Sydney Gay Community Periodic Survey: February 1996 to February 2006

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February 1996 to February 2006

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1 About the study

The Sydney Gay Community Periodic Survey is a biannual cross-sectional survey of gay and homosexually active men recruited through a range of sites in Sydney. The first survey in this series was conducted in February 1996. The major aim of the survey is to provide data on sexual practices related to the transmission of HIV and other sexually transmissible infections (STIs) among gay men. Since the surveys began, the same recruitment strategies and similar questionnaires have been used, which allows an examination of trends and changes in these practices over time.

The survey was conducted using a short, self-administered questionnaire that takes about 10 minutes to complete (see Appendix 1). Questions solicited information on sexual identification, types of sexual relationships and number of partners, anal and oral intercourse, unprotected anal intercourse (UAI), testing for HIV and STIs, HIV status, recreational drug use and demographic characteristics. To compare gay men's sexual practices across different states and territories of Australia, similar gay community periodic surveys have been carried out regularly in other capital cities using questionnaires designed to collect comparable data.

The project has been funded by the AIDS/Infectious Diseases Branch of the NSW Department of Health. The survey was implemented in association with the AIDS Council of New South Wales and People Living with HIV/AIDS (NSW). The most recent Sydney Gay Community Periodic Survey, the twenty-first carried out in Sydney and the subject of this report, was conducted in February 2006.

Study design

As in the case of previous gay community periodic surveys, this study employed the time–location sampling frame, which is often used to enrol hard-to-reach populations. Men who have sex with men (MSM) were recruited at certain types of locations and at times when they were most likely to be attending them. These locations included gay social venues, gay sex-on-premises venues, gay men's clinics and Gay and Lesbian Mardi Gras Fair Day. This survey methodology produces convenience samples that may not be able to be generalised to the whole population of MSM, but are still informative for the purposes of policy making and designing interventions.

Sample

In February 2006, men were recruited at fourteen sites—seven gay social venues, four gay sex-on-premises venues, two gay men's clinics and the Gay and Lesbian Mardi Gras Fair Day. These were the same data collection sites as in February 2005, except for one sexual health clinic which had yielded an extremely low response rate in 2005 and was not used for recruitment in February 2006. Exclusion of this site did not influence the results of the February 2006 survey.

The February 2006 sample consisted of 2594 men and was the largest sample ever recruited since the survey started in 1996. As usual, because it recruited at Fair Day, the February 2006 survey recruited more participants than the previous August survey. Compared with the February 2005 survey, the February 2006 survey recruited a slightly higher proportion of men at the gay social venues and the lowest proportion of men at the gay sex-on-premises venues. Sample sizes of men recruited from all sites are presented in Table 1.

Table 1: Sample sizes across time for men recruited from all sites—gay social venues, gay sex-on-premises venues, gay men's clinics and Mardi Gras Fair Day

Year	Month	Gay social venues		Gay sex-on-premises venues		Gay men's clinics		Fair Day		Total	
		n	**%**	***n***	**%**	***n***	**%**	***n***	%	***N***	%
1996	**February**	131	8.1	206	12.8	241	15.0	1034	64.1	1612	100
	August	162	25.8	361	57.6	104	16.6			627	100
1997	**February**	104	6.5	221	13.7	196	12.2	1088	67.6	1609	100
	August	251	24.6	386	37.8	384	37.6			1021	100
1998	**February**	311	14.1	371	16.9	361	16.4	1156	52.6	2199	100
	August	201	24.0	318	38.0	317	37.9			836	100
1999	**February**	299	12.5	351	14.6	301	12.5	1450	60.4	2401	100
	August	328	34.8	305	32.4	309	32.8			942	100
2000	**February**	285	14.1	229	11.4	339	16.8	1162	57.7	2015	100
	August	321	35.6	240	26.6	340	37.7			901	100
2001	**February**	270	12.7	233	10.9	305	14.3	1326	62.1	2134	100
	August	353	48.5	215	29.5	160	22.0			728	100
2002	**February**	232	11.3	231	11.3	155	7.6	1432	69.9	2050	100
	August	358	42.9	313	37.5	163	19.5			834	100
2003	**February**	302	16.3	304	16.4	182	9.8	1066	57.5	1854	100
	August	340	49.5	211	30.7	136	19.8			687	100
2004	**February**	383	20.1	213	11.2	171	9.0	1141	59.8	1908	100
	August	517	56.6.	209	22.9	187	20.5			913	100
2005	**February**	458	20.5	244	10.9	205	9.2	1323	59.3	2230	100
	August	623	52.7	277	23.4	283	23.9			1183	100
2006	**February**	517	19.9	206	7.9	314	12.1	1576	60.1	2594	100

Response rate

In February 2006 the overall participation rate was similar to those of 2005 and previous years. However, in comparison with the previous two years, refusal rates had declined at Fair Day and increased at gay social venues, gay sex-on-premises venues and gay men's clinics.

Table 2: Survey refusal rate, by type of venue (%)

	Gay social venues	Gay sex-on-premises venues	Gay men's clinics	Fair Day	Overall participation rate
1996	7.0	18.5	23.5	18.0	83.3
1997	10.5	28.5	12.5	29.0	79.9
1998	16.5	28.0	11.5	25.0	79.6
1999	22.0	30.0	12.0	33.0	75.8
2000	17.5	31.5	14.5	35.0	75.4
2001	20.5	40.0	18.5	31.0	72.5
2002	32.0	39.5	25.0	34.0	67.4
2003	33.3	34.9	32.6	30.5	67.2
2004	27.3	29.9	19.5	34.4	72.2
2005	20.7	23.7	18.0	35.5	75.8
Feb 2006	31.4	36.8	22.4	22.7	73.7

Reporting

This report compares the results of the most recent February 2006 survey with data from the 20 previous surveys. Except where indicated, data are provided for all sites. The data from the February and August surveys each year are combined so that yearly trends can be analysed without the fluctuation in results that occurs when data are collected twice yearly and a large number of men are recruited at Fair Day in February. Men recruited at Fair Day tend to differ in a number of ways from those recruited at gay social venues, sex-on-premises venues and gay men's clinics. Given that this document is released prior to the survey in August 2006, the results for 2006 reflect February 2006 data only rather than annualised data for the year.

2 Demographic profile

Residential location

In February 2006 the Sydney Gay Community Periodic Survey recruited 2594 men who attended gay venues or Fair Day in Sydney. Their residential locations are presented in Figure 1 below. The majority of men were residents of metropolitan Sydney (Sydney City and suburbs), 3% came from Newcastle or Wollongong, 1.1% were residents of rural New South Wales and 13.2% came from other states or overseas. This sample distribution by residential location did not differ from that observed in previous years.

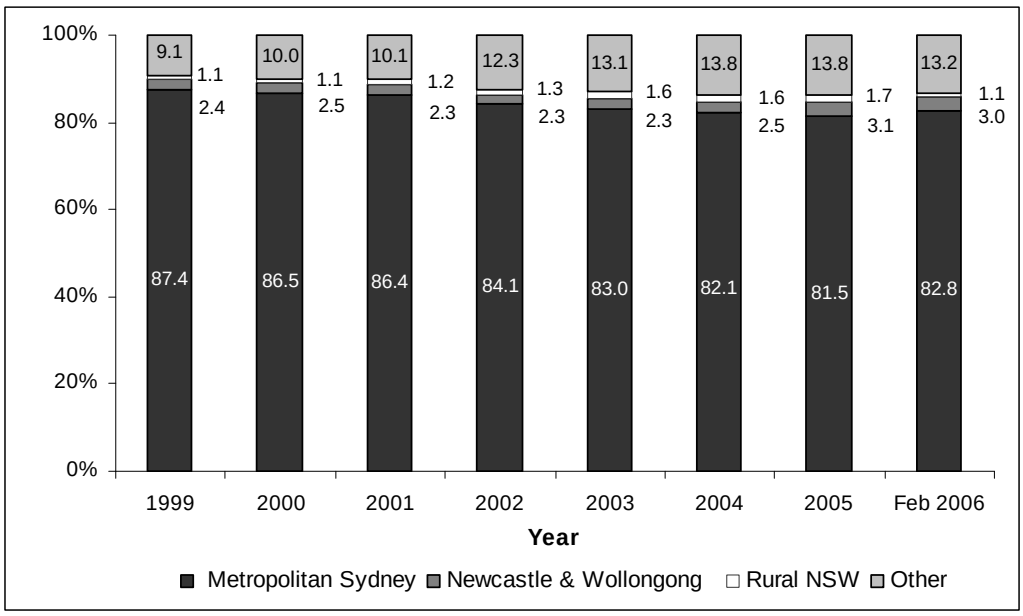

Figure 1: Residential location

Age

In the February 2006 survey, 28% of the respondents were aged under 30, about 38% were between 30 and 39 years old, 24% were between 40 and 49 years old and about 10% were 50 or older (see Figure 2). While the age distribution of the sample was similar to that observed in all previous years of the Sydney survey, it was substantially different from that observed in gay community periodic surveys in other states. For example, 48% of the men surveyed in Queensland in June 2006 (Zablotska et al., forthcoming) and 38% of the men surveyed in Melbourne in February 2006 (Hull et al., 2006) were under the age of 30. The differences observed in the age distribution of the samples from different states can be explained by the convenience time–location sampling frame used in the surveys.

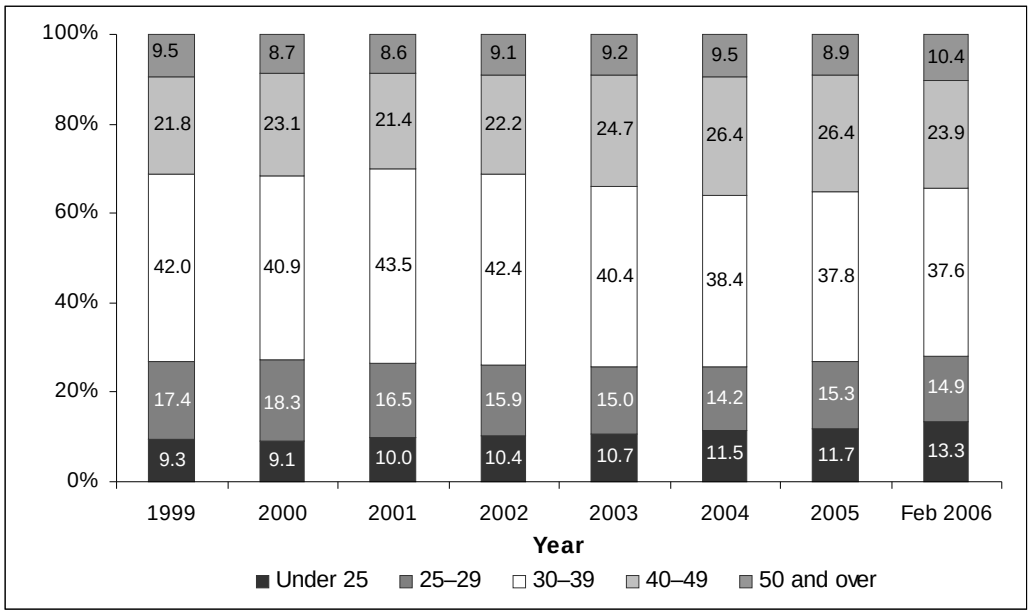

Figure 2: Age

Ethnicity

The February 2006 Sydney Gay Community Periodic Survey was similar to previous Sydney surveys with respect to the ethnic distribution of its participants (see Figure 3). About 70% of the men identified as Anglo-Australian, 3% were of Aboriginal or Torres Strait Islander background, 14% were of European background and a further 14% were of 'other' ethnic background.

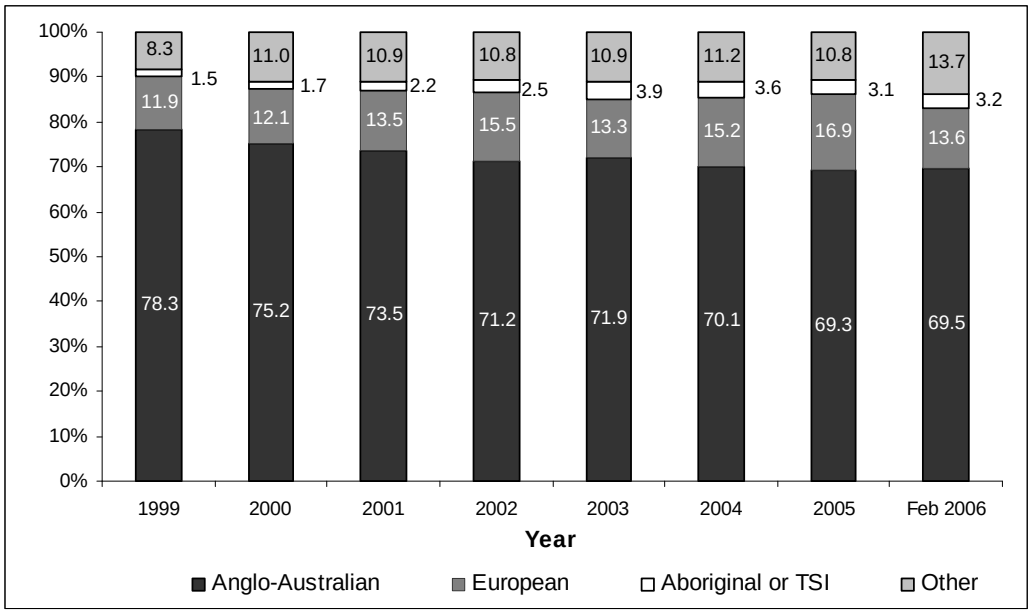

Figure 3: Ethnicity

Education

As in previous Sydney Gay Community Periodic Surveys, the February 2006 sample was relatively well educated. About 76% of the men had received some post-secondary

education, with 57% of these having a university degree (see Figure 5). Over time there has been a steady increase in the proportion of men with a university degree or trade diploma recruited to the Sydney Gay Community Periodic Survey (χ^2 test for trend, $p < .01$).

