Gay Community Periodic Survey: Melbourne 2001

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gay community periodic survey

MELBOURNE 2001

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Description of the Study

The Melbourne Gay Community Periodic Survey is a cross-sectional survey of gay and homosexually active men recruited through a range of gay community sites in Melbourne. The project was funded by the Victorian Department of Human Services. The Periodic Survey provides a snapshot of sexual and HIV-related practices among gay and homosexually active men. This survey, the third in Melbourne, was administered in February 2001. The current report contains results of that survey and makes comparisons with data from the initial survey conducted in February 1998 (Van de Ven et al., 1998) and the second survey in February 2000 (Aspin et al., 2000).

The major aim of the Survey is to provide data on levels of safe and unsafe sexual practice in a broad cross-sectional sample of gay and homosexually active men. With this in mind, men were recruited from a number of gay community venues. In 2001, six sites — the same as in 1998 and 2000 — were used for recruitment: the Midsumma Carnival and 5 gay community venues (1 social venue, 2 sex-on-premises venues and 2 sexual health clinics). Trained recruiters carried out recruitment at these venues over a 1-week period.

The questionnaire used in this study is attached to this report. It is a short, self-administered instrument that typically takes 5 to 10 minutes to complete. Questions focus on anal intercourse and oral sex, the use of condoms, the nature of sexual relationships, HIV testing and serostatus, aspects of social attachment to gay community, recreational drug use, and a range of demographic items including sexual identity, age, occupation and ethnicity. In the main, the questions in the 2001 survey were the same as those in the 2000 and 1998 surveys. This ensures that a direct comparison between the 3 surveys is possible.

Nonetheless, some questions in the current survey were included for the first time this year while other questions that were included in previous surveys were removed. In all, 3 questions were added about post-exposure prophylaxis (PEP) and a further 3 questions were also included about the use of condoms in casual relationships when the partner's status is positive, negative, or unknown. Certain items were omitted from the

current survey to make way for these new questions. These include items about the location in which unprotected anal intercourse occurred and attendance at certain gay venues. Furthermore, the survey contained a reduced number of the types of drugs that may have been used or injected.

This report describes data from the third Melbourne Gay Community Periodic Survey in comparison with data from the 2 surveys preceding it. More detailed analyses of the data will continue and will be disseminated as they are completed. As with any data analysis, further examination may necessitate minor reinterpretation of the findings.

Sample and Recruitment

Respondents were recruited through 5 sites in the Melbourne metropolitan area and at a large public gay community event (Midsumma Carnival). In comparison with the 2 preceding surveys, in 2001 there was an increase in the proportion of men recruited at the Midsumma Carnival and a corresponding decrease in the recruitments from gay venues (see Table 1). The number of men recruited at sexual health centres remained stable. As in the 2 previous surveys, most of the sample was recruited from the Midsumma Carnival and in 2001 about 26% of the recruitments occurred at gay venues.

The implication of these subtle changes in sample composition is that in certain analyses comprising, for example, unprotected anal intercourse (UAI), there may be a slight underestimation of the percentage engaging in UAI with casual partners (UAI-C) and a corresponding overestimation of the percentage engaging in UAI with regular partners (UAI-R). The basis for this estimation is that in the 2 preceding surveys, men recruited at the Midsumma Carnival were less likely to engage in UAI-C but more likely to engage in UAI-R than their counterparts who were recruited at sex-on-premises and social venues or clinics.

Table 1 : Source of recruitment

	1998	2000	2001
Sexual health centres	49 (2.6%)	60 (3.8%)	68 (3.7%)
Gay venues	657 (34.7%)	520 (33.0%)	481 (26.3%)
Midsumma Carnival	1185 (62.7%)	998 (63.2%)	1281 (70.0%)
Total	**1891 (100%)**	**1578 (100%)**	**1830 (100%)**

In 2001, 2336 men were asked to complete a questionnaire and 1830 did so. This represents a sound response rate of 78.3 per cent.

Previous studies such as SMASH (Prestage et al., 1995) have demonstrated that HIV serostatus is an important distinguishing feature among gay men, particularly with regard

to sexual behaviour. For this reason some of the data on sexual practices are reported separately for men who are HIV-positive, those who are HIV-negative, and those who have not been tested or do not know their serostatus.

As indicated in previous Periodic Surveys (Van de Ven et al., 1997), men recruited from events such as the Midsumma Carnival are different in some respects from those recruited from clinics and gay venues. Nonetheless, most of the data reported here are for the sample as a whole, giving an account of practices drawn from a *broad* cross-sectional sample of Melbourne gay men.

Demographic Profile

In terms of demographic variables, the participants in the 1998, 2000 and 2001 surveys are quite similar.

Geographic distribution

There is little variation in the geographic distribution of participants from 1998 to 2001. In all 3 surveys, the men came primarily from the Melbourne metropolitan area. A small percentage of men, who indicated that they participated regularly in Melbourne gay community, came from other parts of Victoria or from outside the State (see Table 2).

Table 2 : Residential location

	1998	2000	2001
Gay Melbourne	850 (44.9%)	659 (41.8%)	802 (43.8%)
Urban Victoria	845 (44.7%)	734 (46.5%)	816 (44.6%)
Rural Victoria	89 (4.7%)	92 (5.8%)	109 (6.0%)
Elsewhere	107 (5.7%)	93 (5.9%)	103 (5.6%)
Total	**1891 (100%)**	**1578 (100%)**	**1830 (100%)**

Note: The suburbs defined as 'Gay Melbourne' are the same as those defined as such in previous studies, eg. Project Male Call (Crawford et al, 1998). 'Urban Victoria' included the rest of metropolitan Melbourne, plus Geelong.

Age

In the 2001 survey, the maximum age of respondents was 75, with a median age of 34. Age range and distribution were fairly similar to those observed in the previous 2 studies (see Table 3).

Table 3 : Age

	1998	2000	2001
Under 25	286 (15.5%)	223 (14.4%)	267 (15.0%)
25–29	371 (20.0%)	262 (16.9%)	289 (16.2%)
30–39	746 (40.3%)	572 (36.9%)	733 (41.1%)
40–49	319 (17.2%)	333 (21.4%)	347 (19.5%)
50 and over	129 (7.0%)	162 (10.4%)	147 (8.2%)
Total	**1851 (100%)[1]**	**1552 (100%)[2]**	**1783 (100%)[3]**

[1] Missing data (n=40)
[2] Missing data (n=26)
[3] Missing data (n=47)

Ethnicity

As with the 2 previous surveys, the sample was predominantly 'Anglo-Australian' with a slightly higher proportion identifying as such in the current survey (see Table 4). Forty-two men (2.3% of the total sample) reported being of Aboriginal or Torres Strait Islander origin.

Table 4 : Ethnicity

	1998	2000	2001
Anglo-Australian	1471 (77.8%)	1222 (77.4%)	1481 (80.9%)
European	212 (11.2%)	232 (14.7%)	215 (11.8%)
Other	208 (11.0%)	124 (7.9%)	134 (7.3%)
Total	**1891 (100%)**	**1578 (100%)**	**1830 (100%)**

Occupation

The proportion of men who were not in the work force was fairly high compared with the general population, and on par with the previous year (see Table 5). The figure is elevated because of the relatively higher percentage of HIV-positive men who received some form of social security payment. Most of the sample was employed, with 72% of all respondents being in full-time employment, a slight increase from the previous year. In 2001, there was a correspondingly smaller proportion of participants in part-time work.

Table 5 : Employment status

	2000	2001
Full-time	1046 (68.0%)	1293 (72.3%)
Part-time	209 (13.6%)	190 (10.6%)
Unemployed/Other	283 (18.4%)	305 (17.1%)
Total	**1538 (100%)[1]**	**1788 (100%)[2]**

[1] Missing data (n=40)
[2] Missing data (n=42)

As in 1998 and 2000, and as in most studies of male homosexual populations, there was a substantial over-representation of professionals/managers and an under-representation of manual workers in comparison to the general population (Connell et al., 1991; Hood et al., 1994). Similar to 2000, the 2001 data show a greater number of professionals and fewer paraprofessionals and slightly fewer tradesmen, plant operators and labourers than in 1998. There were even fewer tradesmen in 2001 than there had been in 2000 (see Table 6).

