriginal and Torres Strait Islander people

The first Australian national study assessing knowledge, risk practices and health service use in relation to sexually transmitted infections and blood borne viruses among young Aboriginal and Torres Strait Islander people.

This questionnaire is anonymous and your responses are confidential. Your honest response to questions is important.

BEFORE YOU START:

I have been given the opportunity to read the information sheet, or have had someone explain the nature of the study to me. I freely agree to participate in this survey. I understand that my identity and personal details will remain completely confidential and anonymous at all times. I also agree that I am over the age of 16 years.

☐ **Agree**

[GO TO Q1]

☐ **Disagree**

[EXIT SURVEY]

Q01 How old are you?

_____ years (*write in your age*) **[IF <16 OR >29 EXIT SURVEY]**

Q02 Are you Aboriginal or Torres Strait Islander?

- 1 ☐ Aboriginal
- 2 ☐ Torres Strait Islander
- 3 ☐ Both Aboriginal and Torres Strait Islander
- 4 ☐ Neither Aboriginal nor Torres Strait Islander **[IF SELECTED EXIT SURVEY]**

Q03 Are you?

- 1 ☐ Female
- 2 ☐ Male
- 3 ☐ Transgender

Q04 Are you?

- 1 ☐ Single
- 2 ☐ Living with a partner
- 3 ☐ In a relationship but not living with your partner

Q05 Is English your first language?

- 1 ☐ Yes
- 2 ☐ No

Q06 What is the highest level of education that you have completed?

- 1 ☐ I completed primary school only
- 2 ☐ I left school before finishing Year 10
- 3 ☐ I completed Year 10
- 4 ☐ I completed Year 12
- 5 ☐ I completed a diploma or university degree

Q07 Please provide the postcode or town and State/Territory of where you now live

_____ (Post Code) ^{7a} **[Skip is responded to]**
_____ (Town) ^{7b}
_____ (State) ^{7c}

Q08 Do you think of yourself as?

- 1 ☐ Straight / Heterosexual
- 2 ☐ Gay / Homosexual
- 3 ☐ Lesbian / Homosexual
- 4 ☐ Bisexual

Q09 Have you ever been in prison and/or juvenile detention for more than 24 hours?

- 1 ☐ No
- 2 ☐ Yes, in the last 12 months
- 3 ☐ Yes, more than 12 months ago

Q10 For each of the following, please answer YES, NO, or Don't Know.

	Yes	No	Don't know
Q10 _a If a woman with HIV is pregnant, can her baby become infected with HIV?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _b Can a man have a sexually transmitted infection without any obvious symptoms?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _c Are people who have injected drugs at risk for Hepatitis C?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _d Does the pill (birth control) protect a woman from HIV infection?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _e Can Chlamydia make a woman unable to have a baby?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _f If condoms are used during sex, does this help to protect people from getting HIV?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _g Can Hepatitis C be transmitted by tattooing and body piercing?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _h Could someone who looks healthy pass on HIV infection?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _i Are people who always use condoms safe from all STIs?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _j Can a woman have a sexually transmitted infection without any obvious symptoms?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _k Can Hepatitis B be transmitted sexually?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃
Q10 _l Can Chlamydia be easily treated with antibiotics?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

This section asks you about your own personal experiences with sex. Some people have had sex and other people have not.

Q11 At what age did you first have oral sex?

⁰ ☐ I have never had oral sex
 _____ Years [MUST BE NO GREATER THAN CURRENT AGE IN YEARS]

Q12 At what age did you first have sexual intercourse (vaginal or anal)?

⁰ ☐ I have never had sexual intercourse
 _____ Years [MUST BE NO GREATER THAN CURRENT AGE IN YEARS]

[IF Q11 AND Q12 EQUAL NEVER, GO TO QUESTION Q28]

Q13 Over the last year, with how many people have you had oral sex who you did not have intercourse with?

- | | |
|-------------------|----------------------------|
| None | <input type="checkbox"/> 1 |
| 1 person | <input type="checkbox"/> 2 |
| 2 people | <input type="checkbox"/> 3 |
| 3 people | <input type="checkbox"/> 4 |
| 4 people | <input type="checkbox"/> 5 |
| 5 to 10 people | <input type="checkbox"/> 6 |
| 11 or more people | <input type="checkbox"/> 7 |

Q14 In the last year how many people have you had sexual intercourse with?

