



Gay Community Periodic Survey Sydney 2015

Never Stand Still

Arts & Social Sciences

Centre for Social Research in Health

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Glossary

ART antiretroviral treatment

CAIC condomless anal intercourse with casual partners

CAIR condomless anal intercourse with regular partners

HIV human immunodeficiency virus

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

HIV-serodiscordant relationship 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

HIV-serononconcordant relationship 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

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

PEP post-exposure prophylaxis

PrEP pre-exposure prophylaxis

STI sexually transmissible infection

Report

Executive Summary

The Sydney Gay Community Periodic Survey is a cross-sectional survey of gay and homosexually active men recruited at a range of gay community sites in Sydney. Since 1996, the project has been funded by the NSW Ministry of Health and supported by ACON and Positive Life NSW. 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 in Sydney. The data presented in this report are from the period 2011 to 2015.

In 2015, 2,846 men were recruited at 20 data collection sites which included gay social venues (bars and gyms), sex-on-premises venues, sexual health clinics, Fair Day (part of the Sydney Gay and Lesbian Mardi Gras) and, for the first time, through online recruitment. The response rate for offline recruitment was 57.1%. Online recruitment was conducted through the social networking site Facebook. Men were directed to a website with an online version of the GCPS questionnaire (http://gcpsonline.net). The advertisements were targeted to all men aged 16 and above who were located in New South Wales and indicated in their Facebook profile that they were 'interested' in men.

In 2015, a quarter of the sample was recruited online. When the online participants are excluded, there was a slight but significant decrease between 2014 and 2015 in the proportion of men recruited from sex-on-premises venues and Fair Day, and an increase in men recruited from social venues. These changes should be borne in mind when interpreting the results.

There were some significant differences between the men recruited online and those recruited at venues and events. Men recruited online were younger (30 vs. 37 years), more likely to be born in Australia (86% vs. 58%) and more likely to be in a monogamous relationship (36% vs. 30%). Online participants were less likely than offline participants to have been tested for HIV (53% vs. 72%) or other STIs (52% vs. 64%) in the previous 12 months, and were less likely to report being HIV-positive (3% vs. 9%) and more likely to have an unknown HIV status (18% vs. 10%). Online participants were more likely to report condomless anal intercourse with casual partners (27% vs. 20%) and regular partners (48% vs. 37%) in the six months prior to the survey. Online participants also reported having fewer gay friends (24% vs. 46%) and spending less time with gay men (25% vs. 41%), and were less likely to report any drug use (57% vs. 63%).

Although there are some significant differences between the online and offline participants, we found that the inclusion of the online sample did not dramatically alter key indicators (such as HIV testing and condom use with casual or regular partners). This report therefore presents analyses including all participants, with some additional commentary about the effect of online recruitment on key indicators.

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Key points

- The proportion of men reporting that they have ever been tested for HIV has remained stable over time (90% in 2015). The proportion of non-HIV-positive men reporting a recent HIV test (in the previous 12 months) has increased over time (to 75% in 2015).
- The proportion of HIV-positive men on antiretroviral treatment continues to increase (to 91% in 2015). Most of the men on treatment (96%) reported having an undetectable viral load in 2015.
- There is a continued switch to mobile phone applications to meet partners, and a decline in the use of other ways to meet men. In 2015, 46% of men met male partners using mobile apps.
- The proportion of men reporting any condomless anal intercourse with their regular partners (CAIR) has increased over time to 58% in 2015. At the same time, relationship agreements have become less common and serononconcordant relationships have become more common.
- The proportion of men reporting any condomless anal intercourse with casual partners (CAIC) has increased over time to 36% in 2015. HIV-negative men who have CAIC have become more likely to report serosorting over time.
- Between 2014 and 2015, there was a significant increase in the proportion of men who believe that that pre-exposure prophylaxis (PrEP) is available now (from 27% to 36%).

Demographic profile

As in previous surveys, the men in the sample were primarily of Anglo-Australian background, lived in the metropolitan Sydney area, were well educated and in full time employment. The age distribution of the survey participants has changed over time, with an increase in the proportion of men aged under 30 years old and decreases in the proportions of men in their thirties and forties. The proportion of men aged over 50 has been relatively stable over time.

Almost two-thirds of the sample (63.7%) were born in Australia. Over time, there has been a steady increase in the ethnic diversity of the sample. Since 2011, the proportion of Anglo-Australian men has declined from 63.2% to 58.9%, while the proportion of European men has increased from 14.6% to 18.4%. In 2015, there was no significant change in the proportions of non-European (17.6%) and Aboriginal or Torres Strait Islander (3.2%) participants. The addition of online recruitment appears to have increased the proportion of men who report that they live outside the Sydney metropolitan area, from 10.0% in 2014 to 17.7% in 2015.

In 2015, the majority of the sample identified as gay (89.9%) or bisexual (6.0%). In 2015, we asked participants about their gender identity for the first time. The majority of participants indicated that they only identified as male (98.0%) with small numbers of participants identifying as male and trans (n=32, 1.1%) or male and intersex (n=24, 0.9%).

HIV status and testing

The overwhelming majority of men in the sample reported having 'ever' been tested for HIV (89.8%). Since 2011, the ever tested proportion has remained stable. In 2015, three-quarters of non-HIV-positive participants (75.1%) reported having an HIV test in the 12 months prior to survey. This was not significantly different to the figure reported in 2014, but the trend over time is upwards. The exclusion of men recruited online changes the proportion of non-HIV-positive

men who reported an HIV test in the past 12 months to 77.4% in 2015 (a slight increase but not a statistically significant change from 2014).

In 2015, most non-HIV-positive men in the survey reported that their last HIV test was either at a general practice (43.6%) or a sexual health clinic or hospital (46.0%). A minority of men reported using a community-based service for testing, e.g., one of ACON's aTest services (7.5%). The proportion of men reporting testing at general practices has declined over the last few years while testing at sexual health clinics/hospitals has increased. Among non-HIV-positive men in the 2015 survey, nearly half (47.6%) reported having been tested more than once in the previous 12 months. Over a fifth of men (21.8%) reported having 3 or more HIV tests in the previous 12 months has increased significantly since 2013 while the proportion of men who have had no tests has declined.

Of the participants that had been tested, most men reported that they were HIV-negative (90.4%) with smaller proportions reporting that they were HIV-positive (8.5%) or did not know their HIV status (1.1%) because they had not received or returned for their results yet. The proportion of HIV-positive men was significantly lower in the 2015 survey while the proportion of HIV-negative men was significantly higher when compared to the 2014 survey (this may be due to the addition of online recruitment).

Over the period from 2011 and 2015, there has been a significant upward trend in the proportion of HIV-positive men who reported being on antiretroviral treatment. In 2015, 90.7% of HIV-positive men said they were receiving combination treatment for HIV. In 2015, most of the HIV-positive men on treatment (95.7%) reported having an undetectable viral load.

Sexual relationships with men

In 2015, around three in ten men reported being in a monogamous relationship with a regular male partner (30.8%). A slightly smaller proportion reported having both regular and casual partners (28.6%), and a quarter had casual partners only (24.5%). Sixteen percent of men reported no sexual relationships with men in the six months prior to the survey. These proportions have been relatively stable since 2011.

In 2015, just under a third of men (31.6%) said they had met male sex partners through the internet in the six months prior to survey. This had been the most common way that men met male sex partners between 2009 and 2013; however, since 2014, the use of mobile applications to find sex partners has become the most common method. In 2015, 46.0% of participants used mobile apps to meet sex partners. Other commonly reported ways to meet partners were gay saunas (25.6%), gay bars (26.3%), and travelling overseas (20.4%). It is noticeable that between 2011 and 2015, as the use of mobile applications increased, in general, the use of other ways to meet partners has declined.