Table 6 : Occupation

	1998	2000	2001
Professional/Managerial			
Professional/ Managerial	568 (37.1%)	591 (46.0%)	664 (44.7%)
Paraprofessional	235 (15.3%)	111 (8.7%)	146 (9.8%)
White collar			
Clerical/Sales	495 (32.3%)	429 (33.4%)	556 (37.4%)
Blue collar			
Trades	147 (9.6%)	93 (7.2%)	58 (3.9%)
Plant operator/Labourer	87 (5.7%)	61 (4.7%)	63 (4.2%)
Total	**1532 (100%)[1]**	**1285 (100%)[2]**	**1487 (100%)[3]**

Note: Missing data here is mainly N/A, ie not currently employed.
[1] Missing data (n=359)
[2] Missing data (n=293)
[3] Missing data (n=343)

Sexual relationships with women

As in 1998 and 2000, few men had had sex with women in the previous 6 months, and these percentages are steady across the 3 survey periods (see Table 7).

Table 7 : Sex with women in the previous six months

	1998	2000	2001
No female partners	1670 (93.0%)	1454 (94.0%)	1539 (94.3%)
One female partner	78 (4.3%)	48 (3.1%)	50 (3.1%)
More than one female partner	48 (2.7%)	44 (2.9%)	42 (2.6%)
Total	**1796 (100%)[1]**	**1546 (100%)[2]**	**1631 (100%)[3]**

[1] Missing data (n=95)

[2] Missing data (n=32)

[3] Missing data (n=199)

Sexual relationships with men

The majority of men in each of the 3 samples were in a regular sexual relationship with a man at the time of completing the survey (see Table 8). In comparison with 2000, and to a lesser extent with 1998, there was a smaller proportion of men in a regular relationship who also had sex with casual partners. About 32% of the study participants in 2001 were in a monogamous relationship, slightly higher than in previous years. Although in 2001 the majority of men were having sex with casual partners, the percentage was down slightly from previous years. It is quite plausible that one of the main reasons for this reduction is the difference in sample composition in 2001. Men recruited from the Carnival Day, for example, are more likely to be monogamous only and less likely to have casual sex only (no regular partner) in comparison to men recruited at clinics or venues. A small proportion of the men was not having sex with other men at the time of the survey and this has remained steady over time.

Table 8 : Current relationships with men

	1998	2000	2001
None	225 (12.2%)	197 (12.9%)	227 (13.7%)
Casual only	472 (25.6%)	374 (24.4%)	420 (25.3%)
Regular plus casual*	612 (33.1%)	537 (35.1%)	478 (28.8%)
Regular only (monogamous)	538 (29.1%)	422 (27.6%)	535 (32.2%)
Total	**1847 (100%)[1]**	**1530 (100%)[2]**	**1660 (100%)[3]**

*This category may include either of the partners having casual sex, or both.

[1] Missing data (n=44)

[2] Missing data (n=48)

[3] Missing data (n=170)

About two-thirds of men in a regular relationship had been in that relationship for at least 1 year, and that proportion has remained steady across the 3 time periods (see Table 9). Correspondingly, about one-third of the men have consistently reported being in a relationship of less than 1 year.

Table 9 : Length of relationships with men

	1998	2000	2001
Less than one year	364 (36.8%)	268 (31.8%)	363 (33.6%)
At least one year	626 (63.2%)	574 (68.1%)	718 (66.4%)
Total	**990 (100%)**	**842 (100%)**	**1081 (100%)**

Association with Gay Community

Similar in composition to both 1998 and 2000, and consistent with the recruitment strategies employed, the 2001 sample were highly gay-identified and gay-community-attached.

Sexual identity

The data in all 3 surveys show that the samples were composed predominantly of men who identified as homosexual (see Table 10), and these percentages are comparable with similar surveys conducted in Sydney. There were relatively few men in each sample who identified as bisexual or heterosexual, and the proportions have been quite consistent across the 3 survey periods.

Table 10 : Sexual identity

	1998	2000	2001
Gay/homosexual/queer	1705 (91.3%)	1426 (91.0%)	1693 (93.1%)
Bisexual	119 (6.4%)	83 (5.3%)	84 (4.6%)
Heterosexual/other	43 (2.3%)	58 (3.7%)	41 (2.3%)
Total	**1867 (100%)[1]**	**1567 (100%)[2]**	**1818 (100%)[3]**

[1] Missing data (n=24)
[2] Missing data (n=11)
[3] Missing data (n=12)

Gay community involvement

As with the 1998 and 2000 surveys, men in the 2001 sample were highly socially involved with gay men (see Table 11). About half of the men in the sample said most or all of their friends were gay men and a similar proportion reported that some or a few of their friends were gay.

Table 11 : Gay friends

	1998	2000	2001
None	21 (1.1%)	17 (1.1%)	15 (0.8%)
Some or a few	882 (46.8%)	757 (48.1%)	919 (50.4%)
Most or all	981 (52.1%)	800 (50.8%)	891 (48.8%)
Total	**1884 (100%)[1]**	**1574 (100%)[2]**	**1825 (100%)[3]**

[1] Missing data (n=7)
[2] Missing data (n=4)
[3] Missing data (n=5)

Correspondingly, in all 3 surveys, about 85% of the men said they spent some or a lot of their free time with gay men (see Table 12).

Table 12 : Proportion of free time spent with gay men

	1998	2000	2001
None	8 (0.4%)	9 (0.6%)	13 (0.7%)
A little	222 (11.8%)	228 (14.5%)	212 (11.6%)
Some	728 (38.7%)	627 (39.8%)	718 (39.3%)
A lot	925 (49.1%)	711 (45.1%)	883 (48.4%)
Total	**1883 (100%)[1]**	**1575 (100%)[2]**	**1826 (100%)[3]**

[1] Missing data (n=8)
[2] Missing data (n=3)
[3] Missing data (n=4)

HIV Testing and Status

Most of the men in each of the samples had been tested for antibodies to HIV, and the status of these men is predominantly HIV-negative (see Table 13). The respective proportions of men in the sample who are HIV-positive or HIV-negative have remained steady across the 3 study periods. Also steady from 1998 to 2001 is the percentage of men who had not been tested or had not obtained their test results — about 17% in the most recent survey.

Table 13 : HIV test results

	1998	2000	2001
Not tested/No results	330 (17.8%)	243 (15.5%)	300 (16.7%)
HIV-negative	1371 (73.9%)	1180 (75.5%)	1347 (75.2%)
HIV-positive	154 (8.3%)	140 (9.0%)	145 (8.1%)
Total	**1855 (100%)[1]**	**1563 (100%)[2]**	**1792 (100%)[3]**

[1] Missing data (n=36)
[2] Missing data (n=15)
[3] Missing data (n=38)

Time since most recent HIV-antibody test

Among the non HIV-positive men who had 'ever' had an HIV antibody test, the majority had at least done so within the previous 12 months and that proportion has remained steady across the 3 study periods (see Table 14). Recency of testing for the remaining men is equally distributed between the categories of 7-12 months, 12-24 months, and over 24 months, with about 20% of men in each category.

Table 14 : Time since most recent HIV test

	1998	2000	2001
Less than 6 months ago	632 (44.8%)	506 (42.0%)	571 (41.1%)
7–12 months ago	228 (16.1%)	246 (20.4%)	281 (20.2%)
1–2 years ago	296 (21.0%)	236 (19.6%)	259 (18.6%)
Over 2 years ago	256 (18.1%)	216 (18.0%)	279 (20.1%)
Total	**1412 (100%)**	**1204 (100%)**	**1390 (100%)**

Note: This table includes only non HIV-positive men who had been tested for HIV.

Combination therapies

About two-thirds of the men who reported that they were HIV-positive were taking combination therapies at the time of the most recent survey (Table 15). This percentage is lower than in 2000, which is also lower than the remarkably high baseline figure in 1998. Indeed, across the 3 time periods there has been a statistically significant downward trend in the proportion of HIV-positive men reporting that they are on combination antiviral therapy ($p < .01$). This trend is consistent with that reported in HIV Futures II, an Australian-wide survey, which found that there had been a decline in the number of people who were taking combination therapy (Grierson et al., 2000).

Table 15 : Use of combination antiretroviral therapies

	1998	2000	2001
Yes	128 (82.6%)	108 (78.3%)	101 (66.9%)
No	27 (17.4%)	30 (21.7%)	50 (33.1%)
Total	**155 (100%)[1]**	**138 (100%)[2]**	**151 (100%)[3]**

Note: Includes only HIV-positive men.

