

Gay Community Periodic Survey: Queensland 2002

Author:

Hull, Peter; Rawstorne, Patrick; Van de Ven, Paul; Prestage, Garrett; Kippax, Susan; Harrison, Geoffrey; Tunley, Fiona; Ferguson, Gary

Publication details:

Report No. NCHSR Monograph 7/2002
1875978585 (ISBN)

Publication Date:

2002

DOI:

<https://doi.org/10.4225/53/5750DF5866024>

License:

<https://creativecommons.org/licenses/by-nc-nd/3.0/au/>

Link to license to see what you are allowed to do with this resource.

Downloaded from <http://hdl.handle.net/1959.4/50989> in <https://unsworks.unsw.edu.au> on 2024-04-27

gay community periodic survey

QUEENSLAND 2002

Peter **HULL**
Patrick **RAWSTORNE**
Paul **VAN DE VEN**
Garrett **PRESTAGE**
Susan **KIPPAX**
Jodie **WALTON**
Geoffrey **HARRISON**
Fiona **TUNLEY**
Gary **FERGUSON**



NATIONAL CENTRE IN HIV SOCIAL RESEARCH
NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL
RESEARCH
QUEENSLAND AIDS COUNCIL
QUEENSLAND POSITIVE PEOPLE

gay community periodic survey

QUEENSLAND
2002

Peter HULL¹
Patrick RAWSTORNE¹
Paul VAN DE VEN¹
Garrett PRESTAGE²
Susan KIPPAX¹
Jodie WALTON⁴
Geoffrey HARRISON^{3,5}
Fiona TUNLEY³
Gary FERGUSON³

¹ NATIONAL CENTRE IN HIV SOCIAL RESEARCH

² NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH

³ QUEENSLAND AIDS COUNCIL

⁴ QUEENSLAND POSITIVE PEOPLE

Monograph 7/2002

National Centre in HIV Social Research
Faculty of Arts and Social Sciences
The University of New South Wales



Copies of this monograph or any other publications from this project may be obtained by contacting :

National Centre in HIV Social Research

Level 2, Webster Building
The University of New South Wales
Sydney NSW 2052 AUSTRALIA
Telephone: (61 2) 9385 6776
Fax: (61 2) 9385 6455
Email: nchsr@unsw.edu.au
Website: nchsr.arts.unsw.edu.au

© National Centre in HIV Social Research 2002
ISBN 1-875978-58-5

Hull, P., Rawstone, P., Van de Ven, P., Prestage, G., Kippax, S., Walton, J., Harrison, G., Tunley, F., & Ferguson, G. (2002). Gay Community Periodic Survey: Queensland 2002 (Monograph 7/2002). Sydney: National Centre in HIV Social Research, The University of New South Wales. <http://doi.org/10.4225/53/5750DF5866024>

The National Centre in HIV Social Research is funded by the Commonwealth Department of Health and Ageing and is affiliated with the Faculty of Arts & Social Sciences at The University of New South Wales.

CONTENTS

Acknowledgments	ii
List of Tables	iii
DESCRIPTION OF THE STUDY	1
SAMPLE AND RECRUITMENT	3
DEMOGRAPHIC PROFILE	5
Geographic distribution	5
Age	6
Ethnicity	6
Employment and occupation	7
Education	8
Sexual relationships with women	8
Sexual relationships with men	9
ASSOCIATION WITH GAY COMMUNITY	10
Sexual identity	10
Gay community involvement	11
HIV TESTING	12
Time since most recent HIV-antibody test	12
Combination therapies	13
Viral Load	13
Regular partner's HIV-status	14
Sexual practice with men	16
Overview of sexual practices with regular and casual partners	18
Sex with regular male partners	20
Condom Use	20
Agreements	24
Sex with casual male partners	25
Condom use	25
Serostatus	27
INFORMATION ABOUT HIV THERAPIES AND PEP	29
Post-exposure Prophylaxis (PEP)	32
DRUG USE	33
DISCUSSION	36
REFERENCES	39
APPENDIX	41

ACKNOWLEDGMENTS

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

FUNDING

Queensland Health

STEERING COMMITTEE

Fiona Tunley, Jodie Walton, Tanya Bain

RECRUITMENT

Ruth Bridgstock, Shamus Brown, Michael Buckler, Sally Colley, Deirdre Gillen, Travis Goode, Ryan Goodfellow, Kim Greathead, Geoffrey Harrison, Keryn Henry, Jahi Ireland, Ryan Lynch, Rachel Malone, Thomas Munroe, Neil O'byrne, Patrick O'Duffy, Andrew Pascoe, Jason Pask, Stephen Rose, Roy Starkey, Colin Stewart, David Widden

QUEENSLAND AIDS COUNCIL

Fiona Tunley, Gary Ferguson

NATIONAL CENTRE IN HIV SOCIAL RESEARCH

Sahar Behman, June Crawford

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH

Andrew Grulich, John Kaldor

SURVEY PARTICIPANTS

The 1787 men who gave their time to ensure that the study was fully inclusive of their particular circumstances.

VENUES

The management and staff of the various gay community venues who assisted in the administration of the survey and gave generous permission for the survey to be conducted on their premises.

LIST OF TABLES

Table 1 :	Source of recruitment	3
Table 2 :	Residential location	5
Table 3 :	Age	6
Table 4 :	Ethnicity	6
Table 5 :	Employment status	7
Table 6 :	Occupation	7
Table 7 :	Education.....	8
Table 8 :	Sex with women in previous 6 months	8
Table 9 :	Relationships with men.....	9
Table 10 :	Length of relationships with men	9
Table 11 :	Sexual identity	10
Table 12 :	Gay friends	11
Table 13 :	Proportion of free time spent with gay men	11
Table 14 :	HIV test results	12
Table 15 :	Time since most recent HIV test.....	13
Table 16 :	Use of combination antiretroviral therapies	13
Table 17 :	Use of combination antiretroviral therapies (ART) and viral load (VL)	13
Table 18 :	HIV status of regular partner	14
Table 19 :	Match of HIV status in regular relationships	15
Table 20 :	Reported sex with male partners in previous six months	16
Table 21 :	Reported sex with male partners in previous six months, by type of recruitment site	17
Table 22 :	Number of male sex partners in previous six months.....	18
Table 23 :	Sexual behaviour with regular male partners	18
Table 24 :	Sexual behaviour with casual male partners	20
Table 25 :	Condom use with regular male partners.....	21
Table 26 :	Serostatus and condom use among regular male partners.....	22
Table 27 :	Condom use and match of HIV serostatus in regular relationships	23
Table 28 :	Agreements with regular male partners about sex <i>within</i> relationship	24
Table 29 :	Agreements with regular male partners about sex <i>outside</i> relationship	24
Table 30 :	Condom use with casual male partners	25
Table 31 :	Serostatus and condom use with casual male partners	26
Table 32 :	Sites of unprotected anal intercourse with casual partners	27
Table 33 :	Participants' disclosure of serostatus to casual partners.....	27
Table 34 :	Casual partners' disclosure of serostatus to participants	28
Table 35 :	Responses to questions about combination therapy.....	29
Table 36 :	Responses to the statement that 'New HIV treatments will take the worry out of sex', by serostatus	30
Table 37 :	Responses to the statement that 'The availability of treatment (PEP) immediately after unsafe sex makes safe sex less important', by serostatus	30
Table 38 :	Responses to the statement that 'HIV is less of a threat because the epidemic is on the decline', by serostatus	31

Table 39 :	Responses to the statement that 'HIV/AIDS is a less serious threat than it used to be because of new treatments', by serostatus.....	31
Table 40 :	Levels of knowledge about post-exposure prophylaxis (PEP).....	32
Table 41 :	Unprotected anal intercourse and knowledge of post-exposure prophylaxis (PEP).....	32
Table 42 :	Drug use in the previous six months	33
Table 43 :	Frequency of drug use in the previous six months.....	34
Table 44 :	Injecting drug use in the previous six months	34
Table 45 :	Frequency of injecting drug use in the previous six months	35

Description of the study

The Queensland Gay Community Periodic Survey is a cross-sectional survey of gay and homosexually active men recruited through a range of gay community sites in Queensland. The project was funded by Queensland Health. The Periodic Survey provides a snapshot of sexual and HIV-related practices among gay men and other homosexually active men. This is the fifth time the survey has been conducted in Queensland. Data from this survey can be used to make comparisons with the four previous surveys conducted in 1998, 1999, 2000, and 2001 (Van de Ven et al., 1998; Van de Ven et al., 1999; Aspin et al., 2000; Rawstorne et al., 2002).

The major aim of the Queensland Periodic 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. To this end, men were recruited from a number of gay community venues. In 2002, eighteen sites in Brisbane, the Gold Coast, the Sunshine Coast, Cairns and Townsville were used for recruitment: the Pride Fair Day, fourteen gay community venues (eleven social venues and three sex-on-premises venues) and three sexual health clinics. Trained personnel recruited participants and administered the questionnaire at each of these venues over a one-week period.

This latest study was conducted in June 2002. It is similar to the four previous surveys in that it was conducted at the same time of the year and employed the same recruitment strategies. This makes it possible to examine practices and changes over time.

The questionnaire (appended to this report) is a short, self-administered instrument that typically takes five to ten minutes to complete. Questions focus on anal intercourse and oral sex, the use of condoms, the nature of sexual relationships, HIV testing practice and serostatus, aspects of social attachment to gay community, recreational drug use, and a range of demographic items including sexual identity, age, education, occupation

and ethnicity. In the main, the questions employed in 2002 were the same as those in the four previous surveys so as to facilitate as direct a comparison as possible.

This report describes the data from the fifth Queensland Gay Community Periodic Survey and compares them with the previous data sets. 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 17 sites in Queensland as well as at a large public gay community event, Pride Fair Day. In all, 2149 men were asked to complete the questionnaire and 1787¹ did so. This represents a sound response rate of 83 per cent and similar to the response rate the year before. In comparison with previous surveys, in 2002 more men were asked to participate and more men did participate.

In 2002, there was a slight increase in the number of men recruited at gay venues with just over three-quarters of the respondents completing surveys in these venues. The number of recruitment sites (other than the Fair Day) increased from 10 in 2001 to 17 in 2002. These were mainly gay bars and dance parties. In the 2002 survey, a greater proportion of men were recruited at sexual health clinics than in 2000 and 2001 (see Table 1).

Table 1 : Source of recruitment

	1998	1999	2000	2001	2002
Sexual health centres	116 (8.7%)	109 (8.9%)	43 (3.3%)	44 (2.8%)	106 (5.9%)
Gay venues	712 (53.0%)	808 (66.0%)	942 (73.4%)	1138 (72.5%)	1382 (77.3%)
Pride Fair Day	513 (38.3%)	308 (25.1%)	300 (23.3%)	388 (24.7%)	299 (16.7%)
Total	1341 (100%)	1225 (100%)	1285 (100%)	1570 (100%)	1787 (100%)

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 practice. For this reason, some of the data on sexual practices have been

¹ Although 1819 men returned a questionnaire, 32 had to be discarded due to extensive missing data.