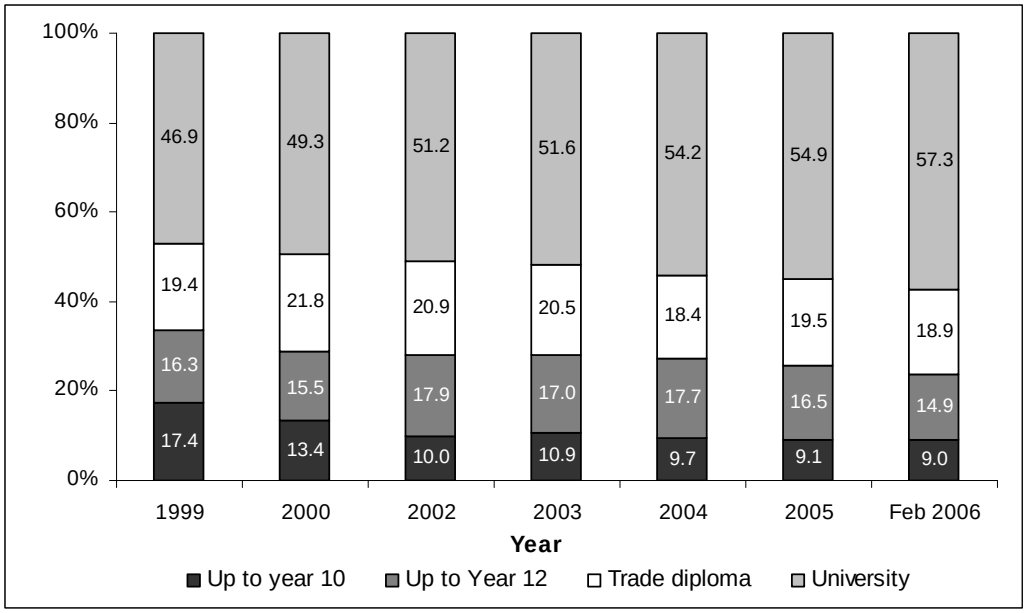

Figure 4: Education

Employment and occupation

As in all previous surveys, a larger proportion of men in the sample than in the general population were unemployed (15.9% vs. 5.5%) (Australian Bureau of Statistics, 2006). This was partly due to HIV-positive men, about 25% of whom were unemployed and received some form of social security support. The number of men in full-time employment was 745 and this was a similar proportion to that in previous surveys (see Figure 5).

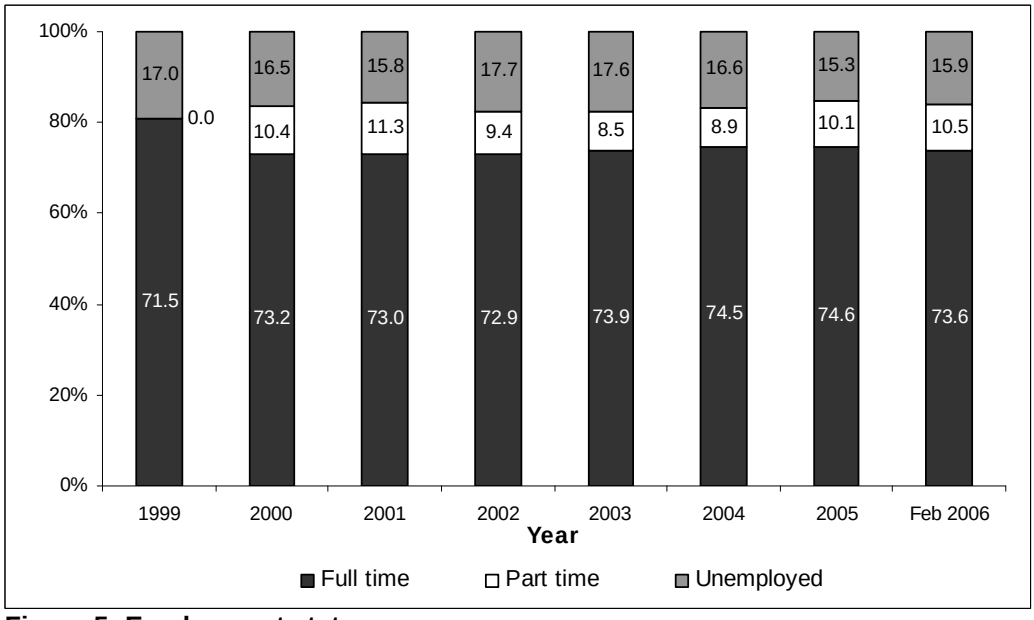

Figure 5: Employment status

3 Sexual practices between men

Sexual relationships with men

In February 2006, 11% of the men reported that they had not had sex with another man in the six months prior to the survey. Sixty-two per cent of the men had had sex with regular partners (20% had had regular partners only and 42% had had both regular and casual partners) and 38% had had sex with casual partners only (see Figure 6). This distribution was different from that observed in the previous year; the number of men who had had sex with casual partners in the six months prior to the survey increased from 57% in 2005 to 70% in February 2006 ($p < .01$). While the proportion of men who did not have sex with another man in the six months prior to the survey increased in 2004 and 2005 (χ^2 test for trend, $p < .01$), this trend was reversed in 2006, with the proportion dropping to about 11%.

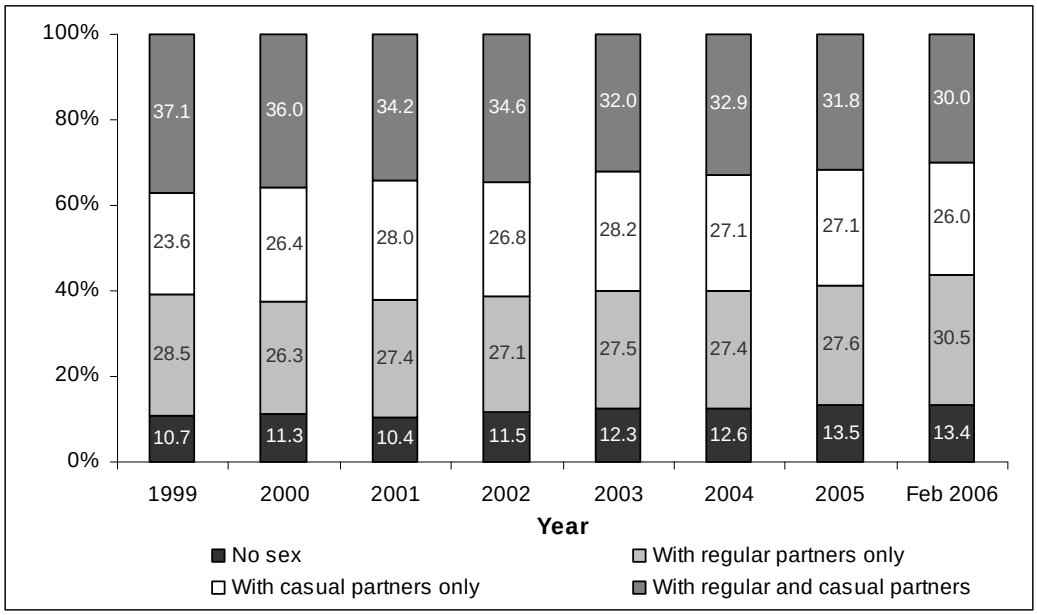

Figure 6: Current relationships with men

Relationships with regular male partners

In February 2006 approximately 54% of the men recruited at all sites reported being in a regular relationship at the time of completing the survey. Of the men recruited from gay venues and gay men's clinics, 48.1% reported being in a regular relationship. These proportions have not changed since 2001. Figure 7 below is based solely on men with regular partners to give reliable trends over time.

Unprotected anal intercourse with regular partners (UAIR)

In February 2006, of the men who had had sex with regular partners in the six months prior to the survey, 56% of men recruited at all sites and 55% of men recruited at gay venues and gay men's clinics reported having engaged in unprotected anal intercourse with regular partners (UAIR) during this six-month period (see Figure 7). Compared with the previous year, the February 2006 survey showed a decrease in UAIR in the six months prior to the survey regardless of where the men were recruited. However, this change was not statistically significant.

From 1996 to 2005 there was an evident upward trend in UAIR among men recruited at all sites (χ^2 test for trend, $p < .001$). However, the increase since 2001 (χ^2 test for trend, $p < .05$) has not been as great as that reported before 2001.

Among the men recruited at gay venues and gay men's clinics, there has been a significant trend increase since 1996 in the proportion of men engaging in UAIR (χ^2 test for trend, $p < .001$). However, there has been no significant change over the past five years (indicating that incidence of UAIR has possibly plateaued).

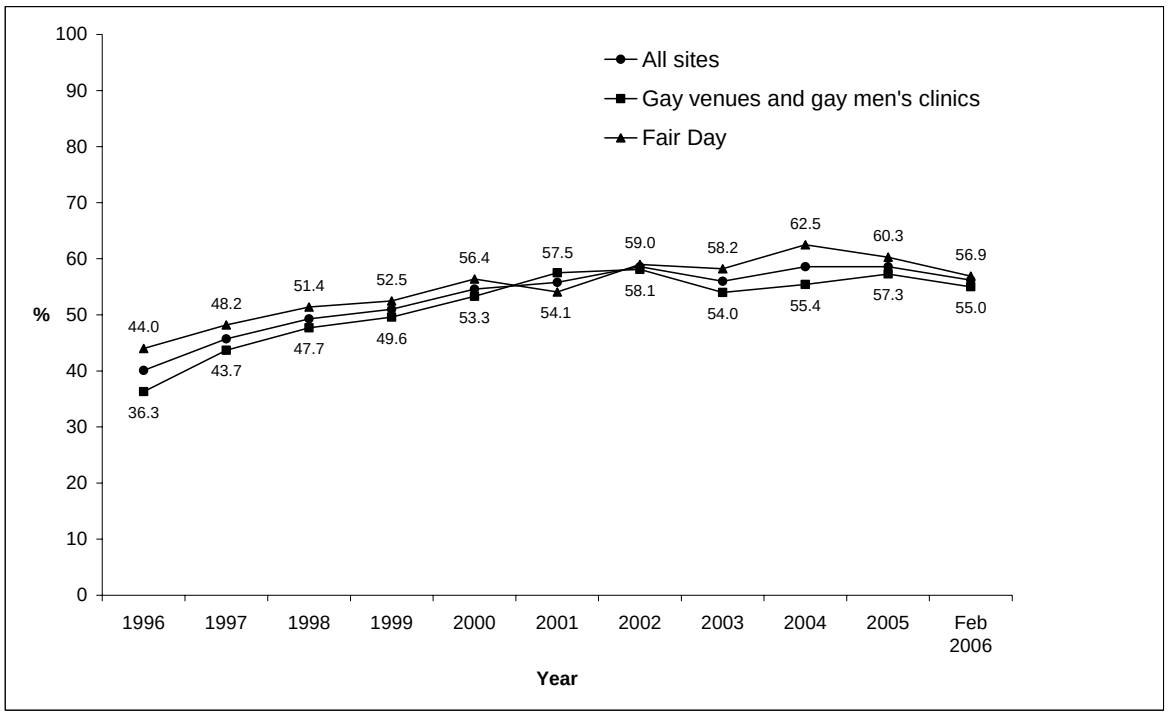

Figure 7: UAIR among men with regular partners, by recruitment site

Of the men who had engaged in UAIR in the six months prior to the survey in February 2006, significantly more had had unprotected anal intercourse with a seroconcordant* partner (79.5%) than with a serodiscordant† or serononconcordant‡ partner (20.5%) ($p < .001$).

Trend analysis of UAIR among men who had been in a seroconcordant relationships for at least six months shows an increase over time from 1996 to 2001 (χ^2 test for trend, $p < .001$), but not thereafter. For the men in serodiscordant/nonconcordant relationships, we observed an increase in the reporting of UAIR from 1996 till 2004 (χ^2 test for trend, $p < .001$), with a subsequent decline in reporting UAIR in 2005 and February 2006. In this survey, compared with the previous year, the proportion of men in serodiscordant/ nonconcordant relationships of over six months duration who had engaged in UAIR decreased from 48.4% to 44.6%, but this change was not statistically significant.

A minority of men never used condoms when engaging in anal intercourse with their regular partners. See Appendix 2 for a more detailed analysis of this group.

*seroconcordant = of the same HIV antibody status, i.e. both partners HIV-positive or HIV-negative.
†serodiscordant = known to be of different HIV antibody status, i.e. one partner HIV-positive and the other HIV-negative.
‡serononconcordant = not known to be of the same HIV antibody status, e.g. one partner HIV-negative, the other untested.

Relationships with casual male partners

Unprotected anal intercourse with casual male partners (UAIC)

The proportions of gay men who reported having engaged in unprotected anal intercourse with casual male partners (UAIC) in the six months prior to the survey are presented in Figure 8.

In February 2006, 20.8% of all men and 24.7% of men recruited at gay venues and gay men's clinics reported having engaged in UAIC. These rates were not significantly different from those reported in 2005. Trend analysis shows that rates of UAIC increased from 1996 to 2001 (χ^2 test for trend, $p < .0001$) and turned downwards thereafter (χ^2 test for trend, $p < .0001$), but remained higher than when the cross-sectional surveys began in 1996. The overall trend from 1996 to 2006 showed a significant rise (χ^2 test for trend, $p < .001$).