[1] Missing data (n=5)

[2] Missing data (n=3)

[3] Missing data (n=3)

Regular partner's HIV-status

In all 3 surveys, participants were asked about the serostatus of their current regular partner (see Table 16). As the question referred to current partners only, fewer men responded to this item than indicated sex with a regular partner during the previous six months. The majority (about 70%) of the men in a regular relationship reported having a partner who is HIV-negative and almost 10% were with partners of HIV-positive status. When viewed across the 3 study periods, the proportions of men in a relationship with a partner who is HIV-positive, HIV-negative, or HIV-unknown, has remained reasonably steady.

Table 16 : HIV status of regular partners

	1998	2000	2001
HIV-positive	106 (10.3%)	58 (7.7%)	84 (8.6%)
HIV-negative	640 (62.2%)	526 (70.0%)	669 (68.3%)
HIV status unknown	283 (27.5%)	167 (22.2%)	227 (23.2%)
Total	**1029 (100%)**	**751 (100%)**	**980 (100%)**

Note: Includes only those men who had a regular partner at the time of completing the survey.

The survey in 2000 revealed an upturn in the percentage of HIV-positive men with an HIV-negative partner and a corresponding downturn in the percentage of HIV-positive men with an HIV-positive partner. In 2001, the percentage of HIV-positive respondents with HIV-positive partners has increased to a level on par with that seen in 1998 and the percentage of HIV positive respondents with HIV-negative partners has dropped below 50%, but not to the level it was at in 1998 (see Table 17). Similar proportions of HIV-positive respondents are in a serodiscordant relationship (with an HIV-negative partner) and in a seroconcordant relationship (with an HIV-positive partner). HIV-negative respondents are in relationships with predominantly other HIV-negative men and the proportion is similar to the previous year, as is the proportion of HIV-negative respondents with HIV-positive partners. As in the 2 previous surveys, men without knowledge of their own serostatus tended not to know the serostatus of their regular partners, or they had HIV-negative regular partners. The proportion of men who did not know the serostatus of their partner decreased in the period from 1998 to 2000, but has since remained steady.

Table 17 : Match of HIV status in regular relationships

Serostatus of Regular Partner	Respondent's HIV status		
	HIV-Positive	HIV-Negative	Unknown
1998			
HIV-positive	45 (46.9%)	50 (6.3%)	10 (7.4%)
HIV-negative	39 (40.6%)	553 (69.7%)	45 (33.0%)
HIV status unknown	12 (12.5%)	190 (24.0%)	81 (59.6%)
Total (*N* = 1025)	**96 (100%)**	**793 (100%)**	**136 (100%)**
2000			
HIV-positive	25 (37.9%)	30 (5.0%)	2 (2.6%)
HIV-negative	37 (56.0%)	458 (75.9%)	29 (37.7%)
HIV status unknown	4 (6.1%)	115 (19.1%)	46 (59.7%)
Total (*N* = 746)	**66 (100%)**	**603 (100%)**	**77 (100%)**
2001			
HIV-positive	37 (45.1%)	44 (5.7%)	2 (1.8%)
HIV-negative	40 (48.8%)	578 (74.7%)	42 (37.8%)
HIV status unknown	5 (6.1%)	152 (19.6%)	67 (60.4%)
Total (*N* = 967)	**82 (100%)**	**774 (100%)**	**111 (100%)**

Note: Includes only those men who had a regular partner at the time of completing the survey.

Sexual Practice and 'Safe Sex'

Sexual behaviour between men

Participants were asked to report on a limited range of sexual practices (separately for regular and casual partners): anal intercourse with and without ejaculation, and oral intercourse with and without ejaculation (see Table 18). Based on the responses to the sexual behaviour items and the sort of sexual relationships with men indicated by the participants, about two-thirds of the men in all 3 surveys were classified as having had sex with a regular male partner and this proportion has been steady across the 3 study periods. A similar proportion was classified as having had sex with any casual male partners 'in the previous six months', and this represents a significant downturn from 72% in 1998 ($p < .001$). Further interpretation of these findings is reported on below.

Table 18 : Reported sex with male partners in previous six months

	1998 (n=1891)	2000 (n=1578)	2001 (n=1830)
Any sexual contact with *regular* partners	1215 (64.3%)	1007 (63.8%)	1199 (65.5%)
Any sexual contact with *casual* partners	1362 (72.0%)	1123 (71.2%)	1209 (66.1%)
Total	**1891**	**1578**	**1830**

Note: These categories are not mutually exclusive

The result referred to in Table 18 ought to be interpreted in consideration of the slight differences in sample composition mentioned in the section entitled ***Sample and Recruitment***. As in 1998 and 2000, men recruited at the Midsumma Carnival were more likely to have had regular partners, and less likely to have had casual partners than their counterparts recruited at sex-on-premises and social venues or clinics (see Table 19). Such a finding is not surprising as men attending gay venues, particularly sex-on-premises venues, do so to find casual partners. When the analysis reported in Table 18 is conducted separately for these 2 groups of men, the downturn in the percentage of

men reporting sexual contact with casual partners is noticeable only among the men recruited at sex-on-premises and social venues or clinics.

Table 19 : Reported sex with male partners in previous six months by recruitment site

Serostatus of Regular Partner	Midsumma Carnival	Venues & Clinics
1998		
Any sexual contact with *regular* partners	815 (68.8%)	400 (56.7%)
Any sexual contact with *casual* partners	762 (64.3%)	600 (85.0%)
Total (*N* = 1891)	**1185**	**706**
2000		
Any sexual contact with *regular* partners	684 (68.5%)	323 (55.7%)
Any sexual contact with *casual* partners	618 (61.9%)	505 (87.1%)
Total (*N* = 1578)	**998**	**580**
2001		
Any sexual contact with *regular* partners	894 (69.8%)	305 (55.8%)
Any sexual contact with *casual* partners	780 (60.9%)	428 (78.2%)
Total (*N* =1830)	**1281**	**547**

Note: These categories are not mutually exclusive.

In comparison with the 2 preceding surveys, in 2001 there were slightly more men reporting that they had no sexual partners in the previous 6 months and slightly fewer indicating they had more than 10 partners (see Table 20). This result may be partly attributable to the slight differences in sample composition in comparison to the 2 previous surveys. The majority of the men had engaged in sex with between 1 partner and 10 partners 'in the previous six months'.

Table 20 : Number of male sex partners in previous six months

	1998	2000	2001
None	87 (4.6%)	99 (6.3%)	274 (15.1%)
One	427 (22.8%)	325 (20.7%)	339 (18.7%)
2–10	786 (41.9%)	611 (39.0%)	703 (38.7%)
11–50	454 (24.2%)	411 (26.2%)	388 (21.4%)
More than 50	122 (6.5%)	122 (7.8%)	111 (6.1%)
Total	**1876 (100%)[1]**	**1578 (100%)[2]**	**1815 (100%)[3]**

[1] Missing data (n=15)

[2] Missing data (n=10)

[3] Missing data (n=15)

Overview of sexual practices with regular and casual partners

Not all participants engaged in oral intercourse with ejaculation with their regular male partners, but those who did were equally likely to do so in the insertive as in the receptive role (see Table 21). This result is consistent across the 3 study periods. Over half of those with regular male partners engaged in any oral intercourse (receptive or insertive) with ejaculation with their partners.

Most respondents engaged in anal intercourse with their regular male partners and the percentage has remained steady across the three study periods. About 75% of the men with regular partners reported engaging in insertive anal intercourse while a slightly lower proportion, in the vicinity of 70%, reported engaging in receptive anal intercourse. This discrepancy in the proportions reporting insertive and receptive anal intercourse has been evident since 1998 and may suggest there is a slight bias to report being insertive rather than receptive.

