

Gay Community Periodic Survey: Sydney 2015

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Gay Community Periodic Survey Sydney 2015

Never Stand Still

Arts & Social Sciences

Centre for Social Research in Health

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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-serononcordant 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

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.

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. The proportion of men receiving 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).

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 HIV-positive 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 post-exposure 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 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-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 (<i>p</i> -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 (<i>p</i> -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 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-value)	Trend over time (p-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 (<i>p</i> -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.

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

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -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)		

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 (<i>p</i> -value)	Trend over time (<i>p</i> -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 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (<i>p</i> -value)	Trend over time (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 (p-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.

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

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-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)		

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.

Table 17: Any condomless anal intercourse with 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 (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	2012	2013	2014	2015	Change from 2014	Trend over time
	n (%)	(p-value)	(p-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.

Table 19: Consistent disclosure of HIV status to casual partners among men who engaged in condomless anal intercourse, 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 (p-value)
HIV-positive men who disclosed to all	52 (36.9)	75 (48.7)	54 (46.6)	60 (59.4)	44 (41.4)	Decrease p< .05	ns
Total	141 (100)	154 (100)	116 (100)	101 (100)	105 (100)		
HIV-negative men who disclosed to all	168 (36.4)	137 (34.8)	162 (39.9)	133 (38.8)	216 (46.4)	Increase p< .05	Increase p< .001
Total	462 (100)	394 (100)	406(100)	343 (100)	466 (100)		

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

Table 20: Positioning in condomless anal intercourse with casual male 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							
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							
nsertive 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.

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

	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	Change from 2014 (p-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		

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

Table 22: Where men met their male sex partners 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)
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 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 (p-value)	Trend over time (p-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		

Table 24: STI testing among HIV-negative 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 (p-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 lests)	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 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 (<i>p</i> -value)	Trend over time (p-value)
Diagnosed with any STI	-	331 (11.6)	334 (13.1)	321 (14.5)	399 (14.0)	ns	Increase p< .05
Total	-	2,843 (100)	2,546 (100)	2,222 (100)	2,846 (100)		
Disclosed STI diagnosis to any		224 (70.7)	225 (70.4)	260 (94.0)	227 (92.0)		Increase no 001
sex partner	-	234 (70.7)	235 (70.4)	260 (81.0)	327 (82.0)	ns	Increase p< .001
Total	-	331 (100)	334 (100)	321 (100)	399 (100)		

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

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 (<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 27: Recreational drug use among HIV-positive 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 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 (p-value)	Trend over time (p-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)	ns	Decrease p< .05
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)		

Table 29: Injecting drug use in the six months prior to the survey, 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 (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 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 (p-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		

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

	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)		

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











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).

Castian A About you	Castian B. Vous any northern
Section A – About you	Section B – Your sex partners
How many of your friends are gay or homosexual men? ¹□None ²□A few ³□Some ⁴□Most ⁵□All	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? 1 None 2 A little 3 Some 4 A lot	13. Do you currently have sex with casual male partners? ¹ □No ² □Yes
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
4. Do you think of yourself as:	15. How would you describe your sexual relationship with your current regular male partner? (choose one)
¹ ☐ Gay/Homosexual ² ☐ Bisexual ³ ☐ Heterosexual	¹☐ We are monogamous – neither of us has casual sex
⁴ Other (please specify)	² Both my partner and I have casual sex with other men
	³ □I have casual sex with other men but my partner does
5. How old are you?	⁴ My partner has casual sex with other men but I do not
Years	⁵ □I have several regular male partners
 Are you of Aboriginal or Torres Strait Islander origin? ¹□No ²□Yes 	⁶ No current regular male partner → Go to Section C→
7. What is your ethnic background? (e.g. Dutch, Greek, Vietnamese, Lebanese)	16. If you are in a regular relationship with a man, for how long has it been?¹□Less than 6 months
¹ Anglo-Australian ² Other	² □6–11 months
	□6-11 months 3 □ 1-2 years
8. Where were you born?	⁴ ☐ More than 2 years
¹ ☐ Australia ² ☐Overseas	⁵ ☐ Not in a regular relationship with a man ☐ Go to C→
9. Where do you live?	
	17. Do you have a clear (spoken) agreement with your regular male partner about sex within your relationship?
Postcode	¹□No agreement
Suburb/Town	² Agreement: No sex at all
10. Are you:	³☐Agreement: No anal sex at all
¹□Employed full-time ⁴ □A student	⁴ ☐Agreement: All anal sex is with a condom
² ☐Employed part-time ⁵ ☐Unemployed	⁵ ☐Agreement: Anal sex can be without a condom
³ ☐ On pension/social security ⁶ ☐ Other	18. Do you have a clear (spoken) agreement with your regular male partner about sex with casual male partners?
11. What is your occupation? (e.g. bartender, teacher, welder)	¹ ☐No agreement
(specify)	² ☐ Agreement: No sex at all
12. What is the highest level of education you have completed?	³ ☐ Agreement: No anal sex at all
¹ □ Up to Year 10	⁴ ☐ Agreement: All anal sex is with a condom
² ☐Year 12 / HSC / VCE / QCE / SACE / WACE	⁵ ☐ Agreement: Anal sex can be without a condom
³☐Tertiary diploma or trade certificate / TAFE	Go to section C →
4 University degree Go to section B ₹	
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Gay Community Periodic Survey: Sydney 2015

