Gay Community Periodic Survey: Perth 2019

Author:
Broady, Timothy; Chan, C; Bavinton, B; Mao, L; Sackville-Podmore, R; Pierce, M; Lobo, R; Churcher, S; Bastian, L; ... Holt, M

Publication details:
Commissioning Body: Department of Health, Western Australia

Publication Date:
2020-03

Publisher DOI:
https://doi.org/10.26190/5e7ad7bd09a0f

DOI:
https://doi.org/10.26190/5e7ad7bd09a0f

UNSW SYDNEY | Australia's Global University

Gay Community Periodic Survey: Perth 2019

Timothy Broady[1]
Curtis Chan[1]
Benjamin Bavinton[2]
Limin Mao[1]
Ryker Sackville-Podmore[3]
Mick Pierce[3]
Roanna Lobo[4]
Siân Churcher[5]
Lisa Bastian[5]
Garrett Prestage[2]
Martin Holt[1]

1 Centre for Social Research in Health, UNSW Sydney
2 The Kirby Institute, UNSW Sydney
3 Western Australian AIDS Council
4 Curtin University
5 Department of Health, Western Australia

Centre for Social Research in Health

UNSW Sydney NSW 2052

T: +61 2 9385 6776

F: +61 2 9385 6455

E: csrh@unsw.edu.au

W: https://www.arts.unsw.edu.au/csrh

Suggested citation:

Broady, T., Chan, C., Bavinton, B., Mao, L., Sackville-Podmore, R., Pierce, M., Lobo, R., Churcher, S., Bastian, L., Prestage, G., & Holt, M. (2020). *Gay Community Periodic Survey: Perth 2019*. Sydney: Centre for Social Research in Health, UNSW Sydney. http://doi.org/10.26190/5e7ad7bd09a0f

Acknowledgments

We acknowledge the following individuals and organisations for contributing to the success of this project:

Department of Health, Western Australia
who funded the project

Western Australian AIDS Council
for coordinating recruitment

Survey coordinator
Ryker Sackville-Podmore

The team of peer recruiters
who successfully recruited participants at venues and events

Survey participants
The 755 men who participated in the survey

Venues
The management and staff of the various gay community venues and clinics who gave permission for the survey to be administered on their premises

Contents

List of tables

Glossary

ART antiretroviral treatment

CAIC condomless anal intercourse with casual partners

CAIR condomless anal intercourse with regular partners

Cisgender a term used to describe people whose gender identity matches the sex they were assigned at birth

HIV human immunodeficiency virus

HIV status a person's antibody status established by HIV testing, e.g. HIV-negative, HIV-positive, or unknown (untested)

Non-binary an umbrella term for any number of gender identities that sit within, outside of, across or between the spectrum of the male and female binary

Non-HIV-positive HIV-negative and untested/unknown status

PEP post-exposure prophylaxis—a course of antiretroviral drugs used to reduce the risk of HIV infection after potential exposure has occurred

PrEP pre-exposure prophylaxis—antiretroviral drugs used to reduce the risk of HIV infection before a potential exposure

Seroconcordant a relationship in which both partners are of the same HIV status, either HIV-positive or HIV-negative

Serodiscordant a relationship in which both partners are known (as a result of testing) to be of different HIV status, e.g. HIV-positive and HIV-negative

Serononconcordant a relationship in which the HIV status of at least one partner in the relationship is not known, e.g. HIV-positive and untested, HIV-negative and untested, or both untested

Serosorting choosing a sexual partner who shares the same HIV status

STI sexually transmissible infection

Transgender an umbrella term that describes people who identify their gender as different to what was assigned to them at birth

Executive summary

Background

The Perth Gay Community Periodic Survey is a cross-sectional survey of gay and homosexually active men recruited from a range of gay community sites in Perth and online throughout Western Australia. The major aim of the survey is to provide data on sexual, drug use and testing practices related to the transmission of HIV and other sexually transmissible infections (STIs) among gay men. The most recent survey was conducted in November 2019 to coincide with PrideFEST in Western Australia. The survey is normally conducted biennially, although it was conducted back-to-back in 2016 and 2017 after changes to the Pride festival, and in advance of widespread pre-exposure prophylaxis (PrEP) rollout.

The project is funded by the Department of Health, Western Australia. The Centre for Social Research in Health at UNSW Sydney coordinates the survey, with support from the Kirby Institute at UNSW Sydney. In 2019, the Western Australian AIDS Council (WAAC) oversaw the local coordination of recruitment.

Respondents and recruitment

A total of 755 men participated in the 2019 survey. The response rate during face-to-face recruitment was 63.1% and during online recruitment was 64.9%. The majority of men (n=448; 59.3%) were recruited by trained staff at gay community events, social venues, sex-on-premises venues, and sexual health clinics in Perth and Bunbury. Online recruitment has been conducted through the social networking site Facebook since 2016. Advertisements were targeted to all men aged 16 and above who were residents of Western Australia and whose Facebook profiles indicated any LGBTI-related interests, such as ‘same sex relationship’, ‘gay friendly’, ’LGBT social movements’, or ‘LGBT culture’. Potential participants were directed to the study website (http://gcpsonline.net), which provided additional information about the study and links to the online version of the questionnaire. Between 2012 and 2019, the proportions of men recruited from sexual health clinics, social venues and online increased, while the proportions of men recruited from Fair Day and sex-on-premises venues decreased (Table 1).

Key points

- The proportion of men who reported ever being tested for HIV increased to 89% in 2019.
- The proportion of non-HIV-positive men who reported an HIV test in the previous 12 months increased to 72% in 2019.
- The frequency of HIV testing has increased over the last five surveys, with 30% of non-HIV-positive men in the 2019 survey reporting three or more HIV tests in the previous year. This increase was concentrated among HIV-negative men on PrEP, with 83% of men on PrEP reporting three or more HIV tests in the previous year compared to 13% of non-HIV-positive men not on PrEP.
- The proportion of HIV-positive men who were on HIV treatment remained stable at 86% in 2019. All men on HIV treatment reported an undetectable viral load.
- Mobile apps remained the most common way of meeting male sex partners in 2019, reported by 49% of participants.
- The proportion of men with regular partners who reported any condomless anal intercourse with those partners (CAIR) increased to 74% in 2019.
- The proportion of men with casual partners who reported any condomless anal intercourse with those partners (CAIC) increased to 63% in 2019. This increase is attributable to the rapid uptake of PrEP.
- The proportion of non-HIV-positive men using PrEP increased to 25% in 2019.
- The most common way to obtain PrEP in 2019 was from a chemist (77%), followed by a trial or study (13%) or buying it online from overseas (4%).

Demographic profile

As in previous surveys, the majority of the sample had an Anglo-Australian background (67.2%) and were born in Australia (69.3%). The most common overseas locations from which participants originated were high-income English-speaking countries (13.3%), followed by Asia (6.4%), Africa (4.0%), and Europe (3.1%). Among those born overseas (n=232), most had been living in Australia for more than five years (81.0%), with smaller proportions having lived in Australia for between 2–5 years (8.2%) or less than two years (10.8%).

Most men lived in the greater Perth metropolitan area (91.8%), were well-educated (47.8% had a university degree), were in full-time employment (61.7%), and identified as gay (85.3%). Since 2012, the proportion of men who identified as gay has increased, while the proportion of men who were in full-time employment has decreased. In 2019, 4.1% of the sample reported an Aboriginal or Torres Strait Islander background. The proportion of Aboriginal or Torres Strait Islander men in the survey has remained stable over the last five surveys (Table 2).

In 2019, the majority of participants indicated that they were cisgender men (96.8%) with a small number of participants identifying as transgender (n=6, 0.8%) or non-binary (n=16, 2.1%; Table 2).

Between 2012 and 2019, the proportions of men aged under 25 years and 40–49 years decreased, while the proportions of men aged 30–39 and 50 and over increased (Table 3).