Table 21 : Sexual behaviour with regular male partners

	Total Sample	Those with regular partners
1998		
Any oral intercourse with ejaculation	803 (42.5%)	803 (66.1%)
Insertive fellatio with ejaculation	650 (34.4%)	650 (53.5%)
Receptive fellatio with ejaculation	652 (34.5%)	652 (53.7%)
Any anal intercourse	1047 (55.4%)	1047 (86.2%)
Insertive anal intercourse	923 (48.8%)	923 (76.0%)
Receptive anal intercourse	822 (43.5%)	822 (67.7%)
Base	**1891**	**1215**
2000		
Any oral intercourse with ejaculation	562 (35.6%)	562 (55.8%)
Insertive fellatio with ejaculation	450 (28.5%)	450 (44.7%)
Receptive fellatio with ejaculation	424 (26.9%)	424 (42.1%)
Any anal intercourse	894 (56.6%)	894 (88.7%)
Insertive anal intercourse	773 (49.0%)	773 (76.8%)
Receptive anal intercourse	710 (45.0%)	710 (70.5%)
Base	**1578**	**1007**
2001		
Any oral intercourse with ejaculation	721 (39.4%)	721 (60.1%)
Insertive fellatio with ejaculation	597 (32.6%)	597 (49.8%)
Receptive fellatio with ejaculation	589 (32.2%)	589 (49.1%)
Any anal intercourse	1015 (55.5%)	1015 (84.7%)
Insertive anal intercourse	886 (48.4%)	886 (73.9%)
Receptive anal intercourse	833 (45.5%)	833 (69.5%)
Base	**1830**	**1199**

Note: These items are not mutually exclusive. The percentages do not sum to 100 per cent as some men engaged in more than one of these practices and some in none of these practices.

Fewer respondents engaged in either oral intercourse with ejaculation or any anal intercourse with casual male partners than with regular male partners (see Table 22). In the 2001 survey, approximately 40% of the men with casual partners engaged in oral intercourse with ejaculation, with this being slightly more common in the insertive rather than the receptive role. There has been a significant reduction in the percentage of men reporting receptive fellatio with ejaculation across the 3 study periods ($p < .01$).

Three-quarters of the men who had sex with casual male partners engaged in anal intercourse with those partners, and again more usually in the insertive than the receptive role. These percentages have remained steady across the 3 study periods.

Table 22 : Sexual behaviour with casual male partners

	Total Sample	Those with casual partners
1998		
Any oral intercourse with ejaculation	624 (33.0%)	624 (45.8%)
Insertive fellatio with ejaculation	511 (27.0%)	511 (37.5%)
Receptive fellatio with ejaculation	436 (23.1%)	436 (32.0%)
Any anal intercourse	971 (51.3%)	971 (71.3%)
Insertive anal intercourse	870 (46.0%)	870 (63.9%)
Receptive anal intercourse	677 (35.8%)	677 (49.7%)
Base	**1891**	**1362**
2000		
Any oral intercourse with ejaculation	452 (28.6%)	452 (40.7%)
Insertive fellatio with ejaculation	389 (24.6%)	389 (35.0%)
Receptive fellatio with ejaculation	277 (17.5%)	277 (25.0%)
Any anal intercourse	832 (52.7%)	832 (75.0%)
Insertive anal intercourse	762 (48.3%)	762 (68.6%)
Receptive anal intercourse	612 (38.8%)	612 (55.1%)
Base	**1578**	**1110**
2001		
Any oral intercourse with ejaculation	488 (26.7%)	488 (40.4%)
Insertive fellatio with ejaculation	436 (23.8%)	436 (36.6%)
Receptive fellatio with ejaculation	320 (17.5%)	320 (26.5%)
Any anal intercourse	911 (49.8%)	911 (75.4%)
Insertive anal intercourse	829 (45.3%)	829 (68.6%)
Receptive anal intercourse	664 (36.3%)	664 (54.9%)
Base	**1830**	**1209**

Note: These items are not mutually exclusive. The percentages do not sum to 100 per cent as some men engaged in more than one of these practices and some in none of these practices.

Sex with regular male partners

Condom Use

Across the 3 study periods there has been a significant increase in the percentage of men engaging in any UAI with regular male partners in the previous 6 months ($p < .001$) (see Table 23). There has been a corresponding decrease in the number of men who indicated that they always used condoms ($p < .001$). It ought to be borne in mind that the rate of UAI-R reported here in 2001 might be an overestimate of what the rate would have been if the sample had been similar to that of 1998 and 2000.

Remaining quite steady across the three study periods are the percentages of men reporting to have been in a regular relationship in the previous six months and of men who had a partner but did not engage in any anal intercourse.

Table 23 : Condom use with regular partners

	Total Sample	Those with regular partners
1998		
No regular partner	676 (35.7%)	—
No anal intercourse	168 (8.9%)	168 (13.8%)
Always uses condom	497 (26.3%)	497 (40.9%)
Sometimes does not use condom	550 (29.1%)	550 (45.3%)
Base	**1891 (100%)**	**1215 (100%)**
2000		
No regular partner	571 (36.2%)	—
No anal intercourse	113 (7.2%)	113 (11.2%)
Always uses condom	370 (23.4%)	370 (36.7%)
Sometimes does not use condom	524 (33.2%)	524 (52.0%)
Base	**1578 (100%)**	**1007 (100%)**
2001		
No regular partner	631 (34.5%)	—
No anal intercourse	184 (10.1%)	184 (15.3%)
Always uses condom	329 (18.0%)	329 (27.4%)
Sometimes does not use condom[1]	686 (37.5%)	686 (57.2%)
Base	**1830 (100%)**	**1199 (100%)**

[1] Of the 686 men who engaged in unprotected anal intercourse with regular partners 'in the previous 6 months', 187 men practised only withdrawal prior to ejaculation, 187 also practised only ejaculation inside, and 312 engaged in both withdrawal and ejaculation inside.

In 1998, there were no statistically significant differences between HIV-negative, HIV-positive and 'untested' men in their condom use with regular partners (see Table 24). However, in 2000, there was a trend in the direction of a higher percentage of HIV-positive men having unprotected anal intercourse with their regular partners, especially when compared with men of unknown serostatus. These findings should be treated cautiously as they are based on a small number of HIV-positive men. In 2001, the rate of UAI-R significantly increased among HIV-negative ($p < .01$) men but

remained on par with HIV-positive men and men of unknown HIV serostatus. Although not statistically significant, data from 2001 suggest that a slightly higher proportion of HIV-negative men had more UAI with regular partners than the men of either HIV-positive status or of HIV-unknown status.

Table 24 : Serostatus and condom use among regular partners

	HIV-Positive	HIV-Negative	Unknown serostatus
1998			
No anal intercourse	12 (11.7%)	115 (12.5%)	40 (23.0%)
Always uses condom	45 (43.7%)	376 (40.9%)	70 (40.2%)
Sometimes does not use condom	46 (44.7%)	429 (46.6%)	64 (36.8%)
Total	**103 (100%)**	**920 (100%)**	**174 (100%)**
2000			
No anal	3 (3.4%)	92 (11.8%)	15 (11.7%)
Always uses condom	32 (36.4%)	281 (36.0%)	55 (43.0%)
Sometimes does not use condom	53 (60.2%)	408 (52.2%)	58 (45.3%)
Total	**88 (100%)**	**781 (100%)**	**128 (100%)**
2001			
No anal	12 (13.2%)	141 (15.1%)	26 (17.6%)
Always uses condom	32 (35.2%)	241 (25.7%)	49 (33.1%)
Sometimes does not use condom	47 (51.6%)	554 (59.2%)	73 (49.3%)
Total	**91 (100%)**	**936 (100%)**	**148 (100%)**

In Table 25, the serostatus of each of the participants who had anal intercourse with a regular partner has been compared with that of his regular partner. For each of the 9 serostatus combinations, sexual practice has been divided into 'no unprotected anal intercourse' versus 'some unprotected anal intercourse'. The numbers overall are small and these figures should be treated cautiously.

HIV-positive men were less likely to have unprotected anal intercourse with HIV-negative partners than with positive partners. HIV-negative men were more likely to have unprotected anal intercourse with negative partners than with positive or unknown status partners. These patterns have remained quite consistent over the 3 time periods. Whereas much of the unprotected anal intercourse was between seroconcordant (positive-positive or negative-negative) couples, 115 men in 2001 had unprotected anal intercourse in a relationship where seroconcordance was absent or in doubt. Separate analyses of these 115 men showed that 53 of them *never* used condoms for anal intercourse with their regular partners (ie. all anal intercourse with their regular partners was without condoms).