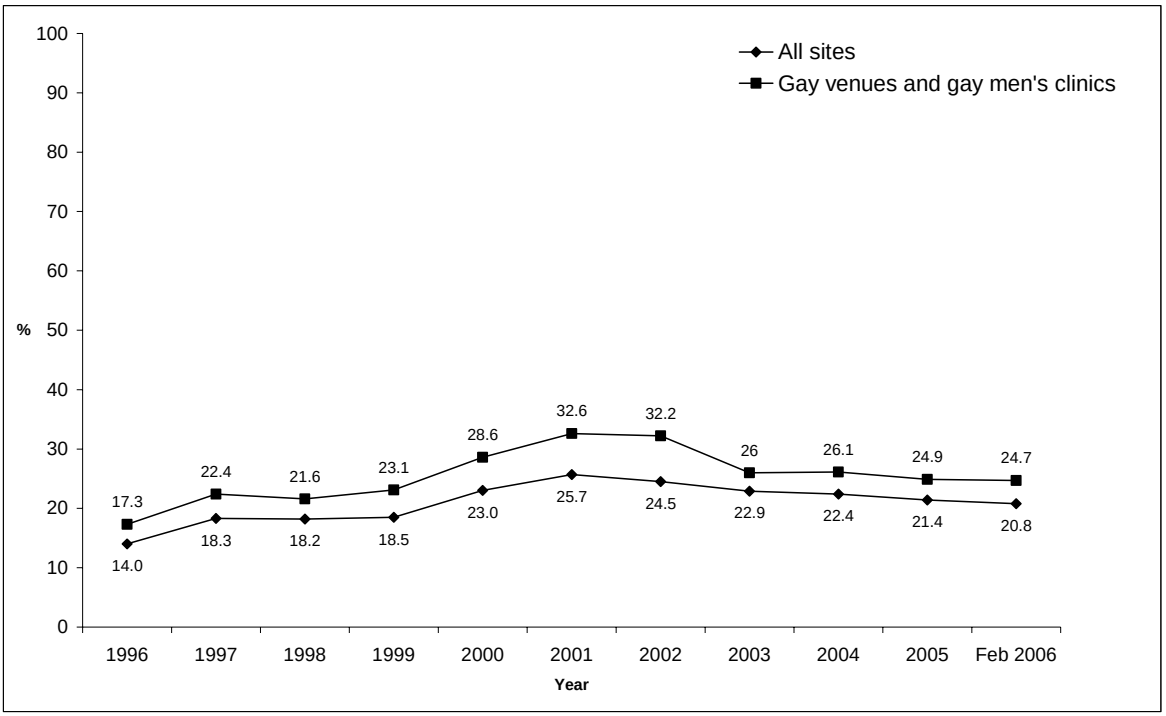

Figure 8: Proportion of men recruited from all sites, and from gay venues and gay men's clinics, who reported having had UAIC in the six months prior to the survey

Throughout almost all the years of observation, the highest prevalence of UAIC was reported by men recruited at sex-on-premises venues (see Figure 9). However, over the past three years the highest prevalence of UAIC has been reported by men recruited at gay men's sexual health clinics. This observation is in concordance with recent increases in the rates of STIs and STI testing among gay men in Sydney (McDonald, 2005). Historically, the lowest rates of UAIC were observed among men recruited at Fair Day.

In February 2006 prevalence of UAIC among men recruited at gay social venues, sex-on-premises venues and Fair Day reversed the changes observed in 2005 and returned to 2004 levels, while UAIC among men recruited at gay men's clinics decreased, but not significantly.

Analysis of trends in UAIC over the period from 2001 to February 2006 shows no significant change among men recruited at Fair Day or gay men's clinics. At the same time, the proportion of men recruited at sex-on-premises venues who had engaged in UAIC has decreased significantly (χ^2 test for trend, $p < .001$); the greatest fall was observed between 2002 and 2004.

The overall trend in UAIC from 1996 to February 2006 for the whole sample and for the men recruited from each type of venue showed a significant rise (χ^2 test for trend, social venues, clinics, Fair Day, $p < .001$; sex-on-premises venues, $p < .01$).

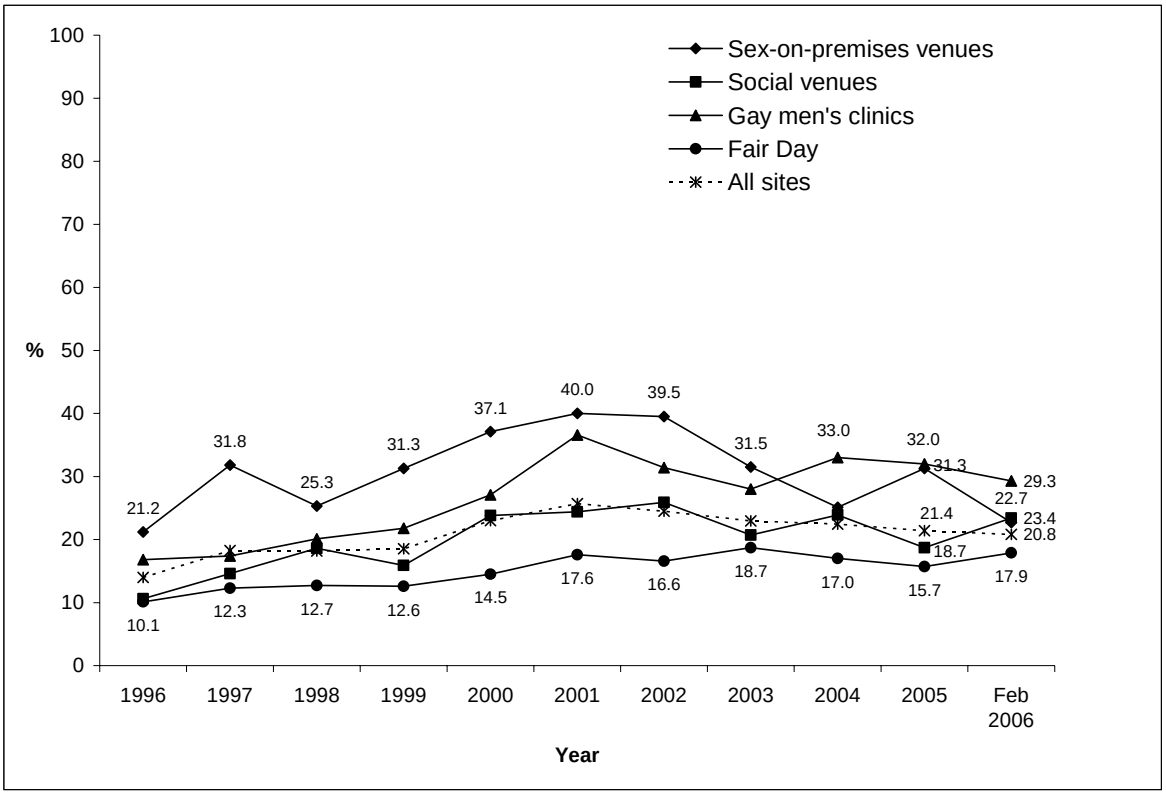

Figure 9: UAIC over time among men recruited at gay social venues, sex-on-premises venues, gay men's clinics and Fair Day

Unprotected anal intercourse with casual male partners, by HIV status

The reporting of UAIC differed according to the type of venue from which the men were recruited. In this section we present trends in UAIC by HIV status for the whole sample, as well as for the subsamples of men recruited at gay social/sex-on-premises venues and gay men's clinics.

All sites

Across all recruitment sites in February 2006, as well as in all previous years, HIV-positive men reported a significantly higher rate of UAIC (40.1%) than either HIV-negative men (18.0%) or men of unknown HIV status (16.9%) ($p < .001$) (see Figure 10). This result concurs with recent analyses from the Positive Health cohort of HIV-positive men, which showed that in 2005 a large proportion of episodes of UAIC engaged in by HIV-positive men (about 43%) occurred with other HIV-positive men (Rawstorne et al., in press).

In 2006 any changes in the prevalence of UAIC among HIV-positive men, HIV-negative men and men of unknown HIV status were insignificant and followed the same direction observed in the previous 2005 surveys.

The trends in rates of UAIC over time for HIV-positive men, HIV-negative men and men of unknown HIV status all showed an increase from 1996 to a peak in 2001. Following this peak there was a downward trend in UAIC, which was statistically significant only among HIV-negative men (χ^2 test for trend, $p < .05$).

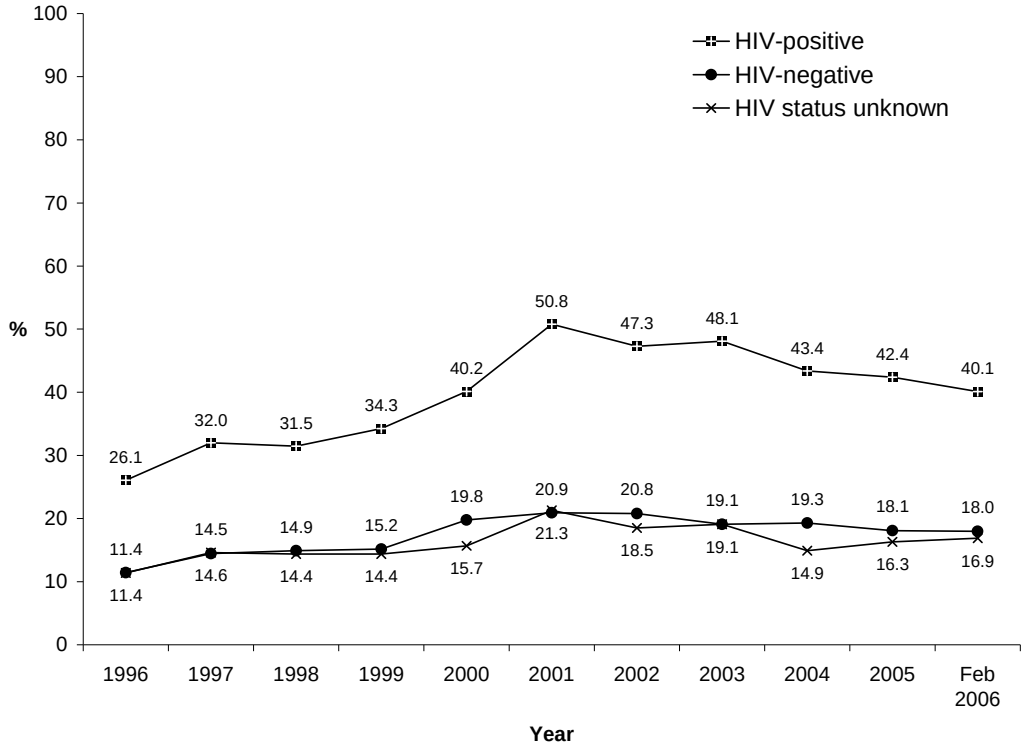

Figure 10: UAIC among men recruited at all sites, by HIV status

Gay social and sex-on-premises venues (categories combined)

Among men recruited at gay social and sex-on-premises venues in February 2006, as in all previous surveys, HIV-positive men reported significantly higher rates of UAIC (51.2%) than either their HIV-negative counterparts (20.2%) or men of unknown HIV status (19.4%) ($p < .001$) (see Figure 11).

In February 2006, compared with the previous year, the rate of UAIC among HIV-positive men increased from 46.5% to 51.2% but there was no significant change in the rate of UAIC among any of the status groups recruited at gay social and sex-on-premises venues.

Between 1996 and 2001 there was an increase in UAIC among HIV-positive and HIV-negative men (χ^2 test for trend, $p < .01$, in the case of both groups). However, after levels of UAIC peaked in 2001 there has been a significant decrease in UAIC among HIV-positive (χ^2 test for trend, $p < .01$) and HIV-negative men (χ^2 test for trend, $p < .001$) but not among men of unknown HIV status.

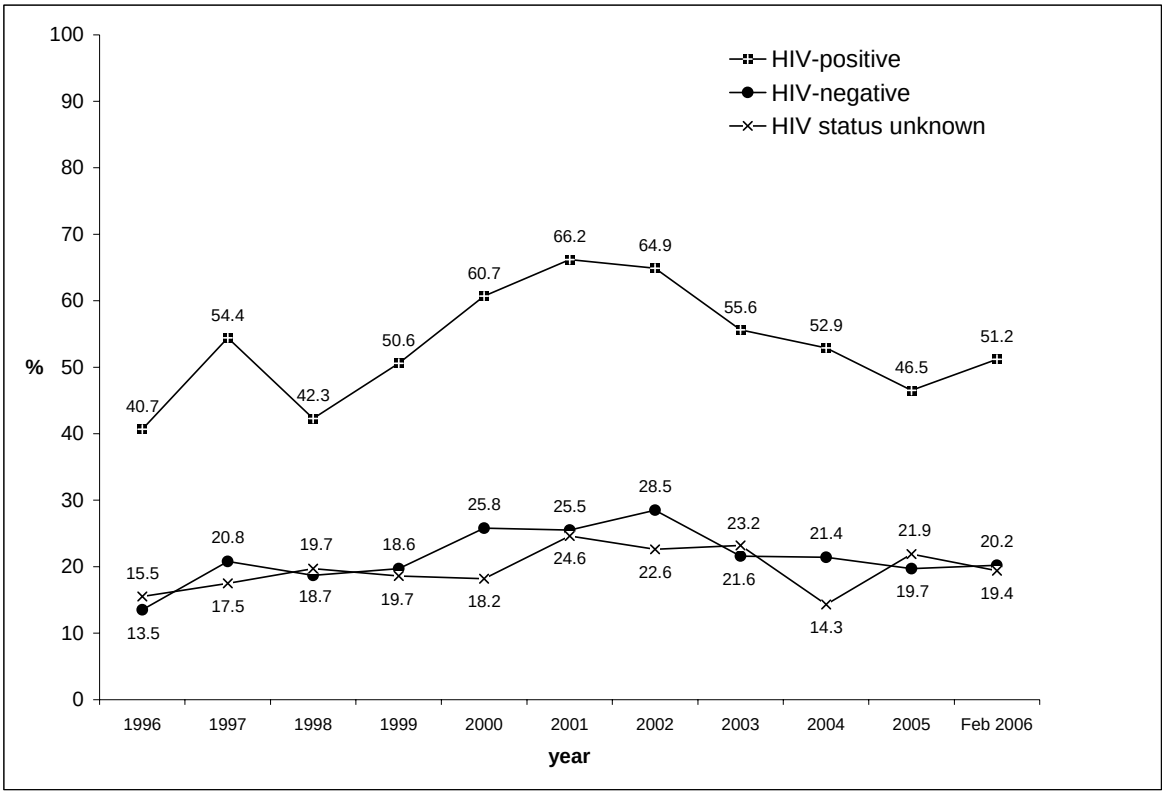

Figure 11: UAIC among men recruited at gay social and gay sex-on-premises venues, by HIV status

Gay men's clinics

A very small number of men recruited from gay men's clinics and who engaged in UAIC reported that they did not know their HIV status or had not been tested. The results presented are for HIV-positive and HIV-negative men only.

In February 2006, as in all previous surveys, the prevalence of UAIC among HIV-positive men was significantly higher than among HIV-negative men (see Figure 12).

Compared with the previous year, in February 2006 the rate of UAIC among HIV-positive men fell from 38.1% to 34.8% and, among HIV-negative men, from 26.3% to 23.6%. However, these decreases were not statistically significant.

As was the case at other gay venues, men at gay men's clinics reported significantly increasing rates of UAIC from 1996 until the peak in 2001 (χ^2 test for trend, $p < .01$). After 2001 the trends fluctuated, without any significant changes in the proportions of HIV-positive or HIV-negative men having engaged in UAIC.

Additional information about men who never used condoms is presented in Appendix 3.