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.

Also, as indicated in previous Periodic Surveys, men recruited from events such as the Pride Fair Day 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 Queensland gay men.

Demographic Profile

In terms of demographic variables, the participants in the 1998, 1999, 2000, 2001 and 2002 surveys were quite similar.

GEOGRAPHIC DISTRIBUTION

The men came primarily from the Brisbane metropolitan area (see Table 2). Approximately 7% of the sample was living in the Gold Coast. With recruitment at two sites in the Sunshine Coast in 2002 there were more respondents from this area than in the previous survey. In 2001 there was a decrease in the number of men from the Sunshine Coast due to the closure of a venue that had been a survey recruitment site since 1998. Due to the closure of this site, no data were collected from sites in the Sunshine Coast in 2001. About 12% of men who indicated that they participated regularly in Queensland gay community came from other parts of Queensland and a small percentage came from outside the State.

Table 2 : Residential location

	1998	1999	2000	2001	2002
Brisbane Metropolitan Area	958 (71.4%)	854 (69.7%)	871 (67.8%)	1138 (72.5%)	1200 (67.2%)
Gold Coast	99 (7.4%)	92 (7.5%)	83 (6.5%)	111 (7.1%)	122 (6.8%)
Sunshine Coast	81 (6.0%)	50 (4.1%)	39 (3.0%)	14 (0.9%)	61 (3.4%)
Cairns/ Townsville	5 (0.4%)	46 (3.8%)	66 (5.1%)	52 (3.3%)	110 (6.2%)
Other Queensland	149 (11.1%)	135 (11.0%)	181 (14.1%)	193 (12.3%)	220 (12.3%)
Elsewhere	49 (3.7%)	48 (3.9%)	45 (3.5%)	62 (3.9%)	74 (4.1%)
Total	1341 (100%)	1225 (100%)	1285 (100%)	1570 (100%)	1787 (100%)

AGE

In the 2002 survey the maximum age of respondents was 78 years, with a median of 32. There had been a significant upward trend from 1998 to 2001 in the proportion of men under the age of 25 participating in the study which is still evident with the inclusion of 2002 data (Mantel-Haenszel, $p < .01$). However, there was a significant decrease in the proportion of respondents under 25 from 2001 to 2002 ($p < .01$). There has also been a corresponding increase in the proportion of men from 2001 to 2002 who are aged 40 or above ($p < .01$) (see Table 3). These slight differences over time in the age composition of the sample may need to be considered when interpreting some of the findings in this study.

Table 3 : Age

	1998	1999	2000	2001	2002
Under 25	224 (17.2%)	212 (19.0%)	291 (23.6%)	439 (28.6%)	409 (23.9%)
25–29	252 (19.3%)	189 (16.9%)	238 (19.3%)	269 (17.6%)	308 (18.0%)
30–39	477 (36.5%)	429 (38.5%)	403 (32.6%)	488 (31.8%)	538 (31.4%)
40–49	226 (17.3%)	175 (15.7%)	200 (16.2%)	217 (14.2%)	289 (16.9%)
50 and over	127 (9.7%)	110 (9.9%)	103 (8.3%)	120 (7.8%)	168 (9.8%)
Total	1306¹ (100%)	1115² (100%)	1235³ (100%)	1533⁴ (100%)	1712⁵ (100%)

¹ Missing data (n=35), ² Missing data (n=110), ³ Missing data (n=50), ⁴ Missing data (n=37), ⁵ Missing data (n=75)

ETHNICITY

As in the previous four surveys, this was predominantly an 'Anglo-Australian' sample (based on responses to the open-ended Question 46). Across the four survey periods, about 10% of the sample has consistently not answered the question about ethnicity (see Table 4).

Table 4 : Ethnicity

	1998	1999	2000	2001	2002
Anglo-Australian	973 (84.2%)	945 (81.8%)	931 (81.9%)	1167 (82.1%)	1357 (84.8%)
European	87 (7.4%)	105 (9.1%)	157 (13.8%)	174 (12.3%)	165 (10.3%)
Aboriginal/ Torres Strait Islander*	20 (1.7%)	21 (1.8%)	5 (0.4%)	23 (1.6%)	24 (1.5%)
Other	77 (6.7%)	84 (7.3%)	44 (3.9%)	57 (4.0%)	55 (3.4%)
Total	1157¹ (100%)	1155² (100%)	1137³ (100%)	1421⁴ (100%)	1601⁵ (100%)

*In response to the binary choice in Question 45, 82 men indicated they were of Aboriginal or Torres Strait Islander origin.

¹ Missing data (n=184), ² Missing data (n=70), ³ Missing data (n=148), ⁴ Missing data (n=149), ⁵ Missing data (n=186)

EMPLOYMENT AND OCCUPATION

As in the four previous surveys, the sample was comprised of a larger proportion of men who were not in the work force compared with the general population. This was particularly true of HIV positive men, of whom a relatively high percentage was in receipt of some form of social security payment. The proportion of men in full-time employment was on par with previous surveys (see Table 5).

Table 5 : Employment status

	1998	1999	2000	2001	2002
Full-time	798 (61.9%)	728 (61.1%)	801 (65.0%)	977 (63.4%)	1048 (61.2%)
Part-time	198 (15.3%)	180 (15.1%)	176 (14.3%)	198 (12.8%)	230 (13.4%)
Unemployed/ Other	294 (22.8%)	284 (23.8%)	255 (20.7%)	367 (23.8%)	435 (25.4%)
Total	1290¹ (100%)	1192² (100%)	1232³ (100%)	1542⁴ (100%)	1713⁵ (100%)

¹ Missing data (n=51), ² Missing data (n=33), ³ Missing data (n=53), ⁴ Missing data (n=28), ⁵ Missing data (n=74)

Like the previous surveys, and as in most studies of male homosexual populations, there was a substantial overrepresentation of professionals/managers and an underrepresentation of manual workers in comparison with the general population (Connell et al., 1991; Hood et al., 1994). These differences have been further accentuated over the last few surveys. The proportion of men who were working in the trades has decreased since 1998 (Mantel-Haenszel, $p < .001$) and there has been a corresponding increase in the proportion of men occupying professional/managerial roles (Mantel-Haenszel, $p < .005$) as well as the clerical/sales positions (Mantel-Haenszel, $p < .001$) (see Table 6).

Table 6 : Occupation

	1998	1999	2000	2001	2002
Professional/ Managerial	357 (33.6%)	253 (26.6%)	351 (35.3%)	550 (44.3%)	528 (38.9%)
Paraprofessional	153 (14.4%)	203 (21.3%)	141 (14.3%)	116 (9.3%)	183 (13.5%)
Clerical/Sales	347 (32.7%)	346 (36.3%)	411 (41.3%)	442 (34.0%)	474 (34.9%)
Trades	133 (12.5%)	70 (7.3%)	24 (2.4%)	89 (7.2%)	104 (7.7%)
Plant operation/ Labouring	72 (6.8%)	81 (8.5%)	67 (6.7%)	64 (5.2%)	70 (5.2%)
Total	1062 (100%)	953 (100%)	994 (100%)	1236 (100%)	1354 (100%)

Note: Missing data here is mainly N/A (ie. not currently employed)

EDUCATION

As in other gay-community-based studies, this sample was relatively well educated in comparison with the general population. Sixty percent of the men had received some post-secondary education, and for most this included a university degree (see Table 7). The proportion of men in each of the education categories shown in Table 7 has been consistent across the four survey periods.

Table 7 : Education

	1998	1999	2000	2001	2002
Up to 3 years of high school	232 (17.9%)	198 (16.6%)	185 (15.4%)	194 (13.1%)	280 (16.6%)
Up to Year 12 / Senior Certificate	299 (23.1%)	269 (22.6%)	288 (24.0%)	377 (25.4%)	409 (24.2%)
Trade certificate or diploma	267 (20.6%)	245 (20.6%)	286 (23.8%)	355 (23.9%)	361 (21.4%)
University	498 (38.4%)	478 (40.2%)	441 (36.8%)	559 (37.6%)	639 (37.8%)
Total	1296¹ (100%)	1190² (100%)	1200³ (100%)	1485⁴ (100%)	1689⁵ (100%)

¹ Missing data (n=45), ² Missing data (n=35), ³ Missing data (n=85), ⁴ Missing data (n=85), ⁵ Missing data (n=98)

SEXUAL RELATIONSHIPS WITH WOMEN

As in the four previous surveys, few men had had sex with any women in the preceding six months. These proportions have remained remarkably stable over time (Table 8). However, there has been a slight but statistically significant increase since 1998 in the proportion of men who have had sex with more than one female partner (Mantel-Haenszel, $p < .01$).

Table 8 : Sex with women in previous 6 months

	1998	1999	2000	2001	2002
No female partner	1128 (87.9%)	1064 (89.7%)	1080 (88.3%)	1329 (87.1)	1476 (88.3%)
One female partner	90 (7.0%)	71 (6.0%)	80 (6.5%)	100 (6.6)	77 (4.6%)
More than one female partner	66 (5.1%)	51 (4.3%)	63 (5.2%)	96 (6.3)	118 (7.1%)
Total	1284¹ (100%)	1186² (100%)	1223³ (100%)	1525⁴ (100%)	1671⁵ (100%)

¹ Missing data (n=57), ² Missing data (n=39), ³ Missing data (n=62), ⁴ Missing data (n=45), ⁵ Missing data (n=116)

SEXUAL RELATIONSHIPS WITH MEN

About fifty percent of the men in the sample were in a regular sexual relationship with a man at the time of completing the survey (see Table 9). Approximately twenty two percent of study participants were monogamous (ie. had sex only with a regular partner). The majority of the men had sex with casual partners, while for one-fifth of the sample there was 'currently' no sex with men at all. These proportions have been consistent across the five surveys.

Table 9 : Relationships with men

	1998	1999	2000	2001	2002
None	215 (16.4%)	218 (18.1%)	223 (17.8%)	297 (19.5%)	327 (18.6%)
Casual only	278 (21.2%)	289 (24.1%)	265 (21.2%)	321 (21.0%)	549 (31.2%)
Regular plus casual	454 (34.7%)	404 (33.6%)	397 (31.7%)	504 (33.0%)	490 (27.8%)
Regular only (monogamous)	363 (27.7%)	291 (24.2%)	366 (29.3%)	405 (26.5%)	396 (22.5%)
Total	1310¹ (100%)	1202² (100%)	1251³ (100%)	1527⁴ (100%)	1762⁵ (100%)

¹ Missing data (n=31), ² Missing data (n=23), ³ Missing data (n=34), ⁴ Missing data (n=43), ⁵ Missing data (n=25)

As in the previous four surveys, about 60% of the men who were in a regular relationship had been in that relationship for more than one year (see Table 10).