- | | | |
|-------------------|----------------------------|-------------------------|
| None | <input type="checkbox"/> 1 | <u>GO TO Q28</u> |
| 1 person | <input type="checkbox"/> 2 | |
| 2 people | <input type="checkbox"/> 3 | |
| 3 people | <input type="checkbox"/> 4 | |
| 4 people | <input type="checkbox"/> 5 | |
| 5 to 10 people | <input type="checkbox"/> 6 | |
| 11 or more people | <input type="checkbox"/> 7 | |

Q15 When you had sex with people in the last year, how often were condoms used?

- | | |
|------------------------|----------------------------|
| Always used condoms | <input type="checkbox"/> 1 |
| Sometimes used condoms | <input type="checkbox"/> 2 |
| Never used condoms | <input type="checkbox"/> 3 |

Q16 Was the last person you had sex with...

- | | |
|---|----------------------------|
| Your current girlfriend or boyfriend/husband/wife? | <input type="checkbox"/> 1 |
| Someone you had just met for the first time? | <input type="checkbox"/> 2 |
| Someone you had known for a while, but had not had sex with before? | <input type="checkbox"/> 3 |
| Someone you had known for a while and had had sex with before,
but not your current girlfriend/boyfriend/husband/wife? | <input type="checkbox"/> 4 |

Q17 Was the last person you had sex with...

- | | | |
|---|--------------------------|---|
| 1 | <input type="checkbox"/> | Aboriginal |
| 2 | <input type="checkbox"/> | Torres Strait Islander |
| 3 | <input type="checkbox"/> | Both Aboriginal and Torres Strait Islander |
| 4 | <input type="checkbox"/> | Neither Aboriginal nor Torres Strait Islander |
| 5 | <input type="checkbox"/> | I'm not sure |

Q18 How old was the last person you had sex with?

- | | | |
|---|--------------------------|--------------------------|
| 1 | <input type="checkbox"/> | Under 16 years old |
| 2 | <input type="checkbox"/> | 16-17 years old |
| 3 | <input type="checkbox"/> | 18-19 years old |
| 4 | <input type="checkbox"/> | 20-24 years old |
| 5 | <input type="checkbox"/> | 25-29 years old |
| 6 | <input type="checkbox"/> | 30 years of age or older |
| 7 | <input type="checkbox"/> | I'm not sure |

Q19 Did you or the person you had sex with have a condom the last time you had sex?

- | | | |
|---|--------------------------|-----|
| 1 | <input type="checkbox"/> | No |
| 2 | <input type="checkbox"/> | Yes |

Q20 Did you use a condom the most recent time you had sex?

- 1 ☐ No
2 ☐ Yes

Q21 Was the person you had sex with last time

- 1 ☐ Male?
2 ☐ Female?

Q22 Were you drunk or high last time you had sex?

- 1 ☐ No
2 ☐ Yes

Q23 The last time you had sex did you want to have sex?

- 1 ☐ No
2 ☐ Yes

Q24 After the last time you had sex, to what extent did you feel?

Please ✓ one box to rate each feeling.

	Not at all				Extremely
Good _a	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Upset _b	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Guilty _c	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Happy _d	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Used _e	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Fantastic _f	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Worried _g	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Loved _h	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Regretful _i	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q25 Where do you usually get your condoms from?

- 1 ☐ At an Aboriginal Medical Service
2 ☐ Local doctor at a General Practice clinic
3 ☐ Chemist,/ supermarket, local store
4 ☐ Never use condoms
5 ☐ Family planning clinic / Sexual health clinic
6 ☐ Boyfriend / girlfriend/ friends
7 ☐ Family member(s)
8 ☐ From a vending machine
9 ☐ My sexual partner(s)

[IF Q01=1]

Q26 How many children have you ever given birth to? [ASKED OF WOMEN ONLY]

- 0 ☐ Tick here if you have never had children of your own

_____ Children (*write number of children*)

[GO TO Q28]

[IF Q01=2 OR 3]

Q27 How many children do you know you have fathered? [ASKED OF MEN ONLY]

o ☐ Tick here if you have never fathered children of your own

_____ Children (*write number of children*)

This section asks you about your personal experiences with alcohol and other drug use.

Q28 How many cigarettes a day do you smoke?

_____ Cigarettes (*write in number of cigarettes, 0 if you don't smoke tobacco*)

Q29 In the last 12 months, how often did you have an alcoholic drink (grog) of any kind?

- 1 ☐ I never drink alcohol (grog)
- 2 ☐ Once a month or less
- 3 ☐ 2 to 3 days a month
- 4 ☐ About once a week
- 5 ☐ More than once a week

Q30 On the days that you have an alcoholic drink (grog), how many alcoholic drinks do you usually have?