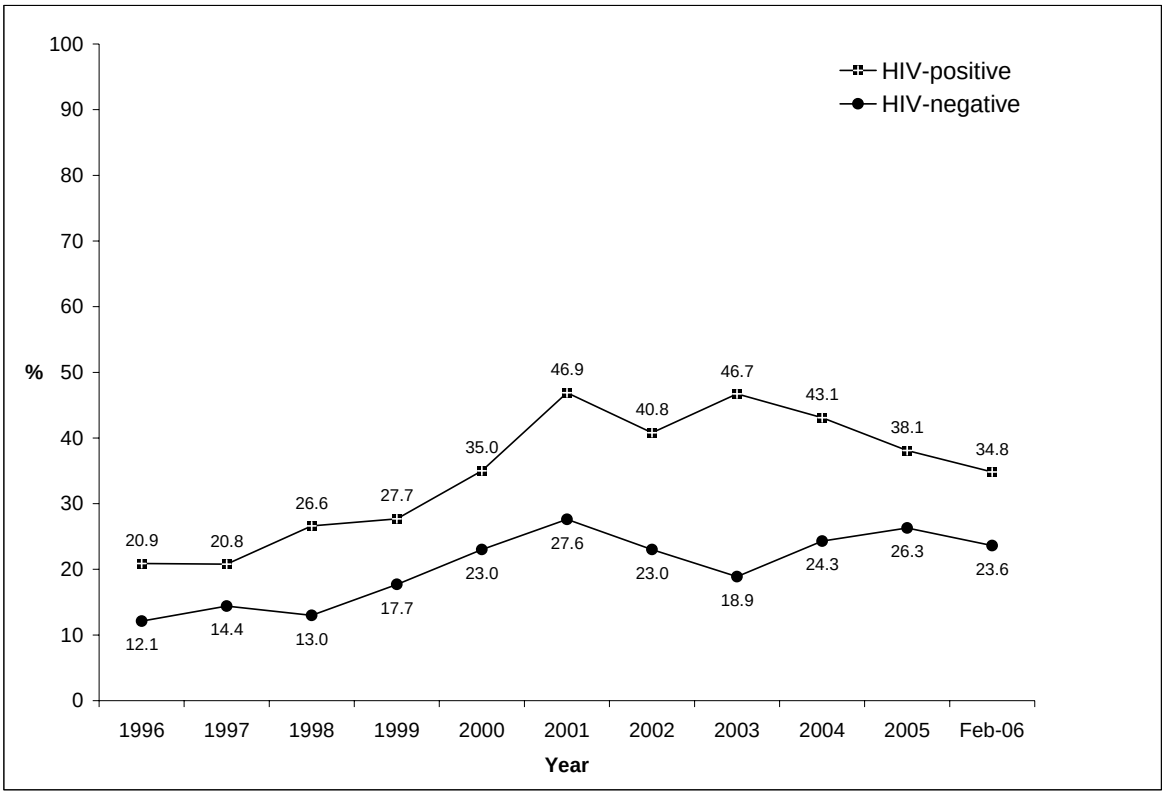

Figure 12: UAIC among men recruited from gay men's clinics, by HIV status

Note: The percentages of men who did not know their HIV status are not shown because there were too few men in this category.

Where men looked for casual male sex partners

In February 2006, of the men who answered the question asking where they looked for male sex partners, more than two-thirds used the internet for that purpose and about 60% looked in gay bars. Other popular venues included dance parties (54.5%) and sex venues (49.8%).

Trend analysis indicates that from 2002 there has been a significant increase in the proportion of men who used the internet to search for sex partners, especially those who reported 'often' using the internet for this purpose (χ^2 test for trend, $p < .001$) (see Table 3). In contrast, over the same period there have been significant falls in the proportions of men who looked for sex partners in gay beats and sex venues (χ^2 test for trend, $p < .001$).

Table 3: Where men looked for male sex partners

	2002 *n* (%)	2003 *n* (%)	2004 *n* (%)	2005 *n* (%)	February 2006 *n* (%)
Internet					
Never	343 (50.9)	777 (51.0)	1276 (49.7)	1229 (42.7)	914 (41.3)
Occasionally	265 (39.3)	562 (36.9)	905 (35.3)	1147 (39.9)	886 (40.1)
Often	66 (9.8)	185 (12.1)	386 (15.0)	500 (17.4)	412 (18.6)
Total	674 (100)	1524 (100)	2567 (100)	2876 (100)	2212 (100)
Gay bar					
Never	161 (22.5)	489 (30.1)	877 (33.6)	884 (29.7)	670 (29.9)
Occasionally	433 (60.6)	831 (51.2)	1293 (49.5)	1585 (53.3)	1191 (53.1)
Often	120 (16.8)	302 (18.6)	441 (16.9)	507 (17.0)	381 (17.0)
Total	714 (100)	1622 (100)	2611 (100)	2976 (100)	2242 (100)
Beat					
Never	403 (61.3)	996 (66.7)	1781 (70.3)	1874 (68.0)	1478 (71.4)
Occasionally	204 (31.1)	403 (27.0)	591 (23.3)	699 (25.4)	482 (23.3)
Often	50 (7.6)	94 (6.3)	160 (6.3)	183 (6.6)	111 (5.4)
Total	657 (100)	1493 (100)	2532 (100)	2756 (100)	2071 (100)
Saunas and other sex venues					
Never	193 (26.0)	701 (44.0)	1225 (47.2)	1342 (45.7)	1099 (50.2)
Occasionally	362 (48.8)	596 (37.4)	950 (36.6)	1222 (41.6)	854 (39.0)
Often	187 (25.2)	295 (18.5)	420 (16.2)	372 (12.7)	236 (10.8)
Total	742 (100)	1592 (100)	2595 (100)	2936 (100)	2189 (100)
Among sex workers					
Never	573 (91.2)	1304 (92.0)	2333 (93.5)	2448 (93.1)	1856 (92.4)
Occasionally	45 (7.2)	90 (6.4)	146 (5.8)	169 (6.4)	129 (6.4)
Often	10 (1.6)	23 (1.6)	17 (0.7)	12 (0.5)	24 (1.2)
Total	628 (100)	1417 (100)	2496 (100)	2629 (100)	2009 (100)
Dance party					
Never	_	678 (44.3)	1317 (51.6)	1288 (45.8)	972 (45.5)
Occasionally	_	689 (45.1)	991 (38.8)	1230 (43.7)	933 (43.6)
Often	_	162 (10.6)	244 (9.6)	296 (10.5)	233 (10.9)
Total		1529 (100)	2552 (100)	2814 (100)	2138 (100)
Gym					
Never	_	1079 (74.6)	1920 (76.4)	1997 (73.8)	1499 (73.1)
Occasionally	_	324 (22.4)	502 (20.0)	626 (23.1)	482 (23.5)
Often	_	44 (3.0)	91 (3.6)	82 (3.0)	71 (3.5)
Total		1447 (100)	2513 (100)	2705 (100)	2052 (100)
Private sex party					
Never	–	–	–	2272 (85.2)	1734 (85.0)
Occasionally	–	–	–	340 (12.7)	260 (12.7)
Often	–	–	–	55 (2.1)	47 (2.3)
				2667 (100)	2041 (100)

In 2005 and February 2006, among men who used the internet to look for male sex partners, about 70% found at least one partner. The median number of partners found via the internet in the six months prior to the survey was between two and five (see Table 4). In 2006 approximately 12% of the men found only one partner and a similar proportion found more than 10 partners.

Table 4: Number of male sex partners found via the internet by men who used the internet to look for sex partners

	None *n* (%)	One *n* (%)	2–5 *n* (%)	6–10 *n* (%)	11–50 *n* (%)	More than 50 *n* (%)
2005	455 (27.9)	172 (10.6)	666 (40.9)	158 (9.7)	155 (9.5)	24 (1.5)
February 2006	376 (29.4)	149 (11.7)	468 (36.7)	134 10.5)	130 (10.2)	20 (1.6)

4 HIV and sexually transmissible infections

Contact with the epidemic

In February 2006, for the first time, participants of the Sydney Gay Community Periodic Survey were asked two questions about their contact with the HIV epidemic: how many people did they know personally who had HIV and how many people did they know personally who had found out they were HIV-positive in the previous 12 months.

Only 4% of HIV-positive respondents reported not knowing anyone with HIV, and more than half of them knew more than three people with HIV (see Figure 13). On the other hand, significantly higher proportions of HIV-negative respondents and men of unknown HIV status reported knowing no one with HIV (24% and 49% respectively) ($p < .001$).

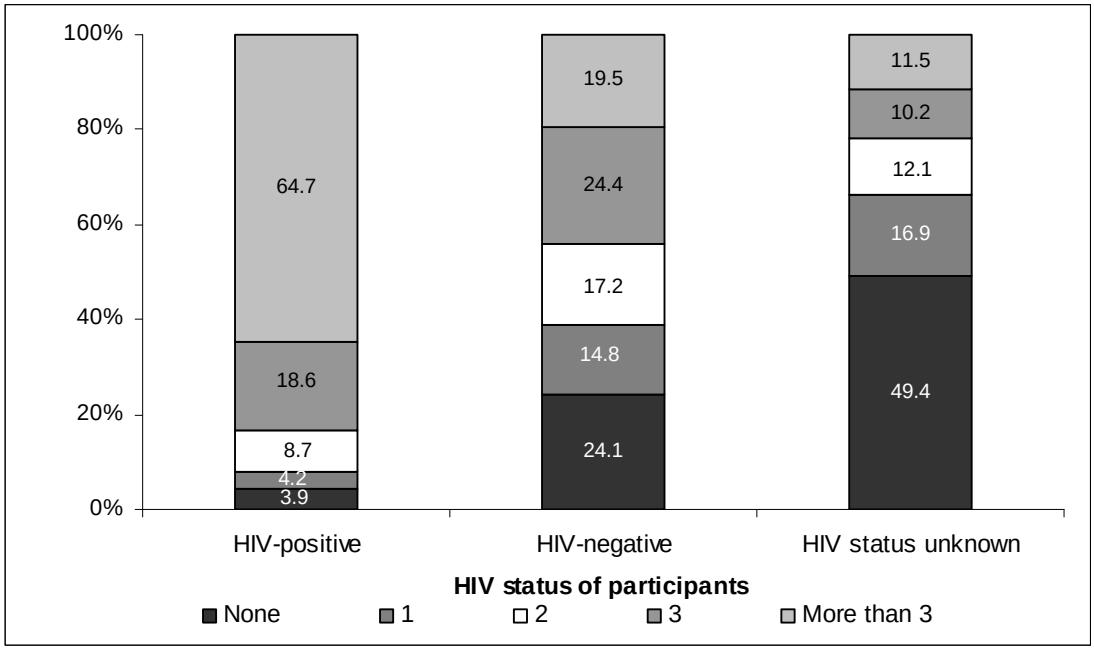

Figure 13: Number of people participants knew who were HIV-positive, by HIV status of participants (February 2006)

Similarly, 51% of HIV-positive respondents knew no one who had found out that they were HIV-positive in the 12 months prior to the survey in comparison with 74% of HIV-negative men and 83% of men of unknown HIV status ($p < .001$) (Figure 14).

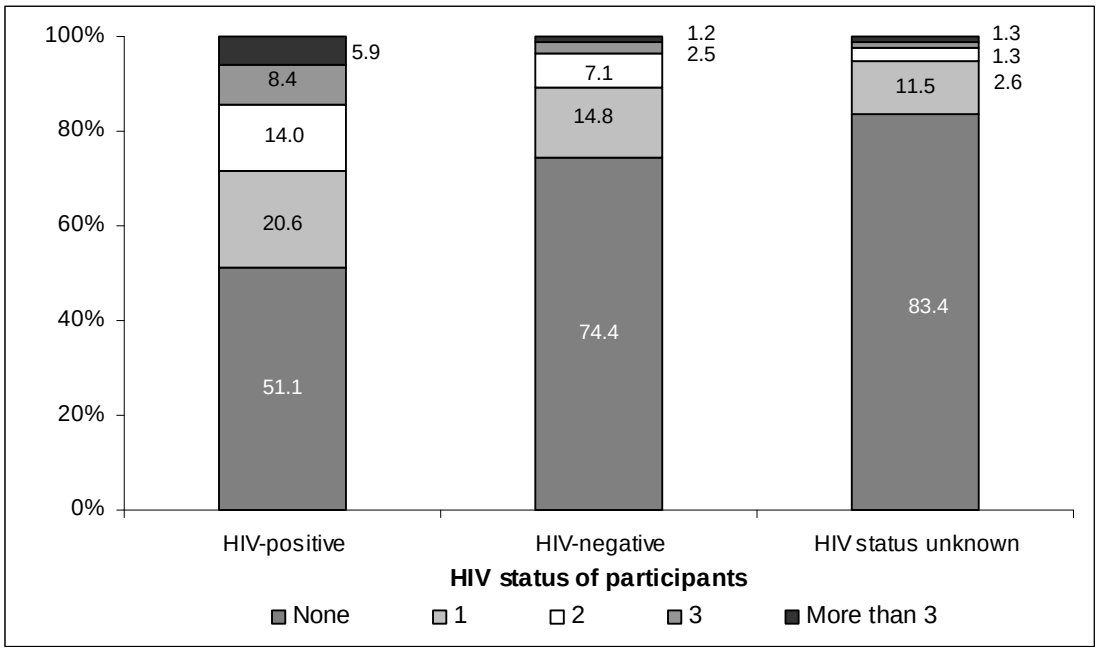

Figure 14: Number of people participants knew who had found out they were HIV-positive in the 12 months prior to the survey, by HIV status of participants (February 2006)

HIV status

In February 2006, 13.0% of the men surveyed were HIV-positive, 77.7% were HIV-negative and 9.3% did not know their HIV status or were untested (see Figure 15). Analysis of the survey data from 2001 to 2006 shows a significant downward trend in the proportion of HIV-positive men in the sample (χ^2 test for trend, $p < .01$) and a corresponding upward trend in the proportion of HIV-negative men (χ^2 test for trend, $p < .001$). Due to the relative success of antiretroviral therapy there are currently more HIV-positive people in the gay community, so these results suggest that the survey is not reaching HIV-positive people to the extent that it has in the past.

Additional information about the HIV status of men recruited at different types of venues is presented in Appendix 4.