Table 10 : Length of relationships with men

	1998	1999	2000	2001	2002
Less than one year	283 (40.1%)	230 (37.5%)	258 (40.2%)	336 (44.1%)	329 (38.6%)
At least one year	422 (59.9%)	384 (62.5%)	384 (59.8%)	426 (55.9%)	523 (61.4%)
Total	705 (100%)	614 (100%)	642 (100%)	762 (100%)	852 (100%)

Note: Includes only those men who answered Question 8 and had a regular partner at the time of the survey

Association with Gay Community

In several respects, and not surprisingly given the recruitment strategies used in this study, this was a highly gay-identified and gay-community-attached sample.

SEXUAL IDENTITY

As in the previous surveys, the men in the 2002 survey were mostly homosexually identified. Homosexual identification included 'gay/homosexual' as well as a small number of men who identified as 'queer'. Non-homosexual identification included 'bisexual' and 'heterosexual' (see Table 11). These proportions have been stable since 1998.

Table 11 : Sexual identity

	1998	1999	2000	2001	2002
Gay / homosexual / queer	1115 (84.4%)	1050 (86.4%)	1093 (86.3%)	1351(86.9%)	1476 (83.9%)
Bisexual	159 (12.0%)	137 (11.3%)	121 (9.5%)	171 (11.0%)	203 (11.5%)
Heterosexual / other	48 (3.6%)	28 (2.3%)	53 (4.2%)	32 (2.1%)	81 (4.6%)
Total	1322¹ (100%)	1215² (100%)	1267³ (100%)	1554⁴ (100%)	1760⁵ (100%)

¹ Missing data (n=19), ² Missing data (n=10), ³ Missing data (n=18), ⁴ Missing data (n=16), ⁵ Missing data (n=27)

GAY COMMUNITY INVOLVEMENT

The men in the 2002 sample were quite socially involved with gay men, as were their counterparts in the previous four surveys (see Table 12). About 44% of the men in the sample said most or all of their friends were gay men. This proportion has decreased significantly since 1998 (Mantel-Haenszel, $p < .001$) suggesting that over time gay men's friendship networks may have become more diverse. The decrease may also be explained by the decrease in the *proportion* of respondents from the Brisbane metropolitan area (despite a larger sample in Brisbane in 2002). Residing further away from the gay community would most likely result in fewer gay friends and a reduction in the amount of time spent with gay friends.

Table 12 : Gay friends

	1998	1999	2000	2001	2002
None	24 (1.8%)	16 (1.3%)	23 (1.8%)	27 (1.7%)	35 (2.0%)
Some or a few	619 (46.3%)	590 (48.3%)	644 (50.3%)	795 (50.8%)	967 (54.2%)
Most or all	694 (51.9%)	617 (50.4%)	613 (47.9%)	744 (47.5%)	781 (43.8%)
Total	1337¹ (100%)	1223² (100%)	1280³ (100%)	1566⁴ (100%)	1783⁵ (100%)

¹ Missing data (n=4), ² Missing data (n=2), ³ Missing data (n=5), ⁴ Missing data (n=4), ⁵ Missing data (n=4)

Just under 80% of the men reported spending 'some' or 'a lot' of their free time with gay men (see Table 13). The proportion of respondents spending 'a lot' of their free time with gay men has decreased over time (Mantel-Haenszel, $p < .001$). Correspondingly, there has been a significant upturn in the proportion of men spending only 'a little' or 'some' of their free time with gay men (Mantel-Haenszel, $p < .001$). Although statistically significant, these changes are only slight and not of the magnitude to indicate any dramatic shift in the social networks of these men.

Table 13 : Proportion of free time spent with gay men

	1998	1999	2000	2001	2002
None	16 (1.2%)	8 (0.7%)	11 (0.9%)	20 (1.3%)	32 (1.8%)
A little	211 (15.8%)	207 (16.9%)	223 (17.4%)	291 (18.6%)	366 (20.5%)
Some	506 (37.9%)	475 (38.8%)	503 (39.3%)	627 (40.0%)	749 (42.0%)
A lot	603 (45.1%)	533 (43.6%)	543 (42.4%)	629 (40.1%)	636 (35.7%)
Total	1336¹ (100%)	1223² (100%)	1280³ (100%)	1567⁴ (100%)	1783⁵ (100%)

¹ Missing data (n=5), ² Missing data (n=2), ³ Missing data (n=5), ⁴ Missing data (n=3), ⁵ Missing data (n=4)

HIV Testing

Most of the men had been tested for antibodies to HIV (see Table 14). Of these men, the vast majority reported a negative result from their most recent HIV test. About 13% of the men had not been tested or had failed to obtain their test results. Few men in the sample, about 7 percent, reported being HIV positive. While there was a slight but non-significant increase in the proportion of respondents who are HIV positive in 2002, there has been a downward trend since 1998 (Mantel-Haenszel, $p < .05$). This trend is most likely attributable to having fewer men recruited from sexual health centres in 2000 and 2001 and an increase in 2002 (refer to Table 1).

Table 14 : HIV test results

	1998	1999	2000	2001	2002
Not tested/No results	177 (13.5%)	168 (13.9%)	173 (13.9%)	235 (15.2%)	228 (13.1%)
HIV negative	1021 (77.9%)	942 (77.8%)	981 (79.2%)	1217 (78.9%)	1381 (79.6%)
HIV positive	113 (8.6%)	101 (8.3%)	85 (6.9%)	90 (5.9%)	126 (7.3%)
Total	1311¹ (100%)	1211² (100%)	1239³ (100%)	1542⁴ (100%)	1735⁵ (100%)

¹ Missing data (n=30), ² Missing data (n=14), ³ Missing data (n=46), ⁴ Missing data (n=28), ⁵ Missing data (n=52)

TIME SINCE MOST RECENT HIV-ANTIBODY TEST

Among those men who had ever been tested for HIV, by far the majority had done so within the previous year. About a third of the sample had not been tested for at least twelve months (see Table 15). These proportions have remained stable across the four study periods.

Table 15 : Time since most recent HIV test

	1998	1999	2000	2001	2002
Less than 6 months ago	532 (52.6%)	483 (51.0%)	499 (52.0%)	628 (52.8%)	702 (52.2%)
7-12 months ago	174 (17.2%)	167 (17.6%)	179 (18.6%)	203 (17.1%)	240 (17.8%)
1-2 years ago	167 (16.5%)	167 (17.6%)	156 (16.3%)	215 (18.1%)	215 (16.0%)
Over 2 years ago	138 (13.7%)	130 (13.8%)	126 (13.1%)	143 (12.0%)	188 (14.0%)
Total	1011 (100%)	947 (100%)	960 (100%)	1189 (100%)	1345 (100%)

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

COMBINATION THERAPIES

About 50% of the men who indicated that they were HIV positive were on combination therapy. This represents a significant downward trend over the five surveys (see Table 16). This is a similar trend to that seen among gay men in Melbourne (see Rawstorne et al., 2001) and Sydney (Van de Ven et al., 2002). (Note: This finding is based on small numbers).

Table 16 : Use of combination antiretroviral therapies

	1998	1999	2000	2001	2002
Yes	77 (68.8%)	67 (67.7%)	51 (66.2%)	52 (59.1%)	59 (48.8%)
No	35 (31.2%)	32 (32.3%)	26 (33.8%)	36 (40.9%)	62 (51.2%)
Total	112 (100%)	99 (100%)	77 (100%)	88 (100%)	121 (100%)

Note: Includes only HIV positive men

VIRAL LOAD

A question about the viral load of HIV positive men was included in the 2002 survey. Three-quarters of the men who currently use antiretroviral therapies have undetectable viral loads (see Table 17). In comparison, just over 20% of the HIV positive men not using this treatment have undetectable viral loads.

Table 17 : Use of combination antiretroviral therapies (ART) and viral load (VL)

ART	Undetectable VL	Detectable VL	Don't know/unsure	Total
Yes	44 (75.9%)	14 (24.2%)	—	58 (100%)
No	13 (21.3%)	43 (70.5%)	5 (8.2%)	61 (100%)

REGULAR PARTNER'S HIV-STATUS

Participants were asked about the serostatus of their current regular partners. As the question referred only to current partners, fewer men responded to this item than indicated sex with a regular partner during the previous six months. In 2002, 68 percent of the men had an HIV negative regular partner, while nine percent had an HIV positive regular partner (see Table 18). Almost one-quarter of the men had a regular partner whose serostatus they did not know. There had been a significant upward trend in the proportion of men who did not know the HIV status of their regular partners from 1998 to 2001 (Mantel-Haenszel, $p < .05$). However, in 2002 the proportion of men with regular partners of unknown HIV status has decreased significantly from the previous year to a level below that reported in 1998 ($p < .01$).

Table 18 : HIV status of regular partner

	1998	1999	2000	2001	2002
HIV positive	61 (8.3%)	63 (9.1%)	63 (8.5%)	58 (6.9%)	81 (9.0%)
HIV negative	486 (66.3%)	442 (64.2%)	462 (62.6%)	531 (62.8%)	612 (67.8%)
HIV status unknown	186 (25.4%)	184 (26.7%)	213 (28.9%)	256 (30.3%)	210 (23.3%)
Total	733 (100%)	689 (100%)	738 (100%)	845 (100%)	903 (100%)

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

In 2002, as in previous surveys, HIV positive participants were more likely to be in a regular relationship with another HIV positive man than with either an HIV negative man or a man whose HIV status was unknown (Table 19). This applied to almost 50% of the HIV positive participants. HIV negative men tended to have HIV negative regular partners. Men who did not know their own serostatus were most likely not to know the serostatus of their regular partners. The data have been remarkably stable across time, particularly for the HIV negative and HIV unknown participants.

Table 19 : Match of HIV status in regular relationships

Serostatus of regular partner	Participant's Serostatus		
	HIV positive	HIV negative	Unknown
1998			
HIV positive	20 (30.8%)	34 (5.9%)	5 (6.0%)
HIV negative	33 (50.8%)	426 (74.1%)	22 (26.2%)
HIV status unknown	12 (18.4%)	115 (20.0%)	57 (67.8%)
Total (N = 724)	65 (100%)	575 (100%)	84 (100%)
1999			
HIV positive	25 (38.5%)	34 (6.3%)	4 (5.1%)
HIV negative	32 (49.2%)	386 (71.3%)	20 (25.7%)
HIV status unknown	8 (12.3%)	121 (22.4%)	54 (69.2%)
Total (N = 684)	65 (100%)	541 (100%)	78 (100%)
2000			
HIV positive	18 (33.3%)	40 (6.9%)	2 (2.4%)
HIV negative	20 (37.1%)	404 (69.3%)	23 (28.0%)
HIV status unknown	16 (29.6%)	139 (23.8%)	57 (69.6%)
Total (N = 719)	54 (100%)	583 (100%)	82 (100%)
2001			
HIV positive	22 (41.5%)	31 (4.6%)	3 (2.8%)
HIV negative	20 (37.7%)	471 (70.5%)	29 (26.8%)
HIV status unknown	11 (20.8%)	166 (24.9%)	76 (70.4%)
Total (N = 829)	53 (100%)	668 (100%)	108 (100%)
2002			
HIV positive	35 (49.3%)	39 (5.3%)	5 (5.8%)
HIV negative	25 (35.2%)	557 (75.8%)	23 (26.7%)
HIV status unknown	11 (15.5%)	139 (18.9%)	58 (67.4%)
Total (N = 892)	71 (100%)	735 (100%)	86 (100%)

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

Sexual Practice and 'Safe Sex'

SEXUAL PRACTICE WITH 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 20).