HIV testing, status and treatment

In 2019, most participants (89.0%) reported ever having an HIV test, which is an increase from 76.4% in 2012. Nearly three-quarters of non-HIV-positive participants (72.3%) reported having an HIV test in the 12 months prior to the 2019 survey. This proportion has increased from 68.8% in 2012 but has been stable since 2016 (Table 4).

In 2019, the most common place non-HIV-positive men reported having their last test for HIV was a general practice (44.4%), followed by a sexual health clinic/hospital (30.7%) and a community-based service, i.e. M Clinic (22.7%). The proportion of non-HIV-positive men who last tested at a sexual health clinic/hospital increased from 22.4% in 2014 to 30.7% in 2019 (Table 5).

The frequency of HIV testing has increased over time, with 29.6% of non-HIV-positive men reporting three or more HIV tests in the 12 months prior to the 2019 survey (compared with 11.6% in 2014). This increase was concentrated among HIV-negative men taking pre-exposure prophylaxis (PrEP), 82.9% of whom reported three or more HIV tests in the 12 months prior to the 2019 survey (compared with 12.6% of non-HIV-positive men not on PrEP). The frequency of HIV testing has remained stable among non-HIV-positive men not on PrEP between 2014 and 2019 (Table 6).

Of the participants who had been tested, the majority (95.5%) reported that they were HIV-negative, which is an increase from 92.8% in 2012. The proportion of men who reported that they were HIV-positive remained stable at 3.3% in 2019, although we note that this was only 22 men in the 2019 survey. A small proportion (n=8; 1.2%) reported that they did not know their HIV status (Table 7).

In 2019, almost all HIV-positive men (n=19) reported taking combination antiretroviral treatment at the time of the survey (86.4%; Table 8). All HIV-positive men on treatment in 2019 reported an undetectable viral load (Table 9). Just over one-third of HIV-positive men reported attending at least three clinical appointments in the 12 months before the survey (n=8; 36.4%) and an additional 50.0% (n=11) reported attending one or two clinical appointments in that time.

Sexual partnerships and practices

At the time of the 2019 survey, almost 1 in 5 men reported having casual partners only (18.8%). There were larger proportions of men who reported being in monogamous relationships (31.2%) or having both regular and casual male partners (32.3%). A smaller proportion (17.7%) reported having no sexual relationships with men at the time of the survey. Between 2012–2019, the proportion of men with both regular and casual male partners increased (from 24.6% to 32.3%), while the proportion who reported no sexual relationships decreased (from 25.3% to 17.7%; Table 10).

In 2019, mobile applications were the most common way that men in Western Australia met male sex partners (49.0%), followed by the internet (27.8%), gay bars (21.7%), and while travelling overseas (20.4%). Other common methods included meeting while travelling in Australia (16.2%) and gay saunas/sex venues (16.0%). Between 2012 and 2019, there were increases in the proportions of men who reported meeting male partners through mobile applications, while travelling overseas, and at dance parties. Over that time, the proportion of men who met partners via the internet decreased (Table 11).

A small proportion of men (5.8%) said they had been paid for sex at least once in the six months prior to the 2019 survey. The proportion of men reporting sex work has remained stable since 2016.

Regular male partners

Among men with regular partners in the six months prior to the 2019 survey, more than half reported an agreement with their regular partner about sex within the relationship (55.7%) and a slightly smaller proportion (51.9%) reported an agreement about sex outside the relationship. In 2019, the most commonly held agreements about sex within a relationship specified that anal intercourse could occur without a condom (41.4%), or that condoms must always be used for anal intercourse (8.7%). Between 2012 and 2019, the proportion of men in relationships who reported an agreement that anal intercourse could occur without a condom increased (from 33.9% to 41.4%), while the proportion of men who reported that condoms must always be used for anal intercourse within the relationship decreased (from 22.8% to 8.7%; Table 12).

The most commonly held agreements about sex outside a relationship were that casual sex was not allowed (23.3%) or that condoms must always be used for anal intercourse with casual partners (15.8%). The proportion of men reporting agreements that allowed condomless sex with casual partners increased from 4.4% in 2012 to 10.4% in 2019. Over the same time period, the proportion of men reporting agreements that condoms must always be used during casual sex decreased (from 22.8% to 15.8%; Table 13).

Among HIV-positive men who had regular partners in the six months prior to the 2019 survey (n=16), 12.5% were in a seroconcordant relationship, 75.0% reported being in a serodiscordant relationship, and the remainder (12.5%) reported being in a serononconcordant relationship (Table 14).

Compared with HIV-positive men, HIV-negative men with regular partners were more likely to be in seroconcordant relationships. In 2019, 76.5% of HIV-negative men with regular partners were in seroconcordant relationships, which is an increase from 71.5% in 2012. The proportion of HIV-negative men who reported being in a serononconcordant relationship decreased from 25.8% in 2012 to 19.5% in 2019. In 2019, 4.0% of HIV-negative men with a regular partner reported a serodiscordant relationship (Table 14).

In 2019, nearly three-quarters of men with a regular partner reported any condomless anal intercourse (CAIR) with their partner (74.2%) in the six months prior to the survey, while less than one-fifth reported having no anal intercourse with their regular partner (18.4%). The proportion of men who reported always using condoms for anal intercourse with their regular partner decreased from 22.0% in 2012 to 7.4% in 2019. The proportion reporting any CAIR increased between 2012 and 2019 (from 55.8% to 74.2%). The proportion of men reporting CAIR is the highest recorded in the Perth surveys (Table 15) but should be understood in the context of rising PrEP use and a greater understanding of the benefits of undetectable viral load for HIV prevention.

Among men who had HIV-negative regular partners in the six months prior to the 2019 survey (n=384), 25.3% reported that those partners were on PrEP. Among men who had HIV-positive regular partners in the six months prior to the 2019 survey (n=19), 89.5% reported that those partners had an undetectable viral load.

Casual male partners

Use of condoms for anal intercourse remains more common with casual partners than with regular partners. In 2019, more than three-fifths of men with casual partners (63.3%) reported any condomless anal intercourse with casual partners (CAIC) in the six months prior to the survey, with just over one-fifth (21.1%) reporting consistent condom use. Between 2012 and 2019, the proportion of men reporting any CAIC increased significantly (from 35.9% to 63.3%), while the proportion of men who always used condoms for anal intercourse decreased (from 44.1% to 21.1%). The proportion of men reporting CAIC is the highest recorded in the Perth surveys (Table 16) but should also be understood in the context of rising PrEP use and a greater understanding of the benefits of undetectable viral load for HIV prevention.

Table 16 provides additional details about the HIV statuses of men who engaged in CAIC and the use of antiretroviral-based prevention (specifically HIV-positive men maintaining an undetectable viral load through HIV treatment and HIV-negative men taking PrEP). There has been a large increase in the proportion of HIV-negative men on PrEP reporting CAIC (from 0.3% of men with casual partners in 2014 to 29.2% in 2019). This reflects the increase in availability and use of PrEP, particularly since its listing on the Pharmaceutical Benefits Scheme in April 2018. HIV-positive men who had an undetectable viral load and reported CAIC represented 1.2% of men with casual partners in 2019. In 2019, more than two-thirds of men with casual partners (67.1%) reported HIV prevention coverage or safe sex (i.e. avoiding anal sex, consistent condom use, PrEP, or undetectable viral load), which has remained stable since 2012. The proportion of men reporting the highest risk practice for HIV transmission (HIV-negative and untested men not on PrEP engaging in receptive CAIC) remained stable at 22.8% in 2019.

In 2019, HIV-positive men with casual partners were the least likely to report any CAIC (42.9%), with untested/unknown status men the most likely (66.7%). Among HIV-negative men with casual partners, 63.9% reported any CAIC, which is an increase from 36.6% in 2012 (Table 17).