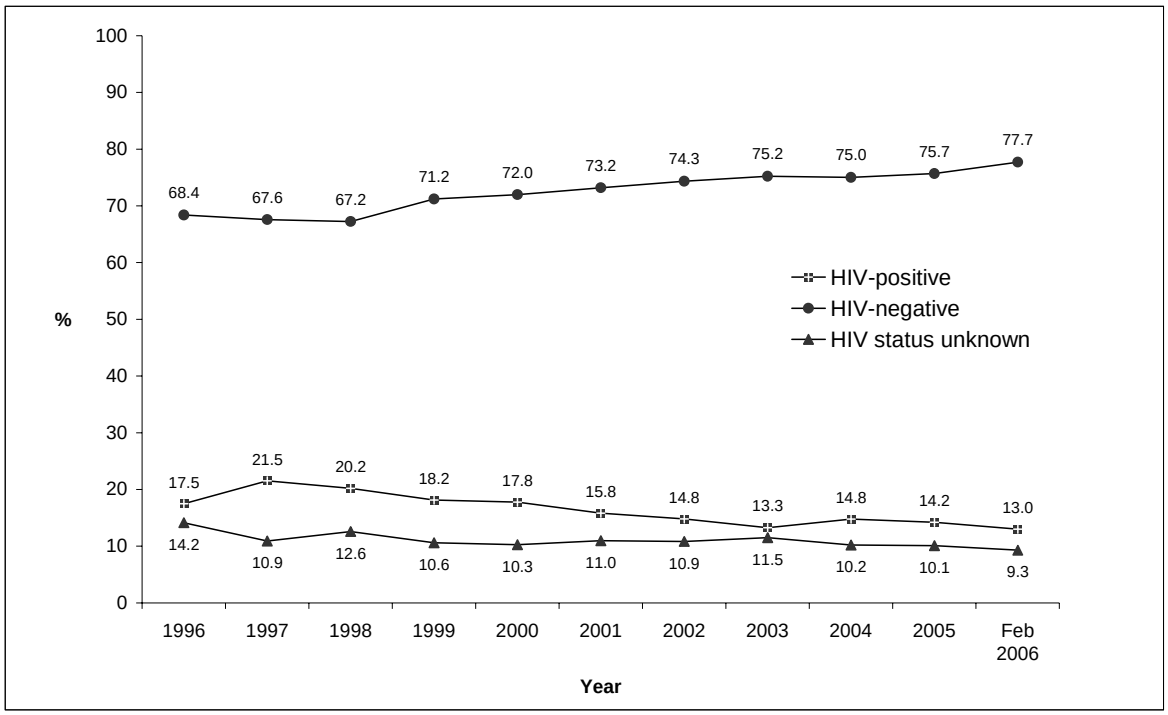

Figure 15: HIV status of participants

Testing for HIV

In February 2006 the percentages of non-HIV-positive men who were tested for HIV antibodies in the 12 months prior to the survey were 69.4% of those recruited from all sites, 73.6% of those from gay men's clinics and 69.0% of those from social and sex-on-premises venues (see Figure 16). From 2001 onwards there has been a slight, though significant, upward trend in the proportion of men recruited from all sites who reported having had an HIV test in the previous 12 months (χ^2 test for trend, $p < .001$). Upward trends were evident among men recruited at social and sex-on-premises venues (χ^2 test for trend, $p < .001$) and Fair Day (χ^2 test for trend, $p < .001$), while there was no significant change over time in reported testing among men recruited at gay men's clinics.

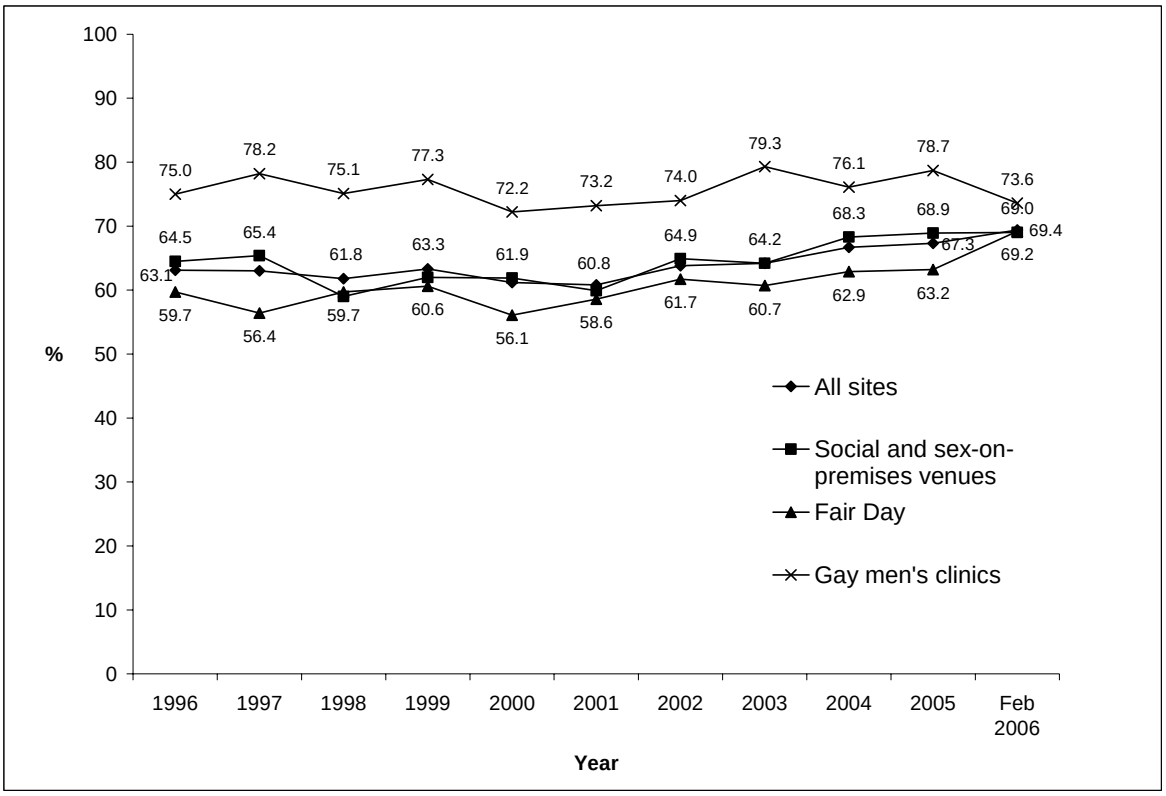

Figure 16: HIV testing among non-HIV-positive men recruited from all sites, gay social and sex-on-premises venues, gay men's clinics and Fair Day during the 12 months prior to the survey

Data on HIV testing among non-HIV-positive gay men, by age, are presented in Appendix 5.

Testing for sexually transmissible infections other than HIV

In February 2006 two-thirds of the men surveyed had had at least one of the tests listed for sexually transmissible infections other than HIV (see Table 5). Fifty-six per cent had had a blood test for infections other than HIV and about half had had a urine sample tested. Since 2003 when the question about sexual health tests was first included there have been increases in the proportions of men who had had anal, throat and penile swabs and urine samples tested (χ^2 tests for trend, $p < .001$ for each category).

Table 5: Sexual health tests undertaken in the 12 months prior to the survey

	2003 *n* (%)	2004 *n* (%)	2005 *n* (%)	February 2006 *n* (%)
Anal swab	652 (27.0)	899 (34.8)	1204 (35.3)	1035 (39.9)
Throat swab	872 (36.2)	1093 (42.0)	1387 (40.6)	1163 (44.8)
Penile swab	668 (27.8)	866 (33.7)	1059 (31.0)	894 (34.5)
Urine sample	1067 (44.3)	1303 (49.9)	1597 (46.8)	1348 (52.0)
Blood test other than for HIV	1430 (59.4)	1531 (58.8)	1867(54.7)	1460 (56.3)
Any of the above tests	1677 (66.0)	1874 (66.4)	2238 (65.6)	1755 (67.7)

In February 2006 fewer than half the participants reported having had anal, throat or penile swabs in the 12 months prior to the survey. Most of the men who reported having had these tests had been tested only once during this period and few men had been tested more than twice (see Figure 17). Just over half of the men surveyed had provided urine samples for testing, with the majority having had only one test during the previous 12 months. Fewer than 60% of the men surveyed reported having had blood tests for infections other than HIV in the previous 12 months and most of them had had only one blood test during this time. HIV tests were the most common tests reported by the men surveyed in 2006 (about 68% of the sample) and about 30% reported having been tested twice or more during the previous 12 months.

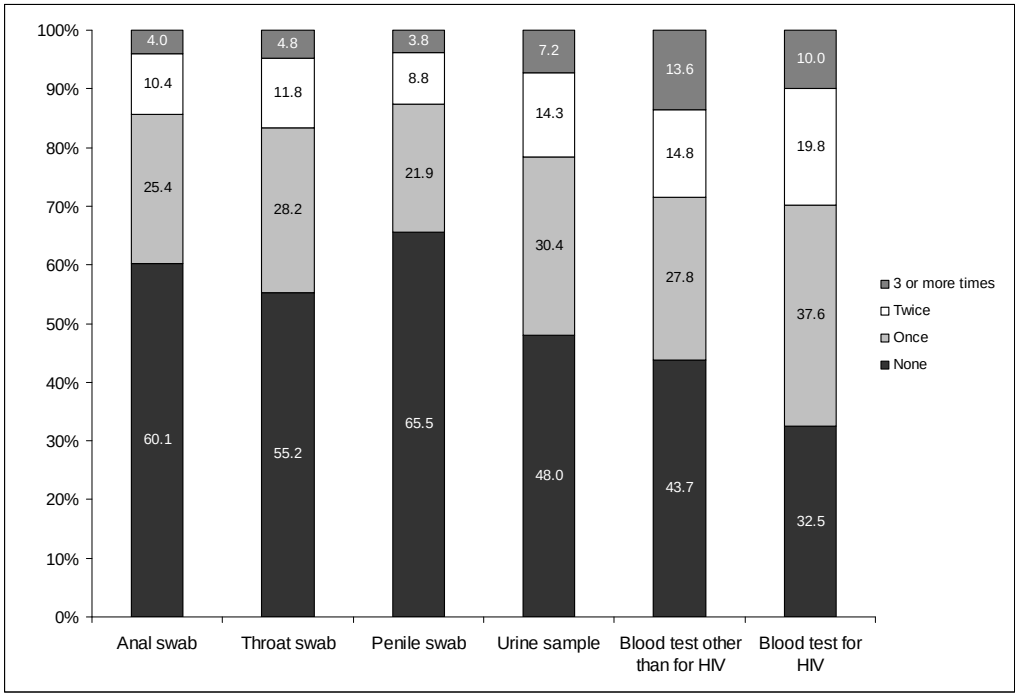

Figure 17: Frequency of sexual health tests in the 12 months prior to the survey

Combination antiretroviral therapy and viral load

The proportion of HIV-positive men using combination antiretroviral therapy in February 2006, about 70.6%, was not significantly different from that reported in 2005 (see Figure 18). From 1997 to February 2006 there has been a significant downward trend in the proportion of HIV-positive men using combination therapy (χ^2 test for trend, $p < .001$). However, this trend was most evident before 2001.

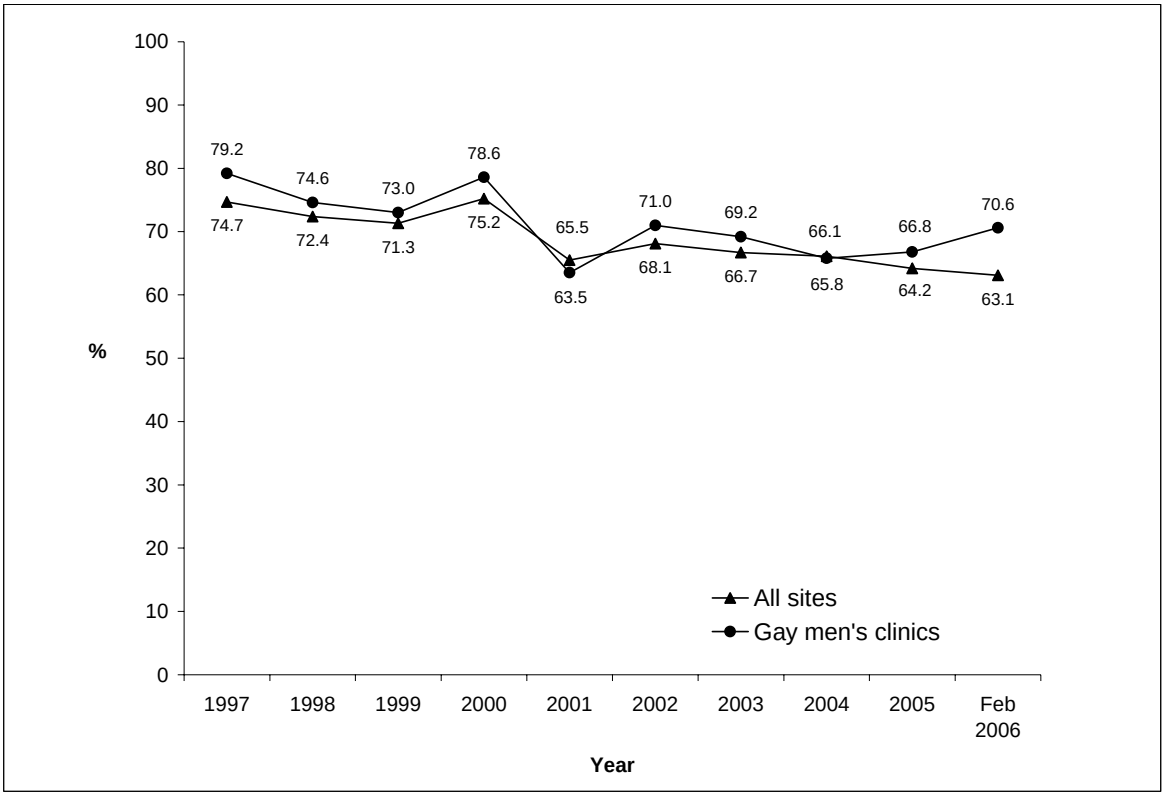

Figure 18: Use of combination antiretroviral therapies (ART)

Note: Includes only HIV-positive men.

In February 2006, 85% of the HIV-positive men who were using antiretroviral therapies had an undetectable viral load. In comparison, less than a fifth of the men who were not using treatments had an undetectable viral load (see Table 6).

