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**HIV/AIDS, Hepatitis C &
Related Diseases in Australia**

***2002
Annual Report of Behaviour***

edited by National Centre in HIV Social Research

**HIV/AIDS, Hepatitis C &
Related Diseases in Australia**

Annual Report of Behaviour
2002

Edited by

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National Centre in HIV Social Research

in collaboration with

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The behavioural data reported in this Annual Summary are the collective effort of researchers, funding organisations, collaborators and participants.

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 New South Wales Users and AIDS Association
 Northern Territory AIDS Council
 People Living With HIV/AIDS (NSW)
 People Living With HIV/AIDS (Victoria)
 Queensland AIDS Council
 Queensland Health Department
 Queensland Intravenous AIDS Association
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 Victorian Department of Human Services
 Western Australian AIDS Council

Management and staff of venues and sexual health/medical centres across the country and many thousands of participants in the research projects.

Preface

This report is the fourth in the annual series to review behavioural data relevant to HIV/AIDS and related diseases in Australia. Specifically these data relate to behavioural risk of transmission of HIV and behaviours related to the social aspects of treatment and care. Where available, data relevant to the related diseases—other sexually transmissible infections and hepatitis C—are also presented.

Unless stated otherwise, all data provided in this report are from the six-year period 1996–2001 inclusive. In this way, this annual report builds on the previous reports by comparing data from the last year with data from the previous five. Data pertaining to trends over time in behaviour relevant to risk of HIV transmission over a period extending from 1984 to 1995 can be found in *Valuing the past, Investing in the future: Evaluation of the National HIV/AIDS Strategy 1993–94 to 1995–96* (Feachem, 1995) and its *Technical Appendices* 3 (Crawford et al., 1995), 4 (Crofts et al., 1995) and 5 (Smith et al., 1995). Data from periods (1995–1998, 1996–1999 and 1996–2000, respectively) after the Feachem evaluation were presented in the three earlier reports in this series, *HIV/AIDS and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 1999), *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 2000) and *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 2001).

It is opportune for this extensive and detailed information—edited by the National Centre in HIV Social Research (NCHSR)—to be made available to interested organisations and individuals.

This report is published as a companion to the *HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia: Annual Surveillance Report* (National Centre in HIV Epidemiology and Clinical Research [NCHECR], 2002). Some of the tables herein provide data that overlap with or duplicate those in the NCHECR report. We acknowledge the contribution of the National Centre in HIV Epidemiology and Clinical Research to this report.

We also acknowledge the contribution of researchers at the Australian Research Centre in Sex, Health and Society (ARCSHS), La Trobe University.

We thank a large number of organisations and people involved in health throughout Australia for their help and support. Their contribution to this report is very gratefully acknowledged.

Summary

This report brings together information for the period 1996 to the end of 2001 regarding the monitoring of practices which may risk transmission of HIV and practices related to the social and behavioural aspects of the treatment and care of people living with HIV/AIDS. It builds on data from the *Valuing the past, Investing in the future: Evaluation of the National HIV/AIDS Strategy 1993–94 to 1995–96* (Feachem, 1995) and the earlier reports in this series, *HIV/AIDS and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 1999), *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 2000) and *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 2001). Data are organised around a number of themes or topics, namely:

1. SEXUAL PRACTICE
2. LIVING WITH HIV
3. DRUG USE AND RELATED ISSUES
4. THE CURRENT CLIMATE

With regard to ***Sexual Practice***, the most detailed information in this report comes from studies of homosexually active men, the population most affected by HIV in Australia. Limited data are available regarding other populations, namely people living with HIV; first-year tertiary students; and women in contact with gay and lesbian communities.

From the mid 1980s there was a decrease in the practices which risk transmission of HIV and an increase in protective behaviour, particularly condom use, among homosexually active men and other populations. These changes happened quite early (that is, by the middle to late 1980s) and were mostly sustained through to the mid 1990s. There was little evidence of anything other than stability in these practices from the early 1990s to around 1995 (Feachem, 1995).

However, as indicated by data detailed in this report, there is evidence of increases in unprotected anal intercourse among homosexually active men since 1996 in some areas. The increases in unprotected anal intercourse which have occurred among men in regular relationships are in general of the order of 15% (see Table 1.1.5b), for example from around 40% to 56% in Sydney *Gay Community Periodic Survey* data (with parallel increases reported in Melbourne, Brisbane and Perth). Much of the unprotected anal intercourse within regular relationships is safe with regard to HIV transmission as it occurs within seroconcordant relationships. Changes in levels of unprotected anal intercourse in casual sexual encounters are uneven across the country. There is, nonetheless, evidence of an increase among men with casual partners in Sydney from around 17% in 1996 to 35% in 2001, based on *Gay Community Periodic Survey* data (see Table 1.1.4b). Such increases have also been documented in Melbourne, Brisbane and Perth. HIV-positive men are (almost universally) more likely to engage in unprotected anal intercourse than HIV-negative men, although some of this unprotected anal intercourse is safe with regard to HIV transmission as it occurs between HIV-positive partners (see Table 1.1.10).

Summary

Data based on surveys to the end of 2000 indicated a small decline among HIV-negative homosexually active men in HIV testing, consistent across most of the areas studied (see National Centre in HIV Social Research, 2001). With the addition of the 2001 data, this decline has largely been curbed. For Sydney *Gay Community Periodic Survey* data alone, the percentage of men tested for HIV 'in the last six months' decreased from 54% in 1996 to 44% in 2001 (see Table 1.1.8). Moreover, the proportion of men under 25 years of age 'ever tested for HIV' was steady in all areas except Brisbane and Perth which showed significant decrease (see Table 1.1.9).

As noted in the *Living with HIV* section, retrospective accounts of the seroconversion of homosexually active men indicate that about half of the seroconversions occurred within regular relationships (see Section 2.6).

Information in this section is also provided relating to the uptake of therapies and other treatment-related issues. HIV-positive homosexually active men in Australia took up combination antiretroviral therapy very quickly. The data indicate that a plateau was reached by about the middle of 1998, with around 65–70% of HIV positive men on combination therapy, and these levels have been decreasing steadily since then.

The need for adherence to antiretroviral therapy regimens is generally well understood and current data indicate a high level of commitment to adherence despite the difficulties experienced by those on antiretroviral therapy.

Measures of 'contact' with the HIV epidemic indicate continuing high levels during the reporting period, notably among HIV-positive men. HIV-negative men in Sydney have high levels of contact with the epidemic but over time there has been a downward trend. Generally, HIV-negative men in other parts of Australia continue to have less contact with the epidemic than their Sydney counterparts.

Until the end of 2001, the National Centre in HIV Social Research had obtained some data on *Drug Use and Related Issues*, especially 'recreational' drug use among homosexually active men. The data indicate high levels of drug use, particularly among men who are attached to gay community, with 50–80% (depending on location) reporting the use of at least one non-prescription drug in the six months prior to 2001 data collection. While drug use is common, injecting drugs is a minority practice. It is difficult to comment on changes in drug use although the few available data indicate stability in use on the whole.

Many years have elapsed since Australia first responded to HIV and *The Current Climate* is very different to that at the advent of the epidemic. In general, the majority of homosexually active men have sustained a 'safe sex culture' even though sustaining safe sex over such a long period is difficult. People have aged and the young have become sexually active. Many have become accustomed to living with the epidemic—they no longer live with a constant sense of crisis. The announcement at the 11th International AIDS Conference in Vancouver in July 1996 of the comparative success of new combination antiretroviral therapies added to this sense of post-crisis. New therapies have lessened the burden on most people living with HIV and AIDS: there are fewer deaths and, despite often serious side effects, less debilitating illness among many PLWHA.

Although there is some optimism with regard to the efficacy of new combination therapies slowing progression to AIDS and reducing the burden of illness, there is also evidence that the majority of people are sceptical about lowered risk of HIV transmission as a result of lowered viral load (see Section 4.1). However, for some homosexually active men there is a significant association between HIV optimism and unprotected anal intercourse, notably with casual partners.

Through the Australian HIV Vaccine Initiative, local researchers are preparing to undertake trials. Important questions for the conduct of future preventive HIV vaccine efficacy trials are the degree to which HIV-negative gay men will enrol in such trials and the factors associated with willingness to participate. A scale of Willingness to Participate in HIV Vaccine Trials has been developed and baseline data have been collected in the *HIM* cohort study. These data (see Section 4.2) provide evidence that Sydney HIV-negative gay men as a group are neither willing nor unwilling to participate in HIV vaccine trials. More likely to participate are those who perceive themselves at greater likelihood of HIV infection and those who actually engage in sexual risks with discordant/non-concordant regular partners or with casual partners.

1

Sexual Practice

During the period covered by this report (1996 to 2001) much of the work of the NCHSR was concerned with documenting sexual practice among homosexually active men, the population most affected by HIV. The NCHSR has also concerned itself with other populations at comparatively lower HIV risk, including young people. In this report, a distinction is made between regular and casual sexual partners. This distinction is important because the meanings of sexual behaviour change depending on whether such behaviour occurs within a regular or committed relationship or in a casual encounter. Moreover strategies for safe sex take into account the context (regular partner or casual encounter) of sexual practice. Among homosexually active men, many of whom have both regular and casual partners, the distinction is especially relevant.

1.1 SAFE SEX BEHAVIOUR AMONG HOMOSEXUALLY ACTIVE MEN

With respect to homosexually active men, information in this report comes from both national data (*Male Call 96* and the *2000 Male Out Survey*) and State-based data. In the *2000 Male Out Survey* (Van de Ven et al., 2001)—as in the *Male Call 96* study (Crawford et al., 1998) and *Project Male Call* in 1992 (Kippax et al., 1994)—two groups of men could be identified. One group included men who are attached to gay community, and are referred to as gay community attached (GCA). The other group consisted of men who are not attached to gay community, many of whom do not identify as gay but instead as bisexual or heterosexual and many of whom, unlike most of their gay counterparts, have sex with women as well as men. This group is designated non gay community attached (NGCA). Men in the *Male Call* studies were classified as GCA or NGCA on the basis of their responses to a set of questions relating to their social life. In the *2000 Male Out Survey*, two questions relating to social life—number of gay friends; amount of free time spent with gay men—were used to classify men as GCA or NGCA¹. As the GCA and NGCA groups of men differed significantly with respect to many of the indicators included in this report, *Male Call 96* and *2000 Male Out Survey* data are given for each group separately.

In general, data from State-based studies such as the *Gay Community Periodic Surveys*, the Health in Men cohort of HIV-negative men only (*HIM*), the Sydney Men and Sexual Health cohort study (*SMASH*), the Melbourne Men and Sexual Health survey (*MMASH*) and the Brisbane Regional and Sexual Health survey (*BRASH*) are based on men recruited from gay communities.

¹ In the *Male Call* surveys of 1992 and 1996 a wide range of recruitment strategies was used, unlike the *2000 Male Out Survey* which employed questionnaires distributed with sex video catalogues alone. To facilitate detailed reporting for each State, *Male Call 96* data in this report are based on *all* participants not just those recruited through sex video catalogues. Separate analyses showed that this did not substantially affect results—eg, in Table 1.1.5b, 1996 *Male Call* percentages for men engaging in UAI-regular would be 52.9% rather than 50.7% (GCA) and 41.8% rather than 39.4% (NGCA) based solely on men recruited through sex video catalogues. Likewise, separate analyses revealed that the slightly different methods of classifying men as GCA or NGCA did not bias results in any significant way.

The most complete State-based data are from Sydney where *SMASH* was available as a source of information to 1999, *HIM* from 2001, and where the *Periodic Surveys* funded by the New South Wales Health Department have been carried out on a six-monthly basis since February 1996. Results from the Sydney *Periodic Surveys* and from *SMASH* appeared on a six-monthly basis in the Surveillance Reports published by the National Centre in HIV Social Research in association with the New South Wales Health Department and the AIDS Council of New South Wales from June 1996 to December 1999 (Van de Ven, Campbell, Prestage et al., December 1995; Van de Ven, Richters, Campbell et al., June 1996; Richters, Van de Ven, Campbell et al., December 1996; Richters, Van de Ven, Campbell et al., June 1997; Richters, Van de Ven, Knox et al., December 1997; Richters, Knox, Van de Ven et al., June 1998; Knox, Van de Ven, Richters et al., December 1998; Knox, Van de Ven, Prestage et al., June 1999; Knox, Van de Ven, Prestage et al., December 1999). For the purpose of this report, these data have been aggregated in order to report on an annual basis.

Surveys based on the *Periodic Survey* questionnaire have also been carried out in Melbourne in February 1998 (Van de Ven et al., 1998a), February 2000 (Aspin et al., 2000a) and February 2001 (Rawstorne et al., 2001), Queensland in June 1998 (Van de Ven et al., 1998b), June 1999 (Van de Ven, Prestage, Kippax et al., 1999), June 2000 (Aspin et al., 2000b) and June 2001 (Rawstorne et al., 2001b), Perth in October 1998 (Van de Ven et al., 1999a) and October 2000 (Brown et al., 2001), Adelaide in November 1998 (Van de Ven et al., 1999b), November 1999 (Van de Ven, Prestage, Kippax et al., 2000) and November 2001 (Rawstorne et al., forthcoming), and Canberra in November 2000 (Aspin et al., 2001). *Queensland Gay Community Periodic Surveys* covered Brisbane and the Sunshine Coast and Gold Coast in 1998–2000. Cairns was included from 1999 on. Surveys based on the *SMASH* study questionnaire were carried out in Melbourne (*MMASH*, 1996) (Prestage, Kippax, Benton et al., 1996) and in the Brisbane region (*BRASH*, 1996) (Prestage et al., 1997).

A survey of gay Asian men in Sydney was conducted in December 1999–January 2000 (Prestage et al., 2000). Wherever available, key indicators based on these data are reported as a follow-up survey will be conducted in 2002.

Data for gay community attached (GCA) men and non gay community attached (NGCA) men in the *Male Call 96* (October–December, 1996) (Crawford et al., 1998) and the *2000 Male Out Survey* (August–September, 2000) (Van de Ven et al., 2001) are provided for both the whole of Australia and for selected cities in order to provide some comparison with results gathered from other parts of Australia. Nationwide information relating to people living with HIV comes from the *HIV Futures Study* of 1997 (Ezzy et al., 1998) and the follow-up surveys, *HIV Futures II* of 1999 (Grierson et al., 2000) and *HIV Futures III* of 2001 (Grierson et al., 2002).

In each of the surveys for which data are included in this report, men were asked about sexual practice in the six months prior to each survey. Key indicators in this area are:

- the percentage of men with regular and/or casual partners
- the percentage of men who engage in unprotected anal intercourse (with either regular and/or casual partners)
- the percentage of men who engage in unprotected anal intercourse with casual partners
- the percentage of men who engage in unprotected anal intercourse with regular partner/s
- mean scores on a scale of esoteric practices for men who engaged in (a) any unprotected anal intercourse, (b) unprotected anal intercourse with regular partner/s and (c) unprotected anal intercourse with casual partners.

It should be noted that in general a sizeable proportion of homosexually active men report sexual practice with both regular and casual partners.