Based on the responses to the sexual practice items and the sort of sexual relationships with men indicated by the participants, almost 70% of the men had sexual contact with casual partners and about 60% had sex with regular partners in the preceding six months. These proportions have been remarkably stable across the five surveys.

Table 20 : Reported sex with male partners in previous six months

	1998	1999	2000	2001	2002
Any sexual contact with regular partners	826 (61.6%)	762 (62.2%)	803 (62.5%)	968 (61.7%)	1060 (59.3%)
Any sexual contact with casual partners	962 (71.7%)	901 (73.6%)	908 (70.7%)	1124 (71.6%)	1227 (68.7%)
Total	1341 (100%)	1225 (100%)	1285 (100%)	1570 (100%)	1787 (100%)

Note: These categories are not mutually exclusive

As in the previous four years, in the 6 months preceding the survey, men recruited at the Pride Fair Day were more likely to have had regular partners and less likely to have had casual partners than their counterparts recruited at the gay venues (see Table 21). These results are not altogether surprising as men attending some of the gay venues, particularly the sex-on-premises venues, do so to find casual partners.

Table 21 : Reported sex with male partners in previous six months, by type of recruitment site

	Pride Fair Day	Venues
1998		
Any sexual contact with regular partners	360 (70.2%)	466 (56.3%)
Any sexual contact with casual partners	338 (65.9%)	624 (75.4%)
Total	513	828
1999		
Any sexual contact with regular partners	202 (65.6%)	560 (61.1%)
Any sexual contact with casual partners	196 (63.6%)	705 (76.9%)
Total	308	917
2000		
Any sexual contact with regular partners	193 (64.3%)	610 (62.0%)
Any sexual contact with casual partners	189 (63.0%)	719 (73.0%)
Total	300	985
2001		
Any sexual contact with regular partners	259 (66.8%)	709 (60.0%)
Any sexual contact with casual partners	225 (58.0%)	899 (76.1%)
Total	388	1182
2002		
Any sexual contact with regular partners	197 (65.9%)	859 (58.0%)
Any sexual contact with casual partners	163 (54.5%)	1059 (71.5%)
Total	299	1482

Note: These categories are not mutually exclusive

The majority of the men had engaged in sex with between one and 10 partners 'in the previous six months', while about one-quarter of the men had more than 10 partners (see Table 22). The proportions for two or more partners has remained steady across the five survey periods. However, in 2002 there was a significant increase in the number of men reporting no sex partners in the previous six months ($P<.01$) and a corresponding decrease in the number who report only one sex partner in the previous six months.

Table 22 : Number of male sex partners in previous six months

	1998	1999	2000	2001	2002
None	97 (7.3%)	67 (5.5%)	74 (5.8%)	98 (6.3%)	216 (12.2%)
One	282 (21.2%)	250 (20.5%)	282 (22.2%)	323 (20.7%)	289 (16.4%)
2 – 10	610 (45.9%)	574 (47.1%)	636 (50.0%)	767 (49.1%)	811 (45.9%)
11 – 50	268 (20.0%)	266 (21.9%)	227 (17.9%)	298 (19.0%)	342 (19.4%)
More than 50	74 (5.6%)	61 (5.0%)	52 (4.1%)	77 (4.9%)	108 (6.1%)
Total	1331¹ (100%)	1218² (100%)	1271³ (100%)	1563⁴ (100%)	1766⁵ (100%)

¹ Missing data (n=10), ² Missing data (n=7), ³ Missing data (n=14), ⁴ Missing data (n=7), ⁵ Missing data (n=11)

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 position (Table 23). This result is consistent across the five study periods. About 75 percent of the men with regular male partners engaged in oral intercourse with ejaculation with their regular partners. There has been a significant upturn in this practice across the five study periods (Mantel-Haenszel, $p < .001$).

About 90 percent of the men with regular partners had engaged in anal intercourse with their partners. At least three-quarters of the men with regular partners had engaged in insertive anal intercourse, while a similar proportion had engaged in receptive anal intercourse. These percentages are on par with the four previous surveys.

Table 23 : Sexual behaviour with regular male partners

	Total Sample	Those with Regular Partners
1998	N = 1341	n = 826
Any oral intercourse with ejaculation	523 (39.0%)	523 (63.3%)
Insertive fellatio with ejaculation	417 (31.1%)	417 (50.5%)
Receptive fellatio with ejaculation	427 (31.8%)	427 (51.7%)
Any anal intercourse	725 (54.1%)	725 (87.8%)
Insertive anal intercourse	628 (46.8%)	628 (76.0%)
Receptive anal intercourse	592 (44.1%)	592 (71.7%)
1999	N = 1225	n = 762
Any oral intercourse with ejaculation	497 (40.6%)	497 (65.2%)
Insertive fellatio with ejaculation	403 (32.9%)	403 (52.9%)
Receptive fellatio with ejaculation	409 (33.4%)	409 (53.7%)
Any anal intercourse	692 (56.5%)	674 (88.5%)
Insertive anal intercourse	604 (49.3%)	592 (77.7%)
Receptive anal intercourse	539 (44.0%)	533 (69.9%)

.../continued

	Total Sample	Those with Regular Partners
2000	N = 1285	n = 803
Any oral intercourse with ejaculation	566 (44.0%)	566 (70.5%)
Insertive fellatio with ejaculation	466 (36.3%)	466 (58.0%)
Receptive fellatio with ejaculation	466 (36.3%)	466 (58.0%)
Any anal intercourse	708 (55.1%)	708 (88.2%)
Insertive anal intercourse	633 (49.3%)	633 (78.8%)
Receptive anal intercourse	573 (44.6%)	573 (71.4%)
2001	N = 1570	n = 968
Any oral intercourse with ejaculation	679 (43.2%)	679 (70.1%)
Insertive fellatio with ejaculation	556 (35.4%)	556 (57.4%)
Receptive fellatio with ejaculation	574 (36.6%)	574 (59.3%)
Any anal intercourse	864 (55.0%)	864 (89.3%)
Insertive anal intercourse	752 (47.9%)	752 (77.7%)
Receptive anal intercourse	723 (46.1%)	723 (74.7%)
2002	N = 1787	n = 1059
Any oral intercourse with ejaculation	792 (44.3%)	792 (74.7%)
Insertive fellatio with ejaculation	677 (37.9%)	677 (63.9%)
Receptive fellatio with ejaculation	661 (37.0%)	661 (62.4%)
Any anal intercourse	948 (53.0%)	948 (89.4%)
Insertive anal intercourse	845 (47.3%)	845 (79.7%)
Receptive anal intercourse	784 (43.9%)	784 (74.0%)

Note: These items are not mutually exclusive. The percentages do not sum to 100 percent 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 anal intercourse with casual male partners than with regular male partners (see Table 24). Almost 60% of the men with casual partners engaged in oral intercourse with ejaculation, more commonly in the insertive position. There has been a significant upward trend across the five study periods in the proportion of men engaging in oral intercourse with ejaculation (Mantel-Haenszel, $p < .001$), insertive fellatio with ejaculation (Mantel-Haenszel, $p < .001$) and receptive fellatio with ejaculation (Mantel-Haenszel, $p < .001$), with casual partners.

Similar to 2001, about three-quarters of those who had sex with casual male partners engaged in anal intercourse with those partners, again more usually in the insertive position. However, as with oral intercourse, there has also been a significant upward trend since 1998 in the proportion of men engaging in any anal intercourse (Mantel-Haenszel, $p < .001$), insertive anal intercourse (Mantel-Haenszel, $p < .01$) and receptive anal intercourse (Mantel-Haenszel, $p < .001$) with casual male partners.

Table 24 : Sexual behaviour with casual male partners

	Total Sample	Those with Casual Partners
1998	N = 1341	n = 962
Any oral intercourse with ejaculation	424 (31.6%)	424 (44.1%)
Insertive fellatio with ejaculation	351 (26.2%)	351 (40.0%)
Receptive fellatio with ejaculation	274 (20.4%)	274 (31.0%)
Any anal intercourse	673 (50.2%)	673 (70.0%)
Insertive anal intercourse	597 (44.5%)	597 (62.1%)
Receptive anal intercourse	486 (36.2%)	486 (50.5%)
1999	N = 1225	n = 901
Any oral intercourse with ejaculation	391 (31.9%)	391 (43.4%)
Insertive fellatio with ejaculation	332 (27.1%)	332 (36.8%)
Receptive fellatio with ejaculation	260 (21.2%)	260 (28.9%)
Any anal intercourse	660 (53.9%)	660 (73.3%)
Insertive anal intercourse	585 (47.8%)	585 (64.9%)
Receptive anal intercourse	483 (39.4%)	483 (53.6%)
2000	N = 1285	n = 908
Any oral intercourse with ejaculation	449 (34.9%)	449 (49.4%)
Insertive fellatio with ejaculation	385 (30.0%)	385 (42.4%)
Receptive fellatio with ejaculation	294 (22.9%)	294 (32.4%)
Any anal intercourse	672 (52.3%)	672 (74.0%)
Insertive anal intercourse	605 (47.1%)	605 (66.6%)
Receptive anal intercourse	521 (40.5%)	521 (57.4%)
2001	N = 1570	n = 1124
Any oral intercourse with ejaculation	600 (38.2%)	585 (52.0%)
Insertive fellatio with ejaculation	507 (32.3%)	494 (44.0%)
Receptive fellatio with ejaculation	410 (26.1%)	397 (35.3%)
Any anal intercourse	865 (55.1%)	854 (76.0%)
Insertive anal intercourse	761 (48.5%)	751 (66.8%)
Receptive anal intercourse	680 (43.3%)	671 (59.7%)
2002	N = 1787	n = 1248
Any oral intercourse with ejaculation	734 (41.1%)	734 (57.5%)
Insertive fellatio with ejaculation	635 (35.5%)	635 (49.8%)
Receptive fellatio with ejaculation	523 (29.3%)	523 (41.0%)
Any anal intercourse	967 (54.1%)	967 (75.8%)
Insertive anal intercourse	858 (48.0%)	858 (67.2%)
Receptive anal intercourse	732 (41.0%)	732 (57.4%)

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

Based on the entire sample, one-third of the men who participated in the survey engaged in any unprotected anal intercourse with regular male partners ('UAI-R') 'in the

previous six months' (See Table 25). This proportion is similar to the 2000 and 2001 surveys. Although there was no increase in the proportion of men engaging in UAI-R between 2000 and 2002, across the five survey periods there has been a significant rise in the proportion of men engaging in this practice (Mantel-Haenszel, $p<.05$).