Table 6: Use of combination antiretroviral therapies (ART) and viral load (VL)

	August 2002		2003		2004		2005		February 2006	
Viral load	**Using ART *n* (%)**	**No ART *n* (%)**	**Using ART *n* (%)**	**No ART *n* (%)**	**Using ART *n* (%)**	**No ART *n* (%)**	**Using ART *n* (%)**	**No ART *n* (%)**	**Using ART *n* (%)**	**No ART *n* (%)**
Undetectable	81 (80.2)	7 (13.0)	163 (75.1)	26 (24.1)	207 (77.5)	35 (24.8)	250 (81.7)	36 (21.6)	1771 (85.1)	22 (18.2)
Detectable	18 (17.8)	44 (81.5)	50 (23.0)	74 (68.5)	52 (19.5)	95 (67.4)	51 (16.7)	112 (67.1)	26 (12.9)	89 (73.6)
Don't know/ Unsure	2 (2.0)	3 (5.6)	4 (1.8)	8 (7.4)	8 (3.0)	11 (7.8)	5 (1.6)	19 (11.4)	4 (2.0)	10 (8.3)
Total	101 (100)	54 (100)	217 (100)	108 (100)	267 (100)	141 (100)	306 (100)	167 (100)	201 (100)	121 (100)

Disclosure of HIV status

In February 2006 a third of the HIV-positive men who had had casual partners in the six months prior to the survey reported having disclosed their HIV status to all of their casual partners, 46% had disclosed to some of their casual partners and about 21% had disclosed to none (see Figure 19). Since 2002 there has been a significant upward trend in the proportion of HIV-positive men who disclosed their HIV status to all of their casual partners (χ^2 test for trend, $p < .01$). Conversely, over the same period there has been a significant downward trend in the proportion of HIV-positive men who never told their casual partners their HIV status (χ^2 test for trend, $p < .01$).

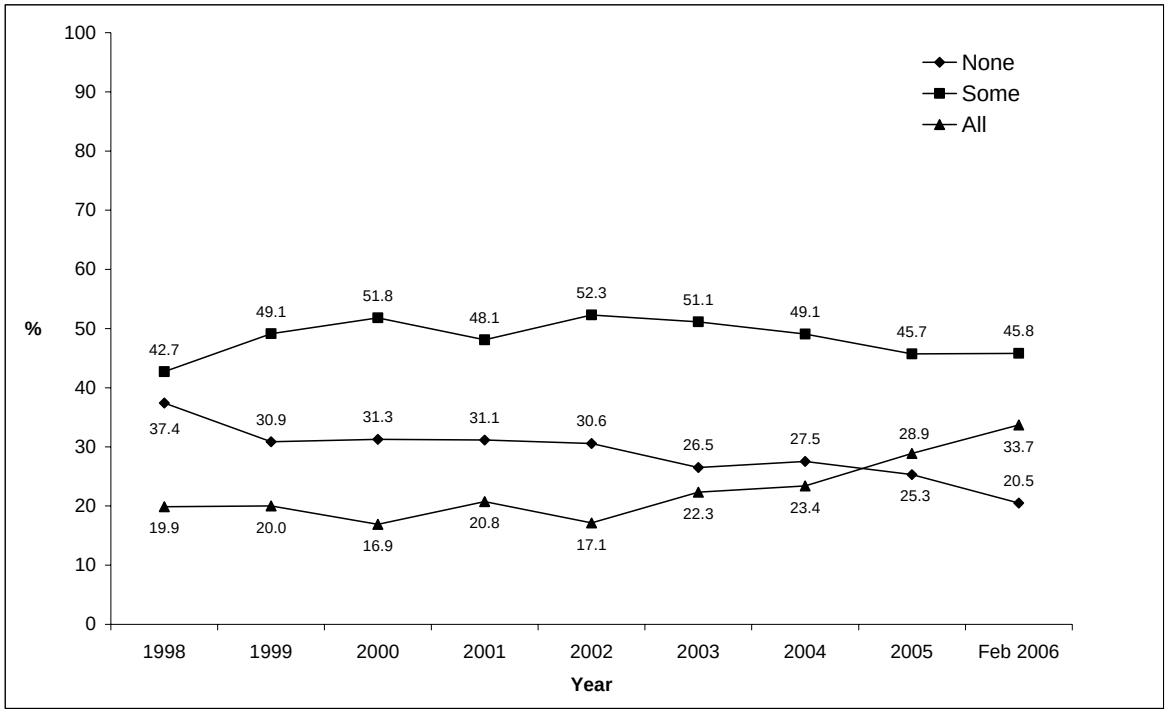

Figure 19: Disclosure of HIV status to casual partners by HIV-positive men recruited at all sites

A smaller proportion of HIV-negative men than HIV-positive men had disclosed their HIV status to their casual partners. In February 2006, 24% of the HIV-negative men who had had casual partners in the six months prior to the survey reported having disclosed their HIV status to all of their casual partners, 28% had disclosed to some of their casual partners and about 48% had disclosed to none (see Figure 20). Since 2001 there has been a significant fall in the proportion of men who never disclosed their HIV status to their casual partners (χ^2 test for trend, $p < .001$) but in 2006 this trend did not continue. Conversely, over the same period there has been a significant increase in the proportion of men who disclosed their HIV status to all of their casual partners (χ^2 test for trend, $p < .001$).

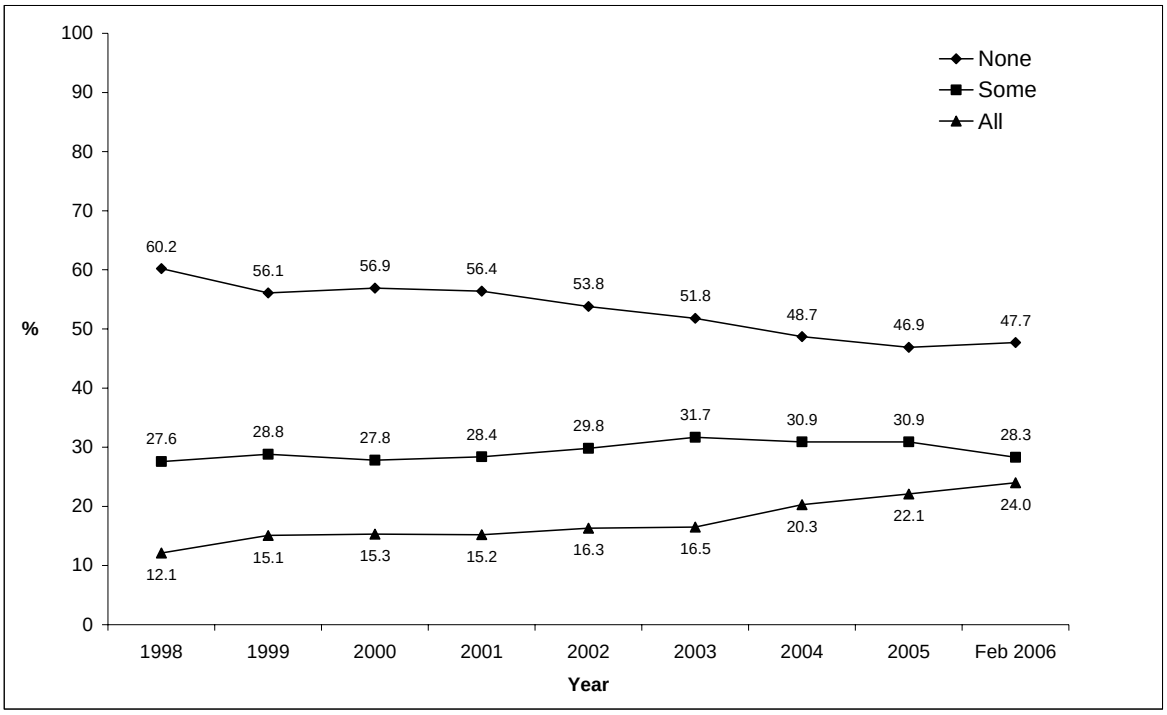

Figure 20: Disclosure of HIV status to casual partners by HIV-negative men recruited at all sites

Similar trends in HIV disclosure were observed among HIV-positive and HIV-negative men recruited from gay venues and gay men's clinics, but the data are not presented here.

5 Drug use

The collection of data on drug use began in 1998 but questions to elicit information about drug use have undergone some changes over time. Data on the use of poppers, marijuana, ecstasy, cocaine, heroin and the injection of some drugs have been collected since August 1998. A question about the use of steroids was introduced in August 1999. In August 1998 and February 1999 ecstasy, speed and LSD were lumped together as a single item; since August 1999 separate questions have been asked about the use of each of these drugs. In August 2000 a question on the use of Viagra was introduced. While questions about the use of heroin and steroids were omitted in 2000 due to the small numbers of men in the sample using these drugs, they were reintroduced in August 2002 to enable comparisons of the use of these drugs in other cities where gay community periodic surveys are conducted. Special K and GHB were listed in 1999 and 2000, were then omitted and were added in again in February 2004 in response to anecdotal evidence of recent increases in the use of these drugs.

Any drug use

All sites

In February 2006 about 47% of the respondents reported having used ecstasy in the six months prior to the survey (see Table 7). Other drugs used by a sizeable proportion of participants were marijuana (38%), amyl/poppers (42%) and speed (26%). Special K, Viagra, cocaine and crystal meth were also used by about 20% of the men surveyed.

Since 2001 there have been significant downward trends in the proportions of men recruited at all sites who reported having used amyl/poppers, marijuana, speed, and heroin. The use of steroids and Special K has remained fairly consistent over the past years. While there was a decrease in the use of cocaine from 2001 to 2003 ($p < .001$), this was followed by an increase from 2004 to 2006 (overall trend not significant). The use of LSD/trips declined from 2001 to 2005 but we observed a rise in its use from 5% of men using it in 2005 to 6% using it in February 2006. While the proportion of men who had used Viagra increased from 2001 to 2005 ($p < .001$), there was a significant decrease in the proportion who had used it in February 2006 ($p < .001$). However, a change in the annualised trend has yet to be confirmed by the next survey in August 2006. After a significant increase in the use of crystal meth between 2000 and 2004, the proportion of men who reported having used the drug decreased from 22% to 21% between 2004 and 2005 ($p < .01$). In February 2006 its use increased again to levels similar to those reported in 2004.

Table 7: Percentage who used drugs in the six months prior to the survey, among men recruited at all sites

	2001	2002	2003	2004	2005	Feb 06	Sig.**
Amyl/Poppers	49.3	46.2	48.2	48.4	47.8	42.1	.001
Marijuana	48.6	44.9	45.1	45.3	44.8	37.6	.001
Ecstasy	47.6	44.5	46.4	46.9	49.3	46.5	ns
Speed	35.0	28.8	30.5	31.8	29.8	25.8	.001
Crystal meth*	—	12.0	16.3	21.9	21.1	21.7	.001
Viagra	15.1	15.9	18.9	21.6	23.3	20.2	.001
Cocaine	23.3	20.9	17.0	18.4	20.9	21.8	ns
Special K*	—	—	—	22.6	24.8	21.0	ns
GHB*	—	—	—	10.3	13.3	12.9	.01
Steroids	2.3	0.9	2.8	4.0	3.6	3.0	ns
LSD/Trips*	—	6.5	6.7	6.0	4.9	6.0	.001
Heroin	1.4	1.6	1.0	1.4	0.9	0.8	ns

*Not included in all surveys.
**Trend from 2001 onwards.

Gay venues and gay men's clinics

Among the men recruited at gay venues and gay men's clinics, the use of Viagra increased significantly from 19% in 2001 to 27% in February 2006 (χ^2 test for trend, $p < .001$). Similarly, the use of crystal meth doubled from 13% in 2002 to 26% in February 2006 (χ^2 test for trend, $p < .001$). The proportion of men who used GHB increased significantly from 12% in 2004 to 16% in February 2006 (χ^2 test for trend, $p < .001$). Since 2001 there have been downward trends in the proportions of respondents who used amyl/poppers (χ^2 test for trend, $p < .05$), marijuana (χ^2 test for trend, $p < .001$), speed (χ^2 test for trend, $p < .01$) and LSD (since 2002, χ^2 test for trend, $p < .05$).

Injecting drug use

All sites

About 4.5% of the men who completed the questionnaire in February 2006 had injected at least one drug in the six months prior to the survey (see Table 8). The most commonly injected drugs were crystal methamphetamine, speed and steroids. Very few men had injected any of the other drugs listed.

Table 8: Percentage who injected drugs in the six months prior to the survey, among men recruited at all sites

	2001	2002	2003	2004	2005	Feb 06	Sig.**
Any drug	7.0	5.4	6.5	6.8	5.2	4.5	.001
Speed	5.3	3.4	3.0	3.4	3.1	1.4	.001
Ecstasy	1.9	1.1	1.1	1.0	0.8	0.5	.001
Cocaine	2.1	1.3	0.9	0.9	0.7	0.5	.001
Crystal meth*	—	2.9	3.5	4.9	4.3	2.9	.001
LSD*	—	0.1	0.2	0.3	0	0.4	ns
Special K*	—	—	—	0.8	0.8	0.3	0.05
GHB*	—	—	—	0.2	0	0.1	ns
Heroin	0.6	0.4	0.7	0.8	0.8	0.3	ns
Steroids	1.3	0.6	1.5	2.2	2.2	1.2	0.5
Other drug	1.9	1.3	0.8	0.9	0.8	0.2	0.001

*Not included in all surveys.
**Trend from 2001 onwards.

Gay venues and gay men's clinics

Among the men recruited at gay venues and gay men's clinics, the proportion who had injected crystal meth increased significantly from 3.6% in 2002 to 6.8% in February 2004 (χ^2 test for trend, $p < .001$) and then declined to 4.1% in February 2006. Similarly, there was an increase in the proportion of men who had injected steroids (χ^2 test for trend, $p < .001$). Conversely, there were downward trends in the proportions of men who had injected speed, cocaine and ecstasy (χ^2 tests for trend, $p < .001$, in each case).

The use of drugs for the purpose of sex

In 2006 a new question was asked about how frequently respondents used drugs for the purpose of sex, and 2450 participants provided responses. Of the men recruited at all sites, 58.5% reported never having used drugs for the purpose of sex, 3.5% reported having used them on a weekly basis, 10.9% reported having used them monthly and 27.1% less often than monthly (see Figure 23). A significantly higher proportion of HIV-positive men (57.6%) than HIV-negative (40.5%) and men of unknown HIV status (25.9%) ($p < .001$) reported having used drugs for the purpose of sex.