Tables 1.1.1 to 1.1.6 show the percentages of men who engaged in the above practices over the period 1996 to 2001. Information enabling an assessment of change in behaviour over the whole of this period is available only for Sydney men. It should be noted that data from the *SMASH* cohort in 1998 refer only to the first six months of 1998 as regular *SMASH* interviews ceased in mid 1998. *SMASH* data reported for 1999 are from self-complete questionnaires which were a much shortened version of the *SMASH* interview schedule. Moreover, the *SMASH* self-complete questionnaires used in 1999 included questions more akin to—though not exactly the same as—those of the *Gay Community Periodic Surveys*. For this reason, comparisons between 1999 *SMASH* data and earlier *SMASH* data need to be treated with caution.

1.1.1. PERCENTAGE REPORTING REGULAR, CASUAL, AND BOTH REGULAR AND CASUAL PARTNERS

As mentioned above, sexual behaviour often depends on the context, in particular the relationship between the people involved in the behaviour. Table 1.1.1 shows the percentage of men who reported that they had regular or casual partner/s, and those who reported both regular and casual partners in the six months prior to the survey. These percentages are derived from responses about sexual behaviour with regular and/or casual partners. These are not mutually exclusive categories, since those who had sex with both regular and casual partners were also counted as having had sex with each category of partner.

For regular partners, the gay community samples (from *HIM*, *SMASH* and the *Periodic Surveys*) show a high degree of consistency in the percentages reported in Table 1.1.1. Around 60% of gay men report sex with a regular partner in the six months prior to each survey. For the *Male Call/Out* data, there was a trend toward a greater proportion of men reporting regular partners. This upward trend occurred across all regions and pertained to GCA and NGCA men alike.

The picture for casual partners was one of fairly consistent percentages (around 75%) for the gay community samples in *HIM*, *SMASH* and the *Periodic Surveys*. However, in the *Male Call/Out* data there was a tendency toward a smaller proportion with casual partners, particularly among NGCA men.

Around 40–50% of men reported sex with both regular and casual partners in 2001, fairly consistent with previous years for GCA men but generally higher than in earlier years among NGCA men.

Sexual practice data became available from Sydney HIV-positive men in the Positive Health cohort study (*pH*) in 2001. Consistent with past findings, smaller proportions of HIV-positive men reported regular/casual partners than, say, their HIV-negative counterparts in *HIM*. Therefore, in drawing conclusions throughout this report, it is important to differentiate between studies whose samples comprised HIV-negative participants only (*HIM*), HIV-positive participants only (*pH*), and those which included HIV-negative and HIV-positive as well as those who did not know their serostatus (eg. *Periodic Surveys*). (Note: See Table 1.1.10 for a breakdown of some sexual practice data by serostatus.)

Table 1.1.1: Percentage of men who reported (a) regular partners, (b) casual partners and (c) both regular and casual partners¹

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(a) Men with regular partner/s												
Australia (Male Call/Out)												
GCA	2253	62.5							1181	76.0		
NGCA	786	32.1							651	63.6		
Sydney												
SMASH	699	60.5	625	61.9	393	63.9	371	63.6			451	67.8
HIM											197	57.9
pH											2862	64.2
Periodic	2238	69.5	2630	62.0	3037	61.3	3343	66.6	2916	64.0		
GCA (Male Call/Out)	513	56.9							223	74.4		
NGCA (Male Call/Out)	138	36.2							78	65.4		
Gay Asian Men									319	65.8		
Melbourne												
MMASH	406	62.8										
Periodic					1891	64.3			1578	63.8	1830	65.5
GCA (Male Call/Out)	395	65.8							258	74.4		
NGCA (Male Call/Out)	88	36.4							103	67.0		
Brisbane												
BRASH	299	50.5										
Periodic					1341	61.6	1225	62.2	1285	62.5	1570	61.7
GCA (Male Call/Out)	204	66.7							99	80.8		
NGCA (Male Call/Out)	53	34.0							62	61.3		
Perth												
Periodic					846	62.3			1035	65.6		
GCA (Male Call/Out)	198	62.6							93	77.4		
NGCA (Male Call/Out)	84	21.4							49	53.1		
Adelaide												
Periodic					552	65.4	463	63.5			565	65.7
GCA (Male Call/Out)	187	62.0							78	74.4		
NGCA (Male Call/Out)	69	26.1							42	66.7		
Canberra												
Periodic									350	61.4		
(b) Men with casual partner/s												
Australia (Male Call/Out)												
GCA	2253	75.7							1181	71.7		
NGCA	786	74.3							651	66.1		
Sydney												
SMASH	699	77.4	625	74.1	393	76.0	371	72.5			451	80.0
HIM											197	62.9
pH											2862	73.3
Periodic	2238	82.5	2630	73.5	3037	75.3	3343	70.3	2916	72.8		
GCA (Male Call/Out)	513	81.9							223	75.3		
NGCA (Male Call/Out)	138	77.5							78	74.4		
Gay Asian Men									319	75.2		
Melbourne												
MMASH	406	77.3										
Periodic					1891	72.0			1578	71.2	1830	66.1
GCA (Male Call/Out)	395	74.7							258	69.8		
NGCA (Male Call/Out)	88	75.0							103	66.0		
Brisbane												
BRASH	299	83.6										
Periodic					1341	71.7	1225	73.6	1285	70.8	1570	71.6
GCA (Male Call/Out)	204	66.7							99	70.7		
NGCA (Male Call/Out)	53	73.6							62	67.7		
Perth												
Periodic					846	65.1			1035	66.0		
GCA (Male Call/Out)	198	76.8							93	71.0		
NGCA (Male Call/Out)	84	81.0							49	65.3		

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(b) Men with casual partner/s (continued)												
Adelaide												
Periodic					552	60.5	463	61.8			565	66.4
GCA (Male Call/Out)	187	74.3							78	74.4		
NGCA (Male Call/Out)	69	75.4							42	71.4		
Canberra												
Periodic									350	64.3		
(c) Men with both regular and casual partners												
Australia (Male Call/Out)												
GCA	2253	41.3							1181	52.5		
NGCA	786	16.0							651	39.2		
Sydney												
SMASH	699	43.2	625	41.7	393	44.9	371	41.8				
HIM											451	32.0
pH											451	49.2
Periodic	2238	57.0	2630	42.1	3037	42.6	3343	42.1	2916	42.4	2862	42.7
GCA (Male Call/Out)	513	41.1							223	52.0		
NGCA (Male Call/Out)	138	22.5							78	42.3		
Gay Asian Men									319	47.3		
Melbourne												
MMASH	406	41.9										
Periodic					1891	42.0			1578	42.6	1830	39.0
GCA (Male Call/Out)	395	43.3							258	49.6		
NGCA (Male Call/Out)	88	20.5							103	39.8		
Brisbane												
BRASH	299	37.1										
Periodic					1341	42.7	1225	42.4	1285	41.6	1570	40.9
GCA (Male Call/Out)	204	38.2							99	55.6		
NGCA (Male Call/Out)	53	11.3							62	38.7		
Perth												
Periodic					846	40.0			1035	39.5		
GCA (Male Call/Out)	198	44.9							93	52.7		
NGCA (Male Call/Out)	84	9.5							49	30.6		
Adelaide												
Periodic					552	36.1	463	35.6			565	40.2
GCA (Male Call/Out)	187	40.1							78	50.0		
NGCA (Male Call/Out)	69	11.6							42	47.6		
Canberra												
Periodic									350	34.3		

Notes: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9. *Gay Community Periodic Survey* comparisons between cities—here and throughout—are to be treated with caution. The samples in each city are from different sets of social venues, sex-on-premises venues and medical centres.

¹Based on responses to questions about sexual behaviour with regular and/or casual partners.

1.1.2 PERCENTAGE ENGAGING IN ANY ANAL INTERCOURSE

The following table (1.1.2) shows the percentage of men who reported that they had engaged in any anal intercourse with either regular or casual sex partners—including anal intercourse without ejaculation ('withdrawal')—during the six months prior to the survey.

Generally, around 80% of gay community attached homosexually active men engaged in any anal intercourse during the six months prior to interview. By 2000, non gay community attached men in the *Male Out Survey* yielded a fairly similar percentage (significantly higher than in *Male Call 96*) in all regions except Perth.

In the *Periodic Surveys* in Sydney, Brisbane and Perth there was a significant increasing trend in any engagement in anal intercourse, a trend not evident in the data from Melbourne and Adelaide.

Table 1.1.2: Men engaging in any anal intercourse

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	83.8							1181	85.3		
NGCA	786	68.1							651	76.2		
Sydney												
SMASH	699	76.0	624	78.7	393	78.6	371	80.1				
HIM											451	92.9
pH											197	82.2
Periodic	2238	82.5	2630	82.4	3037	83.5	3343	82.4	2916	84.0	2862	85.5
GCA (Male Call/Out)	513	83.0							223	87.0		
NGCA (Male Call/Out)	138	71.0							78	83.3		
Gay Asian Men									319	76.8		
Melbourne												
MMASH	406	82.5										
Periodic					1891	79.5			1578	80.1	1830	78.9
GCA (Male Call/Out)	395	86.3							258	84.1		
NGCA (Male Call/Out)	88	63.6							103	73.8		
Brisbane												
BRASH	299	81.9										
Periodic					1341	77.4	1225	80.7	1285	79.8	1570	81.1
GCA (Male Call/Out)	204	84.8							99	85.9		
NGCA (Male Call/Out)	53	67.9							62	66.1		
Perth												
Periodic					846	70.7			1035	77.4		
GCA (Male Call/Out)	198	74.2							93	86.0		
NGCA (Male Call/Out)	84	63.1							49	77.6		
Adelaide												
Periodic					552	75.0	463	75.2			565	77.3
GCA (Male Call/Out)	187	79.7							78	87.2		
NGCA (Male Call/Out)	69	71.0							42	78.6		
Canberra												
Periodic									350	77.7		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

1.1.3 PERCENTAGE ENGAGING IN ANY UNPROTECTED ANAL INTERCOURSE

The following table (1.1.3) shows the number and percentage of men who reported that they had engaged in unprotected anal intercourse at last once in the six months prior to interview — including anal intercourse without ejaculation ('withdrawal') — with any male partner/s, regular or casual for the years 1996 to 2001. This indicator varied considerably from sample to sample reflecting differences between samples with respect to sex with regular/casual partners as shown in Table 1.1.1(a) above. Nevertheless, there was an overall trend — across most regions and for both GCA and NGCA men — toward a greater proportion of men engaging in any unprotected anal intercourse. In the *Periodic Surveys* in Sydney, Melbourne, Brisbane and Perth there was a significant upward trend in any engagement in unprotected anal intercourse, a trend not evident in the data from Adelaide alone. (The *SMASH* figure of 53.4% must be treated with caution, as noted above, because it was based on a different set of questions and is not directly comparable with the other data in the table.)

From the *2000 Male Out Survey*, it can be seen that, compared with gay community attached men, men who are not attached to gay community were less likely to have unprotected anal intercourse across all regions (except Adelaide). This is largely a reflection of the lower percentage of NGCA men who had sex with regular partners as shown in Table 1.1.1(a) above. In general, as seen in Tables 1.1.4a/b and 1.1.5a/b below, men are more likely to engage in unprotected anal intercourse with regular than with casual partners.

Table 1.1.3: Men engaging in unprotected anal intercourse

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	41.5							1181	56.5		
NGCA	786	26.1							651	50.5		
Sydney												
SMASH	699	40.4	625	45.1	393	42.4	371	53.4 ¹			451	63.0
HIM											2862	51.2
Periodic	2238	35.0	2630	39.8	3037	41.7	3343	43.1	2916	48.3	197	49.2
pH												
GCA (Male Call/Out)	513	38.0							223	54.3		
NGCA (Male Call/Out)	138	21.0							78	48.7		
Gay Asian Men									319	36.4		
Melbourne												
MMASH	406	43.1										
Periodic					1891	36.8			1578	42.6	1830	46.8
GCA (Male Call/Out)	395	43.5							258	51.6		
NGCA (Male Call/Out)	88	18.2							103	46.6		
Brisbane												
BRASH	299	41.5										
Periodic					1341	38.3	1225	38.8	1285	44.0	1570	44.0
GCA (Male Call/Out)	204	47.1							99	60.6		
NGCA (Male Call/Out)	53	26.4							62	50.0		
Perth												
Periodic					846	36.1			1035	45.7		
GCA (Male Call/Out)	198	28.8							93	57.0		
NGCA (Male Call/Out)	84	21.4							49	44.9		
Adelaide												
Periodic					552	41.7	463	39.7			565	41.9
GCA (Male Call/Out)	187	41.2							78	50.0		
NGCA (Male Call/Out)	69	29.0							42	50.0		
Canberra												
Periodic									350	42.9		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Figure to be treated with caution; see text.

1.1.4 PERCENTAGE ENGAGING IN UNPROTECTED ANAL INTERCOURSE WITH CASUAL PARTNERS

The following tables (1.1.4a—total samples; 1.1.4b—reduced base of those who had casual partners) show the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation ('withdrawal')—with casual partners during the six months prior to the survey for the years 1996 to 2001.

To 1998, data from the *SMASH* cohort showed a pattern of stable behaviour for this indicator, with roughly 15% of men reporting one or more episodes of unprotected anal intercourse with casual partners in the six months prior to interview. (As noted above, 1999 *SMASH* data must be treated with caution.)

Data from the *Gay Community Periodic Surveys* conducted in Sydney, Melbourne, Brisbane and Perth provide evidence of statistically significant increases in levels of unprotected anal intercourse with casual partners (not the case in Adelaide). More detailed analyses of the data from the *Sydney Periodic Surveys* pinpoint that the upturn was significant for the six consecutive Fair Day samples as well as for the samples of men recruited from clinics and gay community venues (see '4 consistent sites' in Table 1.1.4a). Similarly, data from *Male Call 96* and the *2000 Male Out Survey* indicate an increase in unprotected anal intercourse with casual partners, among GCA men as well as their NGCA counterparts, and across all regions.

Table 1.1.4a: Men engaging in unprotected anal intercourse with casual partners (based on all the men who participated)

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	15.0							1181	25.7		
NGCA	786	16.2							651	25.3		
Sydney												
SMASH	699	12.3	625	15.0	393	14.8	371	22.9 ¹				
HIM											451	29.9
pH											197	31.0
Periodic												
Total sample	2238	14.0	2630	18.3	3037	18.2	3343	18.5	2916	23.0	2862	25.7
4 consistent sites	1042	17.6	1168	25.3	1274	23.2	1103	27.3	995	31.9	903	37.1
Fair Days	1034	10.1	1088	12.3	1156	12.7	1436	12.5	1162	14.5	1326	17.6
GCA (Male Call/Out)	513	15.6							223	26.9		
NGCA (Male Call/Out)	138	11.6							78	20.5		
Gay Asian Men									319	16.3		
Melbourne												
MMASH	406	15.0										
Periodic					1891	13.4			1578	16.6	1830	17.0
GCA (Male Call/Out)	395	15.7							258	19.8		
NGCA (Male Call/Out)	88	9.1							103	21.4		
Brisbane												
BRASH	299	19.1										
Periodic					1341	14.0	1225	14.7	1285	18.4	1570	19.2
GCA (Male Call/Out)	204	15.2							99	26.3		
NGCA (Male Call/Out)	53	17.0							62	21.0		
Perth												
Periodic					846	11.8			1035	18.1		
GCA (Male Call/Out)	198	8.6							93	18.3		
NGCA (Male Call/Out)	84	17.9							49	24.5		
Adelaide												
Periodic					552	14.1	463	12.1			565	15.9
GCA (Male Call/Out)	187	15.5							78	19.2		
NGCA (Male Call/Out)	69	18.8							42	28.6		
Canberra												
Periodic									350	14.3		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Figure to be treated with caution; see text.