In 2019, disclosure of HIV status before sex to casual partners continued to be more commonly reported by HIV-positive men (78.6%) than by HIV-negative men (73.0%). HIV-positive men were also more likely than HIV-negative men to report disclosure from their casual partners in 2019 (78.6% and 72.0% respectively). The proportion of HIV-negative men who disclosed their HIV status before sex to any casual partner increased between 2012 and 2019 (from 51.7% to 73.0%), as did the proportion of HIV-negative men who reported HIV status disclosure from casual partners (from 50.9% to 72.0%; Table 18).

Among HIV-negative men who reported CAIC in the six months prior to the 2019 survey (n=246), the most common HIV risk reduction practice was serosorting (59.4%), followed by taking PrEP before sex (52.0%), and ensuring that their partners were on PrEP before sex (50.4%). Smaller proportions of HIV-negative men reported ensuring that HIV-positive partners had an undetectable viral load before sex (16.7%), taking the insertive role during nonconcordant CAIC (strategic positioning; 13.8%), or their casual partners withdrawing before ejaculation (6.1%). The proportions of HIV-negative men who had CAIC and who reported frequent serosorting, took PrEP, and whose casual partners were on PrEP all increased between 2012 and 2019 (Table 19).

Sexual health

As in previous surveys, in 2019 a higher proportion of HIV-positive men reported having had any sexual health test (including blood tests) in the 12 months prior to the survey (91.3%; Table 20), compared with HIV-negative men (77.0%; Table 21). The proportion of HIV-negative men reporting each type of STI test increased between 2012 and 2019, and the proportion of HIV-negative men reporting any STI test increased from 70.9% in 2012 to 77.0% in 2019 (Table 21).

In 2019, one-fifth of men (19.3%) reported an STI diagnosis in the 12 months prior to the survey. The most commonly diagnosed STI was chlamydia (11.0%), followed by gonorrhoea (9.6%). Smaller proportions of men reported being diagnosed with syphilis (3.6%) or another STI (3.8%; Table 22).

We examined how STI diagnoses varied by HIV status, PrEP use and sexual behaviour. In 2019, 19.1% of HIV-positive men, 43.0% of HIV-negative men on PrEP and 10.0% of HIV-negative and untested men not on PrEP reported a diagnosis with any STI other than HIV. In 2019, 34.8% of men who had engaged in CAIC in the six months prior to the survey reported an STI diagnosis, compared with 10.6% of men who had not engaged in CAIC. STI diagnoses remain concentrated among HIV-negative men on PrEP (who typically engage in higher frequency STI testing) and men who engage in condomless sex with casual partners (a higher risk practice for STI transmission).

In 2019, nearly three-quarters of men reported having been tested for hepatitis C (73.9%). Almost all of them reported that they did not have hepatitis C (98.0%) and 1.1% said they did have hepatitis C. In 2019, nearly three-quarters of men (74.2%) had been vaccinated for hepatitis A and a slightly larger proportion (79.5%) had been vaccinated for hepatitis B, with 70.1% of men being vaccinated for both.

Recreational drug use

Recreational drug use remains common within the sample, with the most frequently used drugs being amyl/poppers (37.1%), cannabis (27.4%), and Viagra (17.9%; Table 23). Between 2012 and 2019, there have been significant increases in the use of amyl/poppers and Viagra. Over that time, the use of amphetamine and crystal methamphetamine have declined. Since 2012, the proportion of men reporting no drug use in the six months prior to the survey has decreased (from 48.2% to 43.8%), while the proportion of men who reported using one or two drugs has increased (from 30.6% to 36.2%). In 2019, HIV-negative men were more likely to report any drug use (59.2%) than HIV-positive men (47.8%) for the first time. Since 2012, the proportion of HIV-negative men reporting using one or two drugs has increased (from 33.3% to 38.2%).

The proportion of men reporting any injecting drug use in the six months prior to the survey decreased from 3.8% in 2012 to 1.8% in 2019 (Table 24). In 2019, 12.2% reported using party drugs for sex in the six months prior to the survey. This has decreased from 17.3% in 2012 (Table 25).

In 2019, nearly one-third of men reported having more than four drinks at least weekly (32.1%), which is a decrease from 38.7% in 2016. In 2019, one-quarter said they had more than four drinks at least monthly (25.6%). The proportion of men who said they had had more than four drinks once or twice in the previous six months increased from 22.6% in 2016 to 26.9% in 2019.

Knowledge and use of PEP and PrEP

In 2019, 83.2% of all men reported knowing that post-exposure prophylaxis (PEP) was available. PEP awareness has increased over time, from 52.3% in 2012 to 83.2% in 2019. There has been an even bigger increase in the awareness of PrEP (from 24.3% in 2014 to 90.3% in 2019; Table 26).

Among non-HIV-positive men, 3.6% reported taking a prescribed course of PEP in the six months prior to the survey in 2019. The proportion of non-HIV-positive men who reported using PrEP in the six months prior to the survey increased dramatically from 1.3% in 2012 to 25.1% in 2019 (Table 26).

Among the men who reported taking PrEP in the six months prior to the 2019 survey, the majority used it daily or most days (88.8%), with a small proportion (11.2%) using PrEP around the time of sex but not daily (on demand or event-based dosing). The most common way to obtain PrEP was from a chemist (76.9%), followed by a trial or study (12.5%). A small proportion bought it online from overseas (4.4%). Men who obtained PrEP from a chemist are assumed to have received a prescription for PrEP from their doctor, reflecting the listing of PrEP on the Pharmaceutical Benefits Scheme in 2018.

Reporting

Data are shown for the period 2012–2019. Each table includes the statistical significance (p-value), if any, of the change between 2017 and 2019 and the trend over time (2012–2019). An alpha level of .05 was used for all statistical tests. Changes between 2017 and 2019 were assessed with logistic regression (comparing one category with all the others). The p-value of the logistic regression test (if shown) indicates a statistically significant change within that category compared with all the others. For statistically significant trends over time, also tested with logistic regression, the direction of the change (an increase or decrease) is indicated. Where there is no significant change, ns (non-significant) is shown. Where there are low frequencies or data over time are not comparable, tests have not been performed and are marked NA (not applicable). Please exercise caution when interpreting results where there are low frequencies. When data are missing or were not collected in a given year, this is indicated in the table by a dash (–).

Table 1: Recruitment source

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Fair Day	633 (77.4)	492 (72.2)	250 (27.8)	193 (31.5)	187 (24.8)	Decrease <.01	Decrease <.001
Sexual health clinics	31 (3.8)	22 (3.2)	104 (11.6)	67 (11.0)	62 (8.2)	ns	Increase <.001
Social venues	78 (9.5)	121 (17.8)	238 (26.4)	150 (24.5)	168 (22.3)	ns	Increase <.001
Sex-on-premises venues	76 (9.3)	46 (6.8)	56 (6.2)	49 (8.0)	31 (4.1)	Decrease <.01	Decrease <.001
Online	-	-	252 (28.0)	153 (25.0)	307 (40.7)	Increase <.001	Increase <.001
Total	**818 (100)**	**681 (100)**	**900 (100)**	**612 (100)**	**755 (100)**		