Table 25 : Condom use and match of HIV serostatus in regular relationships

Regular Partner's Serostatus	Anal intercourse	Participant's Serostatus		
		HIV-Positive	HIV-Negative	Unknown serostatus
1998				
HIV-Positive	No UAI	10 (34.5%)	14 (56.0%)	_
	Some UAI	19 (65.5%)	11 (44.0%)	2 (100.0%)
HIV-Negative	No UAI	13 (76.5%)	102 (29.7%)	9 (40.9%)
	Some UAI	4 (23.5%)	241 (70.3%)	13 (59.1%)
Unknown	No UAI	2 (50.0%)	29 (43.3%)	13 (34.2%)
	Some UAI	2 (50.0%)	38 (56.7%)	25 (65.8%)
Total		**50**	**435**	**42**
2000				
HIV-Positive	No UAI	1 (6.7%)	8 (40.0%)	_
	Some UAI	14 (93.3%)	12 (60.0%)	_
HIV-Negative	No UAI	10 (40.0%)	67 (23.5%)	5 (21.7%)
	Some UAI	15 (60.0%)	218 (76.5%)	18 (78.3%)
Unknown	No UAI	_	19 (38.0%)	6 (30.0%)
	Some UAI	_	31 (62.0%)	14 (70.0%)
Total		**40**	**355**	**43**
2001				
HIV-Positive	No UAI	4 (17.4%)	13 (44.8%)	_
	Some UAI	19 (82.6%)	16 (55.2%)	_
HIV-Negative	No UAI	16 (72.7%)	62 (15.8%)	10 (35.7%)
	Some UAI	6 (27.3%)	330 (84.2%)	18 (64.3%)
Unknown	No UAI	_	20 (29.4%)	7 (21.9%)
	Some UAI	2 (100.0%)	48 (70.6%)	25 (78.1%)
Total		**47**	**489**	**60**

Note: UAI = unprotected anal intercourse. Includes only men who had anal intercourse with their 'current' regular partner 'in the previous six months'.

Agreements

Most participants who had a 'current' regular male partner (about 60% of men in the sample) also had an agreement with their partner about sex *within* the relationship (see Table 26). This proportion has remained steady across the 3 study periods. Since 1998 there has a been a shift in the type of agreement struck between partners; the proportion agreeing to anal intercourse with a condom has reduced whereas there has been a corresponding increase in the proportion of men agreeing to have unprotected anal intercourse.

A separate analysis (not presented in this report) was conducted to determine whether these changes in the type of agreements occurring within relationships might be a function of a corresponding change in the HIV seroconcordance of partners. The rationale being that such an increase may not represent more risk as there may have been a corresponding increase in the number of seroconcordant regular relationships, and/or the increases in such agreements may have occurred predominantly amongst

men in seroconcordant relationships. This thesis does not hold, however, as there has been no significant change in the proportions of men in regular relationships where the partners are seroconcordant, serodiscordant, or of unknown seroconcordance. Furthermore, the changes in agreements have occurred quite similarly across relationships where the partners are concordant, discordant or of unknown concordance.

Table 26 : Agreements with regular male partners about sex *within* the relationship

	1998	2000	2001
No spoken agreement about anal intercourse	249 (23.7%)	209 (24.3%)	268 (25.5%)
No anal intercourse between regular partners	93 (8.9%)	71 (8.3%)	82 (7.8%)
Anal intercourse permitted only with condom	377 (35.9%)	247 (28.8%)	271 (25.8%)
Anal intercourse without condom is permitted	331 (31.5%)	332 (38.6%)	429 (40.9%)
Total	**1050 (100%)**	**859 (100%)**	**1050 (100%)**

Note: Percentages are based on men who had a regular partner at the time of completing the survey

Most participants had made an agreement with their regular partner about sex with men *outside* the relationship (see Table 27). The majority of these agreements either specified no casual partners or allowed for there to be anal intercourse with casual partners on the proviso that condoms are used. About one-third of the men had no spoken agreement about sex outside the relationship. Across the 3 time periods there has been no change in the proportions of men in each of the agreement categories.

Table 27 : Agreements with regular male partners about sex *outside* the relationship

	1998	2000	2001
No spoken agreement about sex	329 (32.9%)	261 (32.7%)	303 (30.2%)
No sexual contact with casual partners is permitted	297 (29.7%)	226 (28.3%)	347 (34.6%)
No anal intercourse with casual partners is permitted	102 (10.2%)	57 (7.1%)	54 (5.4%)
Anal intercourse permitted only with condom	257 (25.7%)	229 (28.7%)	271 (27.0%)
Anal intercourse without condom is permitted	16 (1.6%)	25 (3.1%)	27 (2.7%)
Total	**1001 (100%)**	**798 (100%)**	**1002 (100%)**

Note: Percentages are based on men who had a regular partner at the time of completing the survey

Sex with casual male partners

Condom use

Based on the entire sample, about 17% of the men who participated in the survey engaged in any unprotected anal intercourse with casual male partners 'in the previous six months' (see Table 28). Although the percentage is similar to that of the previous year, there has been a significant upturn in UAI-C across the 3 study periods. A separate analysis revealed that of the 311 men who reported engaging in UAI-C, 140 had also engaged in unprotected anal intercourse with regular partners.

Table 28 : Condom use with casual partners

	Total Sample	Those with regular partners
1998		
No casual partner	529 (28.0%)	—
No anal intercourse	397 (21.0%)	397 (29.1%)
Always uses condom	712 (37.7%)	712 (52.3%)
Sometimes does not use condom	253 (13.4%)	253 (18.6%)
Base	**1891 (100%)**	**1362 (100%)**
2000		
No casual partner	468 (29.6%)	
No anal intercourse	278 (17.6%)	278 (25.0%)
Always uses condom	570 (36.1%)	570 (51.3%)
Sometimes does not use condom	262 (16.6%)	262 (23.6%)
Base	**1578 (100%)**	**1110 (100%)**
2001		
No casual partner	621 (33.9%)	—
No anal intercourse	307 (16.8%)	307 (25.4%)
Always uses condom	591 (32.3%)	591 (48.9%)
Sometimes does not use condom[1]	311 (17.0%)	311 (25.7%)
Base	**1830 (100%)**	**1209 (100%)**

[1] Of the 311 men who engaged in unprotected anal intercourse with casual partners 'in the previous six months', 142 practised only withdrawal prior to ejaculation, 38 practised only ejaculation inside, and 131 engaged in both withdrawal and ejaculation inside.

A comparison of the data in Tables 23 and 28 confirms that more men had unprotected anal intercourse with regular than with casual partners. Furthermore, unprotected anal intercourse with ejaculation inside was more common within regular relationships than between casual partners.

As in 1998 and 2000, there were slight differences between HIV-positive, HIV-negative and 'untested' men in their condom use with casual partners, and these differences were statistically significant ($p < .001$) (see Table 29). A higher proportion of HIV-positive men engaged in UAI-C in comparison with men of HIV-negative and HIV-unknown status. Some of the HIV-positive men's unprotected anal intercourse with casual partners may be explained by positive–positive sex (Prestage et al, 1995), which poses no risk of seroconversion per se.

Table 29 : Serostatus and condom use with casual partners

	HIV-Positive	HIV-Negative	Unknown serostatus
1998			
No anal intercourse	25 (18.5%)	292 (28.7%)	72 (38.7%)
Always uses condom	65 (48.1%)	565 (55.4%)	73 (39.2%)
Sometimes does not use condom	45 (33.3%)	162 (15.9%)	41 (22.0%)
Total	**135 (100%)**	**1019 (100%)**	**186 (100%)**
2000			
No anal	14 (12.7%)	215 (24.9%)	56 (39.2%)
Always uses condom	56 (50.9%)	457 (52.9%)	58 (40.6%)
Sometimes does not use condom	40 (36.4%)	192 (22.2%)	29 (20.3%)
Total	**110 (100%)**	**864 (100%)**	**143 (100%)**
2001			
No anal	17 (14.8%)	231 (25.4%)	52 (31.7%)
Always uses condom	41 (35.7%)	469 (51.6%)	74 (45.1%)
Sometimes does not use condom	57 (49.6%)	209 (23.0%)	38 (23.2%)
Total	**115 (100%)**	**909 (100%)**	**164 (100%)**

Serostatus

Questions 32 and 33 were included in the questionnaire to obtain a sense of disclosure in the context of sex between casual partners. Many more questions—well beyond the scope of the brief questionnaire used here—would need to be asked to fully understand the issue. Furthermore, the inclusion of the 2 questions was *not* intended to endorse sexual negotiation between casual partners.

The majority of participants with casual partners (about two-thirds of the sample) did not disclose their serostatus to any of their casual partners and this proportion has been quite steady across the study periods (see Table 30). Relatively few men disclosed to all casual partners. Overall rates of disclosure have not changed over time.