Regular male partners

Among men with regular partners in 2015, 55.1% reported they had an agreement with their regular partner about sex within the relationship, and a smaller proportion (52.8%) reported having an agreement about sex outside the relationship. In 2015, the most commonly held agreements about sex within a relationship (among men with a regular partner) specified that anal intercourse could occur without a condom (31.4%) or that condoms must always be used for anal intercourse (17.4%). The most commonly held agreements about sex outside a relationship (among men with a regular partner) specified that no sex with casual partners was allowed (26.7%) or that condoms must always be used

for anal intercourse with casual partners (21.2%). Since 2011, there have been declines in the proportions of men with agreements about sex within and outside their relationships.

In the questionnaire, men with regular partners are asked if they know the HIV status of their partner. Based on the answer to this question and their self-reported HIV status, we classify men as being in a seroconcordant, serodiscordant, or serononconcordant relationship. In 2015, among HIV-positive men with regular partners, 40.8% reported that they were in a seroconcordant relationship, 32.0% were in a serodiscordant relationship, and 27.2% said they were in a serononconcordant relationship. Since 2011, the proportion of HIV-positive men in serodiscordant relationships has fallen while the proportion in serononconcordant relationships has increased.

In 2015, most HIV-negative men with a regular partner reported being in a seroconcordant relationship (70.9%), with considerably smaller proportions in serononconcordant (24.6%) and serodiscordant relationships (4.5%). Since 2011, the proportion of HIV-negative men in seroconcordant relationships has fallen while the proportion in serononconcordant relationships has increased. The proportion of HIV-negative men in serodiscordant relationships has remained stable over time.

In terms of sex with regular partners, in 2015, over half the men with regular partners (57.6%) reported some condomless anal intercourse with their regular partner (CAIR) while around a quarter reported always using condoms for anal intercourse (23.9%). About one in five men with regular partners (18.6%) reported having no anal intercourse with their regular partner. Since 2011, there have been downward trends in the proportions of men who report no anal intercourse with their regular partners or who always use condoms for anal sex. Conversely, there has been a significant increase over time in the proportion of men who report CAIR. If we remove men recruited online, the proportion of men reporting CAIR in 2015 drops to 54.0%, but the upward trend over time remains statistically significant.

Rates of CAIR typically vary according to the HIV status of regular partners. In 2015, among HIV-positive men with regular partners, those with seroconcordant partners were slightly more likely to report CAIR (30.6%) than men whose partners were not concordant (27.9%).

About four in ten HIV-positive men in relationships avoided CAIR (41.5%). These proportions are relatively stable over time.

Among HIV-negative men with regular partners, 45.0% reported CAIR with a seroconcordant partner, and 13.4% reported CAIR that was not concordant. Around four in ten HIV-negative men with a regular partner avoided CAIR (41.6%). Since 2011, the proportions of HIV-negative men who engage in seroconcordant CAIR and who report CAIR that is not concordant have increased slightly while there has been a significant decline in the proportion reporting no CAIR.

Casual male partners

Use of condoms for anal intercourse remains more common with casual partners than with regular partners. In 2015, 44.0% of men with casual partners reported always using condoms for anal intercourse while over a third (36.2%) reported any condomless anal intercourse with casual partners (CAIC). The rate of CAIC has increased between 2011 and 2015. The proportions reporting consistent condom use and no anal intercourse with casual partners have remained relatively stable since 2011. If we remove men recruited online, the proportion of men reporting CAIC in 2015 falls to 32.8%, and the trend over time becomes stable (rather than increasing).

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In 2015, HIV-positive men with casual partners remained more likely to report any CAIC (71.2%) than HIV-negative (32.5%) or untested/unknown status men (37.1%). Since 2011, the proportion of HIV-positive men who report CAIC has been relatively stable while the proportion of HIV-negative men reporting CAIC has increased.

In 2015, HIV-positive men remained more likely to report any disclosure of their HIV status before sex to casual partners compared with HIV-negative men (77.4% vs. 59.7%). However, HIV-negative men have become more likely to report disclosure of HIV status to and from casual partners over time. In previous years, we have also found that HIV-positive men who had CAIC were more likely than HIV-negative men who had CAIC to report consistent HIV status disclosure (to all their casual partners). However, in 2015, HIV-negative men who had CAIC were more likely than HIV-positive men who had CAIC to report consistent disclosure (46.4% vs. 41.4%). Over time, both HIV-negative men and HIV-positive men who engage in CAIC have become significantly more likely to disclose their HIV status to all casual partners. However, the latest result for HIV-positive men shows a significant fall between 2014 and 2015 in the proportion disclosing to all casual partners.

In 2011, new questions were introduced to assess the use of non-condombased risk reduction strategies among men who engage in CAIC. Among HIVpositive men who had CAIC, the most frequently used risk reduction strategy was having an undetectable viral load (reported by 69.2% in 2015), followed by serosorting (51.0%). The proportions of HIV-positive men who reported frequently using strategic positioning (13.5%) or withdrawal before ejaculation (9.6%) were relatively small. Among HIV-negative men who engaged in CAIC, the most frequently used risk reduction strategy was serosorting (54.7%), with smaller proportions reporting strategic positioning (21.0%), withdrawal before ejaculation (12.9%), or ensuring that HIV-positive partners had an undetectable viral load (12.9%). While the use of these strategies is relatively stable among HIV-positive men, the use of serosorting by HIV-negative men has increased since 2011.

Sexual health

As in previous surveys, in 2015, a higher proportion of HIV-positive men (87.2%) reported having any sexual health test (including blood tests) in the 12 months prior to the survey, compared with HIV-negative men (73.3%). Since 2011, there have been significant increases in the proportion of HIV-negative men reporting any STI test while the rate of testing for HIV-positive men has been relatively stable. In 2015, 78.4% of HIV-positive men and 61.8% of HIV-negative men reported a blood test for syphilis.

In 2015, 399 men (14.0% of the whole sample) reported having been diagnosed with an STI (other than HIV) in the 12 months prior to the survey. Among these men, the majority (82.0%) told at least one of their sex partners about their diagnosis, and over a third (38.0%) told all of their sex partners. The proportion of men reporting an STI diagnosis in the year prior to the survey has increased over time (from 11.6% in 2012 to 14.0% in 2015) and telling sex partners about a diagnosis has also become more common over time.

Drug use

Recreational drug use remains common within the sample. After a fall in the proportion of participants reporting no drug use in 2014, the 2015 result (38%) is similar to that reported between 2011 and 2013. Correspondingly, the proportions of men who say they used drugs for sex or engaged in group sex during or after drug use decreased in the 2015 survey to the lowest levels seen since these questions were introduced in 2007.

In 2015, the most frequently used drugs in the six months prior to the survey were amyl/poppers (40.0%), marijuana (30.4%), ecstasy (25.1%), cocaine (21.6%), Viagra (18.6%), and GHB (10.6%). Since 2011, there have been significant decreases in the use of ecstasy, amphetamine/speed, Viagra, ketamine, and GHB and a significant increase in the use of marijuana. Crystal methamphetamine use has been relatively stable since 2011 but declined between 2014 and 2015 (to 11.5%).

In general, HIV-positive men remain more likely to report any drug use compared with HIV-negative men (77.1% vs 62.3% in 2015). HIV-positive men are disproportionately more likely to report any injecting drug use compared with HIV-negative men (20.2% vs. 3.3% in 2015) although the proportion of men reporting any injecting has declined since 2011. HIV-positive men are also disproportionately likely to report any use of crystal methamphetamine compared with HIV-negative men (31.2% vs. 10.2% in 2015).