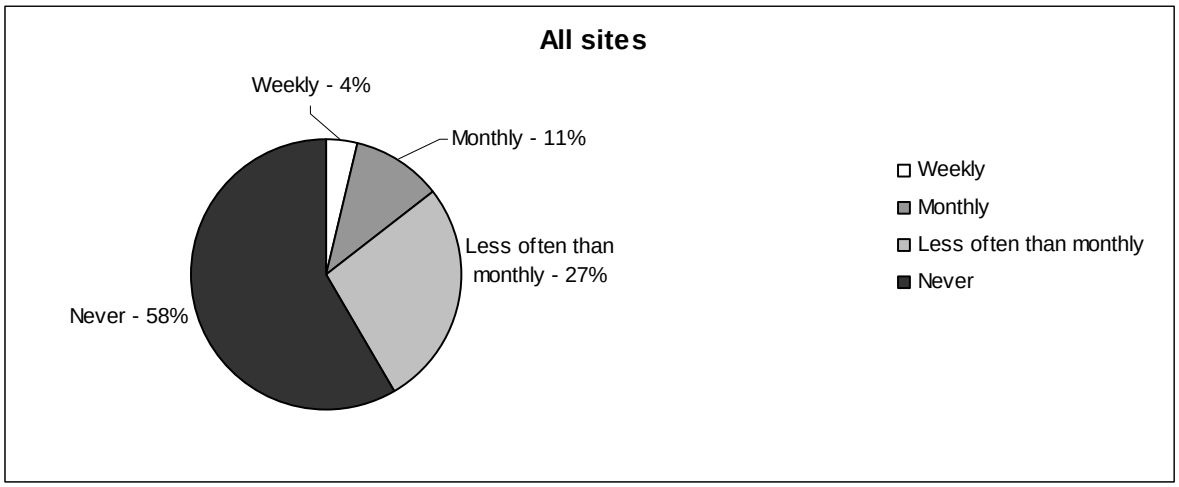

Figure 21: Frequency of drug use for the purpose of sex among men recruited at all sites (February 2006)

6 Discussion

The findings of the February 2006 Sydney Gay Community Periodic Survey provide a snapshot of the sexual practices of Sydney gay men related to the transmission of HIV and other sexually transmissible infections (STIs). The findings are in many respects similar to, and thereby corroborate, the results from the previous surveys. In this survey the 2594 participants were recruited from seven gay social venues, four gay sex-on-premises venues, two gay men's sexual health clinics and the Gay and Lesbian Mardi Gras Fair Day.

The proportion of men in regular relationships has remained fairly consistent since the surveys began in 1997. In February 2006 approximately 54% of the men recruited at all sites reported being in a regular relationship at the time of the survey. The rate of unprotected anal intercourse with regular partners (UAIR) among the total sample has increased over time and reached 56% in February 2006. As expected, a higher proportion of men reported having had unprotected anal intercourse with regular than with casual partners.

The rate of unprotected anal intercourse with casual partners (UAIC) among the total sample in February 2006 was 20.8%, which was not significantly different from the 2005 result. Although trend analysis shows a rise in UAIC since 1996, prevalence of UAIC peaked in 2001 at around 25% and declined thereafter, providing evidence that it has plateaued overall. As is consistent with previous surveys, a higher proportion of men recruited at gay venues and gay men's clinics had engaged in UAIC than those recruited at other sites.

In 2006, as in all previous surveys, a higher proportion of HIV-positive men recruited at all sites reported having engaged in UAIC (40.1%) than HIV-negative men (18.0%) or men of unknown HIV status (16.9%). In February 2006 there were no statistically significant changes in the prevalence of UAIC among any of the HIV-status groups. Trend analysis of UAIC shows that, after the peak levels in 2001, the proportions of HIV-positive and HIV-negative men who reported having had UAIC trended downwards, while the proportion of men of unknown HIV status who had engaged in UAIC did not change significantly.

In February 2006 the rate of UAIC among men recruited from gay social and gay sex-on-premises venues (categories combined) was higher than among those recruited from all sites. Among men recruited at gay social and sex-on-premises venues, 51% of HIV-positive men had engaged in UAIC compared with 20% of HIV-negative men and 19% of men of unknown HIV status. These proportions were not significantly different from those reported in 2005. From a peak in 2001, trend analysis of UAIC among men recruited at gay social or gay sex-on-premises venues shows a fall in the case of HIV-positive and HIV-negative men and no change in the case of men of unknown HIV status. It is possible that this fall in UAIC was a result of education campaigns specifically targeting men at sex-on-premises venues that were initiated by the AIDS Council of NSW (ACON) in response to reports of increased HIV infections. A similar decrease in the incidence of UAIC was observed among men recruited at gay men's clinics.

The rate of HIV testing among non-HIV-positive men has increased fairly consistently since 2001. In February 2006, 69% of men recruited at all sites had been tested in the 12 months prior to the survey. Of the men recruited at gay venues and gay men's clinics, 69% and 74%, respectively, had been tested in the 12 months prior to the survey.

Approximately two-thirds of all men surveyed in February 2006 had had at least one test for sexually transmissible infections other than HIV in the 12 months prior to the survey. As expected, men recruited at gay men's clinics had higher rates of testing. The proportion of men who had had anal, throat and penile swabs and urine samples tested has increased significantly since 2003 when this question was first asked.

The proportion of HIV-positive men who were using combination antiretroviral therapy (almost two-thirds) has not changed significantly since 2001, after falling significantly between 1997 and 2001. About 85% of the men who used antiretroviral therapy had an undetectable viral load. In comparison, only about 18% of the men who were not on treatment had an undetectable viral load.

More HIV-positive than HIV-negative men recruited from all sites in February 2006 had disclosed their HIV status to casual partners. Most of the disclosure among HIV-positive men occurred some of the time (46%) rather than all of the time (34%). About 28% of HIV-negative men had disclosed their HIV status to 'some' of their casual partners and 24% had told 'all' of their casual partners their HIV status. Since 2001 there have been significant upward trends in the proportions of HIV-positive and HIV-negative men who always disclosed their HIV status to casual partners, and disclosure rates were quite similar across all recruitment sites.

Ecstasy (used by 47%), amyl/poppers (used by 42%) and marijuana (used by 38%) were the recreational drugs most widely used by participants recruited at all sites in February 2006. While these three drugs were still the most popular, since 2001 there have been downward trends in their use. The use of Viagra and crystal meth has increased significantly since 2001, although in the past three years their rates of use have plateaued at just above 20%. In February 2006, 21% of the men surveyed used Special K and 13% used GHB. The use of speed (including injected speed) has fallen in recent years, although this can quite likely be explained by the inclusion of crystal meth in the list of drugs about which information is sought. Before the crystal meth option was included in the questionnaire, people who previously used crystal meth were likely to have indicated that they used speed. In February 2006 about 3% of the total sample had injected crystal meth, 1.4% had injected speed and about 4.5% had injected any drug in the six months prior to the survey. Since 2001 there have been downward trends in the injection of speed, ecstasy and cocaine and in the injection of any drug in general. In the current survey the proportion of men who had injected crystal meth was lower than that reported in 2005.

In conclusion, the February 2006 Sydney Gay Community Periodic Survey collected evidence on sexual and health-related practices of gay men that can be used by community members, educators, policy makers and others to develop programs aimed at sustaining and improving gay men's sexual and social health. This evidence can also be used to track secular trends in sexual behaviours of gay men and compare them with similar trends in other states of Australia and elsewhere.

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Appendices

Appendix 1: Questionnaire

National Centre in HIV Social Research
National Centre in HIV Epidemiology & Clinical Research
THE UNIVERSITY OF NEW SOUTH WALES

ACON PLWHA (NSW)

Sydney Gay Community Periodic Survey

This survey is for men who have had sex with another man in the past five years.

PLEASE DO NOT COMPLETE IF YOU HAVE ALREADY DONE SO THIS WEEK.

For each question, please TICK one box only.

1. How many of your friends are gay or homosexual men?
   None ☐ A few ☐ Some ☐ Most ☐ All ☐
2. How much of your free time is spent with gay or homosexual men?
   None ☐ A little ☐ Some ☐ A lot ☐
3. Do you think of yourself as: Gay/homosexual ☐
   Bisexual ☐
   Heterosexual ☐
   Other (please specify) _____

*In this survey we distinguish between **REGULAR** (boyfriend/lover) and **CASUAL** partners.*

4. Do you currently have sex with **casual** male partners?
   No ☐ Yes ☐
5. Do you currently have sex with a **regular** male partner?
   No ☐ Yes ☐
6. How would you describe your sexual relationship with your **current regular** male partner? *(tick one)*
   ***we** are monogamous – **neither of us** has casual sex* ☐
   ***both my partner and I** have casual sex with other men* ☐
   *I have casual sex with other men but **my partner does not*** ☐
   my partner** has casual sex with other men but **I do not ☐
   *I have **several regular** male partners* ☐
   ***no** current regular male partner* ☐
7. If you are in a **regular** relationship with a man, for how long has it been? Less than 6 months ☐
   6–11 months ☐
   1–2 years ☐
   More than 2 years ☐
   Not in a regular relationship with a man ☐

LAST SIX MONTHS . . . .

8. How many different **men** have you had sex with in the past six months?
   None ☐ One ☐
   2–5 men ☐ 6–10 men ☐
   11–50 men ☐ More than 50 men ☐
9. How many different **women** have you had sex with in the past six months?
   None ☐ One ☐
   2–5 women ☐ 6–10 women ☐
   More than 10 women ☐

Regular male partners — last 6 months

10. Have you had sex with regular male partner/s **in the last six months**? Yes ☐ No ☐ *Go directly to Question 21.*

In the past SIX MONTHS which of the following have you done with your **REGULAR male partner/s**?

11. ***Oral sex:*** I sucked his cock but he did NOT come in my mouth
    Never ☐ Occasionally ☐ Often ☐
12. ***Oral sex:*** He sucked my cock but I did NOT come in his mouth
    Never ☐ Occasionally ☐ Often ☐
13. ***Oral sex:*** I sucked his cock and he came in my mouth
    Never ☐ Occasionally ☐ Often ☐
14. ***Oral sex:*** He sucked my cock and I came in his mouth
    Never ☐ Occasionally ☐ Often ☐

Anal sex

15. I fucked him ***with a condom***
    Never ☐ Occasionally ☐ Often ☐
16. He fucked me ***with a condom***
    Never ☐ Occasionally ☐ Often ☐
17. I fucked him ***without a condom*** but pulled out before I came
    Never ☐ Occasionally ☐ Often ☐
18. He fucked me ***without a condom*** but pulled out before he came
    Never ☐ Occasionally ☐ Often ☐
19. I fucked him ***without a condom*** and came inside him
    Never ☐ Occasionally ☐ Often ☐
20. He fucked me ***without a condom*** and came inside me
    Never ☐ Occasionally ☐ Often ☐

Casual male partners — last 6 months

21. Have you had sex with casual male partner/s **in the last six months**? Yes ☐ No ☐ *Go directly to Question 34.*

In the past SIX MONTHS which of the following have you done with any of your **CASUAL male partners**?

22. ***Oral sex:*** I sucked his cock but he did NOT come in my mouth
    Never ☐ Occasionally ☐ Often ☐
23. ***Oral sex:*** He sucked my cock but I did NOT come in his mouth
    Never ☐ Occasionally ☐ Often ☐
24. ***Oral sex:*** I sucked his cock and he came in my mouth
    Never ☐ Occasionally ☐ Often ☐
25. ***Oral sex:*** He sucked my cock and I came in his mouth
    Never ☐ Occasionally ☐ Often ☐

Anal sex

26. I fucked him ***with a condom***
    Never ☐ Occasionally ☐ Often ☐
27. He fucked me ***with a condom***
    Never ☐ Occasionally ☐ Often ☐
28. I fucked him ***without a condom*** but pulled out before I came
    Never ☐ Occasionally ☐ Often ☐
29. He fucked me ***without a condom*** but pulled out before he came
    Never ☐ Occasionally ☐ Often ☐
30. I fucked him ***without a condom*** and came inside him
    Never ☐ Occasionally ☐ Often ☐
31. He fucked me ***without a condom*** and came inside me
    Never ☐ Occasionally ☐ Often ☐

LAST SIX MONTHS . . . .

32. How many of your *casual* partners in the last 6 months did you tell your HIV status? None ☐ Some ☐ All ☐
33. How many of your *casual* partners in the last 6 months told you their HIV status? None ☐ Some ☐ All ☐

34. Have you ever had an HIV antibody test?
    No ☐ Yes ☐

Continues on other side

35. When were you last tested for HIV antibodies?

Less than a week ago ☐ 7–12 months ago ☐
1–4 weeks ago ☐ 1–2 years ago ☐
1–6 months ago ☐ 2–4 years ago ☐
More than 4 years ago ☐

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

No test/Don't know ☐
Negative ☐
Positive ☐

If you are **HIV positive**, please complete the next two questions.

37. Are you on combination antiretroviral therapy?

No ☐ Yes ☐

38. Is your viral load?

Undetectable ☐
Detectable ☐
Don't know / unsure ☐

IF you are **in a regular relationship with a man** at present, please complete the next three questions.

39. Do you know the result of your regular partner's HIV antibody test?

Yes—Positive ☐
Yes—Negative ☐
I don't know/He hasn't had a test ☐

40. Do you have a **clear (spoken) agreement** with your regular partner about anal sex (fucking) within your relationship?

No agreement ☐
Agreement: No anal sex at all ☐
Agreement: All anal sex is with a condom ☐
Agreement: Anal sex can be without a condom ☐

41. Do you have a **clear (spoken) agreement** with your regular partner about sex with casual partners?

No agreement ☐
Agreement: No sex at all ☐
Agreement: No anal sex at all ☐
Agreement: All anal sex is with a condom ☐
Agreement: Anal sex can be without a condom ☐

42. What country were you born in? Australia ☐

Other (please specify) _____

43. How old are you? _____ years

44. Are you of Aboriginal or Torres Strait Islander origin?

No ☐ Yes ☐

45. What is your ethnic background? (*e.g. Dutch, Greek, Vietnamese, Lebanese, Chinese)*

Anglo-Australian only ☐ Other:_____

46. Are you: (tick one only)

Employed full-time ☐
Employed part-time ☐
Unemployed ☐
A student ☐
A pensioner or on social security benefits ☐
Other ☐

47. What is your occupation? _____

48. What is the highest level of education you have had?

Less than or up to 3 years of high school / Year 10 ☐
Year 12 / HSC ☐
Tertiary diploma or trade certificate / TAFE ☐
University or CAE ☐

49. Where do you live? Postcode ☐☐☐☐

OR Suburb/Town: _____

50. Where do you look for male sex partners?

Internet	Never ☐	Occasionally ☐	Often ☐
Gay bar	Never ☐	Occasionally ☐	Often ☐
Dance party	Never ☐	Occasionally ☐	Often ☐
Gym	Never ☐	Occasionally ☐	Often ☐
Beat	Never ☐	Occasionally ☐	Often ☐
Gay sauna	Never ☐	Occasionally ☐	Often ☐
Other sex venue	Never ☐	Occasionally ☐	Often ☐
Sex workers	Never ☐	Occasionally ☐	Often ☐
Private sex parties	Never ☐	Occasionally ☐	Often ☐

51. **In the last 6 months**, how many of your male sex partners did you find on the internet?