Section C - Sex	in the last 6 mo	onths		Section E - C	asual male partne	ers – last 6 months
19. How many different months?			ast 6	in the last 6 r	•	
¹□None	⁴ □6–10 men	⁷ ☐ More than 50	men	¹□Yes ↓	² □No → G	o to section F 🗪
² □One	⁵ □11–20 men				C MONTHS have aff	
³	⁶ □21-50 men			following w	ith any of your CAS	en have you done the UAL male partner/s?
20. In the last 6 mon men you met at o	r through:			Anal sex casua		
Internet	Nev		Often 3	¹□Never	² Occasionally	³ □Often
Mobile app e.g. Gri	_		3	32. He fucked me	with a condom.	
Gay bar	1	: =	3	¹□Never	² Occasionally	³ □Often
Other bar	1	2	3	33 I fucked him w	vithout a condom but	pulled out before I came.
Dance party	1	2	3		² Occasionally	•
Gym	1	2	3			
Beat	1	2	3	came.	without a condom b	ut pulled out before he
Gay sauna	1	2	3	¹□Never	² Occasionally	³ □Often
Other sex venue	1	_	3		vithout a condom and	
Sex workers	1	: =	3	¹ Never	² Occasionally	
Private sex parties	1		3		without a condom a	
In other Australian	_		3	¹□Never	² Occasionally	
Elsewhere in Austra			3			LiOπen
Overseas	1	2	3		casual partner/s	lid you tell your HIV status
21. In the last 6 mon		you have group sex		before sex?	your casual partifers t	nd you ten your inv status
involving at least				¹□None	² Some	³□AII
¹∐Every week		A few times			your casual partners t	old you their HIV status
² Monthly	⁴ □Never			before sex?		
22. In the last 6 mon	ths, how often hav	e you been paid for	sex?	¹∐None	²∐Some	³∐AII
¹□Every week	³□Once	A few times				
² ☐Monthly	⁴ □Never					
Section D – Reg			ths			
23. Have you had set in the last 6 mor	•	e partner/s				
¹□Yes ↓	² □No →					
		en have you done				
following with	any of your REG	JLAR male partn	ier/s?	C		
Anal sex regular	partner/s:			Survey	continues or	n next page
24. I fucked him with	a condom.					
¹□Never	² Occasionally	³ ☐Often				
25. He fucked me wit	th a condom.					
¹□Never	² Occasionally	³□Often				
26. I fucked him with		·	came.			
¹□Never	² Occasionally	³□Often				
27. He fucked me with came.	thout a condom b	ut pulled out before	he			
¹□Never	² Occasionally	³ □Often				
28. I fucked him with	out a condom and	I came inside.				
¹□Never	² Occasionally	³□Often				
29. He fucked me wit	thout a condom a	nd came inside.				
¹□Never	² Occasionally	³□Often				
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The following questions are for men who have had $\underline{any\ anal\ sex\ without\ a\ condom}$ 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, ${f go}$ to section ${f F}$ ${f \ell}$