- 1 ☐ I never drink alcohol (grog)
- 2 ☐ 1 to 2 drinks
- 3 ☐ 3 to 4 drinks
- 4 ☐ 5 to 6 drinks
- 5 ☐ 7 or more drinks

Q31 In the last four [4] weeks, how many weeks did you have at least two alcohol (grog)-free days?

- 1 ☐ None
- 2 ☐ One week
- 3 ☐ Two weeks
- 4 ☐ Three weeks
- 5 ☐ Four weeks

Q32 In the last 12 months, how often did you use marijuana (yarndi, gunga, grass, dope pot, cannabis,)?

- 1 ☐ No marijuana in the last 12 months
- 2 ☐ Every day
- 3 ☐ Once a week or more
- 4 ☐ About once a month
- 5 ☐ Every few months
- 6 ☐ Once or twice a year

Q33 In the last 12 months, how often did you use meth/amphetamine (speed, ice, go-e, base, gas, crystal)?

- 1 ☐ No meth/amphetamine(ice, go-e, speed, gas, crystal, base) in last 12 months
- 2 ☐ Every day
- 3 ☐ Once a week or more
- 4 ☐ About once a month
- 5 ☐ Every few months
- 6 ☐ Once or twice a year

Q34 In the last 12 months, how often did you use ecstasy (E, eccies, MDMA, XTC, Ex)?

- 1 ☐ No ecstasy in the last 12 months
- 2 ☐ Every day
- 3 ☐ Once a week or more
- 4 ☐ About once a month
- 5 ☐ Every few months
- 6 ☐ Once or twice a year

Q35 In the last 12 months, which of these *other* drugs have you used? Tick all the ones you used.

- 1 ☐ None of these [GO TO Q39]
- 2 ☐ Cocaine
- 3 ☐ Heroin
- 4 ☐ Petrol / paint / glue
- 5 ☐ Fantasy/ GHB / GBH / G
- 6 ☐ Benzos / Rhoies
- 7 ☐ Ketamine
- 8 ☐ LSD/Acid/Mushrooms
- 9 ☐ Other

Q36 In the last 12 months, have you injected any drugs?

- 1 ☐ No [GO TO Q39]
- 2 ☐ Yes

Q37 What drug(s) have you injected in the last 12 months? Tick all that apply.

- 1 ☐ Meth/amphetamine (ice, go-e, speed, gas, crystal, base)
- 2 ☐ Heroin
- 3 ☐ Methadone
- 4 ☐ Morphine, pethidine, oxycodone, oxycontin, MS contin
- 5 ☐ Steroids
- 6 ☐ Cocaine
- 7 ☐ LSD or other hallucinogens
- 8 ☐ Benzodiazepines
- 9 ☐ Other drugs

Q38 In the last 12 months, did you use any of the following for injecting a drug after someone else used it (including close friend and/or family, and even if it was cleaned)? Tick all those that apply

- 1 ☐ None of these
- 2 ☐ Needle/Syringe
- 3 ☐ Tourniquet
- 4 ☐ Spoon
- 5 ☐ Filter
- 6 ☐ Swab

Q39 Do you have any tattoo(s)?

- 1 ☐ No [GO TO Q41]
- 2 ☐ Yes

Q40 Where did you get the tattoo(s)? Tick all the places where they were done.

- 1 ☐ Professional parlour
- 2 ☐ In my community (home, park)
- 3 ☐ Prison / juvenile justice centre
- 4 ☐ Other

Q41 Which of the following, have you ever used for advice about STIs (including HIV/AIDS)? Tick all those you have used.

- 1 ☐ Aboriginal Medical Service
- 2 ☐ Local doctor at a General Practice clinic
- 3 ☐ Family planning clinic / Sexual health clinic
- 4 ☐ Never sought advice [GO TO Q42]
- 5 ☐ School / TAFE/ university
- 6 ☐ Boyfriend / girlfriend / friends
- 7 ☐ Family member(s)
- 8 ☐ Internet
- 9 ☐ Magazines

Q42 Have you ever been tested for an STI?

- 1 ☐ Yes, in the last year
- 2 ☐ Yes, more than a year ago
- 3 ☐ I don't know [GO TO Q44]
- 4 ☐ Never tested [GO TO Q45]

Q43 Where did you get your last STI test? Tick only one option.