Table 2: Demographics

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Anglo-Australian	573 (70.1)	484 (71.1)	644 (72.8)	417 (68.1)	505 (67.2)	ns	ns
Aboriginal or Torres Strait Islander	26 (3.2)	25 (3.7)	22 (2.5)	19 (3.1)	31 (4.1)	ns	ns
Total	**818 (100)**	**681 (100)**	**885 (100)**	**612 (100)**	**752 (100)**		
Born in Australia	540 (66.1)	462 (68.2)	637 (70.8)	409 (66.9)	523 (69.3)	ns	ns
Total	**817 (100)**	**677 (100)**	**900 (100)**	**611 (100)**	**755 (100)**		
Lives in Greater Perth	751 (92.3)	627 (93.0)	800 (89.4)	542 (89.6)	678 (91.8)	ns	ns
Total	**814 (100)**	**674 (100)**	**895 (100)**	**605 (100)**	**739 (100)**		
University educated	354 (43.5)	301 (44.4)	395 (44.1)	263 (43.0)	360 (47.8)	ns	ns
Total	**813 (100)**	**678 (100)**	**896 (100)**	**612 (100)**	**754 (100)**		
Full-time employed	536 (65.8)	446 (65.8)	583 (64.9)	374 (61.1)	466 (61.7)	ns	Decrease <.05
Total	**815 (100)**	**678 (100)**	**899 (100)**	**612 (100)**	**755 (100)**		
Gay identity	656 (80.4)	581 (85.7)	776 (86.8)	527 (86.7)	642 (85.3)	ns	Increase <.01
Bisexual identity	73 (9.0)	61 (9.0)	80 (9.0)	53 (8.7)	81 (10.8)	ns	ns
Total	**816 (100)**	**678 (100)**	**894 (100)**	**608 (100)**	**753 (100)**		
Cisgender[1]	-	-	872 (97.7)	585 (95.7)	731 (96.8)	ns	NA
Transgender[1]	-	-	14 (1.6)	13 (2.1)	6 (0.8)	NA	NA
Non-binary[1]	-	-	-	10 (1.6)	16 (2.1)	NA	NA
Total	**-**	**-**	**893 (100)**	**611 (100)**	**755 (100)**		

1 Questions related to gender were altered from 2017 onwards; therefore, trends over time have not been calculated.

Table 3: Age

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Under 25	261 (32.0)	152 (22.4)	239 (26.6)	162 (26.6)	171 (22.8)	ns	Decrease <.001
25–29	162 (19.9)	133 (19.6)	207 (23.1)	141 (23.1)	151 (20.1)	ns	ns
30–39	157 (19.3)	172 (25.4)	234 (26.1)	154 (25.3)	220 (29.3)	ns	Increase <.001
40–49	132 (16.2)	132 (19.5)	122 (13.6)	79 (13.0)	80 (10.7)	ns	Decrease <.001
50 and over	103 (12.6)	89 (13.1)	96 (10.7)	74 (12.1)	129 (17.2)	Increase <.01	Increase <.05
Total	**815 (100)**	**678 (100)**	**898 (100)**	**610 (100)**	**751 (100)**		

Table 4: HIV testing

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
All participants							
Ever tested	625 (76.4)	579 (85.0)	762 (84.7)	545 (89.1)	672 (89.0)	ns	Increase <.001
Total	**818 (100)**	**681 (100)**	**900 (100)**	**612 (100)**	**755 (100)**		
Non-HIV-positive participants							
Tested in previous 12 months	407 (68.8)	355 (65.6)	529 (72.8)	374 (73.1)	470 (72.3)	ns	Increase <.05
Total	**592 (100)**	**541 (100)**	**727 (100)**	**512 (100)**	**650 (100)**		

Table 5: Where non-HIV-positive men were last tested for HIV

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
General practice	-	236 (44.1)	308 (42.4)	208 (40.8)	285 (44.4)	ns	ns
Sexual health clinic/hospital	-	120 (22.4)	208 (28.7)	128 (25.1)	197 (30.7)	Increase <.05	Increase <.01
At home	-	3 (0.6)	4 (0.6)	2 (0.4)	3 (0.5)	NA	NA
Community-based service	-	150 (28.0)	189 (26.0)	161 (31.6)	146 (22.7)	Decrease <.001	ns
Somewhere else	-	26 (4.9)	17 (2.3)	11 (2.2)	11 (1.7)	NA	NA
Total	**-**	**535 (100)**	**726 (100)**	**510 (100)**	**642 (100)**		

Table 6: Number of HIV tests in the previous 12 months

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
All non-HIV-positive men							
None	-	272 (42.2)	312 (36.2)	190 (32.7)	235 (32.1)	ns	Decrease <.001
One	-	184 (28.6)	224 (26.0)	156 (26.9)	157 (21.5)	Decrease <.05	Decrease <.01
Two	-	113 (17.6)	177 (20.5)	122 (21.0)	123 (16.8)	ns	ns
3 or more	-	75 (11.6)	150 (17.4)	113 (19.5)	217 (29.6)	Increase <.001	Increase <.001
Total	**-**	**644 (100)**	**863 (100)**	**581 (100)**	**732 (100)**		
HIV-negative men on PrEP[1]							
None	-	1 (33.3)	0	0	3 (1.9)	NA	NA
One	-	0	0	1 (3.9)	7 (4.4)	NA	NA
Two	-	0	0	4 (15.4)	17 (10.8)	NA	NA
3 or more	-	2 (66.7)	8 (100)	21 (80.8)	131 (82.9)	NA	NA
Total	**-**	**3 (100)**	**8 (100)**	**26 (100)**	**158 (100)**		
Non-HIV-positive men not on PrEP							
None	-	201 (41.6)	259 (36.0)	166 (34.5)	193 (40.5)	ns	ns
One	-	144 (29.8)	197 (27.4)	136 (28.3)	130 (27.3)	ns	ns
Two	-	87 (18.0)	148 (20.6)	100 (20.8)	94 (19.7)	ns	ns
3 or more	-	51 (10.6)	115 (16.0)	79 (16.4)	60 (12.6)	ns	ns
Total	**-**	**483 (100)**	**719 (100)**	**481 (100)**	**477 (100)**		

Note: This table only contains data from non-HIV-positive men. The data for 2014-2017 are slightly different to those included in previous reports due to an adjustment in how this indicator has been calculated.

1 From 2019, 'men on PrEP' includes both regular (daily) and on demand (event-based) users. Prior to 2019, regular and on demand users could not be differentiated.

Table 7: HIV test result

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
HIV-positive	32 (5.1)	35 (6.1)	34 (4.5)	30 (5.5)	22 (3.3)	ns	ns
HIV-negative	580 (92.8)	522 (90.3)	721 (94.6)	503 (92.5)	642 (95.5)	Increase <.05	Increase <.01
Unknown status	13 (2.1)	21 (3.6)	7 (0.9)	11 (2.0)	8 (1.2)	NA	NA
Total	**625 (100)**	**578 (100)**	**762 (100)**	**544 (100)**	**672 (100)**		

Note: This table only includes data from men who have been tested for HIV.

Table 8: Use of combination antiretroviral treatment among HIV-positive men

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
On treatment	26 (81.3)	26 (81.3)	29 (87.9)	27 (90.0)	19 (86.4)	NA	NA
Total	**32 (100)**	**32 (100)**	**33 (100)**	**30 (100)**	**22 (100)**		

Table 9: Undetectable viral load among HIV-positive men, by treatment status

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Men using ART							
Undetectable viral load	22 (84.6)	21 (80.8)	28 (96.6)	25 (92.6)	19 (100)	NA	NA
Total	**26 (100)**	**26 (100)**	**29 (100)**	**27 (100)**	**19 (100)**		
Men not using ART							
Undetectable viral load	3 (50.0)	1 (16.7)	1 (25.0)	3 (100)	2 (66.7)	NA	NA
Total	**6 (100)**	**6 (100)**	**4 (100)**	**3 (100)**	**3 (100)**		

Table 10: Current relationships with men

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
None	195 (25.3)	129 (19.9)	150 (17.1)	105 (17.7)	131 (17.7)	ns	Decrease <.001
Casual only	153 (19.8)	138 (21.3)	177 (20.2)	132 (22.2)	139 (18.8)	ns	ns
Regular plus casual	190 (24.6)	158 (24.4)	264 (30.2)	167 (28.1)	239 (32.3)	ns	Increase <.001
Regular only (monogamous)	233 (30.2)	222 (34.3)	284 (32.5)	191 (32.1)	231 (31.2)	ns	ns
Total	**771 (100)**	**647 (100)**	**875 (100)**	**595 (100)**	**740 (100)**		