Table 25 : Condom use with regular male partners

	Total Sample	Those with Regular Partners
1998		
No regular partner	515 (38.4%)	—
No anal intercourse	101 (7.5%)	101 (12.2%)
Always uses condom	314 (23.4%)	314 (38.0%)
Sometimes does not use condom	411 (30.7%)	411 (49.8%)
Base	1341 (100%)	826 (100%)
1999		
No regular partner	463 (37.8%)	—
No anal intercourse	88 (7.2%)	88 (11.6%)
Always uses condom	308 (25.1%)	308 (40.4%)
Sometimes does not use condom	366 (29.9%)	366 (48.0%)
Base	1225 (100%)	762 (100%)
2000		
No regular partner	482 (37.5%)	—
No anal intercourse	95 (7.4%)	95 (11.8%)
Always uses condom	268 (20.9%)	268 (33.4%)
Sometimes does not use condom	440 (34.2%)	440 (54.8%)
Base	1285 (100%)	803 (100%)
2001		
No regular partner	602 (38.3%)	—
No anal intercourse	104 (6.6%)	104 (10.7%)
Always uses condom	339 (21.6%)	339 (35.0%)
Sometimes does not use condom ¹	525 (33.5%)	525 (54.3%)
Base	1570 (100%)	968 (100%)
2002		
No regular partner	727 (40.7%)	—
No anal intercourse	112 (6.3%)	112 (10.6%)
Always uses condom	357 (20.0%)	357 (33.7%)
Sometimes does not use condom ¹	591 (33.1%)	591 (55.8%)
Base	1787 (100%)	1060 (100%)

¹ Of the 591 men who engaged in UAI-R 'in the previous six months', 117 practised only withdrawal prior to ejaculation, 210 practised only ejaculation inside, and 264 engaged in both withdrawal and ejaculation inside.

In 2002, HIV positive and HIV negative were more likely than men of unknown HIV status to engage in unprotected anal intercourse with their regular partners ($p<.05$) (see Table 26). For a break down of condom use by match of serostatus among regular partners, refer to Table 27.

Table 26 : Serostatus and condom use among regular male partners

	HIV positive	HIV negative	Unknown
1998 (p<.001)			
No Anal	6 (9.1%)	68 (10.6%)	25 (25.5%)
Always uses condom	33 (50.0%)	249 (38.7%)	26 (26.5%)
Sometimes does not use condom	27 (40.9%)	321 (50.8%)	47 (48.0%)
Total	66 (100%)	644 (100%)	98 (100%)
1999 (ns)			
No Anal	3 (4.6%)	70 (11.7%)	14 (15.7%)
Always uses condom	34 (52.3%)	231 (38.6%)	39 (43.8%)
Sometimes does not use condom	28 (43.1%)	297 (49.7%)	36 (40.5%)
Total	65 (100%)	598 (100%)	89 (100%)
2000 (ns)			
No Anal	4 (6.9%)	71 (11.4%)	17 (18.9%)
Always uses condom	21 (36.2%)	214 (34.2%)	21 (23.3%)
Sometimes does not use condom	33 (56.9%)	340 (54.4%)	52 (57.8%)
Total	58 (100%)	625 (100%)	90 (100%)
2001 (ns)			
No Anal	6 (11.1%)	75 (9.9%)	21 (15.0%)
Always uses condom	20 (37.0%)	256 (33.9%)	58 (41.4%)
Sometimes does not use condom	28 (51.9%)	425 (56.2%)	61 (43.6%)
Total	54 (100%)	756 (100%)	140 (100%)
2002 (p<.05)			
No Anal	5 (6.7%)	82 (9.8%)	17 (15.2%)
Always uses condom	25 (33.3%)	278 (33.3%)	45 (40.2%)
Sometimes does not use condom	45 (60.0%)	475 (56.9%)	50 (44.6%)
Total	75 (100%)	835 (100%)	112 (100%)

Note: Includes only those men who had a regular partner 'in the previous six months'.

In the following table, 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 nine 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 (ie. not be interpreted as significant trends).

HIV positive men were *more* likely to have unprotected anal intercourse with positive partners than with negative partners. HIV negative men were *more* likely to have unprotected anal intercourse with negative and status unknown partners than with positive partners. Those who did not know their status were *more* likely to have unprotected anal intercourse with partners of unknown serostatus than with men of either positive or negative serostatus.

In 2002, most of the unprotected anal intercourse within regular relationships of six months or more was between seroconcordant (positive-positive or negative-negative) couples. However, 96 men engaged in unprotected anal intercourse in a relationship where seroconcordance was absent or in doubt².

² It is possible that these figures slightly overestimate the actual number of relationships for which seroconcordance was in doubt at the time couples were engaging in UAI-R. This doubt exists because questions

Table 27 : Condom use and match of HIV serostatus in regular relationships

		Participant's Serostatus		
		HIV positive	HIV negative	Unknown serostatus
1998				
HIV positive	No UAI	5 (41.7%)	7 (33.3%)	1 (50.0%)
	Some UAI	7 (58.3%)	14 (66.7%)	1 (50.0%)
HIV negative	No UAI	16 (66.7%)	74 (29.0%)	2 (15.4%)
	Some UAI	8 (33.3%)	181 (71.0%)	11 (84.6%)
Unknown	No UAI	3 (60.0%)	17 (35.4%)	7 (30.4%)
	Some UAI	2 (40.0%)	31 (64.6%)	16 (69.6%)
Total		41	324	38
1999				
HIV positive	No UAI	5 (25.0%)	20 (76.9%)	1 (33.3%)
	Some UAI	15 (75.0%)	6 (23.1%)	2 (66.7%)
HIV negative	No UAI	14 (73.7%)	73 (29.1%)	5 (41.7%)
	Some UAI	5 (26.3%)	178 (70.9%)	7 (58.3%)
Unknown	No UAI	3 (75.0%)	24 (57.1%)	13 (50.0%)
	Some UAI	1 (25.0%)	18 (42.9%)	13 (50.0%)
Total		43	319	41
2000				
HIV positive	No UAI	2 (20.0%)	7 (35.0%)	—
	Some UAI	8 (80.0%)	13 (65.0%)	1 (100%)
HIV negative	No UAI	8 (53.3%)	72 (30.5%)	1 (11.1%)
	Some UAI	7 (46.7%)	164 (69.5%)	8 (88.9%)
Unknown	No UAI	2 (25.0%)	22 (45.8%)	6 (30.0%)
	Some UAI	6 (63.6%)	26 (54.2%)	14 (70.0%)
Total		33	314	30
2001				
HIV positive	No UAI	3 (17.6%)	7 (36.8%)	1 (50.0%)
	Some UAI	14 (82.4%)	12 (63.2%)	1 (50.0%)
HIV negative	No UAI	8 (72.7%)	78 (27.2%)	5 (27.8%)
	Some UAI	3 (27.3%)	209 (72.8%)	13 (72.2%)
Unknown	No UAI	1 (25.0%)	19 (30.2%)	14 (50.0%)
	Some UAI	3 (75.0%)	44 (69.8%)	14 (50.0%)
Total		32	369	48
2002				
HIV positive	No UAI	4 (16.0%)	18 (66.7%)	1 (33.3%)
	Some UAI	21 (84.0%)	9 (33.3%)	2 (66.7%)
HIV negative	No UAI	7 (41.2%)	92 (25.3%)	5 (35.7%)
	Some UAI	10 (58.8%)	271 (74.7%)	9 (64.3%)
Unknown	No UAI	4 (100.0%)	21 (30.9%)	6 (24.0%)
	Some UAI	—	47 (69.1%)	19 (76.0%)
Total		46	458	42

Note: UAI = unprotected anal intercourse. This analysis includes only men who had anal intercourse with their 'current' regular partner 'in the previous six months' and had been in a relationship with the same man for at least six months.

about sexual practice were asked in the context of the preceding six months, whereas knowledge of a partner's HIV status was at the time of completing the survey. Hence, some couples that had engaged in UAI-R when serostatus of both partners was known may have stopped engaging in the practice if the serostatus of one or both became uncertain.

AGREEMENTS

Most participants with regular male partners at the time of completing the survey (about 72 percent of men in the sample) had agreements with their partners about sex within the relationship (see Table 28). As in previous years, about a third of the men in relationships agreed to anal intercourse without a condom. Of these 318 men, the majority was in a seroconcordant (positive-positive or negative-negative) relationship, while a relatively small number, 55 all up, were in a relationship where seroconcordance was absent or in doubt.

Table 28 : Agreements with regular male partners about sex *within* relationship

	1998	1999	2000	2001	2002
No spoken agreement about anal intercourse	178 (25.0%)	155 (22.9%)	189 (26.0%)	235 (27.5%)	251 (28.1%)
No anal intercourse between regular partners is permitted	46 (6.4%)	61 (9.0%)	61 (8.4%)	79 (9.3%)	64 (7.2%)
Anal intercourse permitted only with condom	243 (34.0%)	253 (37.3%)	231 (31.8%)	255 (29.9%)	261 (29.2%)
Anal intercourse without condom is permitted	247 (34.6%)	209 (30.8%)	246 (33.8%)	284 (33.3%)	318 (35.6%)
Total	714 (100%)	678 (100%)	727 (100%)	853 (100%)	84 (100%)

Note: Based on the responses of men who 'currently' had a regular partner.

In 2002, similar to previous surveys, about a third of the men in a 'current' relationship had no spoken agreement with their partner about sex outside the relationship (see Table 29). Where couples did have an agreement, very few permitted unprotected anal intercourse with casual partners although there has been a significant upward trend over time (Mantel-Haenszel, $p < .01$). (Note: This finding is based on small numbers and should be treated cautiously.)

Table 29 : Agreements with regular male partners about sex *outside* relationship

	1998	1999	2000	2001	2002
No spoken agreement about sex	214 (29.9%)	195 (29.1%)	248 (34.4%)	298 (34.9%)	309 (34.2%)
No sexual contact with casual partners is permitted	213 (29.9%)	199 (29.7%)	216 (30.0%)	243 (28.5%)	257 (28.5%)
No anal intercourse with casual partners is permitted	56 (7.8%)	50 (7.4%)	42 (5.8%)	55 (6.4%)	53 (5.9%)
Anal intercourse permitted only with condom	217 (30.3%)	215 (32.0%)	199 (27.6%)	234 (27.4%)	245 (27.1%)
Anal intercourse without condom is permitted	15 (2.1%)	12 (1.8%)	16 (2.2%)	24 (2.8%)	39 (4.3%)
Total	715 (100%)	671 (100%)	721 (100%)	854 (100%)	903 (100%)

Note: Based on the responses of men who 'currently' had a regular partner.

SEX WITH CASUAL MALE PARTNERS

Condom use

Based on the entire sample, 395 (22.1%) of the men who participated in the 2002 survey engaged in any unprotected anal intercourse with their casual male partners 'in the previous six months' (see Table 30). A separate analysis revealed that of these 395 men, 180 also had unprotected anal intercourse with regular partners. Over the period 1998 to 2002, there has been a significant upward trend in rates of unprotected anal intercourse with casual partners (Mantel-Haenszel, $p < .001$).