Knowledge and use of PEP and PrEP

In 2015, the majority of participants (61.0%) reported that they knew postexposure prophylaxis (PEP) was available. Although this was significantly lower than the 2014 result, since 2011 there has been a gradual increase in knowledge of PEP's availability. Compared to the previous survey in 2014, there has been a significant increase in the proportion of men who believe that that pre-exposure prophylaxis (PrEP) is available now (27.2% in 2014 and 36.1% in 2015).

In 2015, 96 non-HIV-positive men (3.7%) said they had had a course of PEP in the six months prior to the survey (no change from previous rounds). A smaller proportion of non-HIV-positive men (n=46, 1.8%) said they had taken anti-HIV drugs as PrEP (no change from previous rounds).

Reporting

Data are shown for the period 2011–2015. Each table includes the statistical significance (p-value), if any, of the change between 2014 and 2015 and the trend over time (2011–2015). An alpha level of 0.05 was used for all statistical tests. Changes between 2014 and 2015 were assessed with logistic regression (comparing one category with all the others). In tables where there are mutually exclusive categories (shown on separate rows), 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, 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 use 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 (–).

Tables

The findings of the survey are presented in tables 1 to 31 below.

Table 1: Recruitment venue

	2011 <i>n</i> (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Fair Day	1464 (45.8)	1127 (39.6)	1076 (42.3)	715 (32.2)	621 (21.8)	Decrease p< .001	Decrease p< .001
Sexual health clinics	327 (10.2)	318 (11.2)	267 (10.5)	220 (9.9)	251 (8.8)	ns	Decrease p< .001
Sex-on-premises venues	334 (10.5)	369 (13.0)	378 (14.9)	370 (16.7)	266 (9.4)	Decrease p< .001	Increase p< .001
Gay social venues	1069 (33.5)	1029 (36.2)	825 (32.4)	917 (41.3)	1167 (41.0)	Decrease p< .001	Increase p< .001
Online	-	-	-	-	541 (19.0)	NA	NA
Total	3,194 (100)	2,843 (100)	2,546 (100)	2,222 (100)	2,846 (100)		

Table 2: Age

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
Under 25	356 (11.2)	286 (10.1)	288 (11.4)	317 (14.3)	561 (19.8)	Increase p< .001	Increase p< .001
25–29	544 (17.1)	427 (15.1)	416 (16.4)	390 (17.6)	539 (19.0)	ns	Increase p< .01
30–39	973 (30.6)	866 (30.6)	757 (29.9)	618 (27.9)	794 (28.0)	ns	Decrease p< .01
40–49	843 (26.5)	765 (27.1)	630 (24.9)	520 (23.5)	539 (19.0)	Decrease p< .001	Decrease p< .001
50 and over	460 (14.5)	484 (17.1)	440 (17.4)	369 (16.7)	404 (14.2)	Decrease p< .05	ns
Total	3,176 (100)	2,828 (100)	2,531 (100)	2,214 (100)	2,837 (100)		

Table 3: HIV testing

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
All men							
Ever tested for HIV	2,860 (89.5)	2,501 (88.0)	2,262 (88.9)	1985 (89.3)	2555 (89.8)	ns	ns
Total	3,194 (100)	2,843 (100)	2,546 (100)	2222 (100)	2,846 (100)		
Non-HIV-positive men							
Tested for HIV in previous 12 months	1,790 (71.9)	1,500 (69.1)	1,412 (71.4)	1306 (76.0)	1750 (75.1)	ns	Increase p< .001
Total	2,490 (100)	2,172 (100)	1,977 (100)	1,718 (100)	2,330 (100)		

Table 4: Where non-HIV-positive men were last tested for HIV

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
General practice	-	-	1029 (52.6)	842 (49.0)	1037 (43.6)	Decrease p< .01	Decrease p< .001
Sexual health clinic/hospital	-	-	892 (45.6)	677 (39.4)	1015 (46.0)	Increase p< .001	ns
At home	-	-	6 (0.3)	7 (0.4)	10 (0.4)	NA	NA
Community-based service	-	-	-	148 (8.6)	169 (7.5)	ns	NA
Somewhere else	-	-	31 (1.6)	44 (2.6)	56 (2.2)	NA	NA
Total	-	-	1,958 (100)	1,718 (100)	2287 (100)		

Note: This table only includes data from men who have ever been tested for HIV. The question about where men were last tested for HIV was included from 2013.

Table 5: Number of HIV tests in the previous 12 months

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
None	-	-	628 (29.8)	511 (27.3)	608 (25.0)	Decrease p< .05	Decrease p< .001
One	-	-	602 (28.6)	532 (28.4)	669 (27.5)	ns	ns
Two	-	-	573 (27.2)	493 (26.3)	629 (25.8)	ns	ns
3 or more	-	-	302 (14.4)	338 (18.0)	530 (21.8)	Increase p< .05	Increase p< .001
Total	-	-	2,105(100)	1,847 (100)	2,436 (100)		

Note: This table only contains data from non-HIV-positive men.

Table 6: HIV test result

	2011 <i>n</i> (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (<i>p</i> -value)
HIV-positive	352 (12.3)	313 (12.5)	267 (11.8)	254 (12.9)	217 (8.5)	Decrease p< .01	Decrease p< .001
HIV-negative	2,438 (85.4)	2,125 (85.1)	1,950 (86.4)	1,697 (85.8)	2,309 (90.4)	Increase p< .001	Increase p< .001
Unknown status	64 (2.2)	59 (2.4)	39 (1.7)	30 (1.5)	29 (1.1)	ns	Decrease p< .001
Total	2,854 (100)	2,497 (100)	2,256 (100)	1,981 (100)	2,555 (100)		

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

Table 7: Use of combination antiretroviral treatment among HIV-positive men at the time of the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
On treatment	270 (80.6)	264 (86.6)	224 (87.8)	218 (89.0)	186 (90.7)	ns	Increase p< .001
Total	335 (100)	305 (100)	255 (100)	245 (100)	205 (100)		

Table 8: Undetectable viral load and CD4 count among HIV-positive men at the time of the survey, by treatment status

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Men using ART							
Undetectable viral load	256 (94.8)	249 (94.3)	199 (88.8)	205 (94.0)	178 (95.7)	ns	ns
CD4 count > 500	-	148 (56.1)	108 (48.2)	126 (57.8)	114 (61.1)	Increase p< .001	ns
Total	270 (100)	264 (100)	224 (100)	218 (100)	186 (100)		
Men not using ART							
Undetectable viral load	13 (20.3)	12 (29.3)	9 (29.0)	9 (36.0)	13 (68.4)	Increase p< .05	Increase p< .001
CD4 count > 500	-	16 (39.0)	11 (35.5)	15 (55.6)	11 (57.9)	ns	ns
Total	64 (100)	41 (100)	31 (100)	25 (100)	19 (100)		

Table 9: Relationships with men at the time of the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
None	446 (14.8)	436 (16.3)	398 (16.6)	364 (17.2)	439 (16.1)	ns	ns
Casual only	740 (24.6)	665 (24.9)	616 (25.7)	545 (25.8)	667 (24.5)	ns	ns
Regular plus casual	897 (29.8)	812 (30.4)	687 (28.6)	626 (29.6)	781 (28.6)	ns	ns
Regular only (monogamous)	926 (30.8)	758 (28.4)	698 (29.1)	577 (27.3)	841 (30.8)	Increase p< .01	ns
Total	3,009 (100)	2,671 (100)	2,399 (100)	2,112 (100)	2,728 (100)		

Note: Reliable data not available for 2010.