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 o to section F 	
				o to section i	
Section F – HIV testing and HIV status 40. Have you ever had an HIV test?	If you a	are HIV-positive pl xt five questions. If	ease completenot, go to sec	e tion G →	
¹□No ²□Yes	47 Whon w	ara vau firet diagnasa	d as UIV positiv	102	
41. When were you last tested for HIV?	47. When were you first diagnosed as HIV-positive?				
¹ Never tested ⁵ 7−12 months ago	Year ∟				
² ☐Less than a week ago ⁶ ☐1–2 years ago	48. In the las	st 12 months, how ma g HIV have you atten	any clinical appo	ointments about	
$^3\Box$ 1–4 weeks ago $^7\Box$ 2–4 years ago $^4\Box$ 1–6 months ago $^8\Box$ More than 4 years ago	¹□None		¹ □3-4	¹□5 or more	
□ 1–6 months ago □ more than 4 years ago					
42. Based on the results of your HIV tests, what is your HIV status?	49. Are you ² ☐ Yes	on combination antire	troviral therapy ⊒No	?	
¹ □No test/Don't know ³ □Positive ² □Negative	50. What was your last viral load test result?				
43. Where did you have your last HIV test?	¹☐Undetectable				
¹☐No test/don't know 5☐Private home	² □Detectable ³ □Don't know/unsure				
² ☐GP ⁶ ☐Community-based service	°∟Don't	know/unsure			
³☐Sexual health clinic e.g. a[TEST]		s your last CD4 coun			
⁴ ☐Hospital ⁷ ☐Somewhere else	1 ≤200		¹ □>500		
44. How many HIV tests have you had in the last 12 months?	²□201-3 ³□351-5		□Don't know	unsure	
¹□None (no tests) ⁴□3-4 tests	ا ده	500	G	o 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 hasn't had a test					
² Negative ⁴ No regular partner					
46. If your regular partner is HIV positive, what was his last viral load test result?		Survoy conduct	00 00 00	naga	
¹□Undetectable ³□Don't know/unsure		Survey conclud	es on next	page	
² □ Detectable ⁴ □ No HIV-positive partner					
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ection 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 Twice 3 or more Anal swah 1 2 3 4 4	twice monthly week			
1 2 3 4				
1 2 3 4	· · · · · · · · · · · · · · · · · · ·			
	Ecstasy			
Disease test for				
syphilis 1 2 3 4				
Other blood test	, — — — — —			
E2 Hove you over been tested for benefitie C2	GHB			
53. Have you ever been tested for hepatitis C? ¹□ Yes ²□ No ³□ Don't know	Ketamine 1 2 3 4 4 (special K)			
¹ Yes ² No ³ Don't know	Heroin 1 2 3 4			
54. What is your hepatitis C status?	Steroids 1 2 3 4			
¹ Negative ² Positive ³ Don't know				
· ·	Any other drug $1 \square 2 \square 3 \square 4 \square$			
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 for				
¹□Yes ²□No	alcoholic drinks on one occasion?			
□ res □ 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 about your diagnosis?	63. How often have you injected drugs in the last 6 months?			
	¹ ∐Every week ³ ∐Once or twice ² □At least monthly ⁴ □Never			
⁵ Not been diagnosed with an STI in the last 12 months Go to section H ✓	LIAt least monthly Linever			
Section H – Medication to prevent HIV	64. Have you ever injected drugs?			
Section H – Medication to prevent hiv	¹ ☐Yes ² ☐No			
57. 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.	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□I've never heard about it	· ·			
En ve never riedia about it	66. In the last 6 months , how often have you had group sex after			
58. What do you know about pre-exposure prophylaxis (PrEP)?	or while using party drugs?			
PrEP is anti-HIV medication you take regularly to protect vourself from HIV.	¹ □Every week ³ □Once or twice ² □At least monthly ⁴ □Never			
¹□lt's readily available now	LIAt least monthly Linever			
² ☐ It will be available in the future				
³□I've never heard about it	The comment concludes have			
	The survey concludes here.			
If you are HIV-positive you can skip the next two				
questions and go to section I 🛪	Thank you for your time.			
59. In the last 6 months, did you take a prescribed course of PEP	As this survey is anonymous, feedback cannot			
because you were exposed to HIV? ¹ □No	be provided directly. Please check the CSRH 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 [2]				

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