Table 30 : Participants' disclosure of serostatus to casual partners

	1998	2000	2001
Told none	852 (63.3%)	699 (65.8%)	749 (61.8%)
Told some	308 (22.9%)	246 (23.1%)	288 (23.8%)
Told all	187 (13.9%)	118 (11.1%)	175 (14.4%)
Total	**1347 (100%)**	**1063 (100%)**	**1212 (100%)**

Most of the men who had casual partners were not told the serostatus of those partners in the context of sex (see Table 31). These proportions have remained fairly constant across the 3 study periods. Relatively few men had the serostatus of their casual partners routinely disclosed to them.

Table 31 : Casual partners' disclosure of serostatus to participants

	1998	2000	2001
Told by none	866 (63.4%)	691 (64.5%)	740 (61.0%)
Told by some	398 (29.2%)	308 (28.7%)	359 (29.6%)
Told by all	101 (7.4%)	73 (6.8%)	114 (9.4%)
Total	**1365 (100%)**	**1072 (100%)**	**1213 (100%)**

Three questions were added to the survey in 2001 about the use of condoms in casual relationships when the partner's status was known to be positive, negative, or unknown, respectively. Utilising just 3 questions for this purpose is bound to invite some level of error as a series of questions, not possible with a short survey, would be necessary to gain a more accurate picture of these behaviours. Even then there could be some error associated with incorrect assumptions made about partner status and errors associated with memory. Nonetheless, the 3 questions have provided interesting information and are presented in Tables 32, 33 and 34.

On those occasions when the HIV status of the casual partner was unknown to respondents, HIV-negative men were the most likely to 'always' use a condom (see Table 32). Respondents of unknown status were most likely not to have experienced such an occasion in addition to being the most likely to 'never' have used a condom on such occasions. Use of condoms was similarly prevalent for the HIV-positive and HIV-negative men.

Table 32 : Use of condoms with casual partners when HIV status of the partner is unknown, by serostatus of respondent

Condom use	HIV-positive	HIV-negative	HIV-unknown
Men who had casual partners			
No such occasions	12 (11.1%)	149 (17.9%)	40 (27.8%)
Never	8 (7.4%)	76 (9.1%)	25 (17.4%)
Sometimes	34 (31.5%)	115 (13.8%)	17 (11.8%)
Always	54 (50.0%)	494 (59.2%)	62 (43.1%)
Total	**108 (100%)[1]**	**834 (100%)[2]**	**144 (100%)[3]**
Men who had casual partners of unknown serostatus			
Never	8 (8.3%)	76 (11.1%)	25 (24.0%)
Sometimes	34 (35.4%)	115 (16.8%)	17 (16.3%)
Always	54 (56.3%)	494 (72.1%)	62 (59.6%)
Total	**96 (100%)**	**685 (100%)**	**104 (100%)**

Note: This table contains data only for men who had sex with a casual male partner in the preceding 6 months.

[1] Missing data (n=7)

[2] Missing data (n=75)

[3] Missing data (n=20)

The majority of HIV-negative and HIV-unknown men did not have any casual sex occasions in which they knew the HIV status of their partner was positive (see Table 33). Of the men who did have such occasions, HIV-negative men were the most likely to 'always' use condoms, followed by the men of unknown HIV status.

Table 33 : Use of condoms with casual partners when HIV status of the partner is positive, by serostatus of respondent

Condom use	HIV-positive	HIV-negative	HIV-unknown
Men who had casual partners			
No such occasions	16 (15.2%)	432 (53.5%)	83 (60.1%)
Never	16 (15.2%)	73 (9.0%)	21 (15.2%)
Sometimes	35 (33.3%)	29 (3.6%)	5 (3.6%)
Always	38 (36.2%)	273 (33.8%)	29 (21.0%)
Total	**105 (100%)[1]**	**807 (100%)[2]**	**138 (100%)[3]**
Men who had casual partners of HIV-positive serostatus			
Never	16 (18.0%)	73 (19.5%)	21 (38.2%)
Sometimes	35 (39.3%)	29 (7.7%)	5 (9.1%)
Always	38 (42.7%)	273 (72.8%)	29 (52.7%)
Total	**89 (100%)**	**375 (100%)**	**55 (100%)**

Note: This table contains data only for men who had sex with a casual male partner in the preceding 6 months.

[1] Missing data (n=10)

[2] Missing data (n=102)

[3] Missing data (n=26)

HIV-negative and HIV-unknown men were less likely than HIV-positive men to experience occasions when they understood their casual partner to be HIV-negative (see Table 34). Of the men who did experience such occasions, HIV-positive and HIV-negative men 'always' used condoms to a similar extent. HIV-unknown men were most likely to 'never' use a condom in these situations.

Table 34 : Use of condoms with casual partners when HIV status of the partner is negative, by serostatus of respondent

Condom use	HIV-positive	HIV-negative	HIV-unknown
Men who had casual partners			
No such occasions	17 (16.0%)	308 (38.5%)	66 (50.0%)
Never	4 (3.8%)	72 (9.0%)	18 (13.6%)
Sometimes	22 (20.8%)	92 (11.5%)	10 (7.6%)
Always	63 (59.4%)	328 (41.0%)	38 (28.8%)
Total	**106 (100%)[1]**	**800 (100%)[2]**	**132 (100%)[3]**
Men who had casual partners of HIV-positive serostatus			
Never	4 (4.5%)	72 (14.6%)	18 (27.3%)
Sometimes	22 (24.7%)	92 (18.7%)	10 (15.2%)
Always	63 (70.8%)	328 (66.7%)	38 (57.6%)
Total	**89 (100%)**	**492 (100%)**	**66 (100%)**

Note: This table contains data only for men who had sex with a casual male partner in the preceding 6 months.

[1] Missing data (n=9)

[2] Missing data (n=109)

[3] Missing data (n=32)

Information about HIV Therapies and PEP

Several studies have demonstrated that men in Australian gay communities are on the whole well informed about HIV/AIDS (e.g., Crawford et al., 1998). Less well understood are beliefs in the context of advances in viral load testing and combination antiretroviral therapies. Six questions addressed this issue (questions 51–56), these questions being different from those that were asked in 1998 but the same as those included in the 2000 survey. Where men gave responses, these were generally in accordance with recognised medical opinion and erring on the side of caution (see Table 35). There was little change in the way men answered these questions in 2000 and 2001. These 6 items form a reliable scale (Van de Ven et al., 2000) on which the mean score for the entire sample was 9.26 (scale range 6–24, with higher scores indicating greater optimism).

Table 35 : Responses to questions about viral load testing and combination therapy

Item	Year	Strongly disagree	Disagree	Agree	Strongly agree
New HIV treatments will take the worry out of sex.	2000	610 (41.2%)	647 (43.7%)	162 (10.9%)	63 (4.3%)
	2001	720 (41.9%)	697 (40.6%)	224 (13.0%)	77 (4.5%)
If every HIV-positive person took the new treatments, the AIDS epidemic would be over.	2000	763 (51.4%)	610 (41.1%)	78 (5.3%)	33 (2.2%)
	2001	835 (48.8%)	751 (43.9%)	92 (5.4%)	33 (1.9%)
People with undetectable viral load do not need to worry so much about infecting others with HIV.	2000	851 (58.1%)	534 (36.5%)	51 (3.5%)	29 (2.0%)
	2001	980 (57.8%)	630 (37.2%)	66 (3.9%)	19 (1.1%)
The availability of treatment (PEP) immediately after unsafe sex makes safe sex less important.	2000	846 (58.0%)	538 (36.9%)	48 (3.3%)	27 (1.9%)
	2001	973 (57.5%)	630 (37.2%)	61 (3.6%)	28 (1.7%)
HIV is less of a threat because the epidemic is on the decline.	2000	949 (64.7%)	444 (30.3%)	48 (3.3%)	26 (1.8%)
	2001	1095 (64.4%)	533 (31.4%)	52 (3.1%)	19 (1.1%)
HIV/AIDS is a less serious threat than it used to be because of new treatments.	2000	836 (56.9%)	471 (32.0%)	140 (9.5%)	23 (1.6%)
	2001	940 (55.5%)	581 (34.3%)	151 (8.9%)	23 (1.4%)

The relationship between the items about viral load testing/combination therapies and the participant's serostatus was similar to findings in other Australian cities. Most men's responses were generally in line with accepted wisdom (see Table 36). In 2001, men who did not know their serostatus were significantly more 'optimistic' (scale average = 10.01) than their HIV-positive or negative counterparts (9.16 and 9.27, respectively, $p < .001$).