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
No agreement about sex within the relationship	743 (34.4)	670 (35.9)	611 (37.0)	637 (44.0)	872 (44.9)	ns	Increase p< .001
No sex at all	71 (3.3)	56 (3.0)	46 (2.8)	62 (4.3)	82 (4.2)	ns	Increase p< .05
No anal intercourse permitted	69 (3.2)	78 (4.2)	45 (2.7)	34 (2.4)	41 (2.1)	ns	Decrease p< .01
Anal intercourse permitted only with a condom	562 (26.0)	460 (24.7)	397 (24.1)	298 (20.6)	338 (17.4)	Decrease p< .05	Decrease p< .001
Anal intercourse permitted without a condom	716 (33.1)	601 (32.2)	551 (33.4)	418 (28.9)	611 (31.4)	ns	ns
Total	2,161 (100)	1,865 (100)	1,650 (100)	1,449 (100)	1,944 (100)		

Table 10: Agreements with regular male partners about sex within the relationship

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

Table 11: Agreements with regular male partners about sex outside the relationship

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
No agreement about casual sex	910 (42.1)	822 (44.1)	748 (45.3)	695 (48.0)	918 (47.2)	ns	Increase p< .001
No sex with casual partners permitted	564 (26.1)	467 (25.0)	406 (24.6)	335 (23.1)	518 (26.7)	Increase p< .05	ns
No anal intercourse with casual partners permitted	61 (2.8)	53 (2.8)	46 (2.8)	38 (2.6)	42 (2.2)	ns	ns
Anal intercourse with casual partners permitted only with a condom	571 (26.4)	476 (25.5)	396 (24.0)	333 (23.0)	413 (21.2)	ns	Decrease p< .001
Anal intercourse with casual partners permitted without a condom	55 (2.5)	47 (2.5)	54 (3.3)	48 (3.3)	53 (2.7)	ns	ns
Total	2,161 (100)	1,865 (100)	1,650 (100)	1,449 (100)			

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

Table 12: Match of HIV status between regular partners

	2011	2012	2013	2014	2015	Change from 2014	Trend over time
	n (%)	n (%)	n (%)	n (%)	n (%)	(p-value)	(p-value)
HIV-positive men							
Seroconcordant	79 (37.8)	95 (49.5)	63 (40.4)	50 (34.7)	60 (40.8)	ns	ns
Serodiscordant	94 (45.0)	77 (40.1)	55 (35.3)	61 (42.4)	47 (32.0)	ns	Decrease p< .05
Serononconcordant	36 (17.2)	20 (10.4)	38 (24.4)	33 (22.9)	40 (27.2)	ns	Increase p< .001
Total	209 (100)	192 (100)	156 (100)	144 (100)	147 (100)		
HIV-negative men							
Seroconcordant	1303 (74.4)	1,119 (76.3)	967 (72.0)	857 (73.1)	1179 (70.9)	ns	Decrease p< .01
Serodiscordant	100 (5.7)	67 (4.6)	67 (5.0)	48 (4.1)	75 (4.5)	ns	ns
Serononconcordant	348 (19.9)	281 (19.2)	309 (23.0)	267 (22.8)	408 (24.6)	ns	Increase p< .001
Total	1,751 (100)	1,467 (100)	1,343 (100)	1172 (100)	1,662 (100)		

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

Table 13: Anal intercourse and condom use with regular partners

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (<i>p</i> -value)
No anal intercourse	494 (22.9)	448 (24.0)	396 (24.0)	336 (23.2)	361 (18.6)	Decrease p< .001	Decrease p< .01
Always uses a condom	602 (27.9)	460 (24.7)	424 (25.7)	360 (24.8)	464 (23.9)	ns	Decrease p< .01
Sometimes does not use a condom	1,065 (49.3)	957 (51.3)	830 (50.3)	753 (52.0)	1119 (57.6)	Increase p< .001	Increase p< .001
Total	2,161 (100)	1,865 (100)	1,650 (100)	1,449 (100)	1,944 (100)		

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

	2011 <i>n</i> (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
HIV-positive men							
Seroconcordant CAIR	49 (23.4)	69 (35.9)	48 (30.8)	37 (25.7)	45 (30.6)	ns	ns
Not concordant CAIR	55 (26.3)	38 (19.8)	33 (21.2)	43 (29.9)	41 (27.9)	ns	ns
No CAIR	105 (50.2)	85 (44.3)	75 (48.1)	64 (44.4)	61 (41.5)	ns	ns
Total	209 (100)	192 (100)	156 (100)	144 (100)	147 (100)		
HIV-negative men							
Seroconcordant CAIR	740 (42.3)	646 (44.0)	565 (42.1)	503 (42.9)	748 (45.0)	ns	Increase p< .001
Not concordant CAIR	160 (9.1)	130 (8.9)	133 (9.9)	120 (10.2)	223 (13.4)	Increase p< .05	Increase p< .001
No CAIR	851 (48.6)	691 (47.1)	645 (48.0)	549 (46.8)	691 (41.6)	Decrease p< .01	Decrease p< .001
Total	1,751 (100)	1,467 (100)	1,343 (100)	1,172 (100)	1,662 (100)		

Table 14: Condomless anal intercourse with regular partners, by match of HIV status

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

Table 15: HIV-negative men who engaged in CAIR and always used risk-reduction strategies with partners who were not concordant

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Took insertive position during CAIR	52 (32.5)	40 (30.8)	36 (27.1)	38 (31.7)	63 (28.3)	ns	ns
Partner withdrew before ejaculation when participant was receptive	46 (28.8)	27 (20.8)	33 (24.8)	32 (26.7)	54 (24.2)	ns	ns
Total (not mutually exclusive)	160	130	133	120	223		

Note: This table only includes data from men who reported having CAIR in the six months prior to the survey.

Table 16: Anal intercourse and condom use with casual partners

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
No anal intercourse	399 (20.0)	346 (19.5)	300 (19.2)	249 (17.7)	339 (19.9)	ns	ns
Always uses a condom	937 (46.9)	823 (46.5)	695 (44.4)	666 (47.3)	749 (44.0)	ns	ns
Sometimes does not use a condom Total	660 (33.1) 1,996 (100)	602 (34.0) 1,771 (100)	570 (36.4) 1,565 (100)	493 (35.0) 1,408 (100)	616 (36.2) 1,704 (100)	ns	Increase p< .05

Note: This table only includes data from men who reported having a casual male partner in the six months prior to the survey.

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
HIV-negative men	462 (29.8)	394 (29.1)	406 (32.7)	348 (31.8)	466 (32.5)	ns	Increase p< .05
Total	1,551 (100)	1,354 (100)	1,240 (100)	1,102 (100)	1,434 (100)		
HIV-positive men	141 (56.2)	154 (69.1)	116 (68.2)	101 (58.7)	105 (71.2)	Increase p< .05	ns
Total	251 (100)	223 (100)	170 (100)	172 (100)	147 (100)		
Untested/unknown status men	57 (29.4)	54 (27.8)	48 (31.0)	41 (31.5)	45 (37.1)	ns	ns
Total	194 (100)	194 (100)	155 (100)	130 (100)	123 (100)		

Note: This table only includes data from men who reported having 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

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (<i>p</i> -value)
HIV-positive men							
Told casual partners	191 (76.1)	182 (81.6)	143 (84.1)	134 (77.9)	114 (77.4)	ns	ns
Told by casual partners	165 (65.7)	155 (69.5)	133 (78.2)	120 (69.8)	105 (71.2)	ns	ns
Total (not mutually exclusive)	251	223	170	173	147		
HIV-negative men							
Told casual partners	820 (52.9)	752 (55.5)	732 (59.0)	649 (59.3)	856 (59.7)	ns	Increase p< .001
Told by casual partners	837 (54.0)	760 (56.1)	733 (59.1)	659 (60.2)	870 (60.7)	ns	Increase p< .001
Total (not mutually exclusive)	1,551	1,354	1,240	1,095	1,434		

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

Increase p< .001

2014 2011 2012 2013 2015 Change from 2014 Trend over time n (%) n (%) n (%) n (%) n (%) (p-value) (p-value) 52 (36.9) 75 (48.7) 54 (46.6) 60 (59.4) 44 (41.4) HIV-positive men who disclosed to all Decrease p< .05 ns Total 141 (100) 154 (100) 116 (100) 101 (100) 105 (100)

162 (39.9)

406(100)

133 (38.8)

343 (100)

216 (46.4)

466 (100)

Increase p< .05

Table 19: Consistent disclosure of HIV status to casual partners among men who engaged in condomless anal intercourse, by HIV status of participants

Note: This table only includes data from men who reported having CAIC in the six months prior to the survey.