Sexual Practice

Key data from Table 1.1.4a—based on total samples—are also presented graphically in Figure 1. For the purposes of comparison with the *Periodic* surveys, only data for GCA men are presented from the *Male Call/Out* surveys. (Note that for legibility the Y-axis has been drawn from 0–50% rather than the complete 0–100%.)

Figure 1: Percentage of men engaging in unprotected anal intercourse with casual partners

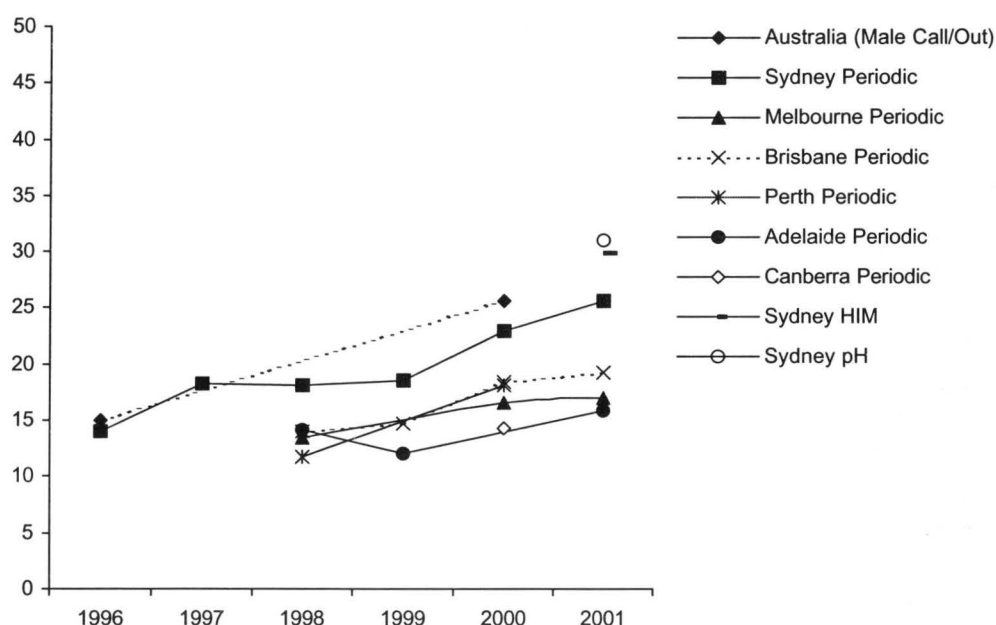


Table 1.1.4b, based on those men who had casual partners, shows the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation ('withdrawal')—with casual partners during the six months prior to the survey for the years 1996 to 2001. In most of the datasets, there was a significant increase over time in the proportion of men engaging in unprotected anal intercourse with casual partners. The upward trend applied to GCA and NGCA men in the *Male Call/Out* studies, across all regions. It also applied to *Periodic Survey* data from Sydney, Melbourne, Brisbane and Perth (but not Adelaide).

**Table 1.1.4b: Men engaging in unprotected anal intercourse with casual partners
(based on the men who had casual partners)**

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	1706	19.8							847	35.8		
NGCA	620	20.5							430	38.4		
Sydney												
SMASH	542	16.2	467	20.1	301	19.3	268	31.7 ¹				
HIM											361	37.4
pH											124	49.2
Periodic												
Total sample	1848	16.9	1932	24.8	2287	24.1	2350	26.4	2122	31.6	2098	35.0
4 consistent sites	907	20.2	1001	29.5	1094	27.0	927	32.5	841	37.7	790	42.4
Fair Days	820	12.7	703	19.1	780	18.8	876	20.8	732	23.0	845	27.7
GCA (Male Call/Out)	413	19.4							168	35.7		
NGCA (Male Call/Out)	111	14.4							58	27.6		
Gay Asian Men									240	21.7		
Melbourne												
MMASH	314	19.4										
Periodic					1362	18.6			1123	23.3	1209	25.7
GCA (Male Call/Out)	298	20.8							180	28.3		
NGCA (Male Call/Out)	67	11.9							68	32.4		
Brisbane												
BRASH	250	22.8										
Periodic					962	19.5	901	20.0	910	25.9	1124	26.9
GCA (Male Call/Out)	136	22.8							70	37.1		
NGCA (Male Call/Out)	43	20.9							42	31.0		
Perth												
Periodic					551	18.1			683	27.4		
GCA (Male Call/Out)	149	11.4							66	25.8		
NGCA (Male Call/Out)	71	21.1							32	37.5		
Adelaide												
Periodic					334	23.4	286	19.6			375	24.0
GCA (Male Call/Out)	138	21.0							58	25.9		
NGCA (Male Call/Out)	57	22.8							30	40.0		
Canberra												
Periodic									225	22.2		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Figure to be treated with caution; see text.

1.1.5 PERCENTAGE ENGAGING IN UNPROTECTED ANAL INTERCOURSE WITH REGULAR PARTNERS

The following tables (1.1.5a—total samples; 1.1.5b—reduced base of those who had regular partners) show the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation ('withdrawal')—with regular partners during the six months prior to the survey for the years 1996 to 2001.

Based on the *SMASH* data, values for this indicator increased between 1996 and 1999. (Again, the 1999 *SMASH* statistic should be treated cautiously.) In the case of the *Sydney Periodic Surveys* the increase is statistically significant, for the overall samples and for the different recruitment sites.

Data from other areas of Australia also show a consistent pattern of increase (except the Adelaide *Periodic Survey*, and the Canberra *Periodic Survey* for which there is one data point only). Data from the *Gay Community Periodic Surveys* conducted in Melbourne, Brisbane and Perth provide evidence of increases in levels of unprotected anal intercourse with regular partners. Likewise, data from *Male Call 96* and the *2000 Male Out Survey* indicate an increase in unprotected anal intercourse with regular partners — among GCA men as well as their NGCA peers — across all regions.

Table 1.1.5a: Men engaging in unprotected anal intercourse with regular partners (based on all the men who participated)

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	30.8							1181	49.7		
NGCA	786	12.3							651	40.4		
Sydney												
SMASH	699	30.5	625	33.7	393	33.6	371	40.4 ¹				
HIM											451	43.0
pH											197	29.9
Periodic												
Total sample	2238	27.9	2630	28.4	3037	30.4	3343	34.0	2916	35.0	2862	35.8
4 consistent sites	1043	22.2	1168	25.0	1274	25.1	1103	30.5	995	28.2	903	31.6
Fair Days	1034	33.1	1088	32.3	1156	35.5	1450	38.0	1162	39.8	1326	37.8
GCA (Male Call/Out)	513	26.3							223	45.3		
NGCA (Male Call/Out)	138	15.2							78	38.5		
Gay Asian Men									319	27.9		
Melbourne												
MMASH	406	32.8										
Periodic					1891	29.1			1578	33.2	1830	37.5
GCA (Male Call/Out)	395	31.1							258	43.8		
NGCA (Male Call/Out)	88	10.2							103	36.9		
Brisbane												
BRASH	299	26.4										
Periodic					1341	30.6	1225	29.9	1285	34.2	1570	33.4
GCA (Male Call/Out)	204	35.8							99	54.5		
NGCA (Male Call/Out)	53	11.3							62	38.7		
Perth												
Periodic					846	30.0			1035	36.3		
GCA (Male Call/Out)	198	22.2							93	52.7		
NGCA (Male Call/Out)	84	4.8							49	30.6		
Adelaide												
Periodic					552	34.4	463	33.0			565	34.7
GCA (Male Call/Out)	187	29.9							78	42.3		
NGCA (Male Call/Out)	69	11.6							42	40.5		
Canberra												
Periodic									350	34.0		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Figure to be treated with caution; see text.

Key data from Table 1.1.5a — based on total samples — are presented graphically in Figure 2. For the purposes of comparison with the *Periodic* surveys, only data for GCA men are presented from the *Male Call/Out* surveys. (Note that for legibility the Y-axis has been drawn from 0–70% rather than the complete 0–100%.)

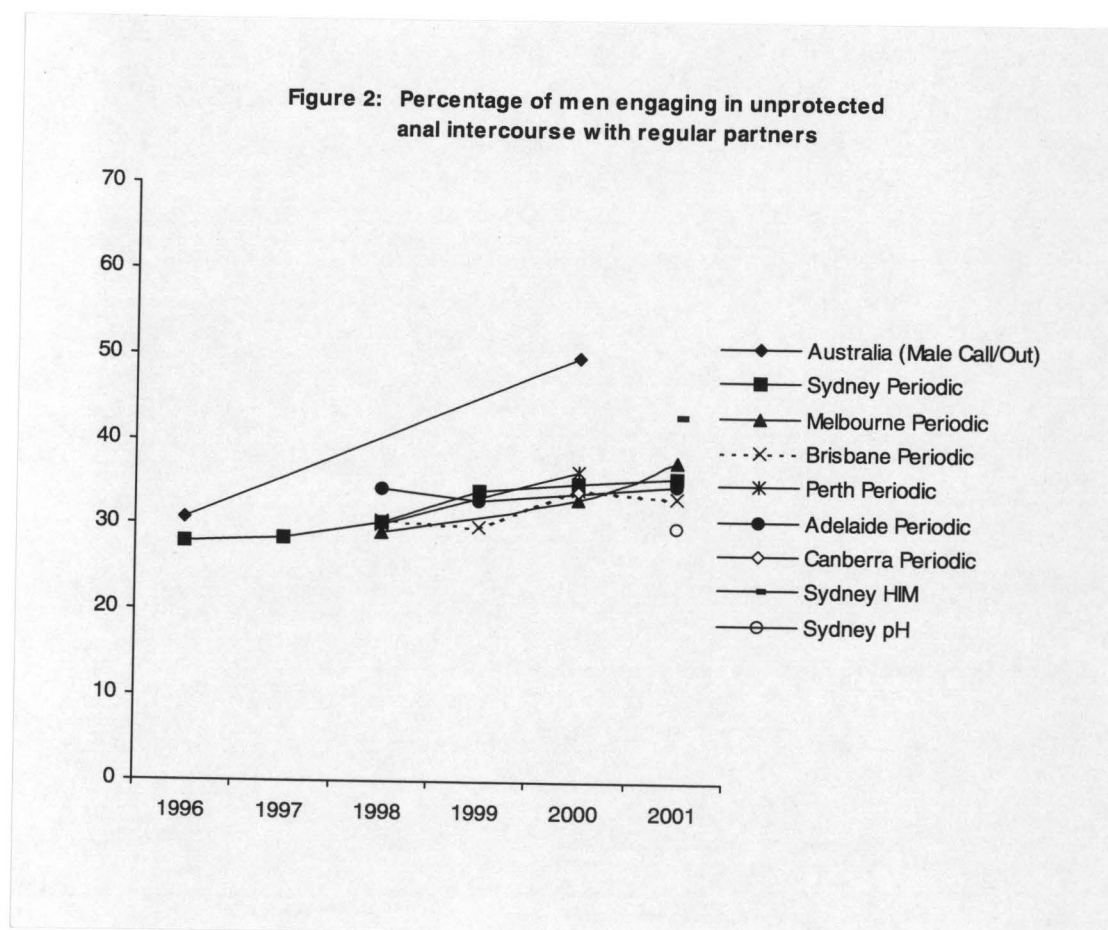


Table 1.1.5b, based on those men who had regular partners, shows the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation ('withdrawal')—with regular partners during the six months prior to the respective survey for the years 1996 to 2001. In most of the datasets, there was a significant increase over time in the proportion of men engaging in unprotected anal intercourse with regular partners. The upward trend applied to both GCA and NGCA men in the *Male Call/Out* studies, across all regions. It also applied to *Periodic Survey* data from Sydney, Melbourne, Brisbane and Perth (but not Adelaide which again remained 'flat').

**Table 1.1.5b: Men engaging in unprotected anal intercourse with regular partners
(based on the men who had regular partners)**

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	1370	50.7							898	65.4		
NGCA	246	39.4							414	63.5		
Sydney												
SMASH	426	50.4	388	54.4	253	53.0	236	63.6				
HIM											308	63.0
pH											120	49.2
Periodic												
Total sample	1557	40.1	1631	45.7	1862	49.3	2227	51.0	1867	54.6	1836	55.8
4 consistent sites	661	35.1	664	44.0	700	45.7	669	50.2	549	51.2	493	57.8
Fair Days	778	44.0	728	48.2	797	51.4	1049	52.5	821	56.4	926	54.1
GCA (Male Call/Out)	285	47.4							166	60.8		
NGCA (Male Call/Out)	50	42.0							51	58.8		
Gay Asian Men									210	42.4		
Melbourne												
MMASH	255	52.2										
Periodic					1215	45.3			1007	52.0	1199	57.2
GCA (Male Call/Out)	254	48.4							192	58.9		
NGCA (Male Call/Out)	32	28.1							69	55.1		
Brisbane												
BRASH	151	52.3										
Periodic					826	49.8	762	48.0	803	54.8	968	54.2
GCA (Male Call/Out)	134	54.5							80	67.5		
NGCA (Male Call/Out)	17	35.3							38	63.2		
Perth												
Periodic					527	48.2			679	55.4		
GCA (Male Call/Out)	115	38.3							72	68.1		
NGCA (Male Call/Out)	18	22.2							26	57.7		
Adelaide												
Periodic					361	52.6	294	52.0			371	52.8
GCA (Male Call/Out)	107	52.3							58	56.9		
NGCA (Male Call/Out)	18	44.4							28	60.7		
Canberra												
Periodic									215	55.3		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Figure to be treated with caution; see text.

1.1.6 RANGE OF ESOTERIC PRACTICES

Research at the NCHSR (Kippax et al., 1998) has indicated that there is a significant relationship between seroconversion and engaging in a range of esoteric practices which are not directly related to transmission of HIV. These practices include fisting, urolagnia (water sports), use of sex toys, cock rings, engaging in sadomasochistic and bondage/dominance practices, and dressing up as part of fantasy. Although information in Table 1.1.6 confirms that there is a significant relationship between engaging in esoteric practices and engaging in unprotected anal intercourse, there is no evidence for change over time in the level of engagement in these practices.

The following table gives the number and mean score on a scale of esoteric practices for men who reported any unprotected anal intercourse (UAI) and those who did not report any unprotected anal intercourse (no UAI). N refers to the number from which the mean was calculated. (Note: No new data for 2000 were available.)

Table 1.1.6: Mean of esoteric practices by unprotected anal intercourse (UAI)¹

Source	1996 N	Mean	1997 N	Mean	1998 N	Mean	1999 N	Mean	2000 N	Mean	2001 N	Mean
Australia (Male Call)												
Any UAI	1141	2.21										
No UAI	1898	1.47										
Sydney												
SMASH												
Any UAI	283	2.02	282	2.10	172	2.46	198	2.19				
No UAI	416	1.26	343	1.33	221	1.34	173	1.21				
Male Call												
Any UAI	224	2.46										
No UAI	427	1.63										
HIM												
Any UAI											284	2.08
No UAI											167	1.14
pH												
Any UAI											97	3.48
No UAI											100	1.39
Melbourne												
MMASH												
Any UAI	175	1.94										
No UAI	231	1.19										
Male Call												
Any UAI	188	2.20										
No UAI	295	1.60										
Brisbane												
BRASH												
Any UAI	124	1.52										
No UAI	175	1.14										
Male Call												
Any UAI	110	2.07										
No UAI	147	1.09										

¹ The difference between the means for those who did and those who did not report unprotected anal intercourse was statistically significant beyond the 0.001 level for all studies except *MMASH* and *BRASH*.