Table 30 : Condom use with casual male partners

	Total Sample	Those with Casual Partners
1998		
No casual partner	379 (28.3%)	—
No anal intercourse	289 (21.6%)	289 (30.0%)
Always uses condom	485 (36.2%)	485 (50.4%)
Sometimes does not use condom	188 (14.0%)	188 (19.5%)
Base	1341 (100%)	962 (100%)
1999		
No casual partner	324 (26.4%)	—
No anal intercourse	241 (19.7%)	241 (26.7%)
Always uses condom	480 (39.2%)	480 (53.3%)
Sometimes does not use condom	180 (14.7%)	180 (20.0%)
Base	1225 (100%)	901 (100%)
2000		
No casual partner	377 (29.3%)	—
No anal intercourse	236 (18.4%)	236 (26.0%)
Always uses condom	436 (33.9%)	436 (48.0%)
Sometimes does not use condom	236 (18.4%)	236 (26.0%)
Base	1285 (100%)	908 (100%)
2001		
No casual partner	446 (28.4%)	—
No anal intercourse	270 (17.2%)	270 (24.0%)
Always uses condom	552 (35.2%)	552 (49.1%)
Sometimes does not use condom	302 (19.2%)	302 (26.9%)
Base	1570 (100%)	1124 (100%)
2002		
No casual partner	560 (31.3%)	—
No anal intercourse	274 (15.3%)	274 (22.3%)
Always uses condom	558 (31.2%)	558 (45.5%)
Sometimes does not use condom	395 (22.1%)	395 (32.2%)
Base	1787 (100%)	1227 (100%)

¹ Of the 395 men who engaged in unprotected anal intercourse with casual partners 'in the previous six months', 149 practised withdrawal prior to ejaculation only, 65 practised ejaculation inside only, and 181 engaged in both withdrawal and ejaculation inside.

A comparison of the data in Tables 25 and 30 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.

In 2002 there were significant differences between HIV positive, HIV negative and 'untested' men in their condom use with casual partners. This difference was also evident in 1998, 2000 and 2001 although not in 1999. HIV negative and serostatus unknown men were *less* likely than HIV positive men to engage in any anal intercourse with casual partners (see Table 31). HIV negative and status unknown men were also *less* likely to have unprotected anal intercourse than their HIV positive counterparts. 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 31 : Serostatus and condom use with casual male partners

	HIV positive	HIV negative	Unknown
1998 ($p < .02$)			
No Anal	18 (20.9%)	219 (29.8%)	47 (37.9%)
Always uses condom	42 (48.8%)	387 (52.7%)	50 (40.3%)
Sometimes does not use condom	26 (30.2%)	129 (17.6%)	27 (21.8%)
Total	86 (100%)	1019 (100%)	186 (100%)
1999 (ns)			
No Anal	12 (16.2%)	187 (26.9%)	37 (30.1%)
Always uses condom	42 (56.8%)	373 (53.6%)	62 (50.4%)
Sometimes does not use condom	20 (27.0%)	136 (19.5%)	24 (19.5%)
Total	74 (100%)	696 (100%)	123 (100%)
2000 ($p < .005$)			
No Anal	12 (17.6%)	177 (25.4%)	41 (32.5%)
Always uses condom	27 (39.7%)	346 (49.7%)	56 (44.4%)
Sometimes does not use condom	29 (42.6%)	173 (24.9%)	29 (23.1%)
Total	68 (100%)	696 (100%)	126 (100%)
2001 ($p < .05$)			
No Anal	13 (17.6%)	206 (23.7%)	43 (26.1%)
Always uses condom	25 (33.8%)	445 (51.2%)	77 (46.7%)
Sometimes does not use condom	36 (48.6%)	218 (25.1%)	45 (27.2%)
Total	74 (100%)	869 (100%)	165 (100%)
2002 ($p < .05$)			
No Anal	16 (16.8%)	213 (22.5%)	36 (23.5%)
Always uses condom	33 (34.7%)	443 (46.8%)	68 (44.4%)
Sometimes does not use condom	46 (48.4%)	290 (30.7%)	49 (32.0%)
Total	95 (100%)	946 (100%)	153 (100%)

Note: Includes only those men who had any casual partners 'in the previous six months'.

In the last three surveys, participants were asked to indicate the sites at which they had had any unprotected anal intercourse with casual partners ('UAI-C'). The sites at which UAI-C was most likely to occur were the respondent's home and his casual partner's home, followed by sex venues/saunas (see Table 32). Fewer men engaged in unprotected anal intercourse either at beats or elsewhere. Over the last three survey periods there has been a significant upward trend in the number of men engaging in unprotected anal intercourse with casual partners at their own home (Mantel-Haenszel, $p<.01$), the home of their partners (Mantel-Haenszel, $p<.01$), beats (Mantel-Haenszel, $p<.01$) and elsewhere (Mantel-Haenszel, $p<.01$). Notably, UAI-C at sex venues / saunas has been stable.

Table 32 : Sites of unprotected anal intercourse with casual partners

	2000	2001	2002
Respondent's home	169 (18.6%)	213 (19.0%)	318 (25.5%)
Casual partner's home	133 (14.6%)	210 (18.7%)	303 (24.3%)
Sex venue/sauna	127 (14.0%)	171 (15.2%)	212 (17.0%)
Beat	58 (6.4%)	91 (8.1%)	129 (10.3%)
Elsewhere	76 (8.4%)	102 (9.1%)	159 (12.7%)

Note: These categories are not mutually exclusive. Percentages calculated on men who had casual partners.

SEROSTATUS

Two questions (ie. 29 and 30) addressed disclosure of serostatus among casual partners. These questions were included in the questionnaire to obtain a sense of disclosure and 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 two questions was not intended to endorse sexual negotiation between casual partners.

Almost 60% of participants with casual partners did not disclose their serostatus to any of their casual partners (see Table 33). Since 2000, there has been a significant decrease in the number of men who did not disclose their HIV status to any casual partners ($p<.01$) and a corresponding increase in the number of respondents who told all their casual partners their HIV status. About 20% of men disclosed to all of their casual partners.

Table 33 : Participants' disclosure of serostatus to casual partners

	1998	1999	2000	2001	2002
Told none	568 (60.5%)	517 (61.8%)	540 (63.3%)	667 (62.3%)	731 (57.7%)
Told some	198 (21.1%)	171 (20.4%)	182 (21.3%)	222 (20.7%)	285 (22.5%)
Told all	173 (18.4%)	149 (17.8%)	131 (15.4%)	181 (17.0%)	251 (19.8%)
Total	939 (100%)	837 (100%)	853 (100%)	1070 (100%)	1267 (100%)

Similarly, almost 60% of participants were not told the serostatus of their casual partners (see Table 34). About 10% of respondents were disclosed to by all of their casual partners. The overall rates of disclosure had been quite steady over the four study periods from 1998 to 2001. However, in 2002 there was a significant decrease in the number of respondents whose casual partners never told them their HIV status ($p < .05$) and a corresponding increase in the number of respondents who were 'told by some' ($p < .01$).

Table 34 : Casual partners' disclosure of serostatus to participants

	1998	1999	2000	2001	2002
Told by none	586 (62.1%)	534 (63.4%)	543 (63.4%)	687 (64.0%)	739 (58.8%)
Told by some	255 (27.1%)	217 (25.8%)	242 (28.2%)	260 (24.2%)	378 (30.1%)
Told by all	102 (10.8%)	91 (10.8%)	72 (8.4%)	127 (11.8%)	140 (11.1%)
Total	943 (100%)	842 (100%)	857 (100%)	1074 (100%)	1257 (100%)

The observed increase in disclosure of HIV status may be partly attributable to the increased number of HIV positive participants in the most recent survey.

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 (eg. Crawford et al., 1998). Less well understood are beliefs in the context of combination antiretroviral therapies. In 2002, four questions addressed this issue (Questions 40 to 43). As with the data from previous surveys, responses tended to be toward the sceptical end of the scale (See Table 35). That is, most men were not overly optimistic about HIV therapies 'reducing infectivity'. There has been no substantial change in beliefs across the four time periods these questions were included.

Table 35 : Responses to questions about combination therapy

	Year	Strongly disagree	Disagree	Agree	Strongly agree
New HIV treatments will take the worry out of sex.	1999	616 (53.3%)	429 (37.1%)	84 (7.3%)	27 (2.3%)
	2000	502 (43.1%)	497 (42.6%)	122 (10.5%)	45 (3.9%)
	2001	659 (46.7%)	549 (38.9%)	147 (10.4%)	55 (3.9%)
	2002	642 (41.6%)	628 (40.7%)	207 (13.4%)	66 (4.3%)
The availability of treatment (PEP) immediately after unsafe sex makes safe sex less important.	1999	638 (57.0%)	399 (35.6%)	52 (4.6%)	31 (2.8%)
	2000	655 (57.3%)	436 (38.1%)	41 (3.6%)	12 (1.0%)
	2001	857 (61.5%)	454 (32.6%)	60 (4.3%)	22 (1.6%)
	2002	818 (54.1%)	544 (36.0%)	109 (7.2%)	41 (2.7%)
HIV is less of a threat because the epidemic is on the decline.	1999	703 (61.6%)	372 (32.6%)	53 (4.6%)	14 (1.2%)
	2000	686 (59.7%)	413 (35.9%)	40 (3.5%)	10 (0.9%)
	2001	924 (66.0%)	413 (29.4%)	49 (3.5%)	15 (1.1%)
	2002	913 (59.8%)	511 (33.5%)	82 (5.4%)	21 (1.4%)
HIV/AIDS is a less serious threat than it used to be because of new treatments.	1999	641 (56.1%)	388 (34.0%)	101 (8.8%)	12 (1.1%)
	2000	629 (54.8%)	399 (34.8%)	105 (9.2%)	14 (1.2%)
	2001	829 (59.3%)	425 (30.4%)	125 (8.9%)	19 (1.4%)
	2002	802 (52.6%)	536 (35.2%)	161 (10.6%)	25 (1.6%)

The relationship between the items about combination therapies and participants' serostatus indicate that, regardless of HIV serostatus, the majority of men responded in line with accepted wisdom and towards the sceptical end of the scale (see Tables 36 to 39). The four items can be combined into a scale, with a score ranging from 1 (most sceptical) to 4 (most optimistic). On this scale, men who did not know their HIV status were significantly more optimistic (mean = 1.78) than HIV negative men (mean = 1.60) ($p < .05$) although not significantly different from their HIV positive counterparts (mean = 1.68).