- 1 ☐ At an Aboriginal Medical Service
- 2 ☐ Local doctor at a General Practice clinic
- 3 ☐ Family planning clinic / Sexual health clinic

Q44 Have you ever been diagnosed with an STI?

- 1 ☐ Yes
- 2 ☐ No

If YES, which STI(s)?:

- 1 ☐ Chlamydia
- 2 ☐ Gonorrhea
- 3 ☐ Syphilis
- 4 ☐ Trichomoniasis (Trich)
- 5 ☐ Herpes
- 6 ☐ HPV (Genital Warts)

Q45 What do you think is the single best way for a person to get help for an STI? Tick only one option.

- 1 ☐ Go to an Aboriginal Medical Service
- 2 ☐ Go to a General Practice clinic
- 3 ☐ Go to a Sexual Health Clinic
- 4 ☐ Go to a Family Planning Clinic
- 5 ☐ Get help from family
- 6 ☐ Internet
- 7 ☐ Get help from friends
- 8 ☐ Magazine
- 9 ☐ Other _____

Q46 Have you ever been tested for HIV?

- 1 ☐ Yes, in the last year
- 2 ☐ Yes, more than a year ago
- 3 ☐ I don't know [GO TO Q48]
- 4 ☐ Never tested [GO TO Q49]

Q47 Where did you get your last HIV test? Tick only one option.

- 1 ☐ At an Aboriginal Medical Service
- 2 ☐ Local doctor at a General Practice clinic
- 3 ☐ At a Sexual Health Clinic
- 4 ☐ At a Family Planning Clinic
- 5 ☐ In a hospital
- 6 ☐ In a prison or juvenile justice centre
- 7 ☐ Other

Q48 Have you ever been diagnosed with HIV?

- 1 ☐ Yes
- 2 ☐ No

Q49 Have you been tested for hepatitis C?

- 1 ☐ Yes, in the last year
- 2 ☐ Yes, more than a year ago
- 3 ☐ Never tested [Go to Q53]
- 4 ☐ I don't know [Go to Q53]

Q50 Have you ever been told that you have hepatitis C infection?

- 1 ☐ No
- 2 ☐ Yes

Q51 Are you having, or have you had, treatment for hepatitis C?

- 1 ☐ No
- 2 ☐ Yes

Q52 Where did you get your last hepatitis C test? Tick only one option.

- 1 ☐ At an Aboriginal Medical Service
- 2 ☐ From a General Practice clinic
- 3 ☐ At a Sexual Health Clinic
- 5 ☐ In a prison or juvenile justice centre
- 6 ☐ In a hospital
- 7 ☐ Other _____

Q53 Which of the following, if any, have you ever used for advice, about alcohol (grog) and/or drug use? Tick all that you have used.

- 1 ☐ An Aboriginal Medical Service
- 2 ☐ Local doctor in a General Practice clinic
- 3 ☐ The Internet
- 4 ☐ A Drug and Alcohol Service
- 5 ☐ Friends
- 6 ☐ Boyfriend or girlfriend
- 7 ☐ Family member(s)
- 8 ☐ Magazines
- 9 ☐ School/TAFE/University
- 10 ☐ Haven't used any of these options

Q54 What do you think is the single best way for a person to get help for alcohol (grog) and/or drug use? Tick only one option

- 1 ☐ Go to an Aboriginal Medical Service
- 2 ☐ Go to a General Practice Clinic
- 3 ☐ Go to a drug and alcohol service
- 4 ☐ Go to a hospital
- 5 ☐ Get help from friends
- 6 ☐ Get help from family
- 7 ☐ Get the health workers to come to me
- 8 ☐ Internet
- 9 ☐ Magazine
- 10 ☐ Other _____

Q55 Have you had an adult health check up in the last year?

- ☐ No **[Go To Q57]**
- ☐ Yes

Q56 Where did you have your adult health check?

- 1 ☐ At an Aboriginal Medical Service
- 2 ☐ Local doctor at a General Practice clinic

Q57 Did you complete this survey last year?

- 1 ☐ No
- 2 ☐ Yes

Q58 This survey has been programmed into this hand held computer to save paper and to trial its use. How did you find using this device for completing this survey? Tick all the options that apply.

- 1 ☐ It was hard to use the PDA
- 2 ☐ I needed help to use it
- 3 ☐ The PDA was easy
- 4 ☐ The survey was quick to do
- 5 ☐ It was fun
- 6 ☐ It's more private than filling in a form
- 7 ☐ I'd rather complete a paper survey next time

This is the end of the survey. Thank you! Please hand this device back to the survey staff