1.1.7 TESTING FOR HIV AMONG HOMOSEXUALLY ACTIVE MEN

Table 1.1.7 shows that, among homosexually active men who are socially attached to gay community (GCA) a very large and fairly consistent percentage, around 85% of those in each sample, have been tested for HIV. The only recent data for non gay community attached men (NGCA) come from the *2000 Male Out* survey which show that in the national sample, only 67% of NGCA men had been tested—up significantly from approximately 58% in 1996.

Table 1.1.7: Percentage of men who had ever been tested for HIV

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	84.3							1181	85.5		
NGCA	786	57.6							651	67.0		
Sydney												
HIM											451	94.2
Periodic	2238	86.1	2630	88.9	3037	87.9	3343	90.1	2916	89.2	2862	89.7
GCA (Male Call/Out)	513	88.7							223	85.7		
NGCA (Male Call/Out)	138	58.7							78	76.9		
Gay Asian Men									319	72.7		
Melbourne												
MMASH	406	91.1										
Periodic					1891	83.0			1578	85.6	1830	84.2
GCA (Male Call/Out)	395	87.3							258	88.8		
NGCA (Male Call/Out)	88	55.7							103	64.1		
Brisbane												
BRASH	299	90.0										
Periodic					1341	84.9	1225	86.9	1285	82.4	1570	82.5
GCA (Male Call/Out)	204	87.7							99	90.9		
NGCA (Male Call/Out)	53	55.1							62	69.4		
Perth												
Periodic					846	82.9			1035	80.5		
GCA (Male Call/Out)	198	84.8							93	86.0		
NGCA (Male Call/Out)	84	47.6							49	73.5		
Adelaide												
Periodic					552	84.6	463	84.9			565	83.2
GCA (Male Call/Out)	187	87.7							78	88.5		
NGCA (Male Call/Out)	69	55.1							42	64.3		
Canberra												
Periodic									350	83.7		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

1.1.8 FREQUENCY OF TESTING FOR HIV NEGATIVE MEN

One of the ways in which some homosexually active men have responded to the HIV/AIDS epidemic is to monitor their own HIV antibody status by a series of HIV antibody tests. Table 1.1.8 gives information from a number of studies regarding recency of testing for HIV. The question asked was, 'How long is it since you had a test for HIV?', and the percentages are derived by counting those whose responses indicated that they had been tested within the six months prior to the respective surveys. The Male Call/Male Out data indicate a significant decline in the frequency of testing, among GCA as well as NGCA men. The Sydney *Periodic Survey* data provide evidence of a significant downward trend in HIV testing frequency (trends not significant in other cities).

Table 1.1.8: Homosexually active men who are HIV negative: tested for HIV within the six months prior to the survey

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	1762	59.0							924	40.5		
NGCA	445	50.1							419	33.4		
Sydney												
SMASH	507	50.4	464	45.7	310	50.0	299	37.1				
HIM											425	59.3
Periodic	1531	54.2	1777	50.4	2041	48.8	2381	47.8	2099	47.0	2095	44.4
GCA (Male Call/Out)	409	57.9							169	43.8		
NGCA (Male Call/Out)	78	59.0							59	27.1		
Gay Asian Men									223	47.5		
Melbourne												
MMASH	323	49.3										
Periodic					1413	44.6			1201	41.5	1373	40.3
GCA (Male Call/Out)	318	57.9							215	36.3		
NGCA (Male Call/Out)	49	48.9							57	29.8		
Brisbane												
BRASH	223	58.8										
Periodic					1021	51.5	942	50.0	981	50.2	1217	51.0
GCA (Male Call/Out)	155	72.3							82	39.0		
NGCA (Male Call/Out)	37	62.1							41	26.8		
Perth												
Periodic					662	45.2			792	40.9		
GCA (Male Call/Out)	158	49.3							77	41.6		
NGCA (Male Call/Out)	44	52.3							35	48.6		
Adelaide												
Periodic					420	46.7	353	43.3			431	45.5
GCA (Male Call/Out)	151	60.2							66	37.9		
NGCA (Male Call/Out)	37	43.2							27	29.6		
Canberra												
Periodic									270	33.7		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

1.1.9 TESTING AMONG MEN UNDER 25

Findings from *Male Call 96* (Crawford et al., 1998) and the *2000 Male Out* survey (Van de Ven et al., 2001) indicated a significant downward trend in the percentage of young men under the age of 25 who had been tested for HIV. Table 1.1.9 shows a mixed picture for HIV testing among younger gay and homosexually active men. Brisbane and Perth *Periodic Survey* figures confirm a significant downward trend, matched by GCA men in the *Male Call/Out* surveys. However, in the overall Australian *Male Call/Male Out* dataset there is a significant increase in the proportion of NGCA younger men tested.

Melbourne and Adelaide *Periodic Survey* data indicate no significant change over time, as do Sydney data now taken as a whole over the period 1996 to 2001.

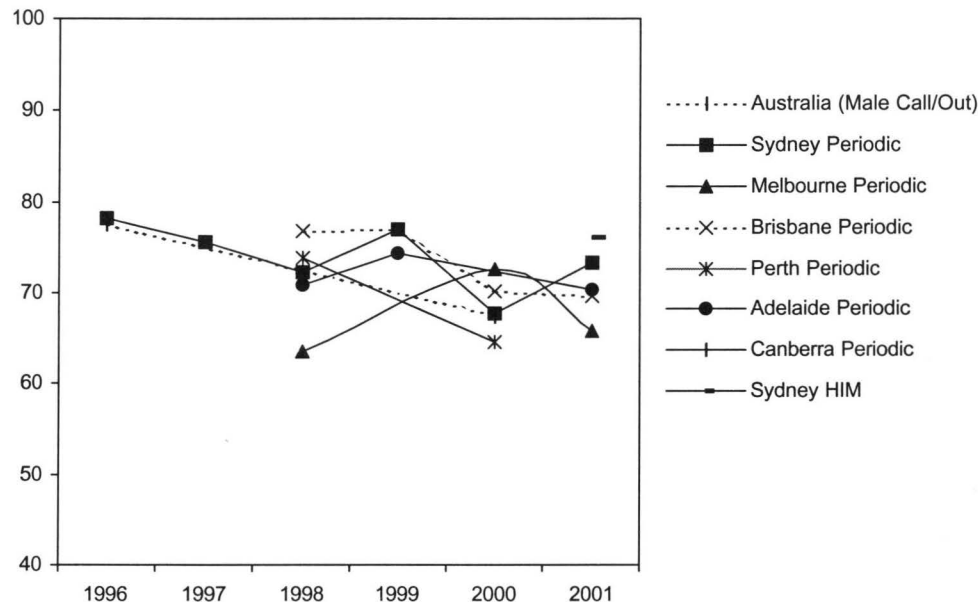
Table 1.1.9: Men under 25 ever tested for HIV

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	429	77.5							71	67.6		
NGCA	90	38.9							65	52.3		
Sydney												
HIM											46	76.1
Periodic	298	78.2	278	75.5	320	72.2	346	76.9	260	67.7	281	73.3
GCA (Male Call/Out)	93	81.7							11	—		
Gay Asian Men									56	66.1		
Melbourne												
MMASH	55	83.6										
Periodic					286	63.6			223	72.6	267	65.9
GCA (Male Call/Out)	58	82.5							10	—		
Brisbane												
BRASH	78	78.2										
Periodic					224	76.8	212	76.9	291	70.1	439	69.7
GCA (Male Call/Out)	54	75.9							12	—		
Perth												
Periodic					119	73.9			198	64.6		
GCA (Male Call/Out)	35	74.3							8	—		
Adelaide												
Periodic					103	70.9	74	74.3			115	70.4
GCA (Male Call/Out)	34	70.6							5	—		
Canberra												
Periodic									52	67.3		

Notes: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9. The number of men under 25 recruited into the *2000 Male Out* survey was too small to give reliable percentages for the State Capitals.

Key data from Table 1.1.9 are presented graphically in Figure 3. For the purposes of comparison with the *Periodic* surveys, only data for GCA men are presented from the *Male Call/Out* surveys. (Note that for legibility the Y-axis has been drawn from 40–100% rather than the complete 0–100%.)

Figure 3: Percentage of men under 25 ever tested for HIV



1.1.10 PERCENTAGE ENGAGING IN UNPROTECTED ANAL INTERCOURSE WITH CASUAL PARTNERS BY SEROSTATUS

This table (1.1.10) shows the number and percentage of men who engaged in any unprotected anal intercourse with casual partners by serostatus during the six months prior to the survey for the years 1996 to 2001. It confirms that men who are HIV-positive are more likely to engage in unprotected anal intercourse with casual partners than men who are HIV-negative. Some unprotected anal intercourse reported by people living with HIV may be with partners who are also HIV antibody positive. Note, however, that information from *SMASH* (Grulich et al., 1998) showed that even if positive men who engaged in unprotected anal intercourse only with other positive men are removed, the remainder of positive men report more unprotected anal intercourse with casual partners than do negative men.

Data from the *Periodic Surveys* conducted in Sydney, Melbourne and Brisbane provide evidence of increasing engagement in unprotected anal intercourse with casual partners among HIV-positive and HIV-negative men alike.

Information comparable to that in the following table is not provided for unprotected anal intercourse with regular partners because it would be meaningful only if the data were further categorised according to the seroconcordance of the partners. In most of the studies, this would result in very small numbers from which to calculate percentages. Section 1.1.11 addresses the related issue of agreements reached between regular partners regarding protection for anal intercourse within and outside the relationship.

Table 1.1.10: Men engaging in unprotected anal intercourse with casual partners by serostatus¹ (based on the men who had casual partners)

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia												
HIV Futures												
Positive ²			777	25.0			795	26.3			725	29.1
Male Call/Out												
Positive	127	30.7							69	62.3		
Negative	1669	18.2							936	34.3		
Sydney												
SMASH												
Positive	98	30.6	91	31.9	61	32.8	73	39.7 ³				
Negative	401	14.0	340	17.6	230	16.1	182	29.1 ³				
HIM												
Negative											361	37.4
pH											124	49.2
Periodic												
Positive	324	31.5	435	41.6	502	38.4	481	43.2	404	51.5	375	61.3
Negative	1282	13.7	1297	19.8	1526	19.9	1647	21.9	1519	27.3	1521	28.8
Gay Asian Men												
Positive									7	— ⁴		
Negative									173	19.7		
Melbourne												
MMASH												
Positive	32	40.6										
Negative	253	19.0										
Periodic												
Positive					135	33.3			110	36.4	115	49.6
Negative					1019	15.9			864	22.2	909	23.0
Brisbane												
BRASH												
Positive	30	23.3										
Negative	183	16.9										
Periodic												
Positive					86	30.2	74	27.0	68	42.6	74	48.6
Negative					735	17.6	696	19.5	696	24.9	869	25.1
Perth												
Periodic												
Positive					33	33.3			42	26.2		
Negative					440	16.1			530	27.9		
Adelaide												
Periodic												
Positive					28	42.9	25	32.0			24	41.7
Negative					260	20.8	216	18.5			293	23.9
Canberra												
Periodic												
Positive									10	— ⁴		
Negative									175	21.7		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ This table excludes men whose serostatus was unknown, either because they reported that they had not been tested or because they did not provide information regarding serostatus. The difference between positive and negative men in the percentage who reported unprotected anal intercourse with casual partners is statistically significant throughout, except for the Perth 2000 *Periodic Survey* data.

² *HIV Futures* figures are an underestimation as they are based on all homosexual/bisexual participants, not just those who had casual male partners—such reduced base could not be determined because of the way questions were asked.

³ Figure to be treated with caution; see text.

⁴ Number of men too small to give a reliable percentage.

1.1.11 AGREEMENTS AMONG HOMOSEXUALLY ACTIVE MEN WITH REGULAR PARTNERS REGARDING UNPROTECTED ANAL INTERCOURSE

Agreements with regular partners to have only protected anal intercourse (or no anal intercourse) both within the relationship and with casual partners (that is, outside the relationship) are regarded as 'safe sex' agreements, regardless of the serostatus of the partners. Agreements with regular partners to have some unprotected anal intercourse can be assessed for safety only if both partners have been tested and each knows the serostatus of the other. That is, unless the seroconcordance (or otherwise) of men in regular relationships can be assessed reliably by such men, any agreement to have unprotected anal intercourse within the relationship is not a safe sex agreement. Table 1.1.11 shows the percentage of men with regular partners in seroconcordant relationships and relationships which were not known to be seroconcordant who had agreements to engage only in 'safe' sex. An agreement to have unprotected anal intercourse was classified as a safe sex agreement when partners were seroconcordant (either positive or negative); had a clear spoken agreement regarding anal intercourse within the relationship and a clear spoken agreement existed regarding anal intercourse with casual partners which involved no unprotected anal intercourse outside the relationship. Research at NCHSR has highlighted the importance of agreements in a series of published papers relating to 'negotiated safety' (Crawford et al., 2001; Kippax et al., 1993; Kippax, Noble, Prestage et al., 1997; Van de Ven et al., 1999). Findings from this research show that a high proportion of men have agreements and stick to them.

Only men with regular partners were included in Table 1.1.11. In this table, non concordant refers to men in relationships with regular partners where HIV serostatus of both partners was known and was discordant, or serostatus of one or both partners was stated as 'unknown'. In every study, very few respondents reported that they were in a serodiscordant relationship, and this is why data from such respondents have been included in the non concordant category rather than being reported separately. Men with regular partners who did not respond to questions regarding their own or their partner's serostatus were excluded from the table.

The data are consistent across a number of studies in suggesting that around 70% of men in seroconcordant relationships have an agreement to have only 'safe' sex (that is, to have no unprotected anal intercourse outside the seroconcordant relationship). There is no evidence in the various Periodic Surveys that this percentage is increasing. Among non concordant couples, the percentage with an agreement to have only 'safe' sex—that is an agreement to have no unprotected anal intercourse at all (either within the relationship or with casual partners)—is around 40% in most samples, but sometimes lower, especially in the later years of data collection. Of those without safe sex agreements, both concordant and non concordant, some had agreements which allow the possibility of unsafe sex, some had no agreements, and some did not answer the questions. (Note: Lack of a safe sex agreement does not necessarily imply unsafe practice.)