Table 36 : Responses to questions about viral load testing and combination therapy by serostatus

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
New HIV treatments will take the worry out of sex				
2000				
HIV-Positive	60 (43.2%)	57 (41.0%)	15 (10.8%)	7 (5.0%)
HIV-Negative	479 (42.4%)	496 (43.9%)	114 (10.1%)	41 (3.6%)
Unknown	69 (33.8%)	89 (43.6%)	31 (15.2%)	15 (7.4%)
2001				
HIV-Positive	70 (47.0%)	56 (37.6%)	19 (12.8%)	4 (2.7%)
HIV-Negative	552 (42.7%)	524 (40.6%)	163 (12.6)	53 (4.1%)
Unknown	90 (35.3%)	107 (42.0%)	40 (15.7%)	18 (7.1%)
If every HIV-positive person took the new treatments, the AIDS epidemic would be over				
2000				
HIV-Positive	83 (59.7%)	51 (36.7%)	2 (1.4%)	3 (2.2%)
HIV-Negative	580 (51.2%)	469 (41.4%)	61 (5.4%)	22 (1.9%)
Unknown	99 (48.5%)	83 (40.7%)	14 (6.9%)	8 (3.9%)
2001				
HIV-Positive	88 (58.3%)	55 (36.4%)	6 (4.0%)	2 (1.3%)
HIV-Negative	646 (50.3%)	554 (43.1%)	65 (5.1%)	20 (1.6%)
Unknown	92 (36.4%)	133 (52.6%)	19 (7.5%)	9 (3.6%)
People with undetectable viral load do not need to worry so much about infecting others with HIV				
2000				
HIV-Positive	86 (61.9%)	39 (28.1%)	12 (8.6%)	2 (1.4%)
HIV-Negative	653 (58.4%)	415 (37.1%)	32 (2.9%)	18 (1.6%)
Unknown	110 (55.0%)	74 (37.0%)	7 (3.5%)	9 (4.5%)
2001				
HIV-Positive	89 (59.3%)	51 (34.0%)	9 (6.0%)	1 (0.7%)
HIV-Negative	758 (59.2%)	466 (36.4%)	45 (3.5%)	12 (0.9%)
Unknown	122 (49.6%)	106 (43.1%)	12 (4.9%)	6 (2.4%)
The availability of treatment (PEP) immediately after unsafe sex makes safe sex less important				
2000				
HIV-Positive	95 (69.3%)	37 (27.0%)	3 (2.2%)	2 (1.5%)
HIV-Negative	643 (57.8%)	419 (37.7%)	34 (3.1%)	16 (1.4%)
Unknown	105 (52.2%)	77 (38.3%)	10 (5.0%)	9 (4.5%)
2001				
HIV-Positive	88 (59.1%)	53 (35.6%)	6 (4.0%)	2 (1.3%)
HIV-Negative	746 (58.4%)	470 (36.8%)	41 (3.2%)	20 (1.6%)
Unknown	127 (51.2%)	103 (41.5%)	13 (5.2%)	5 (2.0%)
HIV is less of a threat because the epidemic is on the decline				
2000				
HIV-Positive	92 (67.2%)	41 (29.9%)	2 (1.5%)	2 (1.5%)
HIV-Negative	732 (65.4%)	334 (29.8%)	36 (3.2%)	18 (1.6%)
Unknown	121 (59.9%)	65 (32.2%)	10 (5.0%)	6 (3.0%)
2001				
HIV-Positive	100 (66.7%)	44 (29.3%)	5 (3.3%)	1 (0.7%)
HIV-Negative	835 (65.2%)	397 (31.0%)	36 (2.8%)	13 (1.0%)
Unknown	147 (58.8%)	87 (34.8%)	11 (4.4%)	5 (2.0%)

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
HIV/AIDS is a less serious threat than it used to be because of new treatments				
2000				
HIV-Positive	77 (55.8%)	34 (24.6%)	25 (18.1%)	2 (1.4%)
HIV-Negative	645 (57.5%)	367 (32.7%)	96 (8.6%)	14 (1.2%)
Unknown	112 (55.7%)	64 (31.8%)	18 (9.0%)	7 (3.5%)
2001				
HIV-Positive	81 (53.6%)	44 (29.1%)	25 (16.6%)	1 (0.7%)
HIV-Negative	715 (56.0%)	441 (34.5%)	105 (8.2%)	16 (1.3%)
Unknown	131 (52.6%)	92 (36.9%)	20 (8.0%)	6 (2.4%)

In Table 37, mean optimism scale scores are reported against sexual practice and serostatus. Generally, higher mean scores (ie. higher levels of optimism) were associated with men who reported unprotected anal intercourse with regular partners, and with casual partners.

Table 37 : Sexual practice, HIV serostatus and mean optimism scale scores

Sexual practice	HIV Serostatus		
	Positive	Negative	Unknown
Regular partner			
2000			
No anal intercourse	6.00	8.42	9.79
100% protected	8.65	9.20	9.69
Some UAI	9.46	9.42	9.52
2001			
No anal intercourse	8.78	8.81	8.61
100% protected	9.16	9.09	9.95
Some UAI	8.99	9.57	10.60
Casual partner			
2000			
No anal intercourse	8.82	9.14	9.64
100% protected	8.41	8.77	8.92
Some UAI	10.36	9.96	11.19
2001			
No anal intercourse	9.18	9.62	10.09
100% protected	8.28	8.29	9.69
Some UAI	10.06	10.13	11.01

Note: UAI = unprotected anal intercourse.

Post-exposure prophylaxis (PEP)

Three questions about post-exposure prophylaxis (PEP) were added to the survey in 2001. These questions were aimed at assessing knowledge, use and proximity to PEP.

The majority of respondents had never heard of PEP (see Table 38). It is likely the percentage is slightly higher as the analysis excludes the 10% of respondents who omitted to answer the question. About 20% of the sample knew about the availability of PEP and about 11% believed that PEP would be available in the future.

Table 38 : Levels of knowledge about post-exposure prophylaxis (PEP)

Level of knowledge	n (%)
It's readily available now	317 (19.2%)
It will be available in the future	177 (10.7%)
I've never heard about it	1157 (70.1%)
Total	**1651 (100.0%)**

Missing data (n=179)

Few men in the sample had ever received PEP (see Table 39). Similar to the question reported above, and indicative of low knowledge about PEP, there was a sizeable proportion of missing data.

Table 39 : Ever received post-exposure prophylaxis (PEP)

	n (%)
No	1649 (98.0%)
Yes	34 (2.0%)
Total	**1683 (100.0%)**

Missing data (n = 147)

Although there was a low percentage of men who knew someone else who had taken PEP, the proportion is higher than for those who had ever taken PEP (see Table 40).

Table 40 : Knowledge of anyone who had received post-exposure prophylaxis (PEP)

	n (%)
No	1542 (93.3%)
Yes	110 (6.7%)
Total	**1652 (100.0%)**

Missing data (n = 178)

The men who might benefit most from knowing about PEP (ie. those who engaged in UAI-C) were quite equally distributed between the three response options relating to knowledge about PEP (see Table 41). About 20% of the men who had heard of PEP had engaged in UAI-C in the previous 6 months, whereas a smaller proportion of those who had never heard of PEP reported UAI-C. There were 217 men who completed the survey in 2001 who engaged in UAI-C and had no knowledge that PEP was available.

Although a high proportion of UAI-R is with partners who are of the same serostatus (concordant), in the 2001 sample there were 500 men who engaged in UAI-R in the preceding six months, some of whom were in sero-nonconcordant relationships, and were unaware of the availability of PEP (see Table 41).