HIV-negative men who disclosed to all

Total

168 (36.4)

462 (100)

Table 20: Positioning in condomless anal intercourse with casual male partners, by HIV status of participants

137 (34.8)

394 (100)

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (<i>p</i> -value)
HIV-positive men							
Receptive only CAIC	22 (15.6)	36 (23.4)	28 (24.1)	18 (17.8)	18 (16.4)	ns	ns
Total	141 (100)	154 (100)	116 (100)	101 (100)	105 (100)		
HIV-negative men							
Insertive only CAIC	162 (35.1)	141 (35.8)	138 (34.0)	130 (37.1)	130 (27.9)	Decrease p< .01	Decrease p< .05
Total	462 (100)	394 (100)	406 (100)	350 (100)	466 (100)		

Note: This table only includes data from men who reported having CAIC in the six months prior to the survey.

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
HIV-positive men							
Ensured partners were seroconcordant before CAIC (serosorting)	87 (61.7)	92 (59.7)	68 (58.6)	68 (67.3)	54 (51.0)	Decrease p< .05	ns
Took receptive position during CAIC when partners were not concordant	26 (18.4)	20 (13.0)	22 (19.0)	22 (21.8)	14 (13.5)	ns	ns
Participant withdrew before ejaculation when he was insertive	13 (9.2)	21 (13.6)	15 (12.9)	16 (15.8)	10 (9.6)	ns	ns
Participant ensured he had an undetectable viral load before having sex	-	-	56 (48.3)	78 (77.2)	73 (69.2)	ns	-
Total (not mutually exclusive)	141	154	116	101	105		
HIV-negative men							
Ensured partners were seroconcordant before CAIC (serosorting)	204 (44.2)	186 (47.2)	195 (48.0)	166 (47.4)	255 (54.7)	Increase p< .01	Increase p< .05
Took insertive position during CAIC when partners were not concordant	101 (21.9)	105 (26.7)	88 (21.7)	88 (25.1)	98 (21.0)	ns	ns
Partner withdrew before ejaculation when participant was receptive	75 (16.2)	69 (17.5)	72 (17.7)	63 (18.0)	60 (12.9)	Decrease p< .05	ns
Ensured HIV-positive partner had an undetectable viral load before having sex	-	-	43 (10.6)	33 (9.4)	60 (12.9)	ns	ns
Participant took anti HIV medication before sex	-	-	14 (3.5)	11 (3.1)	15 (3.2)	ns	ns
Participant took anti HIV medication after sex	-	-	19 (4.7)	18 (5.1)	16 (3.4)	ns	ns
Total (not mutually exclusive)	462	394	406	350	466		

Table 21: Men who frequently used risk-reduction strategies when engaging in condomless anal intercourse with casual partners, by HIV status of participants

Note: This table only includes data from men who reported having CAIC in the six months prior to the survey.

	2011 <i>n</i> (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Internet	1,233 (38.6)	1,038 (36.5)	927 (36.4)	742 (33.4)	898 (31.6)	ns	Decrease p< .001
Mobile app e.g., Grindr	730 (22.9)	896 (31.5)	918 (36.1)	931 (41.9)	1308 (46.0)	Increase p< .01	Increase p< .001
Gay bar	968 (30.3)	776 (27.3)	704 (27.7)	615 (27.7)	747 (26.3)	ns	Decrease p< .01
Other bar	-	-	-	-	243 (8.5)	-	-
Dance party	504 (15.8)	421 (14.8)	432 (17.0)	330 (14.9)	360 (12.7)	Decrease p< .05	Decrease p< .01
Beat	413 (12.9)	347 (12.2)	311 (12.2)	263 (11.8)	295 (10.4)	ns	Decrease p< .01
Gay saunas	995 (31.2)	874 (30.7)	770 (30.2)	603 (27.1)	728 (25.6)	ns	Decrease p< .001
Other sex-on-premises venues	474 (14.8)	404 (14.2)	361 (14.2)	297 (13.4)	264 (9.3)	Decrease p< .001	Decrease p< .001
Sex workers	95 (3.0)	93 (3.3)	91 (3.6)	65 (2.9)	81 (2.9)	ns	ns
In other Australian cities	587 (18.4)	490 (17.2)	419 (16.5)	400 (18.0)	499 (17.5)	ns	ns
Elsewhere in Australia	390 (12.2)	341 (12.0)	330 (13.0)	267 (12.0)	340 (12.0)	ns	ns
Private sex parties	210 (6.6)	203 (7.1)	193 (7.6)	142 (6.4)	132 (4.6)	Decrease p< .01	Decrease p< .01
Gym	297 (9.3)	241 (8.5)	210 (8.3)	175 (7.9)	190 (6.7)	ns	Decrease p< .01
Overseas	672 (21.0)	597 (21.0)	533 (20.9)	505 (22.7)	580 (20.4)	Decrease p< .05	ns
Total (not mutually exclusive)	3,194	2,843	2,546	2,222	2,846		

Table 22: Where men met their male sex partners in the six months prior to the survey

Table 23: STI testing among HIV-positive men in the 12 months prior to the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (<i>p</i> -value)
Anal swab	220 (62.5)	190 (60.5)	164 (61.4)	177 (69.1)	156 (71.1)	ns	Increase p< .01
Throat swab	220 (62.5)	199 (63.4)	169 (63.3)	178 (69.5)	150 (68.4)	ns	Increase p< .05
Penile swab	155 (44.0)	139 (44.3)	114 (42.7)	108 (42.2)	94 (42.7)	ns	ns
Urine sample	252 (71.6)	235 (74.8)	198 (74.2)	193 (75.4)	166 (75.7)	ns	ns
Blood test other than for HIV	275 (78.1)	235 (74.8)	193 (72.3)	179 (69.9)	158 (71.1)	ns	Increase p< .05
Blood test for syphilis	280 (79.6)	247 (78.7)	205 (76.8)	196 (76.6)	172 (78.4)	ns	ns
Any STI test (not including blood tests)	269 (76.4)	247 (78.7)	206 (77.2)	206 (80.5)	177 (80.7)	ns	ns
Any STI test (including blood tests)	320 (90.9)	280 (89.2)	232 (86.9)	227 (88.7)	191 (87.2)	ns	ns
Total (not mutually exclusive)	352	314	267	256	219		