Table 1.1.11: Men with regular partners with 'safe sex agreements' by seroconcordance¹

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
Seroconcordant	1061	70.7							605	70.6		
Non concordant	457	33.3							246	27.2		
Sydney												
SMASH												
Seroconcordant	274	79.9	263	79.8	167	86.2	146	81.5				
Non concordant	93	47.3	93	45.2	68	45.6	85	32.9 ²				
HIM												
Seroconcordant											210	78.1
Non concordant											85	20.0
Periodic												
Seroconcordant	677	69.3	815	69.6	847	72.6	1032	73.0	865	70.9	857	71.8
Non concordant	415	39.5	421	39.2	534	38.6	563	37.7	460	38.7	483	36.0
Male Call/Out												
Seroconcordant	223	69.5							98	77.6		
Non concordant	89	30.3							38	34.2		
Gay Asian Men												
Seroconcordant									90	52.2		
Non concordant									61	31.1		
Melbourne												
MMASH												
Seroconcordant	148	80.4										
Non concordant	49	42.9										
Periodic												
Seroconcordant					545	72.8			423	68.8	571	73.2
Non concordant					351	30.5			232	28.0	320	26.6
Male Call/Out												
Seroconcordant	202	70.8							123	78.9		
Non concordant	65	24.6							52	21.2		
Brisbane												
BRASH												
Seroconcordant	88	76.1										
Non concordant	33	42.4										
Periodic												
Seroconcordant					395	75.2	368	75.0	365	71.0	431	72.4
Non concordant					228	28.1	214	39.3	231	28.1	256	26.2
Male Call/Out												
Seroconcordant	102	78.4							54	74.1		
Non concordant	40	42.5							25	40.0		
Perth												
Periodic												
Seroconcordant					224	71.9			278	74.8		
Non concordant					134	33.6			200	25.0		
Male Call/Out												
Seroconcordant	84	70.2							54	72.2		
Non concordant	52	40.4							21	33.3		
Adelaide												
Periodic												
Seroconcordant					171	67.8	146	76.0			183	61.2
Non concordant					83	27.7	74	40.5			83	26.5
Male Call/Out												
Seroconcordant	75	65.3							38	76.3		
Non concordant	43	41.9							13	30.8		
Canberra												
Periodic												
Seroconcordant									102	72.5		
Non concordant									49	32.7		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ In *SMASH*, *MMASH* and *BRASH* surveys, questions regarding partner's serostatus were different from those included in other surveys.

² Figure to be treated with caution; see text.

1.2 OTHER STUDIES

A limited amount of information is available about other populations during the period covered by this report. For young heterosexual people, the only data available on a yearly basis (except 2000) come from the annual surveys—carried out by the NCHSR—of students in a course at Macquarie University. Data have been collected since 1988 and have been reported in previous Annual Reports (National Centre in HIV Social Research, 2001; National Centre in HIV Epidemiology and Clinical Research, 2001). Data for the period up to 1995 were published earlier (Rodden, Crawford, Kippax et al., 1996; Crawford, Turtle & Kippax, 1990). Data from the Sydney Women and Sexual Health (SWASH) study conducted in 1996, 1998 and 2000 are also reported.

1.2.1 SEXUAL BEHAVIOUR AND CONDOM AVAILABILITY OF FIRST YEAR UNIVERSITY STUDENTS

Table 1.2.1 contains data from the annual surveys of students in a course at Macquarie University for the period 1996 to 1999 inclusive. Questionnaires were handed out in lectures and the response rate was around 95% each year. There was little indication of change over this period in any of the indicators. Fluctuations in the percentage of students who used condoms 'always' for sex with either regular or casual partners appear to be compensated for by similar fluctuations in the percentage of students who do not have such partners or who do not engage in sexual intercourse. The percentage who reported sometimes engaging in unprotected intercourse with a regular partner (the sum of the percentages who reported 'never', 'sometimes' or 'most times' using condoms) remained fairly stable over the four years (around 22-25%). For casual partners, only around 5-8% of all the students surveyed reported any unprotected intercourse.

Of the students with regular partners, never using a condom was the single most common response in this group, given by around a third of the respondents. Clearly, if a relationship is perceived as 'regular', non-use of condoms is widespread. (Some of the irregular condom use may be contraceptive in intent rather than for disease prevention.)

Reporting sex with casual partners in the last month was comparatively rare (10–20% of respondents), but of those who had casual sex, half to two-thirds reported always using a condom.

There are fluctuations in the percentage of men and women reporting that condoms are available. These results need to be seen in the context of the whole period from 1988 to 1999 over which data were collected. The total picture suggests an increase from 1988 to 1993, followed by a fairly stable value at around 60% for men and 40% for women (see Rodden et al., 1996).

The last column of Table 1.2.1 shows results of a postal questionnaire survey of a random sample of all students at the University of New South Wales aged under 30 in 2001 (response rate 19%). Given that the median age of this group is 21, the finding that 30% are sexually inexperienced is surprising, especially in combination with the high percentage who have ever tried anal sex (16%). These results may reflect the low and possibly biased response rate.

Table 1.2.1: Sexual practice among university students

	Macquarie University (first-year students aged 17–19)				UNSW (aged 17–29)
	1996 N=377	1997 N=381	1998 N=336	1999 N=206	2001 N=623
Male	97	85	92	52	235
Female	280	296	244	154	388
Number of partners ever	%	%	%	%	%
0	44.9	39.3	45.2	42.2	28.9
1	24.9	26.7	23.5	27.7	20.4
2–4	21.4	27.5	26.5	21.8	28.4
>4	8.8	6.4	4.8	8.3	22.3
Ready access to condoms¹					
Male	52.6	56.0	65.4	58.8	55.6
Female	42.2	30.3	40.6	44.0	41.4
Condom use with regular partner in the last month (total samples)					
Never	12.8	14.9	10.4	14.6	20.4
Sometimes	4.4	4.6	5.4	4.4	5.5
Most times	4.7	6.2	5.1	5.3	4.5
Every time	10.0	18.6	13.4	14.1	10.9
No partner or no intercourse	68.1	55.7	65.8	61.7	58.7
Condom use with regular partner in the last month (based on those with a regular partner)	n=116	n=139	n=104	n=89	n=276
Never	37.1	36.0	31.7	38.8	43.5
Sometimes	12.1	11.0	16.3	10.2	12.0
Most times	14.7	13.2	13.5	12.2	10.1
Every time	24.1	35.3	30.8	29.6	22.5
No intercourse	12.1	4.4	7.7	9.2	11.9
Condom use with casual partners in the last 6 months (total samples)					
Never	1.9	2.4	1.2	2.9	4.7
Sometimes	1.1	0.8	1.2	1.5	3.0
Most times	2.8	1.3	3.9	3.9	3.9
Every time	11.3	9.4	8.9	7.8	9.1
No partner or no intercourse	82.9	86.1	84.8	84.0	79.3
Condom use with casual partners in the last 6 months (based on those with casual partners)	n=58	n=40	n=50	n=42	n=122
Never	6.9	10.0	6.0	11.9	21.3
Sometimes	5.2	5.0	8.0	7.1	14.8
Most times	15.5	12.5	26.0	21.4	17.2
Every time	69.0	67.5	58.0	50.0	45.1
No intercourse	3.4	5.0	2.0	9.5	1.6
Sexual practice, ever					
Vaginal sex	50.4	56.7	49.1	51.0	61.3
Regular partner	47.4	54.2	46.5	50.0	60.2
Casual partner	23.4	21.0	14.3	16.5	27.6
Anal sex	3.0	7.6	5.7	5.8	16.1
Regular partner	2.6	6.1	4.8	5.8	15.1
Casual partner	0.3	1.8	1.8	0.5	4.9
Any form of sex (oral, vaginal anal)	60.6	66.4	57.4	60.7	70.3

¹ Answering 'yes' to the question: 'Do you currently keep condoms readily accessible, for example, in a purse, wallet, glove box or a bedside table?'

1.2.2 WOMEN IN CONTACT WITH GAY AND LESBIAN COMMUNITIES

Table 1.2.2 contains data from the biennial Sydney Women and Sexual Health (SWASH) surveys conducted by the National Centre in HIV Social Research, the National Centre in HIV Epidemiology & Clinical Research and the AIDS Council of New South Wales in 1996, 1998 and 2000 (Richters et al., 2001). New data were collected in 2002 and these will be reported next year. Each year, most of the women (72–85%) were recruited at the Gay and Lesbian Mardi Gras Fair Day with some respondents also recruited through community social events and meetings as well as clinics. To allow for reliable comparisons over time, the data in the table are based on the women recruited at the Fair Days only.

Very few of the women (1% or less) were HIV positive. A majority (57–62%) reported HIV negative status with the balance unaware of their serostatus. Over time, approximately 29 to 44 per cent of the women had had an HIV test in the previous 12 months. Most of the women had no unprotected (anal and/or vaginal) intercourse with homosexually active men, and those who did tended to identify as bisexual.

Injecting drug use in the previous six months was variable over time. The sample of injectors is too small to determine any trends.

Table 1.2.2: Sydney women in contact with gay and lesbian communities

	1996		1998		2000	
	N=496	%	N=554	%	N=883	%
HIV Status						
Negative	282	56.9	333	62.4	483	56.7
Positive	4	0.8	6	1.1	2	0.2
Unknown	210	33.4	195	36.5	367	43.1
Had an HIV test in past 12 months	144	29.0	153	44.2	146	29.9
Unprotected intercourse with homosexually active men						
Total sample: no UI	465	92.7	482	87.0	795	90.0
Total sample: some UI	31	6.3	72	13.0	88	10.0
Lesbian	4		3		2	
Bisexual	16		15		22	
Heterosexual	11		51		60	
Injecting drug use in past 6 months						
Total sample: no IDU	456	91.9	525	94.8	864	97.8
Total sample: some IDU	40	8.1	29	5.2	19	2.2
Lesbian	27		23		12	
Bisexual	7		2		4	
Heterosexual	6		3		3	

Note: All data from the Fair Day samples only.

Living with HIV

On a national basis, only one study *HIV Futures*—conducted initially in 1997 (Ezzy et al., 1998) and repeated in 1999 (Grierson et al., 2000) and 2001 (Grierson et al., 2002)—provides reliable information on both sexual practice and treatment uptake for people living with HIV and AIDS, including representation of people from all categories of HIV transmission.

Regional information is available from other surveys, notably the *Positive Health (pH)* cohort study conducted in Sydney by NCHSR with input from ARCSHS for a smaller Melbourne arm. The first round of face-to-face interviews for the *pH* study was conducted in 1999, the second round in late 2000/early 2001. Sexual practice questions were not included in the baseline *pH* interview schedule but were included in the Sydney follow-up in 2000/2001.

2.1 SEXUAL PRACTICE

With respect to sexual practice, only three data points (1997, 1999, 2001) are available on a national basis for people living with HIV, and so trends over time cannot be fully assessed at this stage. The number of responses from women in the *HIV Futures* study to questions regarding unprotected intercourse is too small to give reliable data, as are the number of responses from men who had female partners.

The *HIV Futures* study indicates little change in the percentages of HIV-positive men engaging in unprotected intercourse with casual male partners (see Table 2.1). With regular male partners, however, there was an increase in this practice from 1997 to 2001, with HIV-positive regular male partners *and* with HIV-negative regular male partners.

Table 2.1: Unprotected intercourse among people living with HIV/AIDS¹

Partner Type	1997				1999				2001			
	Men N=834		Women N=84		Men N=828		Women N=89		Men N=818		Women N=74	
	N	%	n	%	n	%	n	%	n	%	n	%
HIV Futures												
Casual male	371	53.7	6	50.0	414	52.1	10	10.0	371	59.0	8	25.0
Casual female	18	39.0			22	47.4			17	41.2		
Regular male (HIV-positive)	146	68.5	13	61.5	123	83.4	12	61.6	122	91.8	9	100
Regular male (HIV-negative)	199	21.0	15	46.7	125	34.7	25	41.7	121	41.3	21	42.9
Regular female (HIV-positive)	5	60.0			11	70.0			8	87.5		
Regular female (HIV-negative)	23	13.0			13	28.6			19	27.3		
pH									N=197			
Casual male (HIV-positive only) ²									17	31.0		
Casual male (HIV-negative/unknown) ²									38	69.0		
Regular male (HIV-positive)									40	68.0		
Regular male (HIV-negative/unknown)									52	40.0		

¹ Shows the number and the percentage of people living with HIV/AIDS who reported unprotected intercourse (vaginal or anal) with casual and regular partners in the six months prior to the survey. N is the size of the complete sample and n is the number of people who answered the question (that is, who had a partner of the type shown).

² Based on only those who engaged in unprotected anal intercourse with casual partners (and therefore not comparable with HIV Futures figures above).

Sexual practice among homosexually active men who are HIV-positive from other studies (Table 1.1.10 above) also shows a relatively high level of unprotected anal intercourse among these men. Data from the *SMASH* cohort regarding the percentage of positive men who report unprotected anal intercourse showed no distinct pattern of change over time. Information from *Periodic Surveys* in Sydney suggests that there has been an increase in this percentage (Table 1.1.10 above).

2.2 SELF-RATINGS OF HEALTH

In various studies, HIV-positive people were asked to rate their health as 'excellent', 'good', 'fair' or 'poor'. Table 2.2 shows the percentage of people reporting 'excellent'/'good' overall health. Over time, HIV-positive people's self-ratings of health varied little in the *HIV Futures* studies. Sydney participants in the *pH* cohort study tended to report better overall health in 2001 than in 1999, whereas the reverse was the case among Melbourne *pH* participants.

Table 2.2: Self ratings of health as 'excellent'/'good'¹

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia												
HIV Futures			914	71.7			949	72.8			891	69.2
Sydney												
SMASH	135	70.4	117	78.6	73	80.8						
pH							362	76.2			260	80.0
Melbourne												
pH							56	76.7			103	69.9

¹ Rather than 'fair'/'poor'.

2.3 TREATMENT UPTAKE

Positive homosexually active men in Sydney and Melbourne took up combination antiretroviral therapy very quickly. Evidence regarding the effectiveness of these treatments became widespread in the second half of 1996. As shown in the data from the *SMASH* cohort (Table 2.3), uptake was rapid. By the end of 1997, 63.6% of positive men were on combination therapy. High levels of uptake were also reported in other parts of Australia. In the national sample from the *HIV Futures* study, 73.5% of positive people reported being on combination antiretroviral therapy in 1999, a figure corroborated by data from other studies throughout Australia in 1999. (The different percentages in Table 2.3 to some extent reflect different definitions of 'combination antiretroviral therapy' as indicated by the footnotes to this table.)

However, more recent data indicate a significant decline in the uptake of combination therapy, among *HIV Futures* participants, *pH* participants in both Sydney and Melbourne, and among Sydney and Melbourne participants in the *Gay Community Periodic Surveys*.

Table 2.3: People living with HIV/AIDS on combination therapy

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia												
HIV Futures			893	77.7			952	73.5			884	71.0
Sydney												
SMASH ¹	135	22.3	118	63.6	74	60.8	66	77.3				
Periodic ²			265	74.7	606	72.4	602	71.3	504	75.2	443	65.5
pH ¹							362	72.1			260	66.2
Melbourne												
MMASH ³	42	40.5			155	82.6			138	78.3	151	66.9
Periodic ²							56	80.4			103	68.0
pH ¹												
Brisbane												
BRASH ³	36	27.8			112	68.8	99	67.7	77	66.2	88	59.1
Periodic ²												
Perth					45	62.1			50	74.0		
Periodic ²												
Adelaide					34	64.7	34	73.5			33	57.6
Periodic ²												
Canberra									18	66.7		
Periodic ²												

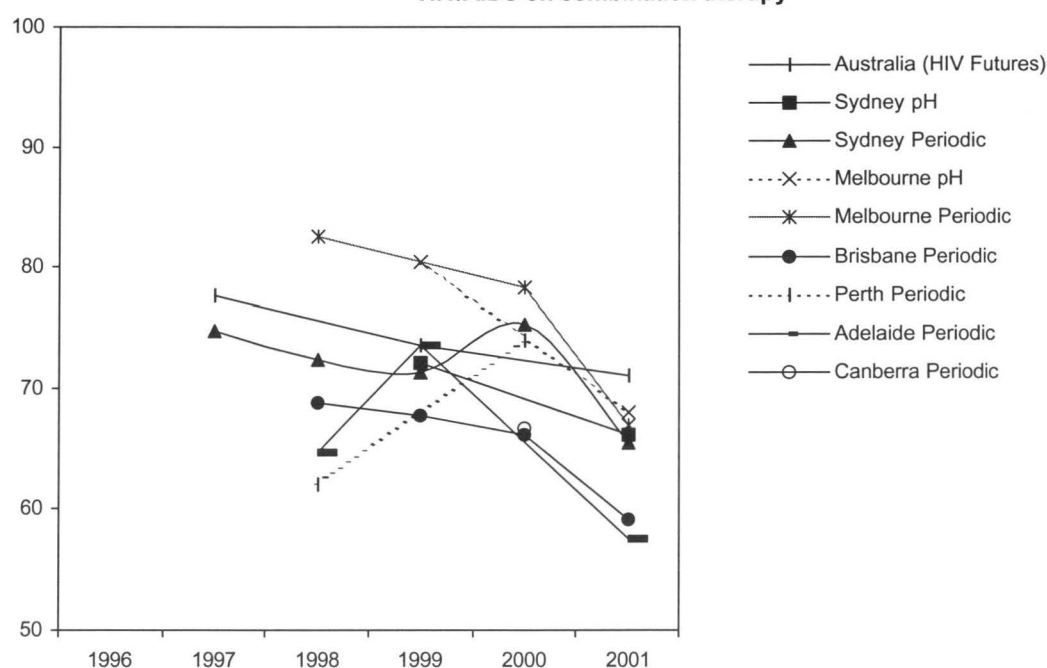
¹ 'Combination therapy' means more than two antiretrovirals.