Table 36 : Responses to the statement that 'New HIV treatments will take the worry out of sex', by serostatus

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
1999				
HIV positive	55 (55.6%)	41 (41.4%)	2 (2.0%)	1 (1.0%)
HIV negative	474 (52.9%)	333 (37.2%)	69 (7.7%)	20 (2.2%)
Unknown	81 (54.4%)	51 (34.1%)	2 (8.1%)	5 (3.4%)
2000				
HIV positive	35 (44.3%)	36 (45.6%)	6 (7.6%)	2 (2.5%)
HIV negative	412 (45.7%)	376 (41.7%)	85 (9.4%)	29 (3.2%)
Unknown	47 (29.2%)	76 (47.2%)	27 (16.8%)	11 (6.8%)
2001				
HIV positive	44 (51.8%)	29 (34.1%)	7 (8.2%)	5 (5.9%)
HIV negative	528 (48.2%)	428 (39.1%)	104 (9.4%)	36 (3.3%)
Unknown	78 (37.3%)	84 (40.3%)	35 (16.7%)	12 (5.7%)
2002				
HIV positive	52 (42.6%)	51 (41.8%)	13 (10.7%)	6 (4.9%)
HIV negative	534 (43.8%)	486 (39.8%)	148 (12.1%)	52 (4.3%)
Unknown	52 (27.8%)	148 (12.1%)	42 (22.5%)	7 (3.7%)

Table 37 : Responses to the statement that 'The availability of treatment (PEP) immediately after unsafe sex makes safe sex less important', by serostatus

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
1999				
HIV positive	62 (65.3%)	29 (30.5%)	4 (4.2%)	—
HIV negative	488 (56.1%)	319 (36.7%)	37 (4.3%)	8 (0.9%)
Unknown	83 (58.0%)	46 (32.2%)	10 (7.0%)	3 (2.1%)
2000				
HIV positive	37 (48.1%)	39 (50.6%)	—	1 (1.3%)
HIV negative	532 (59.9%)	319 (35.9%)	30 (3.4%)	7 (0.8%)
Unknown	74 (47.4%)	71 (45.5%)	9 (5.8%)	2 (1.3%)
2001				
HIV positive	57 (66.3%)	22 (25.6%)	5 (5.8%)	2 (2.3%)
HIV negative	687 (63.6%)	342 (31.6%)	39 (3.6%)	13 (1.2%)
Unknown	102 (49.0%)	86 (41.4%)	14 (6.7%)	6 (2.9%)
2002				
HIV positive	66 (55.0%)	43 (35.8%)	9 (7.5%)	2 (1.7%)
HIV negative	664 (55.5%)	424 (35.4%)	76 (6.3%)	33 (2.8%)
Unknown	81 (44.8%)	72 (39.8%)	23 (12.7%)	5 (2.8%)

Table 38 : Responses to the statement that 'HIV is less of a threat because the epidemic is on the decline', by serostatus

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
1999				
HIV positive	69 (70.4%)	25 (25.5%)	4 (4.1%)	—
HIV negative	542 (61.0%)	297 (33.4%)	39 (4.4%)	10 (1.1%)
Unknown	87 (60.4%)	45 (31.3%)	9 (6.3%)	3 (2.1%)
2000				
HIV positive	41 (52.6%)	33 (42.3%)	4 (5.1%)	—
HIV negative	557 (62.5%)	304 (34.1%)	24 (2.7%)	6 (0.7%)
Unknown	75 (47.8%)	71 (45.2%)	10 (6.4%)	1 (0.6%)
2001				
HIV positive	61 (70.9%)	17 (19.8%)	6 (7.0%)	2 (2.3%)
HIV negative	733 (67.3%)	312 (28.7%)	35 (3.2%)	9 (0.8%)
Unknown	116 (56.0%)	82 (39.7%)	5 (2.4%)	4 (1.9%)
2002				
HIV positive	73 (59.8%)	36 (29.5%)	10 (8.2%)	3 (2.5%)
HIV negative	743 (61.8%)	392 (32.6%)	54 (4.5%)	13 (1.1%)
Unknown	88 (46.6%)	80 (42.3%)	17 (9.0%)	4 (2.1%)

Table 39 : Responses to the statement that 'HIV/AIDS is a less serious threat than it used to be because of new treatments', by serostatus

Serostatus	Strongly disagree	Disagree	Agree	Strongly agree
1999				
HIV positive	57 (58.2%)	28 (28.6%)	2 (12.2%)	1 (1.0%)
HIV negative	495 (56.0%)	305 (34.5%)	77 (8.7%)	7 (0.8%)
Unknown	85 (57.4%)	50 (33.8%)	0 (6.8%)	3 (2.0%)
2000				
HIV positive	30 (38.5%)	30 (38.5%)	16 (20.5%)	2 (2.6%)
HIV negative	512 (57.6%)	299 (33.6%)	71 (8.0%)	7 (0.8%)
Unknown	75 (47.8%)	63 (40.1%)	16 (10.2%)	3 (1.9%)
2001				
HIV positive	50 (58.1%)	20 (23.3%)	14 (16.3%)	2 (2.3%)
HIV negative	660 (60.8%)	323 (29.7%)	90 (8.3%)	13 (1.2%)
Unknown	108 (52.2%)	78 (37.7%)	18 (8.7%)	3 (1.4%)
2002				
HIV positive	57 (47.1%)	30 (24.8%)	27 (22.3%)	7 (5.8%)
HIV negative	651 (54.3%)	422 (35.2%)	111 (9.3%)	16 (1.3%)
Unknown	87 (47.0%)	79 (41.8%)	22 (11.6%)	1 (0.5%)

POST-EXPOSURE PROPHYLAXIS (PEP)

One question about post-exposure prophylaxis (PEP) was added to the survey in 2002. This question was aimed at assessing people's awareness of PEP. The majority of respondents had never heard of PEP (see Table 40). It is likely that the proportion is higher as the analysis does not include the 10% of respondents who omitted to answer the question. Approximately one-quarter of respondents knew about the availability of PEP and about 7% thought that it will be available in the future.

Table 40 : Levels of knowledge about post-exposure prophylaxis (PEP)

Level of knowledge	n (%)
It's readily available now	382 (23.8%)
It will be available in the future	121 (7.5%)
I've never heard about it	1103 (68.7%)
Total	1606 (100%)

Missing data (n = 181)

There was no significant difference in PEP awareness between men who had or had not engaged in UAI-C in the previous six months. Of the men who had engaged in UAI-C in the previous six months, approximately two-thirds had never heard of PEP (see Table 41). Similarly, 70% of men who had not engaged in UAI-C had never heard of PEP. In the 2002 survey there were 262 respondents who engaged in UAI-C and did not know that PEP was available.

There was a significant, albeit slight, difference in awareness of PEP between men who had or had not engaged in UAI-R in the previous six months. Men who had engaged in UAI-R were more likely to know about PEP than men who had not engaged in UAI-R ($p < .05$). Although a large proportion of UAI-R is with partners of the same serostatus, there were 383 men who engaged in UAI-R in the previous six months (see Table 41). Some of these men were in sero-nonconcordant relationships and were unaware of the availability of PEP.

Table 41 : Unprotected anal intercourse and knowledge of post-exposure prophylaxis (PEP)

	Casual		Regular	
	Some UAI-C	No UAI-C	Some UAI-R	No Uai-R
It's readily available now	99 (27.4%)	283 (22.7%)	145 (27.5%)	237 (22.0%)
It will be available in the future	30 (8.3%)	91 (7.3%)	42 (8.0%)	79 (7.3%)
I've never heard of it	232 (64.3%)	871 (70.0%)	341 (64.6%)	762 (70.7%)
Total	361 (100%)	1245 (100%)	528 (100%)	1078 (100%)

Drug Use

Based on responses to Question 53, slightly less than 50% of the men in the sample had used one or more of the drugs listed during the preceding six months. The most commonly used drugs were ecstasy and speed, with about 30% of the sample saying that they had used ecstasy and about a quarter indicating they had used speed in the preceding six months (see Table 42). Thirty percent of the sample had used drugs that were not listed in Question 53 which is a significant reduction since 1999 (Mantel-Haenszel, $p < .01$). Relatively few men had used heroin or steroids in the previous six months. Since 1998 there has been a significant upturn in the proportion of men using cocaine (Mantel-Haenszel, $p < .01$) and ecstasy (Mantel-Haenszel, $p < .001$). There was a significant decrease in the number of men who reported using speed in 2002 ($p < .05$) to levels similar to that reported from 1998 to 2000.

Table 42 : Drug use in the previous six months

	1998	1999	2000	2001	2002
Speed	325 (24.2%)	323 (26.4%)	345 (26.8%)	464 (29.6%)	458 (25.6%)
Cocaine	81 (6.0%)	87 (7.1%)	81 (6.3%)	142 (9.0%)	164 (9.2%)
Heroin	42 (3.1%)	33 (2.7%)	30 (2.3%)	50 (3.2%)	41 (2.3%)
Steroids	—	30 (2.4%)	23 (1.8%)	39 (2.5%)	41 (2.3%)
Ecstasy	262 (19.5%)	—	336 (26.1%)	492 (31.3%)	530 (29.7%)
Any other drug	—	443 (36.2%)	403 (31.4%)	548 (34.9%)	537 (30.1%)

Note: Percentages are based on the total samples (1341, 1225, 1285, 1570 and 1787 in 1998-2002, respectively), although not all men responded to these items. Items are not mutually exclusive.

Most men who used drugs 'within the previous six months' did so infrequently, ie. 1-5 times only (see Table 43). Men who used heroin or steroids tended to do so on a more frequent basis.

Table 43 : Frequency of drug use in the previous six months

	Year	1-5 times	6-10 times	> 10 times	Total
Ecstasy	2000	263 (78.3%)	27 (8.0%)	46 (13.7%)	336 (100%)
	2001	332 (67.5%)	56 (11.4%)	104 (21.1%)	492 (100%)
	2002	355 (67.0%)	67 (12.6%)	108 (20.4%)	530 (100%)
Speed	2000	238 (69.0%)	35 (10.1%)	72 (20.9%)	345 (100%)
	2001	305 (65.7%)	57 (12.3%)	102 (22.0%)	464 (100%)
	2002	302 (65.9%)	53 (11.6%)	103 (22.5%)	458 (100%)
Cocaine	2000	59 (72.8%)	9 (11.1%)	13 (16.0%)	81 (100%)
	2001	103 (72.5%)	15 (10.6%)	24 (16.9%)	142 (100%)
	2002	109 (66.5%)	26 (15.9%)	29 (17.7%)	164 (100%)
Heroin	2000	16 (53.3%)	2 (6.7%)	12 (40.0%)	30 (100%)
	2001	27 (54.0%)	7 (14.0%)	16 (32.0%)	50 (100%)
	2002	29 (70.7%)	2 (4.9%)	10 (24.4%)	41 (100%)
Steroids	2000	15 (65.2%)	3 (13.0%)	5 (21.7%)	23 (100%)
	2001	24 (61.5%)	3 (7.7%)	12 (30.8%)	39 (100%)
	2002	27 (65.9%)	6 (14.6%)	8 (19.6%)	41 (100%)
Any other drug	2000	163 (40.4%)	51 (12.7%)	189 (46.9%)	403 (100%)
	2001	233 (42.5%)	69 (12.6%)	246 (44.9%)	548 (100%)
	2002	207 (38.5%)	65 (12.1%)	265 (49.4%)	537 (100%)

Note: Percentages are based on those men who had used the drug for which the percentage is given.