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (<i>p</i> -value)
Anal swab	1,184 (48.4)	996 (46.7)	1,001 (51.1)	876 (51.4)	1,209 (52.3)	ns	Increase p< .001
Throat swab	1,245 (50.9))	1,072 (50.2)	1,059 (54.0)	945 (55.5)	1,268 (54.8)	ns	Increase p< .001
Penile swab	941 (38.5)	790 (37.0)	709 (36.2)	563 (33.1)	724 (31.3)	ns	Decrease p< .001
Urine sample	1,441 (58.9)	1,262 (59.1)	1,181 (60.3)	1,066 (62.6)	1,450 (62.7)	ns	Increase p< .001
Blood test other than for HIV	1,318 (53.9)	1,181 (55.3)	1,044 (53.3)	880 (51.7)	1,234 (53.4)	ns	ns
Blood test for syphilis	1,483 (60.7)	1,302 (61.0)	1,208 (61.6)	1,084 (63.7)	1,430 (61.8)	ns	ns
Any STI test (not including blood tests)	1,517 (62.0)	1,313 (61.5)	1,255 (64.0)	1,131 (66.4)	1,522 (65.8)	ns	Increase p<.001
Any STI test (including blood tests)	1,741 (71.2)	1,530 (71.7)	1,412 (72.0)	1,277 (75.0)	1,695 (73.3)	ns	Increase p<.05
Total (not mutually exclusive)	2,445	2,134	1,960	1,703	2,313		

Table 24: STI testing among HIV-negative men in the 12 months prior to the survey

Table 25: Diagnosis with STIs and disclosure to sex partners about the diagnosis in the 12 months prior to the survey

2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
-	331 (11.6)	334 (13.1)	321 (14.5)	399 (14.0)	ns	Increase p< .05
-	2,843 (100)	2,546 (100)	2,222 (100)	2,846 (100)		
	224 (70 7)	225 (70.4)	260 (81.0)	227 (22.0)	20	
-	234 (70.7)	235 (70.4)	200 (01.0)	327 (82.0)	lis	increase p< .001
	2011 n (%) - -	2011 2012 n (%) n (%) - 331 (11.6) - 2,843 (100) - 234 (70.7) - 331 (110)	2011 2012 2013 n(%) n(%) n(%) - 331 (11.6) 334 (13.1) - 2,843 (100) 2,546 (100) - 234 (70.7) 235 (70.4) - 331 (100) 334 (100)	2011 2012 2013 2014 n (%) n (%) n (%) n (%) - 331 (11.6) 334 (13.1) 321 (14.5) - 2,843 (100) 2,546 (100) 2,222 (100) - 234 (70.7) 235 (70.4) 260 (81.0) - 331 (100) 334 (100) 321 (100)	2011 2012 2013 2014 2015 n (%) n (%) n (%) n (%) n (%) n (%) - 331 (11.6) 334 (13.1) 321 (14.5) 399 (14.0) - 2,843 (100) 2,546 (100) 2,222 (100) 2,846 (100) - 234 (70.7) 235 (70.4) 260 (81.0) 327 (82.0) - 331 (100) 334 (100) 321 (100) 399 (100)	2011 n (%) 2012 n (%) 2013 n (%) 2014 n (%) 2015 n (%) Change from 2014 (p-value) - 331 (11.6) 334 (13.1) 321 (14.5) 399 (14.0) ns - 2,843 (100) 2,546 (100) 2,222 (100) 2,846 (100) ns - 234 (70.7) 235 (70.4) 260 (81.0) 327 (82.0) ns - 331 (100) 334 (100) 321 (100) 399 (100)

Note: Questions on STI diagnosis and disclosure were included in the questionnaire from 2012 onwards.

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Marijuana	891 (27.9)	819 (28.8)	775 (30.4)	692 (31.1)	864 (30.4)	ns	Increase p< .01
Amyl	1,291 (40.4)	1,163 (40.9)	1,090 (42.8)	934 (42.0)	1,139 (40.0)	ns	ns
Ecstasy	953 (29.8)	766 (26.9)	734 (28.8)	610 (27.5)	715 (25.1)	ns	Decrease p< .001
Amphetamine (speed)	361 (11.3)	311 (10.9)	270 (10.6)	217 (9.8)	231 (8.1)	Decrease p< .05	Decrease p< .001
Crystal methamphetamine	355 (11.1)	393 (13.8)	354 (13.9)	324 (14.6)	326 (11.5)	Decrease p< .001	ns
Viagra	683 (21.4)	610 (21.5)	579 (22.7)	472 (21.2)	529 (18.6)	Decrease p< .05	Decrease p< .05
Cocaine	659 (21.6)	546 (19.2)	484 (19.0)	492 (22.1)	616 (21.6)	ns	ns
Ketamine (special K)	306 (9.6)	233 (8.2)	218 (8.6)	162 (7.3)	223 (7.8)	ns	Decrease p< .01
GHB	422 (13.2)	330 (11.6)	341 (13.4)	260 (11.7)	302 (10.6)	ns	Decrease p< .01
Heroin	27 (0.9)	24 (0.8)	28 (1.1)	10 (0.5)	18 (0.6)	ns	ns
Steroids	-	-	-	78 (3.5)	82 (2.9)	NA	NA
Other drugs	208 (6.5)	197 (6.9)	172 (6.8)	170 7.7)	209 (7.3)	ns	Increase p< .01
Total (not mutually exclusive)	3,194	2,843	2,546	2,222	2,846		
Number of drugs used							
None	1,246 (39.0)	1,104 (38.8)	968 (38.0)	762 (34.3)	1080 (38.0)	Increase p< .01	Decrease p< .05
One or two drugs	948 (29.7)	863 (30.4)	758 (29.8)	754 (33.9)	932 (32.8)	ns	Increase p< .001
More than two drugs	1,000 (31.3)	876 (30.8)	820 (32.1)	706 (31.8)	834 (29.3)	ns	ns
Total	3,194	2,843	2,546	2,222	2,846		

Table 26: Recreational drug use among all men in the six months prior to the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
Marijuana	145 (41.2)	134 (42.7)	106 (39.7)	106 (41.4)	84 (38.5)	ns	ns
Amyl nitrite (poppers)	184 (52.3)	165 (52.6)	149 (55.8)	134 (52.3)	115 (52.8)	ns	ns
Ecstasy	113 (32.1)	96 (30.6)	81 (30.3)	60 (23.4)	50 (22.9)	ns	Decrease p< .01
Amphetamine (speed)	45 (12.8)	46 (14.7)	30 (11.2)	26 (10.2)	10 (4.6)	Decrease p< .05	Decrease p< .01
Crystal methamphetamine	97 (27.6)	105 (33.4)	90 (33.7)	92 (35.9)	68 (31.2)	ns	ns
Viagra	143 (40.6)	124 (39.5)	105 (39.3)	95 (37.1)	88 (40.4)	ns	ns
Total (not mutually exclusive)	352	314	267	256	219		
Number of drugs used							
None	77 (21.9)	78 (24.8)	59 (22.1)	55 (21.5)	51 (22.9)	ns	ns
One or two drugs	120 (34.1)	88 (28.0)	83 (31.1)	86 (33.6)	73 (33.5)	ns	ns
More than two drugs	155 (44.0)	148 (47.1)	125 (46.8)	115 (44.9)	95 (43.6)	ns	ns
Total	352 (100)	314 (100)	267 (100)	256 (100)	219 (100)		

Table 27: Recreational drug use among HIV-positive men in the six months prior to the survey