² 'Combination therapy' means 'combination antiretroviral therapy'

³ 'Combination therapy' means more than one antiretroviral.

Key data from Table 2.3 are presented graphically in Figure 4. (Note that for legibility the Y-axis has been drawn from 50–100% rather than the complete 0–100%.)

Figure 4: Percentage of people living with HIV/AIDS on combination therapy



2.4 TREATMENT EXPERIENCES

A significant consideration for people on combination therapy is the experience of adverse side effects. New data became available for 2001 from the *HIV Futures* and *pH* studies. As indicators of side effects, the experience of (a) diarrhoea or nausea, (b) anxiety or depression or fear and (c) any side effects were computed. There are few time points and therefore trends are difficult to discern. However, based on the available data, a smaller proportion of *HIV Futures* participants reported diarrhoea/nausea or any side effects. A larger proportion of *pH* participants reported diarrhoea/nausea, a smaller proportion any side effects. Reporting of anxiety/depression/fear among *pH* participants remained fairly stable. (The lower percentages in *HIV Futures* were attributable to the way the questions were asked, as an open-ended ('please specify') question, so the figure would be an underestimation of participants' experiences of side effects.)

Table 2.4: Experience of side effects by people on combination therapy¹

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(a) Diarrhoea/Nausea												
Australia												
HIV Futures			694	35.5			700	33.5			588	24.5
Sydney												
pH							292	50.1			186	66.7
Melbourne												
pH							49	46.9			75	84.0
(b) Anxiety/Depression/Fear												
Sydney												
pH							292	66.4			186	60.2
Melbourne												
pH							49	79.6			75	72.0
(c) Any side effects												
Australia												
HIV Futures			693	68.0			708	54.8			588	43.9
Sydney												
pH							292	96.9			186	60.0
Melbourne												
pH							49	100			75	88.0

¹ The side effects may not all be attributable to taking antivirals. In 1999 and 2001, slightly different questions were asked in pH.

2.5 COMPLIANCE

Adherence to antiretroviral regimens is an important issue. An indicator of adherence—having missed any doses ‘during the last two days’—was available from the 1999 and 2001 *HIV Futures* and the *pH* studies. On this indicator, approximately 80% of the participants missed no doses. In the *HIV Futures* study, missing doses was related to the belief that medication gave an unwanted reminder of HIV status, and to the presence of depressive symptoms. Data from the *HIV Futures* and *pH* studies show that between 27 and 45 percent of those ‘currently’ taking antiretrovirals experienced difficulty taking pills on time (see Table 2.5).

Table 2.5: Experience of taking pills

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(a) Missed any doses during last two days												
Australia												
HIV Futures							700	15.9			640	17.2
Sydney												
pH							292	22.3			186	14.0
Melbourne												
pH							49	18.4			75	26.7
(b) Experienced any difficulty taking pills on time												
Australia												
HIV Futures							699	47.8			588	45.0
Sydney												
pH							292	32.5			186	26.9
Melbourne												
pH							49	40.8			75	30.7

2.6 SEROCONVERSION

This study, which began in 1993, documents discursive understandings of HIV-transmission risk. These understandings are present in the accounts that gay men give of the event that they believe led to their seroconversion. Changes over time in these accounts provide insights into changing notions of risk.

Men who recently seroconverted are interviewed within six months of a documented seroconversion. There was a break in interviewing men between 1998 and 1999. Interviewing has recommenced. 1996 has become a watershed in the lives of gay men and others living with HIV. Sixty-five men were interviewed up until the end of 1996, and 32 men were interviewed post 1996—between 1997 to the end of 2001.

The findings (as shown in Tables 2.6.1 to 2.6.3) indicate that there has been little change in the accounts over time. Approximately 50% of seroconversions are believed by the men to have occurred within their regular relationship, some of which were known by them to be serodiscordant for HIV. Most men knew the HIV status of their regular partner while most did not know the HIV status of their casual sexual partners. Receptive anal intercourse is the practice that men believed led to their infection.

The accounts of men who believed they seroconverted within their regular relationship continue to be couched in terms of love and intimacy or to a breakdown in communication and/or trust. On the other hand, men who believed they became infected within a casual sexual encounter continue to account for their infections in terms of 'being out of control' with references to lust, drugs and alcohol.

Table 2.6.1: Type of sexual relationship at time of seroconversion

	Pre treatment success (1993–1996)	Post treatment success (1997–2001)
Regular relationship in which neither the participant nor his partner had casual sex	21 ¹	2
Regular relationship in which participant and his partner had casual sex	13	13
Regular relationship in which participant had casual sex	4	2
Participant had two regular sexual partners	1	1
TOTAL—REGULAR	39 (60%)	18 (56%)
Casual sexual partners only	26 (40%)	14 (44%)
TOTAL	65	32

¹Includes three participants each of whom engaged in sex with his regular partner in a threesome.

Table 2.6.2: Assumed HIV status of partner at seroconversion event

Assumed HIV Status	Pre Treatment success (1993–1996)		Post treatment success (1997–2001)	
	Regular	Casual ¹	Regular	Casual ¹
Positive	13	4	4	0
Negative	14	3	4	6
Unknown	7	24	0	18
TOTAL	34	31	8	24

¹ 'Casual' includes participants in open regular relationships who believe they contracted HIV from a casual partner.

Table 2.6.3: Purported seroconversion event: type of sexual practice by partner

Sexual practice	Pre Treatment success (1993–1996)				Post treatment success (1997–2001)			
	Regular	Casual within open relationship	Casual	Total	Regular	Casual within open relationship	Casual	Total
Anal receptive	16	1 ¹	17	34	2	6	9	17
Anal insertive	8	1	2	11	4	1	1	6
Receptive and insertive	6	2	4	12	1	1	2	4
Other ²	4	1	3	8	1	2	2	5
TOTAL	34	5	26	65	8	10	14	32

¹ This man's regular partner was HIV positive.

² These men believed they had become infected via oral-genital sex (8), sharing a needle (1), esoteric sexual practice involving sado-masochism (2), and blood contact with skin lesions (2).

2.7 CONTACT WITH THE EPIDEMIC

There is little quantitative information available regarding what impact the changing nature of the HIV/AIDS epidemic has had on behaviour. Two indicators of the degree of contact with the HIV epidemic which may be important in monitoring change are 'knowing people with HIV' and 'ever knowing anyone who died following AIDS'. These indicators were included in various studies including the *SMASH*, *HIM* and *pH* cohort studies, the *BRASH* and *MMASH* studies, *Male Call/Male Out* studies and the *Periodic Surveys* in some State capital cities. In Table 2.7 data on these indicators are presented separately for HIV-negative and HIV-positive men.

The data show that HIV-positive men in Sydney had continuing high levels of contact with the epidemic. HIV-positive men in other parts of Australia also had high levels of contact with the epidemic although generally somewhat less than their Sydney counterparts.

Information from the various studies shows that in terms of 'knowing anyone with HIV', HIV negative men in Sydney have high levels of contact with the epidemic but that over time there is a downward trend. Generally, HIV-negative men in other parts of Australia have less contact with the epidemic—on both indicators—than their Sydney counterparts.

Information from the *Male Call/Male Out* surveys shows that in terms of 'knowing anyone with HIV', both HIV-negative and HIV-positive men across Australia have high levels of contact with the epidemic but that over time there is a downward trend among HIV-negative men in most places. As is to be expected, Sydney and Melbourne men tend to have greater contact with the epidemic—on both indicators—than their counterparts elsewhere.

Table 2.7: Indicators of contact with the HIV epidemic

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(a) Knows anyone with HIV												
Australia												
Male Call/Out												
HIV negative men	2190	70.9							1305	66.8		
HIV positive men	150	97.3							81	93.8		
Sydney												
SMASH												
HIV negative men	564	96.1	508	95.3	322	95.0	299	92.3				
HIV positive men	135	100	118	100	74	100	62	100				
Male Call/Out												
HIV negative men	685	72.8							389	67.6		
HIV positive men	61	96.7							29	96.6		
Gay Asian Men												
HIV negative men									223	48.9		
HIV positive men									10	60.0		
HIM												
HIV negative men											451	83.6
pH												
HIV positive men							292	97.2			186	97.3
Melbourne												
MMASH												
HIV negative men	323	85.5										
HIV positive men	42	97.6										
Male Call/Out												
HIV negative men	431	73.3							353	70.8		
HIV positive men	28	96.4							20	95.0		
pH												
HIV positive men							49	100			75	96.0
Brisbane												
BRASH												
HIV negative men	223	83.4										
HIV positive men	36	97.2										
Male Call/Out												
HIV negative men	397	69.3							246	63.4		
HIV positive men	23	100							19	89.5		
Perth												
Periodic												
HIV negative men					649	77.8						
HIV positive men					45	95.6						
Male Call/Out												
HIV negative men	216	66.2							134	68.7		
HIV positive men	13	92.3							5	— ¹		
Adelaide												
Periodic												
HIV negative men					406	75.9	345	75.4			423	69.5
HIV positive men					34	100	33	97.0			34	100
Male Call/Out												
HIV negative men	226	67.3							118	59.3		
HIV positive men	14	100							2	— ¹		
Canberra												
Male Call/Out												
HIV negative men	69	71.0							23	65.2		
HIV positive men	1	— ¹							—	—		

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(b) Ever knew anyone who died following AIDS												
Australia												
Male Call/Out												
HIV negative men	2209	59.9							1343	57.8		
HIV positive men	152	88.8							86	77.9		
Sydney												
SMASH												
HIV negative men	564	87.1	508	91.9	322	95.0	299	94.6				
HIV positive men	135	92.6	118	98.3	74	98.6	66	100				
Male Call/Out												
HIV negative men	686	63.6							394	66.0		
HIV positive men	61	91.8							31	77.4		
Gay Asian Men												
HIV negative men									223	28.7		
HIV positive men									10	20.0		
HIM												
HIV negative men											451	67.4
pH												
HIV positive men							292	61.3 ²			186	49.5 ²
Melbourne												
MMASH												
HIV negative men	323	70.6										
HIV positive men	42	90.5										
Male Call/Out												
HIV negative men	433	61.7							364	58.2		
HIV positive men	29	86.2							22	81.8		
pH												
HIV positive men							49	73.5 ²			75	65.4 ²
Brisbane												
BRASH												
HIV negative men	223	69.5										
HIV positive men	36	83.3										
Male Call/Out												
HIV negative men	401	60.1							256	52.3		
HIV positive men	24	91.7							19	78.9		
Perth												
Periodic												
HIV negative men					652	60.4						
HIV positive men					44	88.6						
Male Call/Out												
HIV negative men	221	55.7							139	54.7		
HIV positive men	13	76.9							5	— ¹		
Adelaide												
Periodic												
HIV negative men					406	62.9	342	62.6			426	55.4
HIV positive men					34	91.2	33	81.8			34	91.2
Male Call/Out												
HIV negative men	230	52.6							119	51.3		
HIV positive men	14	78.6							2	— ¹		
Canberra												
Male Call/Out												
HIV negative men	69	53.6							23	43.5		
HIV positive men	6	— ¹							1	— ¹		

Notes: To provide larger and more reliable samples, Male Call/Out figures are State based rather than Capital City based. Also, with respect to Male Call/Out comparisons, see footnote 1 on p.9.

¹ Number of men too small to give a reliable percentage.

² Not comparable with other data as this figure is based on knowing 'in the last 12 months' anyone who died following AIDS, rather than 'ever'.

3

*Drug use and
related issues*

3.1 HOMOSEXUALLY ACTIVE MEN

3.1.1 HOMOSEXUALLY ACTIVE MEN AND RECREATIONAL DRUG USE

Use of recreational drugs among homosexually active men is high for those attached to gay community (see Table 3.1.1). This information comes from the *Male Call 96* and *2000 Male Out* surveys, the *SMASH*, *BRASH* and *MMASH* studies, the *HIM* and *pH* cohort studies, and also from several *Periodic Surveys* (where relevant questions were included). Close to 70% of these men (more among men in the *SMASH*, *pH*, *HIM* and *Living as Men* studies) reported using at least one non-prescription drug in the six months prior to the survey. Use of more than one such drug was reported by around 65% of those in the *SMASH*, *HIM* and *pH* cohorts and around 30–50% in other surveys.

Recreational drug use is one variable which shows strong regional variation. Generally, the level of use as measured in the percentages reported here appears to be fairly stable over the time period observed; exceptions are Sydney and Brisbane where drug use has increased (based on *Male Call/Out* and *Periodic Survey* data). Differences between cities are highlighted where data were collected from more than one city for the same study. An example is the *Living as Men* study (Lambevski et al., 2000) which provided evidence that recreational drug use was at a much higher level in Sydney than in Melbourne (see Table 3.1.1). Similarly, the *Gay Community Periodic Surveys* indicate more extensive use of drugs in Sydney than in other cities.