Table 11: Where men met their male sex partners in the six months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Mobile app, e.g. Grindr	299 (36.6)	257 (37.7)	441 (49.0)	301 (49.2)	370 (49.0)	ns	Increase <.001
Internet	279 (34.1)	216 (31.7)	291 (32.3)	177 (28.9)	210 (27.8)	ns	Decrease <.01
Gay bar	177 (21.6)	163 (23.9)	190 (21.1)	141 (23.0)	164 (21.7)	ns	ns
Overseas	136 (16.6)	120 (17.6)	139 (15.4)	122 (19.9)	154 (20.4)	ns	Increase <.05
Travelling in Australia[1]	141 (17.2)	123 (18.1)	178 (19.8)	118 (19.3)	122 (16.2)	NA	NA
Gay sauna/sex venue[2]	153 (18.7)	127 (18.7)	156 (17.3)	121 (19.8)	121 (16.0)	NA	NA
Dance party	69 (8.4)	53 (7.8)	53 (5.9)	47 (7.7)	90 (11.9)	Increase <.01	Increase <.05
Beat	68 (8.3)	66 (9.7)	76 (8.4)	45 (7.4)	57 (7.6)	ns	ns
Private sex parties	38 (4.7)	28 (4.1)	49 (5.4)	23 (3.8)	48 (6.4)	Increase <.05	ns
Sex workers	14 (1.7)	8 (1.2)	24 (2.7)	24 (3.9)	26 (3.4)	NA	NA
Total (not mutually exclusive)	**818**	**681**	**900**	**612**	**755**		

1 Prior to 2019, the questionnaire listed meeting men 'In other Australian cities' and 'Elsewhere in Australia' as separate items. They have been combined here.

2 Prior to 2019, the questionnaire listed gay saunas and sex venues as separate items. They have been combined here.

Table 12: Agreements with regular male partners about sex *within* the relationship

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
No agreement about sex within the relationship	204 (39.1)	199 (43.4)	269 (42.5)	189 (44.6)	234 (44.3)	ns	ns
No sex within the relationship permitted	9 (1.7)	20 (4.4)	27 (4.3)	10 (2.4)	17 (3.2)	NA	NA
No anal intercourse permitted	13 (2.5)	14 (3.1)	16 (2.5)	4 (1.0)	13 (2.5)	NA	NA
Anal intercourse permitted only with a condom	119 (22.8)	90 (19.6)	95 (15.0)	48 (11.3)	46 (8.7)	ns	Decrease <.001
Anal intercourse permitted without a condom	177 (33.9)	136 (29.6)	226 (35.7)	173 (40.8)	218 (41.4)	ns	Increase <.001
Total	**522 (100)**	**459 (100)**	**633 (100)**	**424 (100)**	**528 (100)**		

Note: This table only includes data from men who reported that they had a regular male partner in the six months prior to the survey.

Table 13: Agreements with regular male partners about sex *outside* the relationship

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
No agreement about casual sex	233 (44.6)	209 (45.5)	295 (46.6)	211 (49.8)	254 (48.1)	ns	ns
No sex with casual partners permitted	133 (25.5)	133 (29.0)	171 (27.0)	113 (26.7)	123 (23.3)	ns	ns
No anal intercourse with casual partners permitted	14 (2.7)	12 (2.6)	14 (2.2)	10 (2.4)	13 (2.5)	NA	NA
Anal intercourse with casual partners permitted only with a condom	119 (22.8)	91 (19.8)	129 (20.4)	72 (17.0)	83 (15.8)	ns	Decrease <.01
Anal intercourse with casual partners permitted without a condom	23 (4.4)	14 (3.1)	24 (3.8)	18 (4.3)	55 (10.4)	Increase <.001	Increase <.001
Total	**522 (100)**	**459 (100)**	**633 (100)**	**424 (100)**	**528 (100)**		

Note: This table only includes data from men who reported that they had a regular male partner in the six months prior to the survey.

Table 14: Match of HIV status between regular partners

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
HIV-positive men							
Seroconcordant	7 (30.4)	13 (52.0)	7 (24.1)	6 (27.3)	2 (12.5)	NA	NA
Serodiscordant	11 (47.8)	9 (36.0)	12 (41.4)	9 (40.9)	12 (75.0)	NA	NA
Serononconcordant	5 (21.7)	3 (12.0)	10 (34.5)	7 (31.8)	2 (12.5)	NA	NA
Total	**23 (100)**	**25 (100)**	**29 (100)**	**22 (100)**	**16 (100)**		
HIV-negative men							
Seroconcordant	294 (71.5)	264 (70.8)	403 (74.6)	276 (76.0)	364 (76.5)	ns	Increase <.05
Serodiscordant	11 (2.7)	11 (3.0)	14 (2.6)	4 (1.1)	19 (4.0)	NA	NA
Serononconcordant	106 (25.8)	98 (26.3)	123 (22.8)	83 (22.9)	93 (19.5)	ns	Decrease <.05
Total	**411 (100)**	**373 (100)**	**540 (100)**	**363 (100)**	**476 (100)**		

Note: This table only includes data from men who reported that they had a regular male partner in the six months prior to the survey.

Table 15: Anal intercourse and condom use with regular partners

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
No anal intercourse	116 (22.2)	112 (24.4)	118 (18.6)	76 (17.9)	97 (18.4)	ns	Decrease <.05
Always uses a condom	115 (22.0)	103 (22.4)	109 (17.2)	55 (13.0)	39 (7.4)	Decrease <.01	Decrease <.001
Sometimes does not use a condom	291 (55.8)	244 (53.2)	406 (64.1)	293 (69.1)	392 (74.2)	ns	Increase <.001
Total	**522 (100)**	**459 (100)**	**633 (100)**	**424 (100)**	**528 (100)**		

Note: This table only includes data from men who reported that they had a regular male partner in the six months prior to the survey.

Table 16: Anal intercourse and condom use with casual partners

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
No anal intercourse	88 (20.0)	68 (18.8)	96 (18.0)	61 (17.2)	66 (15.6)	ns	ns
Always uses a condom	194 (44.1)	158 (43.7)	214 (40.2)	135 (38.1)	89 (21.1)	Decrease <.001	Decrease <.001
Sometimes does not use a condom	158 (35.9)	136 (37.6)	223 (41.8)	158 (44.6)	267 (63.3)	Increase <.001	Increase <.001
Subcategories of men who did not always use condoms:							
HIV-positive on treatment with undetectable viral load	6 (1.4)	6 (1.7)	16 (3.0)	11 (3.1)	5 (1.2)	NA	NA
HIV-negative on PrEP[1]	-	1 (0.3)	7 (1.3)	18 (5.1)	123 (29.2)	Increase <.001	NA
HIV-positive not on treatment or detectable viral load	3 (0.7)	3 (0.8)	4 (0.8)	0	0	NA	NA
HIV-negative/untested not on PrEP (only insertive anal intercourse)	41 (9.3)	38 (10.5)	57 (10.7)	42 (11.9)	43 (10.2)	ns	ns
HIV-negative/untested not on PrEP (any receptive anal intercourse)	108 (24.5)	88 (24.2)	139 (26.1)	87 (24.6)	96 (22.8)	ns	ns
Total	**440 (100)**	**362 (100)**	**533 (100)**	**354 (100)**	**422 (100)**		

Note: This table only includes data from men who reported that they had any casual male partners in the six months prior to the survey.

1 From 2019, 'men on PrEP' includes both regular (daily) and on demand (event-based) users. Prior to 2019, regular and on demand users could not be differentiated.

Table 17: Any condomless anal intercourse with casual partners (CAIC), by HIV status of participants

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
HIV-positive men	9 (42.9)	9 (47.4)	22 (81.5)	11 (52.4)	6 (42.9)	NA	NA
Total	**21 (100)**	**19 (100)**	**27 (100)**	**21 (100)**	**14 (100)**		
HIV-negative men	126 (36.6)	106 (35.5)	181 (40.0)	131 (44.1)	246 (63.9)	Increase <.001	Increase <.001
Total	**344 (100)**	**299 (100)**	**452 (100)**	**297 (100)**	**385 (100)**		
Untested/unknown status men	23 (30.3)	21 (47.7)	22 (39.3)	16 (44.4)	16 (66.7)	ns	ns
Total	**76 (100)**	**44 (100)**	**56 (100)**	**36 (100)**	**24 (100)**		

Note: This table only includes data from men who reported that they had any casual male partners in the six months prior to the survey. Untested and unknown status includes men who have never been tested for HIV and men who have been tested but do not know their results.