Table 28: Recreational drug use among HIV-negative men in the six months prior to the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (<i>p</i> -value)
Marijuana	657 (26.9)	600 (28.1)	604 (30.8)	524 (30.8)	680 (29.4)	ns	Increase p< .05
Amyl nitrite (poppers)	1,025 (41.9)	919 (43.1)	871 (44.4)	735 (43.2)	950 (41.1)	ns	ns
Ecstasy	776 (31.7)	608 (28.5)	607 (31.0)	515 (30.2)	602 (26.0)	Decrease p< .01	Decrease p< .001
Amphetamine (speed)	285 (11.7)	241 (11.3)	220 (11.2)	174 (10.2)	192 (8.3)	Decrease p< .05	Decrease p< .001
Crystal methamphetamine	235 (9.6)	261 (12.2)	238 (12.1)	216 (12.7)	236 (10.2)	Decrease p< .05	ns
Viagra	505 (20.7)	453 (21.2)	435 (22.2)	355 (20.9)	409 (17.7)	Decrease p< .05	Decrease p< .05
Total (not mutually exclusive)	2,445	2,134	1,960	1,703	2,313		
Number of drugs used							
None	921 (37.7)	784 (36.7)	701 (35.8)	551 (32.4)	871 (37.7)	Increase p< .001	ns
One or two drugs	742 (30.4)	685 (32.1)	617 (31.5)	602 (35.4)	771 (33.3)	ns	Increase p< .01
More than two drugs	782 (32.0)	665 (31.2)	642 (32.8)	550 (32.3)	671 (29.0)	Decrease p< .05	ns
Total	2,445 (100)	2,134 (100)	1,960 (100)	1,703 (100)	2,313 (100)		

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
All men	126 (3.9)	134 (4.7)	114 (4.5)	135 (6.1)	130 (4.6)	Decrease p< .05	Decrease p< .05
Total	3,194 (100)	2,843 (100)	2,546 (100)	2,222 (100)	2,846 (100)		
HIV-positive men	50 (14.2)	57 (18.2)	47 (17.6)	55 (21.5)	44 (20.2)	ns	Increase p< .05
Total	352 (100)	314 (100)	267 (100)	256 (100)	219 (100)		
HIV-negative men	65 (2.7)	62 (2.9)	60 (3.1)	71 (4.2)	77 (3.3)	ns	Increase p< .05
Total	2,445 (100)	2,134 (100)	1,960 (100)	1,703 (100)	2,313 (100)		

Table 29: Injecting drug use in the six months prior to the survey, by HIV status of participants

Table 30: Party drug use and group sex among all men in the six months prior to the survey

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (p-value)
Used party drugs for sex	669 (21.0)	578 (20.3)	529 (20.8)	523 (23.5)	547 (19.2)	Decrease p< .001	ns
Engaged in group sex during or after drug use	401 (12.6)	332 (11.7)	310 (12.2)	292 (13.1)	315 (11.1)	Decrease p< .05	ns
Total (not mutually exclusive)	3,194	2,843	2,546	2,222	2,846		

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-value)
Belief that PEP is available now (all men)	1,820 (57.0)	1,655 (58.2)	1,544 (60.6)	1416 (63.7)	1,736 (61.0)	Decrease p< .05	Increase p< .001
Total	3,194 (100)	2,843 (100)	2,546 (100)	2,222 (100)	2,846 (100)		
Belief that PEP is available now (non- HIV-positive men)	1,554 (54.3)	1,399 (55.3)	1,317 (57.8)	1,192 (60.6)	1,551 (59.0)	ns	Increase p<.001
Total	2,842 (100)	2,529 (100)	2,279 (100)	1,966 (100)	2,627 (100)		
Belief that PrEP is available now (all men)	-	-	-	605 (27.2)	1,028 (36.1)	Increase p<.001	NA
Total	-	-	-	2,222 (100)	2,846 (100)		
Belief that PrEP is available now (non- HIV-positive men)	-	-	-	489 (24.9)	906 (34.5)	Increase p<.001	NA
Total	-	-	-	1,966 (100)	2,627 (100)		
Use of PEP by non-HIV-positive men in the six months prior to survey	-	-	73 (3.2)	79 (4.0)	96 (3.7)	ns	NA
Total	-	-	2,279 (100)	1,966 (100)	2,627 (100)		
Use of PrEP by non-HIV-positive men in the six months prior to survey	-	-	28 (1.2)	33 (1.7)	46 (1.8)	ns	NA
Total	-	-	2,279 (100)	1,966 (100)	2,627 (100)		

Table 31: Knowledge and use of pre- and post-exposure prophylaxis

Note: Questions on the use of PEP and PrEP were included from 2013. The question on awareness of PrEP was included from 2014.

Appendix

Sydney Gay Community Periodic Survey 2015

Conducted by





Section B – Your sex partners



This is a survey of sexual practices of men who have had sex with another man in the last five years. This survey is completely anonymous – please do not write your name on the questionnaire.

Your responses are very important – they provide valuable information that assists in HIV health promotion efforts. PLEASE COMPLETE THE SURVEY ONCE ONLY THIS YEAR (including online).

Section A – About you

Page 1

1. How many of your friends are gay or homosexual men? ¹ None ² A few ³ Some ⁴ Most ⁵ A	In this survey we distinguish between REGULAR (boyfriend/lover) and CASUAL partners
2. How much of your free time is spent with gay or homosexual men?	13. Do you currently have sex with casual male partners?
1 → None 2 → A little 3 → Some 4 → A lot 3. Which of the following best describes you: 1 → Male 2 → Trans male 3 → Intersex male	 14. Do you currently have sex with a regular male partner? ¹ □ No ² □ Yes 15. How would you describe your sexual relationship with your
 4. Do you think of yourself as: ¹ Gay/Homosexual ² Bisexual ³ Heterosexual ⁴ Other (please specified) 	current regular male partner? (choose one) We are monogamous – neither of us has casual sex Both my partner and I have casual sex with other men cify)
 5. How old are you? Years 6. Are you of Aboriginal or Torres Strait Islander origin? 	In have casual sex with other men but iny partner does not ⁴ My partner has casual sex with other men but I do not ⁵ I have several regular male partners
¹ No ² Yes	°∐No current regular male partner → Go to Section C→ 16. If you are in a regular relationship with a man, for how long
7. What is your ethnic background? (e.g. Dutch, Greek, Vietnamese, Lebanese)	has it been? ¹ Less than 6 months
 ¹ Anglo-Australian ² Other 8. Where were you born? ¹ Australia ² Overseas 	$^{2}\square$ 6–11 months $^{3}\square$ 1–2 years $^{4}\square$ More than 2 years
9. Where do you live? Postcode OR Suburb/Town	The first second secon
10. Are you: ¹ □Employed full-time ⁴ □A student ² □Employed part-time ⁵ □Unemployed	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
³ On pension/social security ⁶ Other 11. What is your occupation? (e.g. bartender, teacher, welder)	 18. Do you have a clear (spoken) agreement with your regular male partner about sex with casual male partners? ¹ No agreement
12. What is the highest level of education you have completed 1 Up to Year 10 2 Veer 12 / HEC / VCE / OCE / SACE / WACE	 ⁻□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
³ Tertiary diploma or trade certificate / TAFE ⁴ University degree Go to section	Go to section C →

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Gay Community Periodic Survey: Sydney 2015 Peter Hull, Limin Mao, Johann Kolstee, Tim Duck, Garrett Prestage, Iryna Zablotska, John de Wit, Martin Holt