Drug use and related issues

Table 3.1.1: Recreational drug use among homosexually active men ('past six months')

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(a) Any drug use												
Australia (Male Call/Out)												
GCA	2253	58.7							1181	60.4		
NGCA	786	36.6							651	48.1		
HIV Futures ¹							738	71.1			725	70.6
Sydney												
SMASH	699	77.5	625	80.3	393	77.9	371	81.4				
HIM											451	80.9
pH							345	82.9			246	80.5
Periodic							3343	70.5	2916	73.3	2862	73.2
GCA (Male Call/Out)	513	68.8							223	73.1		
NGCA (Male Call/Out)	138	46.4							78	53.8		
Gay Asian Men									319	30.1		
Living as Men ²							528	82.4				
Melbourne												
MMASH	406	69.7										
pH							52	84.6			90	67.8
Periodic									1578	60.4	1830	60.7
GCA (Male Call/Out)	395	60.0							258	62.8		
NGCA (Male Call/Out)	88	31.8							103	47.6		
Living as Men ²							310	74.8				
Brisbane												
BRASH	299	71.2										
Periodic					1341	29.2	1225	43.6	1285	48.6	1570	52.1
GCA (Male Call/Out)	204	50.5							99	60.6		
NGCA (Male Call/Out)	53	39.6							62	61.3		
Perth												
Periodic									1035	58.0		
GCA (Male Call/Out)	198	61.6							93	57.0		
NGCA (Male Call/Out)	84	38.1							49	38.8		
Adelaide												
Periodic											565	54.9
GCA (Male Call/Out)	187	53.5							78	47.4		
NGCA (Male Call/Out)	69	39.1							42	40.5		
Canberra												
GCA (Male Call/Out)	77	50.6							18	50.0		
NGCA (Male Call/Out)	28	39.3							10	— ³		
(b) Used more than one drug												
Australia (Male Call/Out)												
GCA	2253	36.8							1181	38.9		
NGCA	786	12.8							651	23.3		
HIV Futures ¹							724	49.4			702	49.4
Sydney												
SMASH	699	63.7	625	62.7	393	64.1	371	63.3				
HIM											451	67.6
pH							345	62.6			246	53.3
Periodic							3343	51.0	2916	58.6	2862	57.1
GCA (Male Call/Out)	513	52.4							223	55.2		
NGCA (Male Call/Out)	138	19.6							78	19.2		
Gay Asian Men									319	15.4		
Living as Men ²							528	69.9				
Melbourne												
MMASH	406	50.7										
pH							52	53.8			90	51.1
Periodic									1578	39.7	1830	41.8
GCA (Male Call/Out)	395	39.7							258	37.2		
NGCA (Male Call/Out)	88	11.3							103	23.3		
Living as Men ²							310	49.0				
Brisbane												
BRASH	299	48.5										
Periodic					1341	17.6	1225	23.0	1285	27.5	1570	32.5
GCA (Male Call/Out)	204	27.5							99	39.4		
NGCA (Male Call/Out)	53	9.4							62	25.8		

Drug use and related issues

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
(b) Used more than one drug (continued)												
Perth												
Periodic									1035	39.9		
GCA (Male Call/Out)	198	36.4							93	33.3		
NGCA (Male Call/Out)	84	10.7							49	26.5		
Adelaide												
Periodic											565	30.8
GCA (Male Call/Out)	187	27.8							78	24.4		
NGCA (Male Call/Out)	69	2.9							42	31.0		
Canberra												
GCA (Male Call/Out)	77	24.7							18	27.8		
NGCA (Male Call/Out)	28	7.1							10	— ³		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Gay and homosexually active men only.

² Gay and homosexually active men only. Of 254 heterosexual men in Sydney, 55.9% used at least one drug (other than alcohol) and 37.0% used more than one drug. Of 320 heterosexual men in Melbourne, the corresponding percentages were 39.1% for at least one drug and 14.1% for more than one drug.

³ Number of men too small to give a reliable percentage.

3.1.2 HOMOSEXUALLY ACTIVE MEN AND INJECTING DRUG USE

A minority of homosexually active men reported using a needle to inject drugs in the six months prior to the survey (Table 3.1.2). Again, gay community attached men were much more likely to report such use. A much higher percentage of men who took part in the Brisbane Regional study (*BRASH*) in 1996 reported injecting. This was not the case for those Brisbane men who took part in *Male Call 96*, and may reflect a recruitment bias. A much higher percentage of men in the *pH* and *HIV Futures* studies reported injecting, although the latter study asked about injecting 'in the previous 12 months' so this figure is not directly comparable with the others in Table 3.1.2.

The longitudinal data available suggest that on the whole the level of injecting drug use has remained relatively stable over the reporting period, albeit higher than rates in the general population based on *National Drug Strategy Household Surveys*—for example, any injecting drug use in the past 12 months (cf. six months for most of the data in Table 3.1.2) was reported by 1.1 per cent of metropolitan respondents and 0.7 per cent of regional respondents in 1998 (Williams, 2001).

In the *Male Call/Out* surveys, injecting drug use increased in the National data and in the Sydney, Brisbane and Perth data. This increase may be attributable to the greater proportion of gay-identified men in the 2000 *Male Out Survey* compared with *Male Call 96*.

Drug use and related issues

Table 3.1.2: Injecting drug use among homosexually active men in the six months prior to the survey

Source	1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)												
GCA	2253	5.4							1181	11.3		
NGCA	786	1.8							651	9.2		
HIV Futures ¹							716	13.5			720	14.6
Sydney												
SMASH	699	9.6	625	10.7	393	12.0	371	7.8				
HIM											451	3.4
pH							345	17.7			246	14.2
Periodic					836 ²	12.4	3343	7.6	2916	7.2	2862	7.0
GCA (Male Call/Out)	513	6.8							223	14.3		
NGCA (Male Call/Out)	138	2.2							78	6.4		
Gay Asian Men									319	0.6		
Living as Men ³							524	3.6				
Melbourne												
MMASH	406	5.9										
pH							52	13.5			90	13.3
Periodic									1578	5.1	1830	4.0
GCA (Male Call/Out)	395	6.8							258	6.2		
NGCA (Male Call/Out)	88	1.1							103	2.9		
Living as Men ³							309	4.8				
Brisbane												
BRASH	299	15.7										
Periodic					1341	8.7	1225	9.1	1285	8.6	1570	9.6
GCA Male Call/Out	204	3.4							99	11.1		
NGCA (Male Call/Out)	53	0.0							62	11.3		
Perth												
Periodic					846	6.7			1035	5.1		
GCA Male Call/Out	198	7.1							93	15.1		
NGCA (Male Call/Out)	84	7.1							49	6.1		
Adelaide												
Periodic ⁴					552	8.7	463	7.5			565	4.1
GCA Male Call/Out	187	12.8							78	7.7		
NGCA (Male Call/Out)	69	4.3							42	11.9		
Canberra												
GCA Male Call/Out	77	15.6							18	0		
NGCA (Male Call/Out)	28	0							10	0		

Note: With respect to *Male Call/Out* comparisons, see footnote 1 on p.9.

¹ Gay and homosexually active men only. Data are for IDU in last 12 months.

² August 1998 sample only.

³ Gay and homosexually active men only. Of 254 heterosexual men in Sydney, 3.6% had injected; of 320 heterosexual men in Melbourne, 0.9% had injected.

⁴ Questions changed over time and figures are not directly comparable.

3.2 METHADONE INJECTION IN NEW SOUTH WALES

The *Methadone Injection in New South Wales* study (Southgate et al., 2001) was conducted in the latter half of 1999 following the withdrawal of methadone injecting equipment from publicly funded needle and syringe program outlets (NSPs) in early 1999.

Although methadone syrup is manufactured for oral ingestion only, some injecting drug users inject methadone they receive as take away doses from their methadone maintenance program or acquired via other ways (eg a methadone "black market"). This practice has been established as particularly prevalent in Sydney (Darke, Ross & Hall, 1995; Sunjic & Howard, 1996; MacDonald et al., 1999; Lintzeris et al., 1999). The risks involved in methadone injection include those related to re-use of own or other's injecting equipment as well as other risks specific to methadone including the need to inject large volumes of diluted methadone. Intravenous infusion sets (butterflies) are favoured by users because they allow the syringe to be changed without removal of the needle.

This study, in part, aimed to assess the impact on injecting drug use and risk behaviour of current methadone injectors following the removal of butterfly equipment from NSPs in 1999. Participants completed a survey covering a number of related issues: testing for HIV and HCV, contact with methadone maintenance treatment, take-away doses of methadone per week, initiation into drug use and injection, reasons for injecting methadone, networks and contexts for methadone use and injecting, methadone supply, equipment used for injecting methadone, access to equipment, sharing and re-use of methadone injecting equipment and a range of demographic variables.

In Sydney, access to this population was facilitated by peer recruiters from the NSW Users and AIDS Association (NUAA) using snowball sampling techniques, posters and fliers in selected needle and syringe outlets, methadone clinics and pharmacies, and through contacts established with service providers at health agencies.

Participants included 206 people aged 16 to 53 years who had injected methadone in the previous month recruited from three different locations: inner city Sydney (n= 74), greater western Sydney (n= 68) and towns in the Southern Area Health Service (n= 64). Sixty-five percent were male, 35% were female and 2 participants identified as transgender. In addition, 31 current methadone injectors were recruited from the survey sample to take part in in-depth interviews. Fourteen of these were recruited from central Sydney, eight from western Sydney and nine from the rural site and included 19 men and 12 women aged from 21 to 43 years. The majority of participants identified as Anglo-Australian (73%), and at 14% Indigenous Australians were over-represented relative to their proportion in the total population.

Of the survey participants, almost three-quarters had completed year 10 education or less, nearly two-thirds were unemployed, over half (58.3%) indicated they had been in prison, and of those, half again (n= 60) had injected in prison. In all, 55 participants indicated they had been on a methadone program while in prison (Table 3.2.1).

Drug use and related issues

Table 3.2.1: Sample characteristics

	N	%
Employment		
Employed	39	18.9
Unemployed	134	65.0
Student	2	1.0
Home Duties	31	15.0
Imprisonment		
Ever	120	58.3
Never	86	41.7
Injected in Prison	60	50.0
On prison methadone program	55	45.8 ¹

¹ % based on those who had ever been in prison.

Nearly all respondents (96.1%) had been tested for hepatitis C with 70.4% (n= 145) having tested positive. Similarly nearly all respondents (94.7%) had been tested for HIV, but only 1.4% of respondents tested positive.

Of those who responded (n= 200), 80% indicated that they were currently on a methadone program, 9% had been on a program in the past and only 8.3% said they had never been on a methadone program.

Besides methadone, respondents indicated high rates of injecting other drugs with just over half (52.7%) indicating they had injected some type of drug at least once a day during the previous month. These drugs included heroin (62.6%), amphetamines (32.5%), benzodiazepines (20.9%) and cocaine (19%).

Methadone was injected on a daily basis or more frequently by a significant proportion of the sample (13.6%). Half of all respondents (50.5%) said they had injected methadone 2–6 times a week in the previous month. Just under one-third (31.1%) reported injecting methadone once a week or less in the previous month (Table 3.2.2).

Table 3.2.2: Frequency of methadone injection

	N	%
More than once a day	9	4.4
Once a day	19	9.2
4-6 times a week	33	16.0
2-3 times a week	71	34.5
Once a week	25	12.1
Less than once a week	39	18.9
Not in the last month	9	4.4
Missing	1	0.5

Drug use and related issues

About half of the participants said they obtained methadone for injecting from a friend or partner when they first used and also first injected methadone (Table 3.2.3). Similarly, a large proportion of methadone injected within the last month was obtained from friends and partners, with a similar proportion obtaining methadone from clinics (public and private combined).

Table 3.2.3: Sources of methadone—when first used, when first injected and regular sources¹

	First used		First injected		In the last month	
	N	%	N	%	N	%
Methadone clinic	73	35.4	70	34.0	118	57.3
Friend/partner	62	30.1	65	31.6	82	39.8
Bought it from friend/dealer	47	22.8	48	23.3	38	18.5
Pharmacy	6	2.9	14	6.8	59	28.6
Other	17	8.3	8	3.9	15	7.3
Missing	1	0.5	1	0.5	—	—

¹ Categories not mutually exclusive.

The re-use of one's own methadone injecting equipment and the sharing of this equipment with others were common practices among participants. Significantly more re-use of own methadone injecting equipment (38%) was noted than re-use of own other drug injecting equipment (6%) ($p < .001$). Table 3.2.4 shows that 14% of the sample re-used someone else's drug injecting equipment at some time, about 20% re-used someone else's methadone injecting equipment and almost a third of participants passed on their equipment for methadone injecting to others. Most participants who report sharing methadone injecting equipment, do so with their regular sexual partner (54%).

Table 3.2.4: Re-use of methadone injecting equipment

	Re-use someone else's DIE		Re-use someone else's MIE		Re-use of MIE by someone else	
	N	%	N	%	N	%
Always	2	1.0	7	3.4	8	3.9
Usually	1	0.5	—	—	9	4.4
Sometimes	26	12.6	33	16.0	46	22.3
Never	153	74.3	153	74.3	137	66.5
Missing	24	11.7	13	6.3	6	2.9

Note: DIE = Drug Injecting Equipment; MIE = Methadone Injecting Equipment

Women indicated that they were more likely than men to share methadone injecting equipment. A greater proportion of men than women said that they never re-used anyone else's equipment. A greater proportion of men than women said that no one else ever used their methadone injecting equipment.

3.3 HEPATITIS C DISCRIMINATION

In November 2000, the President of the Anti-Discrimination Board of New South Wales (ADB) announced a state-wide enquiry into hepatitis C-related discrimination. The enquiry was launched in Sydney on 15 March 2001, with hearings conducted in Wollongong, Goulbourn, Dubbo, Lismore and Newcastle throughout May 2001. Sydney hearings were held in June and August 2001. In addition to public hearings, the ADB invited written submissions from individuals and organisations.

The NCHSR was invited to assist in the analysis of submissions tendered to the ADB's enquiry into hepatitis C-related discrimination by providing a sociological analysis of the central themes as they appeared in both the written and oral submissions.

The Anti-Discrimination Board sought input to the enquiry from a broad range of community-based organisations, Area Health Services, relevant government departments, experts in the field, private sector institutions and individuals. The enquiry was advertised widely in the print and electronic media, and via two broadly distributed information fact sheets produced by the ADB and Hepatitis C Council of NSW. In response, oral and written submissions were received from a variety of individuals and organisations throughout Sydney and regional NSW. On receipt of a written submission, the ADB returned a letter of acknowledgement detailing the role of the NCHSR in the enquiry. A two-week period was granted for people making written submissions to withdraw consent for their evidence to be used in the NCHSR analysis.

In total, 110 written submissions were received by the ADB. Eighty-two of these became a primary source of data for use in the NCHSR analysis. In addition, a researcher attended nine out of the thirteen oral hearings held throughout NSW. The following sections discuss the major themes that emerged as informing hepatitis C-related discrimination.

MISINFORMATION AND CONFOUNDING OF HEPATITIS C AND INJECTING DRUG USE

Evidence was tendered to the enquiry suggesting that hepatitis C-related discrimination was inextricably linked to discrimination against injecting drug users and an irrational fear of infection. Poor knowledge and misinformation was noted among the general public and the health care sector as well as in a variety of workplaces, such as insurance companies, funeral services and schools. Ignorance and fear lead to exclusion of some people from activities within their social networks and inappropriate implementation of infection control procedures in other contexts.

Service providers and individuals claimed that hepatitis C-related discrimination, especially in health care settings, is associated with 'userphobia' and that either a disclosure of injecting drug use or a hepatitis C positive serostatus may result in poor treatment: "Once they [health care workers] find out you have hep C or are an addict, they treat you like shit" (injecting drug user).

The stigmatisation and concomitant aggressive dislike of injecting drug users was so common in health settings that some service providers believed that injecting drug users should only go to see a doctor "when they absolutely must", and that they should expect to experience discrimination from GPs and other health care workers.

Drug use and related issues

DISCLOSURE

Disclosure emerged as a major theme in the enquiry, and in the context of health care settings disclosure often resulted in a range of negative outcomes for people such as a “change” or “shift” of health care workers’ attitude: “[T]he atmosphere changes, you know their body language changes and the way they sit back as if to put distance between themselves and me” (hepatitis C positive man).

Other reactions to disclosure were not so subtle and involved patronising and abusive behaviour on the part of health care workers who assumed that infection occurred through injecting drug use regardless of patients’ accounts.