As in the previous surveys, very few men indicated that they had injected drugs/steroids 'in the past six months' (see Table 44). The most commonly injected drug was speed with very small numbers indicating that they injected heroin, cocaine or any other drug. Only 20 respondents indicated that they had injected steroids. Of the 180 respondents who reported that they had injected drugs, 14 (8%) had shared a needle or syringe in the previous six months. One of these 14 men reported being HIV positive; 9 men were HIV negative and 4 were unsure of their status or had never been tested³.

Table 44 : Injecting drug use in the previous six months

	1998	1999	2000	2001	2002
Speed	88 (6.6%)	90 (7.3%)	90 (7.0%)	125 (8.0%)	136 (7.6%)
Cocaine	16 (1.2%)	17 (1.4%)	11 (0.8%)	25 (1.6%)	25 (1.4%)
Heroin	39 (2.9%)	27 (2.2%)	24 (1.9%)	39 (2.5%)	30 (1.8%)
Steroids	10 (0.7%)	12 (1.0%)	14 (1.1%)	22 (1.4%)	20 (1.1%)
Ecstasy	—	—	21 (1.6%)	30 (1.9%)	39 (2.2%)
Any other drug	28 (2.1%)	35 (2.9%)	17 (1.3%)	35 (2.2%)	39 (2.2%)
Any of the above	116 (8.7%)	111 (9.1%)	111 (8.6%)	151 (9.6%)	180 (10.1%)

Note: Percentages are based on the total samples (1341, 1225, 1285 1570 and 1787 in 1998-2002 respectively), although not all men responded to these items. Items are not mutually exclusive.

³ We cannot report whether any of these men had Hepatitis C, as the question was not asked in the survey.

Most men who injected drugs 'within the previous six months' did so infrequently, ie. 1-5 times only, or injected relatively frequently, ie. greater than 10 times (see Table 45). Relatively few men injected between 6-10 times in the previous six months. These results suggest that among the men in the sample who injected drugs in the preceding six months there may be at least two distinct cultures of drug injecting; occasionally or relatively frequently.

Table 45 : Frequency of injecting drug use in the previous six months

	Year	1-5 times	6-10 times	> 10 times	Total
Ecstasy	2000	13 (61.9%)	2 (9.5%)	6 (28.6%)	21 (100%)
	2001	18 (60.0%)	3 (10.0%)	9 (30.0%)	30 (100%)
	2002	25 (64.1%)	5 (12.8%)	9 (23.1%)	39 (100%)
Speed	2000	52 (57.8%)	12 (13.3%)	26 (28.9%)	90 (100%)
	2001	61 (48.8%)	19 (15.2%)	45 (36.0%)	125 (100%)
	2002	72 (52.9%)	17 (12.5%)	47 (34.6%)	136 (100%)
Cocaine	2000	8 (72.7%)	1 (9.1%)	2 (18.2%)	11 (100%)
	2001	11 (44.0%)	5 (20.0%)	9 (36.0%)	25 (100%)
	2002	16 (64.0%)	2 (8.0%)	7 (28.0%)	25 (100%)
Heroin	2000	11 (45.8%)	—	13 (54.2%)	24 (100%)
	2001	18 (46.2%)	5 (12.8%)	16 (41.0%)	39 (100%)
	2002	19 (63.3%)	3 (10.0%)	8 (26.7%)	30 (100%)
Steroids	2000	6 (42.9%)	4 (28.6%)	4 (28.6%)	14 (100%)
	2001	10 (45.5%)	5 (22.7%)	7 (31.8%)	22 (100%)
	2002	8 (40.0%)	6 (30.0%)	6 (30.0%)	20 (100%)
Any other drug	2000	6 (35.3%)	1 (5.9%)	10 (58.8%)	17 (100%)
	2001	14 (40.0%)	6 (17.1%)	15 (42.9%)	35 (100%)
	2002	16 (41.0%)	5 (12.8%)	18 (46.1%)	39 (100%)

Note: Percentages are based on those men who had injected the drug for which the percentage is given should be treated with caution, as the overall number of injectors is low as a proportion of the sample.

Discussion

The findings from the fifth Queensland Gay Community Periodic Survey provide an important snapshot of the social and sexual lives of gay men in Queensland. In the main, the findings are quite similar to (and thereby corroborate) the evidence from the four previous surveys (Van de Ven et al., 1998; Van de Ven et al., 1999; Aspin et al., 2000; Rawstorne et al., 2002). Furthermore, many of the results reported here parallel findings from Gay Community Periodic Surveys in other Australian cities, such as Sydney (Prestage et al., 1999) and Melbourne (Rawstorne et al., 2001), reinforcing the notion that in some respects the gay cultures of the capital cities in Australia are similar.

The 1787 participants were recruited at 17 gay community venues throughout Queensland and at the Pride Fair Day. Most of these men lived in the Brisbane Metropolitan area. They were predominantly of 'Anglo-Australian' background, in professional/managerial or white-collar occupations, and well educated.

Most of the participants identified as gay or homosexual. Also, most had sex with men only, reflected in the finding that 88% 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.

As in the data from the previous surveys, approximately 13% of the men had not been tested for HIV. The majority of those who had been tested for HIV had done so 'within the past year'. Overall, 7.3% of the men were HIV positive. Although there was a slight (but not statistically significant) increase in the proportion of HIV positive men in 2002, across the period of the five surveys this proportion has shown a significant downward trend. The most likely reason for this reduction is that fewer men in 2000 and 2001 had been recruited from sexual health centres. In 2002 there were more men recruited from sexual health centres than in the previous two surveys.

Although most of the men in regular relationships were aware of their partners' HIV status, there were approximately a quarter of the men who were unaware. This proportion had increased from 1998 to 2001, however, in the latest survey this has returned to a level similar to that reported in 1998.

Among the HIV positive participants, approximately 50% were using combination antiretroviral therapies. From a high of around 70% in 1998, across the five 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, consistent with downward trends in Sydney and Melbourne. About three-quarters of the men using combination therapies had undetectable HIV viral loads while only one-fifth of men not using these therapies had undetectable viral loads.

The majority of men reported 'current' sexual contact with at least one other man: about a quarter of the men had a regular partner only; about a quarter had a regular partner and either or both partners also had casual partners; and approximately a third of the men had casual partners only. In the six months prior to the survey, about 60% of the men had sex with regular partners and approximately 69% with casual partners.

Of the total sample and 'in the previous six months', 591 men (33.1%) had any unprotected anal intercourse with a regular partner and 395 men (22.1%) had any unprotected anal intercourse with a casual partner. Some of these men (180 all told) had unprotected anal intercourse with both regular and casual partners. In total, 806 men reported engaging in UAI-R or UAI-C or both. The remainder of the overall sample (981 men) indicated no unprotected anal intercourse with either regular or casual partners. There has been a statistically significant increase in unprotected anal intercourse with casual partners over the period of the five surveys.

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.

Approximately three-quarters of the men with regular partners had agreements about sex within their relationship and two-thirds had agreements about sex outside their relationship. Whereas one-third of these agreements permitted unprotected anal intercourse within the relationship, less than 5% permitted unprotected anal intercourse with casual partners.

Although the numbers overall were small (and the figures must be treated cautiously), HIV positive men were less likely to have unprotected anal intercourse with negative or status unknown partners than with positive partners. HIV negative men were more likely to have unprotected anal intercourse with negative partners than with positive partners. Those who did not know their status were most likely to have unprotected anal intercourse with regular partners also of unknown serostatus. Of those who had any anal intercourse with a regular partner of more than 6 months standing,

only 96 men had unprotected anal intercourse in a relationship that was *not* understood to be seroconcordant.

In general, the men did not routinely disclose their serostatus to casual partners. Similarly, they most commonly did not know the serostatus of their casual partners. About 58% of the men never disclosed their serostatus to casual partners and a similar proportion (59%) were never disclosed to by casual partners. Overall, rates of disclosure in 'casual' contexts have been relatively stable over time. However, in the latest survey the number of respondents who told none of their casual partners their HIV status decreased. Similarly, the number of men who were never told the HIV status of their casual partners also decreased.

As previously, most of the men (90%) had not injected any recreational drugs/steroids 'in the past six months'. Of those who had injected, the majority either did so infrequently (ie. 1-5 times) or relatively frequently (ie. more than 10 times) in that period of time. This finding points to two distinct drug-injecting cultures among a very small proportion of men.

In conclusion, the 2002 Queensland Gay Community Periodic Survey was conducted very successfully. Recruitment at the eighteen diverse sites attracted a large sample of gay men from Brisbane and regional areas of Queensland. The resulting data are robust and comparisons with the 1998-2001 data and other studies are suggestive of sound reliability. The findings from this Survey continue to provide hard evidence that community members, educators, policy planners and the like can use to tailor programs which aim to sustain and improve gay men's sexual and social health.

References

- Aspin, C. Van de Ven, P., Prestage, G., Kippax, S., Mason, D., Lewis, C. and Gallagher, S. (2000). *Queensland Gay Community Periodic Survey: June 2000*. Sydney: National Centre in HIV Social Research.
- Connell, R., Dowsett, G., Rodden, P. & Davis, M. (1991). Social class, gay men and AIDS prevention. *Australian Journal of Public Health* 15, 178–189.
- Crawford, J., Kippax, S., Rodden, P., Donohoe, S. & Van de Ven, P. (1998). *Male Call 96: National telephone survey of men who have sex with men*. Sydney: National Centre in HIV Social Research.
- Hood, D., Prestage, G., Crawford, J., Sorrell, T. & O'Reilly, C. (1994). *Bisexual activity and non gay-attachment. A report on the BANGAR project*. Western Sydney Area Health Service.
- Prestage, G., Van de Ven, P., Knox, S., Grulich, A., Kippax, S. and Crawford, J. (1999). *The Sydney Gay Community Periodic Surveys: 1996—1999*. Sydney: National Centre in HIV Social Research.
- Prestage, G., Kippax, S., Noble, J., Crawford, J., Baxter, D. & Cooper, D. (1995). *A demographic, behavioural and clinical profile of HIV positive men in a sample of homosexually active men in Sydney, Australia*. Sydney: HIV, AIDS & Society Publications.
- Rawstorne, P., Van de Ven, P., Prestage, G., Kippax, S., Horn, G., Kennedy, M., & Voon, D. (2001). *Gay Community Periodic Survey: Melbourne 2001*. National Centre in HIV Social Research, The University of New South Wales.
- Rawstorne, P., Van de Ven, P., Prestage, G., Kippax, S., Walton, J., Lewis, C., Tunley, F., Clementson, C. (2002). *Gay Community Periodic Survey: Queensland 2001*. National Centre in HIV Social Research, The University of New South Wales.

- Van de Ven, P., Prestage, G., Kippax, S., French, J., Benzie, T. and Clementson, C. (1998). *South East Queensland Gay Community Periodic Survey: November 1998*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Van de Ven, P., Prestage, G., Kippax, S., Knox, S., Benzie, T., Sorrentino, J. and Gallagher, S. (1999). *Queensland Gay Community Periodic Survey: June 1999*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Van de Ven, P., Rawstorne, P., & Treloar, C. [Eds] (2002). *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour 2002*. Sydney: National Centre in HIV Social Research, The University of New South Wales.

Appendix