Table 18: Disclosure of HIV status to or from casual partners, by HIV status of participants

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
HIV-positive men							
Told casual partners	16 (76.2)	11 (57.9)	23 (85.2)	15 (71.4)	11 (78.6)	NA	NA
Told by casual partners	15 (71.4)	9 (47.4)	24 (88.9)	14 (66.7)	11 (78.6)	NA	NA
Total (not mutually exclusive)	**21**	**19**	**27**	**21**	**14**		
HIV-negative men							
Told casual partners	178 (51.7)	169 (56.5)	274 (60.6)	206 (69.4)	281 (73.0)	ns	Increase <.001
Told by casual partners	175 (50.9)	167 (55.9)	280 (62.0)	205 (69.0)	277 (72.0)	ns	Increase <.001
Total (not mutually exclusive)	**344**	**299**	**452**	**297**	**385**		

Note: This table only includes data from men who reported that they had any casual male partners in the six months prior to the survey.

Table 19: HIV-negative men who frequently used risk reduction strategies when engaging in condomless anal intercourse with casual partners (CAIC)

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Ensured partners were seroconcordant before CAIC (serosorting)	57 (45.2)	53 (50.0)	100 (55.3)	74 (56.5)	146 (59.4)	ns	Increase <.01
Took insertive position during CAIC when partners were not concordant	27 (21.4)	18 (17.0)	37 (20.4)	19 (14.5)	34 (13.8)	ns	ns
Partner withdrew before ejaculation when participant was receptive	20 (15.9)	14 (13.2)	25 (13.8)	15 (11.5)	15 (6.1)	NA	NA
Ensured HIV-positive partner had an undetectable viral load before having sex	-	5 (4.7)	21 (11.6)	19 (14.5)	41 (16.7)	ns	Increase <.01
Participant took PrEP before sex	-	3 (2.8)	11 (6.1)	21 (16.0)	128 (52.0)	Increase <.001	Increase <.001
Participant knew partner was on PrEP before sex	-	-	-	28 (21.4)	124 (50.4)	Increase <.001	NA
Total (not mutually exclusive)	**126**	**106**	**181**	**131**	**246**		

Note: This table only includes data from men who reported having CAIC in the six months prior to the survey. Men who reported 'often' or 'always' using each strategy were classified as 'frequently' using the strategy.

Table 20: STI testing among HIV-positive men in the 12 months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Anal swab	19 (55.9)	23 (65.7)	28 (75.7)	20 (66.7)	15 (65.2)	NA	NA
Throat swab	20 (58.8)	23 (65.7)	28 (75.7)	20 (66.7)	12 (52.2)	NA	NA
Urine sample	23 (67.7)	26 (74.3)	28 (75.7)	22 (73.3)	16 (69.6)	NA	NA
Blood test for syphilis	20 (58.8)	24 (68.6)	31 (83.8)	24 (80.0)	14 (60.9)	NA	NA
Other blood test	25 (73.5)	26 (74.3)	27 (73.0)	20 (66.7)	19 (82.6)	NA	NA
Any STI test (not including blood tests)	25 (73.5)	27 (77.1)	30 (81.1)	24 (80.0)	19 (82.6)	NA	NA
Any STI test (including blood tests)	30 (88.2)	31 (88.6)	33 (89.2)	26 (86.7)	21 (91.3)	ns	ns
Total (not mutually exclusive)	**34**	**35**	**37**	**30**	**23**		

Table 21: STI testing among HIV-negative men in the 12 months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Anal swab	255 (43.4)	200 (37.9)	350 (48.0)	257 (51.0)	370 (57.0)	Increase <.05	Increase <.001
Throat swab	279 (47.5)	237 (44.9)	372 (51.0)	270 (53.6)	390 (60.1)	Increase <.05	Increase <.001
Urine sample	374 (63.6)	290 (54.9)	456 (62.6)	317 (62.9)	451 (69.5)	Increase <.05	Increase <.01
Blood test for syphilis	357 (60.7)	277 (52.5)	459 (63.0)	322 (63.9)	440 (67.8)	ns	Increase <.001
Other blood test	298 (50.7)	238 (45.1)	399 (54.7)	274 (54.4)	424 (65.3)	Increase <.001	Increase <.001
Any STI test (not including blood test)	386 (65.7)	308 (58.3)	477 (65.4)	328 (65.1)	459 (70.7)	Increase <.05	Increase <.01
Any STI test (including blood tests)	417 (70.9)	353 (66.9)	530 (72.7)	373 (74.0)	500 (77.0)	ns	Increase <.001
Total (not mutually exclusive)	**588**	**528**	**729**	**504**	**649**		

Table 22: STI diagnoses in the 12 months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Chlamydia	-	-	-	55 (9.7)	79 (11.0)	ns	NA
Gonorrhoea	-	-	-	36 (6.3)	69 (9.6)	Increase <.05	NA
Syphilis	-	-	-	27 (4.7)	26 (3.6)	NA	NA
Other STI	-	-	-	13 (2.3)	27 (3.8)	NA	NA
Any STI diagnosis[1]	85 (11.4)	82 (12.7)	120 (13.8)	92 (16.1)	139 (19.3)	ns	NA
Total (not mutually exclusive)	**743**	**648**	**871**	**570**	**720**		

1 Due to a change in questions regarding STI diagnoses, trends over time have not been calculated.

Table 23: Recreational drug use among all men in the six months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Amyl nitrite (poppers)	231 (28.2)	200 (29.4)	297 (33.0)	217 (35.5)	280 (37.1)	ns	Increase <.001
Cannabis	257 (31.4)	207 (30.4)	272 (30.2)	198 (32.4)	207 (27.4)	Decrease <.05	ns
Viagra	105 (12.8)	97 (14.2)	145 (16.1)	100 (16.3)	135 (17.9)	ns	Increase <.01
Ecstasy	132 (16.1)	116 (17.0)	166 (18.4)	89 (14.5)	125 (16.6)	ns	ns
Cocaine	75 (9.2)	72 (10.6)	93 (10.3)	55 (9.0)	93 (12.3)	Increase <.05	ns
Amphetamine (speed)	109 (13.3)	95 (14.0)	75 (8.3)	36 (5.9)	49 (6.5)	ns	Decrease <.001
Crystal methamphetamine	85 (10.4)	84 (12.3)	96 (10.7)	44 (7.2)	42 (5.6)	ns	Decrease <.001
GHB	22 (2.7)	34 (5.0)	27 (3.0)	24 (3.9)	27 (3.6)	NA	NA
Ketamine (special K)	20 (2.4)	27 (4.0)	18 (2.0)	21 (3.4)	24 (3.2)	NA	NA
Other drugs[1]	96 (11.7)	80 (11.8)	97 (10.8)	61 (10.0)	60 (8.0)	NA	NA
Total (not mutually exclusive)	**818**	**681**	**900**	**612**	**755**		
Number of drugs used							
None	394 (48.2)	319 (46.8)	381 (42.3)	259 (42.3)	331 (43.8)	ns	Decrease <.05
One or two drugs	250 (30.6)	209 (30.7)	339 (37.7)	234 (38.2)	273 (36.2)	ns	Increase <.001
More than two drugs	174 (21.3)	153 (22.5)	180 (20.0)	119 (19.4)	151 (20.0)	ns	ns
Total	**818 (100)**	**681 (100)**	**900 (100)**	**612 (100)**	**755 (100)**		

1 Prior to 2019, heroin and steroids were listed as individual response items. They have been combined with “Other drugs” here.

Table 24: Injecting drug use in the six months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
All men	28 (3.8)	34 (5.3)	38 (4.4)	21 (3.6)	13 (1.8)	NA	Decrease <.05
Total	**736 (100)**	**640 (100)**	**868 (100)**	**589 (100)**	**712 (100)**		

Note: The percentages for 2012-2017 are slightly different to those included in previous reports due to an adjustment in how this indicator has been calculated.