None ☐ One ☐
2–5 men ☐ 6–10 men ☐
11–50 men ☐ More than 50 men ☐

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

Anal swab	None ☐	Once ☐	Twice ☐	3 or more ☐
Throat swab	None ☐	Once ☐	Twice ☐	3 or more ☐
Penile swab	None ☐	Once ☐	Twice ☐	3 or more ☐
Urine sample	None ☐	Once ☐	Twice ☐	3 or more ☐
Blood test for HIV	None ☐	Once ☐	Twice ☐	3 or more ☐
Other blood test	None ☐	Once ☐	Twice ☐	3 or more ☐

53. How often do you think you personally need to be tested for sexually transmitted infections?

Every month ☐ Yearly ☐
Every 3 months ☐ Never ☐
Every 6 months ☐

54. How many people do you know personally who have found out they have HIV **in the past twelve months**?

None ☐ One ☐
Two ☐ 3–5 ☐
More than 5 ☐

55. Please look at the resource materials on the reverse side of the Information Sheet. Which ones have you **seen** before?

A: No ☐ Yes ☐ **B**: No ☐ Yes ☐
C: No ☐ Yes ☐ **D**: No ☐ Yes ☐

56. Which of these drugs have you **used** or **injected** in the past **six months**?

	Used	**Injected**
Amyl/Poppers	No ☐ Yes ☐	
Marijuana	No ☐ Yes ☐	
Viagra/Cialis etc.	No ☐ Yes ☐	No ☐ Yes ☐
Ecstasy	No ☐ Yes ☐	No ☐ Yes ☐
Speed	No ☐ Yes ☐	No ☐ Yes ☐
Cocaine	No ☐ Yes ☐	No ☐ Yes ☐
Crystal Meth	No ☐ Yes ☐	No ☐ Yes ☐
LSD / trips	No ☐ Yes ☐	No ☐ Yes ☐
GHB	No ☐ Yes ☐	No ☐ Yes ☐
Special K	No ☐ Yes ☐	No ☐ Yes ☐
Heroin	No ☐ Yes ☐	No ☐ Yes ☐
Steroids	No ☐ Yes ☐	No ☐ Yes ☐
Any other drug	No ☐ Yes ☐	No ☐ Yes ☐

57. How often do you use drugs for the purpose of sex?

Weekly ☐ Less than monthly ☐
Monthly ☐ Never ☐

THANK YOU FOR YOUR TIME 1-2006/1

Appendix 2: Men who never used condoms when engaging in anal intercourse with regular partners

Among all men sampled in February 2006, 17.1% of men recruited from all sites and 15.1% of men recruited from gay venues and gay men's clinics reported that whenever they had had anal intercourse with their regular partners in the six months prior to the survey it was without a condom (see Table A.1). Analysis of data relating to men recruited from all sites from 2001 onwards shows no significant change over time in the proportion of men who never used condoms when engaging in anal intercourse with regular partners. Only men recruited at gay venues and gay men's clinics who had regular partners reported an increase in unprotected anal intercourse with these partners over this time ($p < .05$).

Table A.1: Proportion of men who never used condoms when engaging in anal intercourse with regular partners in the six months prior to rhe survey

	2001	2002	2003	2004	2005	Feb 06	Sig* ($p <$)
All men							
All sites	16.7	16.1	16.2	17.1	16.8	17.1	ns
Gay venues and gay men's clinics	13.9	12.9	13.2	13.6	14.7	15.1	ns
Men with regular partners							
All sites	26.0	25.6	27.1	27.7	27.9	26.7	ns
Gay venues and gay men's clinics	23.5	23.0	24.7	24.0	26.8	26.3	.05
Men who had had anal intercourse with regular partners							
All sites	29.2	28.6	30.6	30.6	30.7	29.5	ns
Gay venues and gay men's clinics	25.9	25.4	28.3	26.4	29.3	29.0	ns

*χ^2 test for trend from 2001.

As expected, these proportions are higher than the proportions of men who never used condoms during anal intercourse with casual partners (see Table A.2). They are consistent with findings from European countries in which the proportions of gay and bisexual men who never used condoms during anal intercourse with regular partners were higher than those of men who never used condoms during anal intercourse with casual partners (Bochow et al., 1994).

Appendix 3: Men who never used condoms when engaging in anal intercourse with casual partners, and disclosure of HIV status

In February 2006, 1.5% of men recruited from all sites (n = 38) and 1.8% of men recruited from gay venues and gay men's clinics (n = 20) reported that every episode of anal intercourse with a casual partner in which they had engaged in the six months prior to the survey had been without a condom (see Table A.2)*.

Among the men recruited at all sites since 2001, there has been no significant change in the proportion who always had unprotected anal intercourse with casual partners (UAIC). However, among men recruited from gay venues and gay men's clinics, there has been a significant decrease.

Table A.2: Proportion of men who never used condoms when engaging in anal intercourse with casual partners in the six months prior to the survey

	2001	2002	2003	2004	2005	Feb 2006	Sig* (p <)
All men							
All sites	2.0	1.7	1.9	1.9	1.4	1.5	ns
Gay venues and gay men's clinics	3.0	2.5	1.9	2.0	1.7	1.8	.01
Men with casual partners							
All sites	2.8	2.4	2.8	2.7	2.0	2.2	ns
Gay venues and gay men's clinics	3.7	3.2	2.5	2.7	2.2	2.5	.05
Men who had had anal intercourse with casual partners							
All sites	3.4	2.9	3.4	3.4	2.4	2.6	ns
Gay venues and gay men's clinics	4.3	3.9	3.1	3.2	2.7	2.9	0.5

*χ^2 test for trend from 2001 to 2006.

Analysis of the total sample over the five years from 2001 to February 2006 reveals that significantly more HIV-positive men (4.4%) than HIV-negative men (1.3%) or men of unknown HIV status (1.3%) ($p < .001$) reported that they had never used condoms when engaging in anal intercourse with casual partners in the six months prior to the survey.

Disclosure of HIV status by men who never used condoms

Of the total sample between 2001 and February 2006, the men who never used condoms during anal intercourse with casual partners were more likely to have disclosed their HIV status to their casual partners than the men who sometimes or

*Due to the limited range of questions that can be asked in the survey, we are unable to ascertain how many episodes of anal intercourse with casual partners took place without condoms.

always used condoms ($p < .001$). Of those who had never used condoms, 34.7% ($n = 100$) reported having told *all* their casual partners their HIV status, while, of those who sometimes or always used condoms, 19.5% ($n = 2315$) had disclosed their HIV status to *all* casual partners. Conversely, a higher proportion of men who sometimes or always used condoms (50.0%, $n = 5939$) reported that they had not told *any* of their casual partners their HIV status, compared to 36.5% ($n = 105$) of those who never used condoms ($p < .001$).

Of the men who always engaged in UAIC, a higher proportion of those recruited at gay men's clinics and Fair Day had disclosed their HIV status to *all* of their casual partners than of those recruited at gay social venues and sex-on premises venues (see Table A.3). Higher proportions of men who reported having disclosed their HIV status to *none* of their casual partners were recruited at Fair Day, sex-on-premises venues and social venues than at gay men's clinics.

Table A.3: Level of disclosure of HIV status to casual partners among men who never used condoms when engaging in anal intercourse with casual partners, by recruitment site (2001 to February 2006)

		Recruitment site							
		Gay men's clinics		Gay social venues		Gay sex-on-premises venues		Fair Day	
	Disclosure	*n*	%	*n*	%	*n*	%	*n*	%
Participants' disclosure of HIV status to casual partners	to none	16	23.9	36	42.4	18	37.5	35	36.8
	to some	18	26.9	24	28.2	18	37.5	23	24.2
	to all	32	47.8	21	24.7	11	22.9	36	37.9
	unknown	1	1.5	4	4.7	1	2.1	1	1.1
	Total	**67**	**100**	**85**	**100**	**48**	**100**	**95**	**100**

Similarly, higher proportions of men recruited at gay men's clinics, gay social venues and Fair Day than men recruited at sex-on-premises venues reported that *all* their casual partners during the six months prior to the survey had disclosed their HIV status (see Table A.4). Higher proportions of men recruited at gay social venues and Fair Day than at other venues reported that *none* of their casual partners in the six months prior to the survey had disclosed their HIV status.

Table A.4: Level of disclosure of HIV status by casual partners to participants who never used condoms when engaging in anal intercourse with casual partners, among men recruited at all sites (2001 to February 2006)

		Recruitment site							
		Gay men's clinics		Gay social venues		Gay sex-on-premises venues		Fair Day	
	Disclosure	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Casual partners' disclosure of HIV status to participants	by none	19	28.4	42	49.4	20	41.7	33	34.7
	by some	19	28.4	24	28.2	22	45.8	31	32.6
	by all	26	38.8	15	17.6	5	10.4	30	31.6
	unknown	3	4.5	4	4.7	1	2.1	1	1.1
	Total	67	100	85	100	48	100	95	100

Appendix 4: Sample sizes over time, by HIV status

Table A.5: Sample sizes over time of men recruited from all sites, gay social and sex-on-premises venues, and gay men's clinics, by HIV status

	All sites			Gay social and sex-on-premises venues			Gay men's clinics		
Survey	**HIV-positive**	**HIV-negative**	**HIV status unknown**	**HIV-positive**	**HIV-negative**	**HIV status unknown**	**HIV-positive**	**HIV-negative**	**HIV status unknown**
Feb 96	274	1109	180	52	218	52	121	103	12
Aug 96	117	422	64	66	376	59	51	46	5
Feb 97	283	1156	144	45	244	32	103	84	3
Aug 97	283	621	68	102	434	62	181	187	6
Feb 98	404	1528	216	109	473	83	165	176	11
Aug 98	209	513	79	73	358	67	136	155	12
Feb 99	382	1746	203	86	478	64	132	161	4
Aug 99	225	635	69	90	468	65	135	167	4
Feb 00	324	1475	195	83	368	57	125	198	13
Aug 00	194	624	51	62	430	43	132	194	8
Feb 01	309	1591	144	66	371	47	127	159	13
Aug 01	144	504	42	79	417	34	65	87	8
Feb 02	268	1568	214	61	350	52	75	75	5
Aug 02	159	576	99	87	490	94	72	86	5
Feb 03	236	1399	219	67	461	78	65	112	5
Aug 03	101	512	74	59	428	64	42	84	10
Feb 04	254	1453	201	75	461	60	68	89	14
Aug 04	163	664	86	78	568	80	85	96	6
Feb 05	233	1748	249	77	547	78	76	118	11
Aug 05	253	835	95	93	725	82	160	110	13
Feb 06	337	2015	242	72	589	62	124	163	27

Appendix 5: HIV testing among non-HIV-positive men

Figure A.1: HIV testing in the 12 months prior to the survey among non-HIV-positive gay men recruited at all sites, by age category

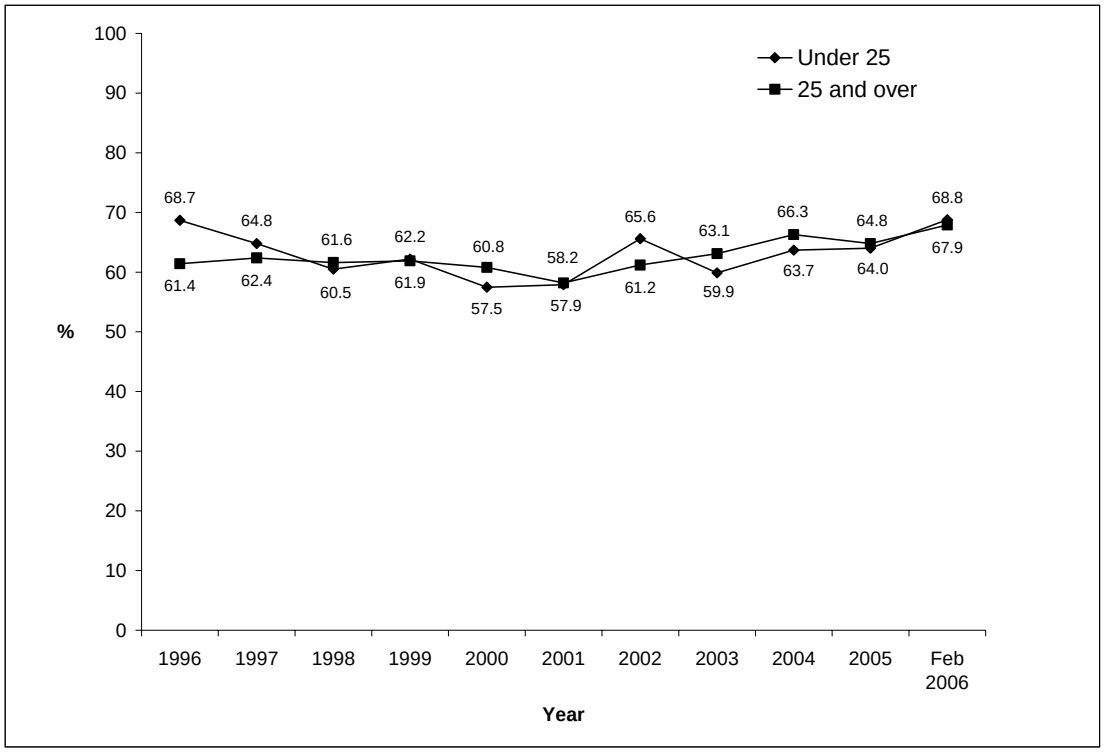

Figure A.2: HIV testing in the 12 months prior to the survey among non-HIV-positive gay men recruited at gay venues and gay men's clinics, by age category