Section C – Sex in the la	ast 6 months	3		Section E – Ca	sual male partne	ers – last 6 months
19. How many different men h months?	nave you had se	ex with in the	last 6	30. Have you had a in the last 6 m	any sex with any cas onths?	sual male partner/s
¹ None ⁴ 6–1	0 men 7	More than 50) men	¹∐Yes ↓		io to section F 🗲
² One ⁵ 11–	20 men					
³ 2–5 men ⁶ 21-5	50 men			following with	n any of your CAS	UAL male partner/s?
20. In the last 6 months how men you met at or through	often have you :	had sex with		Anal sex casual 31. I fucked him wi	partner/s: th a condom.	
Internet			Often ₃□	¹ Never	² Occasionally	′ ³ □Often
Mobile ann e g. Grindr, Scru	ff 1□	2	3	32. He fucked me	vith a condom.	
Gav har	"1	2	3	¹ Never		′ ³ □Often
Other bar	1	2	3	00 I factor d bire and	(h)	to the family second
Dance party	1	2	3			
Gym	1	2	3	Never		
Beat	1	2	3	34. He fucked me v	vithout a condom b	out pulled out before he
Gay sauna	1	2	3			
Other sex venue	1	2	3	25 I fucked bim wi		
Sex workers	1	2	3			
Private sex parties	1	2	3			
In other Australian cities	1	2	3	36. He fucked me v	vithout a condom a	and came inside.
Elsewhere in Australia	1	2	3	' L Never	² Occasionally	∕ [°] ∐Often
Overseas	1	2	3	HIV disclosure of 37. How many of years	casual partner/s	did you tell your HIV status
21. In the last 6 months, how involving at least two othe	often did you h er men?	ave group sex	K	before sex? ¹⊡None	² Some	
¹ Every week	³ Once / A fe	w times		38 How many of y		told you their HIV status
² Monthly	Never			before sex?		iola you then the status
22 In the last 6 menths how	often heve ver	hoop noid fo	-	¹ None	² Some	³ All
			I SEX?			
	Once / A fe	w times				
Section D – Regular ma	le partners -	- last 6 mon	ths			
23. Have you had sex with reg	gular male part	ner/s				
In the last 6 months? ¹ Yes \checkmark ² No	→					
In the last 6 MONTHS	how often h	ave vou done	the			
following with any of ye	our REGULA	R male partr	ner/s?			
Anal sex regular partner/	e.			Survey	continues o	n next page
24. I fucked him with a condo	om.					
¹ Never ² Occ	casionally	³ Often				
25. He fucked me with a cond	dom.	'				
¹ Never ² Occ	casionally	⁰□Often				
26. I fucked him without a co ¹ □Never ² □Oco	ndom but pulle casionally	ed out before I ³ ⊡Often	came.			
27. He fucked me without a c came.	ondom but pu	lled out before	he			
¹ Never ² Occ	casionally ³	Often				
28. I fucked him without a co	ndom and carr	ne inside.				
	asionally	³ Often				
29. He fucked me without a c	ondom and ca	me inside				
	casionally	³ Often				
Page 2	asionally					
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The following questions are for men who have ha	d any anal o	sex without a cond	om		
with casual male partner(s) in the last 6 months.					
· · · · · · · · · · · · · · · · · · ·					
39. 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 before sex	¹ Never	² Occasionally	³ Often	⁴ Always	
I took anti-HIV medication after 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	
			C		
Section F – HIV testing and HIV status	👔 lf you	are HIV-positive pl	ease complet		
40. Have you ever had an HIV test?	the ne	ext five questions. If	not, go to sec	ction G 🗲	
¹ No ² Yes	47 When w	vere vou first diagnose	nositi	ve?	
41. When were you last tested for HIV?	47. When w		a as i iiv-positi	ve:	
¹ Never tested 5 7–12 months ago	Year 🗆				
² Less than a week ago 6 1–2 years ago	48. In the la	ast 12 months, how ma	any clinical app	ointments about	
$^{3}\Box$ 1–4 weeks ago $^{7}\Box$ 2–4 years ago	managi	ng HIV have you atten	ided?		
4 1–6 months ago 8 More than 4 years ago	'∐Non	e ¹∐1-2	1_3-4	¹ 5 or more	
42. Based on the results of your HIV tests,	49. Are you	on combination antire	etroviral therapy	?	
	²∟Yes	'L	∐No		
	50. What w	as your last viral load	test result?		
	¹□Und	etectable			
43. Where did you have your last HIV test?	² Dete	ectable			
¹ UNo test/don't know ⁵ UPrivate home	³ Don	't know/unsure			
² UGP ⁶ Community-based service	51 What w	as your last CD4 cour	+2		
^o Sexual health clinic e.g. a[IES]			4 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
	² 201.	-350	500	lunsure	
44. How many HIV tests have you had in the last 12 months?	³ 351-	-500		anouro	
¹ None (no tests) 4^{4} 3-4 tests			G	io to section G 🗲	
² One test ⁵ 5 or more tests					
³ Two tests					
45. If you have a regular partner, do you know the result of his HIV test?					
¹ Positive 3 I don't know/He basn't bad a test					
² Negative ⁴ No regular partner				k	
46. If your regular partner is HIV positive, what was his last viral					
load test result?		Survey conclud	es on next	page	
¹ Undetectable ³ UDon't know/unsure					
² □Detectable [*] □No HIV-positive partner					
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Section G – STI testing	Section I – Drug use			
52. Which of these sexual health tests have you had in the last 12	61. How often have you used these drugs in the last 6 months?			
months?	Never Once/ At least Every			
None Once I wice 3 or more $1 \square 2 \square 3 \square 4 \square$	Amyl/poppers $1 2^3 4^4$			
Throat swab $1 \square 2 \square 3 \square 4 \square$	Marijuana ¹ ² ³ ⁴			
$\frac{1}{1} = \frac{2}{3} = \frac{3}{4}$	Viana/Cialis etc 1 2 3 4			
$1 \qquad 2 \qquad 3 \qquad 4 \qquad \qquad$	Fostasy $1 2 3 4$			
Pland test for μ_{V} $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{4}$	Speed $1 2 3 4$			
	Cocaine $1 \qquad 2 \qquad 3 \qquad 4$			
syphilis	Crystal meth 1 2 3 4			
	$\begin{array}{c} \text{GHB} & 1 & 2 & 3 & 4 \\ \hline \end{array}$			
53. Have you ever been tested for hepatitis C?				
¹ Yes ² No ³ Don't know				
	Steroids 1 2 3 4			
	Any other drug 1 2 3 4			
55. Were you diagnosed with any sexually transmitted infection (other than HIV) in the last 12 months?	62. In the last 6 months, how often have you had more than four			
¹ Yes ² No	1 Every week 3 Once or twice			
56. If you were diagnosed with a sexually transmitted infection in	2 At least monthly 4 Never			
the last 12 months, how many of your sex partners did you tell				
°∟Not been diagnosed with an STI in the last 12 months	² LIAt least monthly ³ LINever			
Section H – Medication to prevent HIV	64. Have you ever injected drugs?			
	¹ Yes ² No			
57. What do you know about post-exposure prophylaxis (PEP)? <i>PEP is a month-long course of anti-HIV medication prescribed after an exposure to HIV.</i>	65. In the last 6 months, how often have you used party drugs for the purpose of sex?			
¹ It's readily available now	¹ Every week ³ Once or twice			
2 It will be available in the future	² At least monthly ⁴ Never			
$^{3}\Box$ l've never heard about it	66 In the last 6 months, how often have you had aroun sex after			
59 What do you know about and experience prophyloxic (BrED)?	or while using party drugs?			
<i>PrEP is anti-HIV medication you take regularly to protect</i>	¹ Every week ³ Once or twice			
yourself from HIV.	$^{2}\Box$ At least monthly $^{4}\Box$ Never			
¹ It's readily available now				
² It will be available in the future				
°∐l've never heard about it	The survey concludes here.			
If you are HIV-positive you can skip the next two				
questions and go to section I 7	Thank you for your time.			
59. In the last 6 months, did you take a prescribed course of PEP because you were exposed to HIV?	As this survey is anonymous, feedback cannot be provided directly. Please check the CSRH			
1No	and ACON websites for the results of this survey.			
² Yes, once	https://csrh.arts.unsw.edu.au			
³ Yes, more than once	http://www.acon.org.au			
60. In the last 6 months, did you take anti-HIV medication regularly to protect yourself from HIV (PrEP)?				
¹ No				
² Yes, I was prescribed anti-HIV medication to take every				
day ³ ⊡Yes. I took anti-HIV medication that was not prescribed				
Go to section I 7				
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