Table 25: Party drug use for sex in the six months prior to the survey

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Used party drugs for sex	127 (17.3)	132 (20.6)	136 (15.6)	88 (14.9)	86 (12.2)	ns	Decrease <.001
Total	**736 (100)**	**641 (100)**	**871 (100)**	**590 (100)**	**704 (100)**		

Note: The percentages for 2012-2017 are slightly different to those included in previous reports due to an adjustment in how this indicator has been calculated.

Table 26: Knowledge and use of pre- and post-exposure prophylaxis

	2012 *n* (%)	2014 *n* (%)	2016 *n* (%)	2017 *n* (%)	2019 *n* (%)	Change from 2017 (*p*-value)	Trend over time (*p*-value)
Belief that PEP is available now (all men)	364 (52.3)	326 (52.8)	461 (54.6)	390 (67.5)	600 (83.2)	Increase <.001	Increase <.001
Total	**696 (100)**	**617 (100)**	**845 (100)**	**578 (100)**	**721 (100)**		
Belief that PrEP is available now (all men)	-	148 (24.3)	338 (40.1)	415 (71.9)	652 (90.3)	Increase <.001	Increase <.001
Total	**-**	**610 (100)**	**842 (100)**	**577 (100)**	**722 (100)**		
Use of PEP by non-HIV-positive men in the six months prior to the survey	15 (2.7)	13 (2.6)	13 (1.8)	10 (2.0)	23 (3.6)	NA	NA
Total	**559 (100)**	**494 (100)**	**738 (100)**	**514 (100)**	**640 (100)**		
Use of PrEP by non-HIV-positive men in the six months prior to the survey[1]	7 (1.3)	6 (1.2)	10 (1.4)	26 (5.1)	160 (25.1)	Increase <.001	Increase <.001
Total	**559 (100)**	**491 (100)**	**729 (100)**	**511 (100)**	**637 (100)**		

Note: The percentages for 2012-2017 are slightly different to those included in previous reports due to an adjustment in how this indicator has been calculated.

1 From 2019, 'men on PrEP' includes both regular (daily) and on demand (event-based) users. Prior to 2019, regular and on demand users could not be differentiated.

Appendix
Perth Gay Community Periodic Survey 2019

CSRH Centre for Social Research in Health

WAAC

Kirby Institute

This is a survey for adult gay and bisexual men who live in Australia.
It is completely anonymous – please do not write your name on the questionnaire.

Your responses are very important – they provide valuable information that guides HIV and sexual health programs. PLEASE COMPLETE THE SURVEY ONLY ONCE THIS YEAR.

Section A – About you

1. How many of your friends are gay or homosexual men?
1☐None 2☐A few 3☐Some 4☐Most 5☐All

2. How much of your free time is spent with gay or homosexual men?
1☐None 2☐A little 3☐Some 4☐A lot

3. What is your gender?
1☐Male 2☐Female 3☐Non-binary 4☐Other

4. What gender were you assigned at birth?
1☐Male 2☐Female

5. Do you think of yourself as:
1☐ Gay/Homosexual 2☐ Bisexual 3☐ Heterosexual
4☐ Other _____ (please specify)

6. How old are you? (in years) ☐☐

7. Are you of Aboriginal or Torres Strait Islander origin?
1☐No 2☐Yes

8. What is your ethnic background? (e.g. Greek, Vietnamese)
1☐Anglo-Australian 2☐Other _____

9. Where were you born? (please specify)
1☐ Australia 2☐Overseas _____

10. How long have you lived in Australia?
1☐ <2 years 2☐ 2-5 years 3☐ >5 years

11. Where do you live?
Postcode ☐☐☐☐ **OR**
Suburb/Town _____

12. Are you:
1☐Employed full-time 4☐A student
2☐Employed part-time 5☐Unemployed
3☐On pension/social security 6☐Other

13. What is the highest level of education you have completed?
1☐Up to Year 10
2☐Year 12 / HSC / QCE / SACE / VCE / WACE
3☐Tertiary diploma or trade certificate / TAFE
4☐University degree **Go to section B**

Section B – Your sex partners

In this survey we distinguish between **REGULAR** (boyfriends/fuck buddies) and **CASUAL** partners

14. Do you **currently** have sex with **casual** male partners?
1☐No 2☐Yes

15. Do you **currently** have sex with a **regular** male partner (or partners)?
1☐No 2☐Yes

16. How would you describe your sexual relationship with your current **regular** male partner(s)? (choose one)
1☐**We** are monogamous – **neither of us** has casual sex
2☐**Both my partner and I** have casual sex with other men
3☐I have casual sex with other men but **my partner does not**
4☐**My partner** has casual sex with other men but **I do not**
5☐I have **several regular** male partners
6☐No current regular male partner ➔ **Go to Section C**

17. If you are **in a relationship** with a man, how long have you been together?
1☐Less than 6 months
2☐6–11 months
3☐1–2 years
4☐More than 2 years
5☐Not in a relationship with a man ➔ **Go to Section C**

18. Do you have a **clear (spoken) agreement** about sex **within your relationship**?
1☐No agreement
2☐Agreement: No sex at all
3☐Agreement: No anal sex at all
4☐Agreement: All anal sex is with a condom
5☐Agreement: Anal sex can be without a condom

19. Do you have a **clear (spoken) agreement** in your relationship about sex **with casual male partners**?
1☐No agreement
2☐Agreement: No sex at all
3☐Agreement: No anal sex at all
4☐Agreement: All anal sex is with a condom
5☐Agreement: Anal sex can be without a condom **Go to C**

Section C – Sex in the last 6 months

20. How many different men have you had sex with **in the last 6 months**?

1☐None 4☐6–10 men 7☐More than 50 men
2☐One 5☐11–20 men
3☐2–5 men 6☐21-50 men

21. **In the last 6 months** how often have you had sex with men you met at or through:

	Never	Occasionally	Often
Internet	1☐	2☐	3☐
Mobile app e.g. Grindr, Scruff	1☐	2☐	3☐
Gay bar	1☐	2☐	3☐
Dance party	1☐	2☐	3☐
Beat	1☐	2☐	3☐
Gay sauna / sex venue	1☐	2☐	3☐
Sex workers	1☐	2☐	3☐
Private sex parties	1☐	2☐	3☐
Travelling in Australia	1☐	2☐	3☐
Overseas	1☐	2☐	3☐

22. In the **last 6 months**, how often did you have group sex involving **at least two other men**?

1☐Every week 3☐Once / A few times
2☐Monthly 4☐Never

23. In the **last 6 months**, how often have you been **paid for sex**?

1☐Every week 3☐Once / A few times
2☐Monthly 4☐Never

Section D – Regular male partners – last 6 months

24. Have you had sex with **regular** male partner/s **in the last 6 months**?

1☐Yes 2☐No ➔ **Go to section E ➔**

In the last 6 MONTHS how often have you done the following with any of your **REGULAR male partner/s**?

Anal sex regular partner/s:

25. I fucked him **with a condom**.
1☐Never 2☐Occasionally 3☐Often

26. He fucked me **with a condom**.
1☐Never 2☐Occasionally 3☐Often

27. I fucked him **without a condom** but pulled out before I came.
1☐Never 2☐Occasionally 3☐Often

28. He fucked me **without a condom** but pulled out before he came.
1☐Never 2☐Occasionally 3☐Often

29. I fucked him **without a condom** and came inside.
1☐Never 2☐Occasionally 3☐Often

30. He fucked me **without a condom** and came inside.
1☐Never 2☐Occasionally 3☐Often

Go to section E ➔

Section E – Casual male partners – last 6 months

31. Have you had any sex with any **casual** male partner/s **in the last 6 months**?

1☐Yes 2☐No ➔ **Go to section F ➔**

In the last 6 MONTHS how often have you done the following with any of your **CASUAL male partner/s**?