Table 41 : Knowledge of post-exposure prophylaxis (PEP) and unprotected anal intercourse

	It's readily available now	It will be available in the future	I've never heard about it
Unprotected anal intercourse with casual partners			
Some UAI-C	61 (19.2%)	35 (19.8%)	182 (15.7%)
No UAI-C	256 (80.8%)	142 (80.2%)	975 (84.3%)
Total	**317 (100.0%)**	**177 (100.0%)**	**1157 (100.0%)**
Unprotected anal intercourse with regular partners			
Some UAI-R	124 (39.1%)	59 (33.3%)	441 (38.1%)
No UAI-R	193 (60.9%)	118 (66.7%)	716 (61.9%)
Total	**317 (100.0%)**	**177 (100.0%)**	**1157 (100.0%)**

Sexually Transmissible Infections and Drug Use

Sexually Transmissible Infections

A small proportion of men in the preceding 6 months had experienced at least 1 of the sexually transmissible infections listed in question 43. In 2001, similar to 2000, the most common infection was crabs and scabies (see Table 42). There has been a slight decrease in 2001 in the percentage of men who had each of the sexually transmitted infections listed in Table 42. This result may be related to the greater proportion of men recruited from the Midsumma Carnival and/or a slight difference in the way the question was asked in 2001, which was aimed at eliminating a possible ambiguity associated with the way in which some respondents had interpreted the question.

Table 42 : Sexually transmissible infections

	2000	2001
Crabs/Scabies	233 (14.8%)	235 (12.8%)
Gonorrhoea	112 (7.1%)	64 (3.5%)
Chlamydia/NSU	94 (6.0%)	53 (2.9%)
Genital warts	72 (4.6%)	60 (3.3%)
Syphilis	42 (2.7%)	15 (0.8%)

Note: Categories are not mutually exclusive.

Drug Use

In 2001, similar to 2000, the most commonly used drugs in general were marijuana, amyl, ecstasy and speed (see Table 43). Few respondents reported having used other drugs.

A small number of men indicated that they had injected drugs/steroids 'in the past 6 months'. The most commonly injected drug in 2001 was speed (2.7%), followed by

ecstasy (1.1%). Fewer than 1% of respondents reported injecting each of the other drugs for which a question about injecting was asked. Twenty-seven men (2.5%) indicated that they had injected more than 1 drug 'in the past 6 months'. A total of 73 men (4.0%) had injected at least 1 drug/steroid in this period. Questions about injecting drug use were not asked in the 1998 survey.

Table 43 : Drug use and injecting drug use in previous six months

	Used		Injected	
	2000	2001	2000	2001
Amyl/Poppers	633 (40.1%)	684 (37.4%)	_	
Marijuana	606 (38.4%)	744 (40.7%)	_	
Ecstasy	488 (30.9%)	593 (32.4%)	12 (0.8%)	21 (1.1%)
Speed	365 (23.1%)	423 (23.1%)	58 (3.7%)	50 (2.7%)
Cocaine	178 (11.3%)	201 (11.0%)	17 (1.1%)	10 (0.5%)
Heroin	27 (1.7%)	25 (1.4%)	10 (0.6%)	16 (0.9%)
Steroids	23 (1.5%)	31 (1.7%)	10 (0.6%)	15 (0.8%)
Any other drug	97 (6.1%)	192 (10.5%)	9 (0.6%)	16 (0.9%)
LSD/Trips	172 (10.9%)		2 (0.1%)	
GHB	25 (1.6%)		2 (0.1%)	
Special K	99 (6.3%)		8 (0.5%)	
Crystal Meth	100 (6.3%)		17 (1.1%)	

Note: Categories are not mutually exclusive.

Discussion

The findings from the third Melbourne Gay Community Periodic Survey conducted during February 2001 provide an important update on the social and sexual lives of gay men in Melbourne. In the main, the findings are quite similar to (and thereby corroborate) the evidence from the two preceding surveys in 1998 (Van de Ven et al., 1998) and 2000 (Aspin et al., 2000). Likewise, many of the results parallel findings from Gay Community Periodic Surveys in other Australian cities, for example Sydney (Prestage et al, 1996; Van de Ven et al, 1997), reinforcing the notion that in some respects the gay cultures of the capital cities in Australia are akin.

The 1830 participants were recruited at 3 gay venues, 2 sexual health centres and at the Midsumma Carnival. In the current study a larger proportion of the participants were recruited from the Midsumma Carnival than in previous years and this difference should be taken into account in interpreting the results. Most of the men lived in the Melbourne Metropolitan area. They were predominantly of 'Anglo-Australian' background and worked in professional/managerial or white-collar occupations.

Most of the participants identified as gay or homosexual. Correspondingly, most preferred to have sex with men only, reflected in the finding that 94% had not had sex with any women 'in the previous six months'. As a whole, the sample was quite involved socially in gay community with high levels of gay friendships and with much free time spent with gay men.

Similar to previous data, approximately 17% of the men had not been tested for HIV. The majority of those who had been tested for HIV had done so in the preceding 12 months. Overall, about 8% of the men were HIV-positive; a percentage consistent with the 2 previous surveys.

Among the HIV-positive participants, use of combination antiretroviral therapies has declined significantly across the 3 time periods – about two-thirds of the HIV-positive men were taking a combination therapy at the time of the 2001 survey, compared to almost 83% in 1998.

Most men reported 'current' sexual contact with at least 1 other man: just under one-third of the men had a regular partner only; a similar proportion had a regular partner with either or both partners also having casual partners; and approximately one-

quarter of the men had casual partners only. In the 6 months prior to the survey, about two-thirds of the men had sex with regular partners and the same proportion had sex with casual partners.

Of the total sample and 'in the previous six months', 686 men (37.5%) had any unprotected anal intercourse with a regular partner and 311 men (17.0%) had any unprotected anal intercourse with a casual partner. Some of these men (140 all told) had unprotected anal intercourse with both regular and casual partners. The remainder of the men in the overall sample—far and away the majority—indicated no unprotected anal intercourse with either regular or casual partners.

Not unexpectedly, more men had unprotected anal intercourse with regular than with casual partners. As well, unprotected anal intercourse that involved ejaculation inside was much more likely to occur between regular than between casual partners.

Although the proportion of men who had an agreement with their partner about sex within the relationship has altered very little since 1998, the type of agreements that partners are reaching has changed slightly. Within relationships, there has been a downturn since 1998 in the proportion of men who agreed to have anal intercourse only with a condom, and a corresponding increase in the proportion who agreed to have unprotected anal intercourse within the relationship. The increase in agreements to have UAI-R cannot be attributed solely to men in seroconcordant relationships.

In general, and consistent with previous surveys, the men did not routinely disclose their serostatus to casual partners. About 60% of the men never disclosed their serostatus to casual partners, and a similar proportion were never disclosed to by casual partners.

Three new questions were added in 2001 about the use of condoms in the context of occasions when a casual partner's HIV status is understood to be positive, negative or unknown. HIV-positive men were more likely than HIV-negative and HIV-unknown men to have casual sex with men of positive, negative and unknown serostatus. HIV-negative men were more likely to 'always' use condoms when having casual sex with an HIV-positive or HIV-unknown man. On occasions when the partner's status was thought to be negative, both HIV-negative and HIV-positive men were more likely than HIV-unknown men to 'always' use condoms. Detailed analyses of risk reduction strategies such as positive-positive sex (Prestage et al, 1995) and strategic positioning (Van de Ven et al., in press) have not been reported here. However, interpretations of the findings in this report should bear in mind that some gay men's sexual behaviours do involve such risk reduction strategies.

New questions about PEP indicated that knowledge about it is still not widespread. Amongst those who had heard of PEP, about one-third understood that it will be available in the future. There were 217 men who had engaged in unprotected anal intercourse with casual partners in the preceding six months who had never heard about PEP or who understood that PEP would only be available in the future.

In 2001, there was a decrease in the percentage of men with sexually transmissible infections. It is quite plausible that this decrease may be attributable to (i) slight

differences in the composition of the sample, and/or (ii) differences in the wording of the question.

Most of the men had not injected any recreational drugs/steroids 'in the past six months', while a total of 73 men (4.0%) indicated that they had injected at least 1 drug/steroid. About 40% of all respondents had used amyl nitrate and a similar proportion had used marijuana in the preceding six months. Less than one-third indicated that they had used ecstasy and just under a quarter indicated that they had used speed. The use of other drugs was comparatively low.

In conclusion, the 2001 Melbourne Gay Community Periodic Survey was conducted very successfully and has provided evidence that can be used by community members, educators, policy makers and others in developing programs aimed at sustaining and improving gay men's sexual and social health. Recruitment at the Midsumma Carnival and the five diverse sites attracted a large sample of gay men from the Melbourne metropolitan area. Except where indicated, the resulting data are robust and comparisons with the data from 1998 and 2000 and other studies are suggestive of sound reliability.

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Questionnaire