Anal sex casual partner/s:

32. I fucked him **with a condom**.
1☐Never 2☐Occasionally 3☐Often

33. He fucked me **with a condom**.
1☐Never 2☐Occasionally 3☐Often

34. I fucked him **without a condom** but pulled out before I came.
1☐Never 2☐Occasionally 3☐Often

35. He fucked me **without a condom** but pulled out before he came.
1☐Never 2☐Occasionally 3☐Often

36. I fucked him **without a condom** and came inside.
1☐Never 2☐Occasionally 3☐Often

37. He fucked me **without a condom** and came inside.
1☐Never 2☐Occasionally 3☐Often

HIV disclosure casual partner/s

38. How many of your casual partners did you tell **your** HIV status before sex?
1☐None 2☐Some 3☐All

39. How many of your casual partners told you **their** HIV status before sex?
1☐None 2☐Some 3☐All

HIV status of casual partner/s

40. In the last 6 months, did you **get fucked without a condom** by any casual partners who were:

HIV-negative and on PrEP	1☐Yes	2☐No	3☐Don't know
Other HIV-negative men	1☐Yes	2☐No	3☐Don't know
HIV-positive and undetectable	1☐Yes	2☐No	3☐Don't know
Other HIV-positive men	1☐Yes	2☐No	3☐Don't know
Untested/unknown HIV status	1☐Yes	2☐No	3☐Don't know

Survey continues on next page

The following questions are for men who have had <u>any anal sex *without* a condom</u> with casual male partner(s) in the last 6 months.

If you have not had any anal sex without a condom with casual male partners, **go to section F** ➘

41. In the **last 6 months**, if you had anal sex without a condom with any casual male partner(s), how often did you do any of the following to avoid getting or passing on HIV?

I made sure we were the **same HIV status** before we fucked without a condom	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
I chose to take the **top role** (I fucked him) because his HIV status was different or unknown to me	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
I chose to take the **bottom role** (he fucked me) because his HIV status was different or unknown to me	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
When I fucked him, I chose to **pull out before cumming** because his HIV status was different or unknown to me	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
When he fucked me, I made sure **he pulled out before cumming** because his HIV status was different or unknown to me	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
I took anti-HIV medication (**PrEP**) before sex	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
I knew my partner was on **PrEP** before we had sex	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
When my partner was HIV-positive, I checked **he had an undetectable viral load** before we had sex	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always
I knew **I had an undetectable viral load** before we had sex	1☐ Never	2☐ Occasionally	3☐ Often	4☐ Always

Go to section F ➘

Section F – HIV testing and HIV status

42. Have you ever had an HIV test?

1☐No 2☐Yes

43. When were you last tested for HIV?

1☐Never tested
2☐Less than a week ago
3☐1–4 weeks ago
4☐1–6 months ago
5☐7–12 months ago
6☐1–2 years ago
7☐2–4 years ago
8☐More than 4 years ago

44. Based on the results of your HIV tests, what is your HIV status?

1☐No test/Don't know
2☐Negative
3☐Positive

45. Where did you have your last HIV test?

1☐No test/don't know
2☐GP
3☐Sexual health clinic
4☐Hospital
5☐Private home
6☐Community-based service e.g. M Clinic
7☐Somewhere else

46. How many HIV tests have you had in the **last 12 months**?

1☐None (no tests)
2☐One test
3☐Two tests
4☐3-4 tests
5☐5 or more tests

47. If you have a regular partner, do you know the result of his HIV test?

1☐Positive
2☐Negative
3☐I don't know/He hasn't had a test
4☐No regular partner

Go to question 48 ➘

48. Is your regular male partner taking **PrEP** (pre-exposure prophylaxis)?

1☐Yes 2☐No 3☐Don't know

49. If your regular partner is HIV positive, what was his last viral load test result?

1☐Undetectable
2☐Detectable
3☐Don't know/unsure
4☐No HIV-positive partner

If you are **HIV-positive** please complete the next four questions. If not, go to section G ➔

50. When were you first diagnosed as HIV-positive?

Year ☐☐☐☐

51. In the last 12 months, how many clinical appointments about managing HIV have you attended?

1☐None 2☐1-2 3☐3-4 4☐5 or more

52. Are you on combination antiretroviral therapy (HIV treatment)?

2☐Yes 1☐No

53. What was your last **viral load test** result?

1☐Undetectable
2☐Detectable
3☐Don't know/unsure

Go to section G ➔

Survey continues on next page

Section G – Sexual health

54. Which of these sexual health tests have you had in the last 12 months?

	None	Once	Twice	3 or more
Anal swab	1☐	2☐	3☐	4☐
Throat swab	1☐	2☐	3☐	4☐
Urine sample	1☐	2☐	3☐	4☐
Blood test for syphilis	1☐	2☐	3☐	4☐
Other blood test	1☐	2☐	3☐	4☐

55. Have you ever been tested for **hepatitis C**?

1☐Yes 2☐No 3☐Don't know

56. Do you have chronic **hepatitis C**?

1☐Yes 2☐No 3☐Don't know

57. Have you been **vaccinated** for:

1☐Hepatitis A 2☐Hepatitis B

58. Which **sexually transmitted infection(s)** other than HIV were you diagnosed with in the last 12 months?

1☐Chlamydia 2☐Gonorrhoea
3☐Syphilis 4☐Other
5☐Not been diagnosed with an STI in the last 12 months

Section H – Medication to prevent HIV

59. What do you know about **post-exposure prophylaxis** (**PEP**)?
PEP is a month-long course of anti-HIV medication prescribed after an exposure to HIV.

1☐It's available now
3☐I've never heard about it

60. What do you know about **pre-exposure prophylaxis** (**PrEP**)?
PrEP is anti-HIV medication you take regularly to protect yourself from HIV.

1☐It's available now
3☐I've never heard about it

If you are **HIV-positive** you can skip the next three questions and go to **section I** ↗

61. In the **last 6 months**, did you take a prescribed course of **PEP** because you were exposed to HIV?

1☐No
2☐Yes, once
3☐Yes, more than once

62. In the **last 6 months**, did you take **PrEP** to protect yourself from HIV?

1☐No ➔ **Go to section I** ↗
2☐Yes, I took it daily / most days
3☐Yes, I took it around the time of sex (but not daily)

63. If you took **PrEP** in the **last 6 months**, where did you get it from?

1☐A trial or study 2☐ I bought it online (from overseas)
3☐ A friend or sex partner
4☐ Chemist 5☐ Other **Go to section I** ↗

Section I – Drug use

64. How often have you **used** these drugs in the **last 6 months**?

	Never	Once/ twice	At least monthly	Every week
Amyl/poppers	1☐	2☐	3☐	4☐
Cannabis/ marijuana	1☐	2☐	3☐	4☐
Viagra/Cialis etc	1☐	2☐	3☐	4☐
Ecstasy	1☐	2☐	3☐	4☐
Speed	1☐	2☐	3☐	4☐
Cocaine	1☐	2☐	3☐	4☐
Crystal meth / ice	1☐	2☐	3☐	4☐
GHB	1☐	2☐	3☐	4☐
Ketamine	1☐	2☐	3☐	4☐
Any other drug	1☐	2☐	3☐	4☐

65. In the **last 6 months**, how often have you had **more than four alcoholic drinks on one occasion**?

1☐Every week 3☐Once or twice
2☐At least monthly 4☐Never

66. Have you **ever** injected drugs?

1☐Yes 2☐No

67. How often have you **injected** drugs in the **last 6 months**?

1☐Every week 3☐Once or twice
2☐At least monthly 4☐Never

68. In the **last 6 months**, how often have you used party drugs for the purpose of sex?

1☐Every week 3☐Once or twice
2☐At least monthly 4☐Never

The survey concludes here.
Thank you for your time.

As this survey is anonymous, feedback cannot be provided directly. Please check the CSRH and WAAC websites for the results of this survey.

https://csrh.arts.unsw.edu.au

http://www.waaids.com