Similarly, disclosure in the workplace often lead to rumours describing the person as a “heroin addict” sometimes accompanied by innuendo regarding their sex life. Positive people were at times marginalised or completely excluded from friendship networks, rumours were circulated about their sexual practices and drug use, families behaved differently toward loved ones, and relationships became very tense or completely broke down following disclosure. Also, disclosing a hepatitis C positive serostatus to organisations like insurance companies and banks often resulted in poor outcomes for people.

INNOCENT AND GUILTY VICTIMS OF HEPATITIS C

Throughout the enquiry, people living with hepatitis C repeatedly expressed concerns regarding the assumptions made by others relating to how their infection was acquired. It was common for health care workers, other service providers and people from the general community to label hepatitis C positive people as either former or current injecting drug users, responsible for their own infection and therefore “guilty” victims of the virus. This attitude was evident among friendship networks: “One ‘friend’ went so far as to say that those who contracted hep C through medical procedures or workplace injury are entitled to feel much more upset about having HCV than ‘people like me’” (former injecting drug user).

DISCRIMINATION AGAINST HEPATITIS C-RELATED HEALTH CARE WORKERS

Hepatitis C and alcohol and other drug workers reportedly bear the stigma of their clients and were often assumed to be hepatitis C positive “ex-junkies” by other health care providers. It was claimed that staff at needle and syringe programs were “often at odds” with non-AOD workers who see these clients as undeserving of health care.

THE TOOLS OF HARM REDUCTION: RESISTANCE TO DRUG-RELATED HEALTH SERVICES

Related to health care workers’ and the general community’s ignorance of hepatitis C infection was the often cited poor understanding of the role and place of needle and syringe programs, methadone maintenance treatment and alcohol and other drug services in the public health system. In some centres, the media are claimed to manipulate hepatitis C issues to promote stigmatisation and discrimination, and media articles and reports do not mention the positive aspects of these services. One health worker stated that a common attitude expressed by many people in her Area Health Services is: “... we’re not against harm minimisation, but not in our backyard.”

The Current Climate

In two decades of responding to HIV, many changes have occurred. Time itself means that many have become used to living with the epidemic; they no longer live with a constant sense of crisis. Those who were young then are now older and the young have become newly sexual and may be trying out non-prescription drugs. The announcement at the 11th International AIDS Conference in Vancouver in July 1996 of the comparative success of new combination antiviral therapies added to this sense of post-crisis. New therapies have lessened the burden for most people living with HIV and AIDS: there are fewer deaths and, despite often serious side effects, less debilitating illness among PLWHA.

Researchers at the NCHSR have documented a number of phenomena associated with the post Vancouver landscape. These phenomena correspond with the increasing proportions of gay and homosexually active men engaging in unprotected anal intercourse (as reported in Section 1 of this report) and two related issues reported in this Section — HIV treatments optimism and HIV risk reduction strategies.

4.1 HIV OPTIMISM-SCEPTICISM

There has been some concern that the relative success of new combination antiretroviral therapies may have an impact on safe sexual practice. Early data on beliefs about the efficacy of these new therapies in reducing the burden of illness and reducing the risk of HIV infection because of lowered viral load indicated that the majority of men were sceptical rather than optimistic. Whereas men were more optimistic with regard to treatment efficacy, the majority was sceptical about lowered viral load reducing the risk of HIV infection. Nevertheless, a small minority of men were optimistic with regard to 'new' therapies reducing the risk of HIV transmission and they were on the whole more likely to engage in unprotected anal intercourse with their partners.

In 1999, a scale of HIV optimism-scepticism (Van de Ven, Crawford, Kippax et al., 2000) was developed by researchers at NCHSR and subsequently used in a number of studies (locally and internationally). Participants responded to 12 items (e.g. 'A person with undetectable viral load cannot pass on the virus' and 'I'm less worried about HIV infection than I used to be') on a four-point continuum of strongly disagree (=1), disagree (=2), agree (=3), strongly agree (=4). Total (adjusted) scores could range from a highly sceptical 1 (strongly disagree on all items) to an entirely optimistic 4 (strongly agree on all items).

HIV optimism-scepticism items were included in the *Gay Community Periodic Surveys* in Sydney and Brisbane in 1999, 2000 and 2001, in Melbourne in 2000 and 2001, in Adelaide in 2001, in the *2000 Male Out Survey*, and in the *Changing Times* study (Rodden, 1999) which involved an advertisement and questionnaire inserted in the *Sydney Star Observer*. Scale means for the total samples are presented in Table 4.1. Where available, means for HIV negative and HIV positive men are presented, and means for those who did and did not engage in unprotected anal intercourse with regular (UAIR) and with casual partners (UAIC).

The Current Climate

As shown, homosexually active men in the various studies were on average quite sceptical about HIV treatments reducing infectivity. The mean (total sample) scores indicate that on average the men either strongly disagreed or disagreed with each item.

In the 2000 *Male Out* data, HIV positive men were more optimistic than HIV negative men as they were in the 1999 and 2001 *Sydney Periodic* datasets. Across all the relevant studies, those who engaged in UAIC were significantly more optimistic than those who did not (except in the *HIM* cohort study). The relationship between HIV optimism and UAIR was less clear-cut and achieved significance only in the 2000 *Male Out* survey, the 1999 and 2001 *Sydney Periodic* Surveys, and the 1999 *Queensland Periodic Survey*.

Table 4.1: Mean scores on HIV optimism scale

Source	1999		2000		2001	
	N	Mean	N	Mean	N	Mean
Australia (Male Out)						
HIV Optimism score (total sample)			1765	1.65		
HIV status ($p < .05$)						
Negative			1304	1.60		
Positive			80	1.76		
UAIR ($p < .001$)						
No UAIR			451	1.47		
Some UAIR			816	1.77		
UAIC ($p < .001$)						
No UAIC			786	1.51		
Some UAIC			454	1.99		
Sydney						
Changing Times (total sample)	186	1.61				
Sydney (HIM)						
HIV Optimism score (total sample)					451	1.86
UAIR						
No UAIR					257	1.83
Some UAIR					194	1.90
UAIC						
No UAIC					315	1.85
Some UAIC					136	1.88
Sydney (Periodic)						
HIV Optimism score (total sample) ¹	894	1.69	1906	1.58	2748	1.55
HIV status ($p < .05$ 1999, $p < .01$ 2001)						
Negative	599	1.65	1405	1.56	2019	1.52
Positive	222	1.75	317	1.59	448	1.61
UAIR ($p < .05$ 1999, $p < .001$ 2001)						
No UAIR	589	1.66	1226	1.57	1762	1.52
Some UAIR	305	1.74	680	1.62	986	1.60
UAIC ($p < .001$)						
No UAIC	663	1.63	1515	1.55	2041	1.50
Some UAIC	231	1.84	391	1.72	707	1.68
Melbourne (Periodic)						
HIV Optimism score (total sample)			1490	1.56	1725	1.57
HIV status						
Negative			1138	1.54	1296	1.55
Positive			139	1.52	151	1.53
UAIR						
No UAIR			990	1.55	1071	1.54
Some UAIR			500	1.59	654	1.61
UAIC ($p < .001$)						
No UAIC			1240	1.53	1431	1.54
Some UAIC			250	1.70	294	1.70

Source	1999		2000		2001	
	N	Mean	N	Mean	N	Mean
(continued)						
Brisbane (Periodic)						
HIV Optimism score (total sample)	1164	1.62	1173	1.56	1425	1.53
HIV status						
Negative	902	1.61	908	1.52	1107	1.51
Positive	99	1.57	80	1.61	86	1.52
UAIR ($p < .001$ —1999)						
No UAIR	814	1.58	762	1.55	945	1.52
Some UAIR	350	1.70	411	1.58	480	1.56
UAIC ($p < .001$)						
No UAIC	994	1.58	954	1.53	1144	1.51
Some UAIC	170	1.80	219	1.70	281	1.63
Adelaide (Periodic)						
HIV Optimism score (total sample)					526	1.67
HIV status						
Negative					410	1.65
Positive					34	1.47
UAIR						
No UAIR					342	1.66
Some UAIR					184	1.71
UAIC ($p < .05$)						
No UAIC					440	1.64
Some UAIC					86	1.84

¹ August 1999 and February 2000 samples only.

4.2 GAY MEN'S WILLINGNESS TO PARTICIPATE IN HIV VACCINE TRIALS

Important questions for the conduct of future preventive HIV vaccine efficacy trials are the degree to which HIV-negative gay men will enroll in such trials and the factors associated with willingness to participate. A scale of Willingness to Participate in HIV Vaccine Trials has been developed (Van de Ven et al., under review). The scale contains three items:

- I would participate in an HIV vaccine trial even if I thought the vaccine might not work;
- I want to take part in HIV vaccine trials because I think it will benefit me personally;
- Gay men have nothing to lose by participating in an HIV vaccine trial.

Responses to each item are from 'strongly disagree' (=1) to 'strongly agree' (=4), and overall means are also calculated from 'very unwilling to participate' (=1) to 'very willing to participate' (=4).

Three other scales of HIV vaccine attitudes have been developed (Van de Ven et al., under review): Comfort with Participation in HIV Vaccine Trials (based on 8 items such as 'It concerns me that if I take the vaccine the HIV antibody test will show me as being positive'); Optimism about HIV Vaccines/Trials (10 items such as 'There will be an effective HIV vaccine within five years'); and Sexual Freedom (6 items such as 'An effective vaccine will make safe sex less important'). The HIV vaccine attitude scales have been included in the HIM (Health in Men) longitudinal cohort study of HIV-negative gay men in Sydney. Baseline data were collected in 2001 and the analyses reported here are based on 450 HIV-negative gay men.

Willingness to Participate was associated with sexual risk practice (see Table 4.2.1). Men who reported unprotected anal intercourse (UAI) with casual partners and/or with a serodiscordant or non-concordant regular partner were *more* willing to participate in HIV vaccine trials than those who reported no UAI or UAI only with a seroconcordant regular partner.

Table 4.2.1: Willingness to participate in HIV vaccine trials by sexual risk practice

	N	Mean
No unprotected anal intercourse (UAI)	167	2.46
UAI with seroconcordant regular partner only	153	2.41
UAI with casual partners and/or with a serodiscordant or non-concordant regular partner	122	2.67

Willingness to Participate was also related to regular partner's HIV status (see Table 4.2.2). Those with an HIV-positive regular partner were significantly *more* willing to participate than those without regular partners or whose regular partner's status was HIV-negative or unknown.

Table 4.2.2: Willingness to participate in HIV vaccine trials by regular partner's HIV status

	N	Mean
No regular partner	191	2.57
HIV-negative	210	2.42
Unknown	12	2.42
HIV-positive	29	2.67

Willingness to Participate was associated with level of education (see Table 4.2.3). Men who had not progressed beyond Year 12 and those who had attended university were *less* willing to participate in HIV vaccine trials than their counterparts who had undertaken studies for diplomas or trade certificates.

Table 4.2.3: Willingness to participate in HIV vaccine trials by educational level

	N	Mean
Up to year 12	108	2.57
Diploma/Trade certificate	88	2.61
University	244	2.43

Willingness to Participate was significantly associated with self-rated likelihood of HIV infection (see Table 4.2.4). Men who rated themselves as highly or moderately unlikely to become infected with HIV were *less* willing to participate in HIV vaccine trials than those who rated their chances as 'about even' or more likely.

Table 4.2.4: Willingness to participate in HIV vaccine trials by self-rated likelihood of HIV infection

	N	Mean
Highly/moderately unlikely	385	2.46
'About even' or more likely	57	2.82

In a multivariate (linear regression) model, Willingness to Participate in HIV Vaccine Trials was strongly and independently associated with greater Comfort with Participation in HIV Vaccine Trials, greater Optimism about HIV Vaccines/Vaccine Trials, and self-rating likelihood of HIV infection as 'about even'/'moderately likely'/'highly likely'. In this model, Willingness to Participate was also independently associated with greater HIV Treatments Optimism, sexual risk practice (any unprotected anal intercourse with discordant/non-concordant regular partners or with casual partners), having close friends who are HIV-positive, and *not* having HIV-positive friends as former/current sex partners (Van de Ven et al., 2002).

The baseline data from the HIM cohort study provide evidence that Sydney HIV-negative gay men as a group are neither willing nor unwilling to participate in HIV vaccine trials. More likely to participate are those who perceive themselves at greater likelihood of HIV infection and those who actually engage in sexual risks with discordant/non-concordant regular partners or with casual partners.

References

- Aspin, C., Van de Ven, P., Prestage, G., Kippax, S., Horn, G. & Madeddu, D. (2000a). *Melbourne Gay Community Periodic Survey: February 2000*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Aspin, C., Van de Ven, P., Prestage, G., Kippax, S., Mason, D., Lewis, C. & Gallagher, S. (2000b). *Queensland Gay Community Periodic Survey: June 2000*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Aspin, C., Van de Ven, P., Prestage, G., Kippax, S., Schamburg, K. & Coase, D. (2001). *Gay Community Periodic Survey: Canberra 2000*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Brown, G., Maycock, B., Van de Ven, P., Prestage, G., Langdon, T. & Shaw, T. (2001). *Perth Gay Community Survey: Full Report October 2000*. Perth: Centre for Health Promotion Research, Curtin University.
- Crawford, J., Bermingham, S. & Kippax, S. (1995). *Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96 Technical Appendix 3: An Analysis of Trends in Social and Behavioural Factors Related to the Transmission of HIV in Homosexually Active Men*. Canberra: Australian Government Publishing Service.
- 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, Macquarie University.
- Crawford, J., Rodden, P., Kippax, S. & Van de Ven, P. (2001). Negotiated safety and other agreements between men in relationships: Risk practice redefined. *International Journal of STD and AIDS*, 12, 164-170.
- Crawford, J., Turtle, A. & Kippax, S. (1990). Student-favoured strategies for AIDS avoidance. *Australian Journal of Psychology*, 42, 123-137.
- Crofts, N., Webb-Pullman, J. & Dolan, K. (1995). *Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96 Technical Appendix 4: An analysis of trends over time in social and behavioural factors related to the transmission of HIV among injecting drug users and prison inmates*. Canberra: Australian Government Publishing Service.
- Darke, S., Ross, J. & Hall, W. (1995). *The Injection of Methadone Syrup in Sydney Australia*. (Technical Report No. 23.) Sydney: National Drug and Alcohol Research Centre, The University of New South Wales.
- Ezzy, D., de Visser, R., Bartos, M., McDonald, K., O'Donnell, D. & Rosenthal, D. (1998). *HIV Futures Community Report: Health, Relationships, Community and Employment*. Melbourne: Centre for the Study of Sexually Transmissible Diseases, La Trobe University.
- Feachem, R. (1995). *Valuing the Past, Investing in the Future: Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96*. Canberra: Australian Government Publishing Service.
- Grierson, J., Bartos, M., de Visser, R. & McDonald, K. (2000). *HIV Futures II: The Health and Well-being of People with HIV/AIDS in Australia*. (Monograph Series No. 17.) Melbourne: Australian Research Centre in Sex, Health and Society, La Trobe University.

References

- Grierson, J., Mission, S., McDonald, K., Pitts, M. & O'Brien, M. (2002). *HIV Futures 3: Positive Australians on Services, Health and Well-being*. (Monograph Series No. 37.) Melbourne: Australian Research Centre in Sex, Health and Society, La Trobe University.
- Grulich, A., Prestage, G., Kippax, S., Crawford, J. & Van de Ven, P. (1998). HIV serostatus of sexual partners of HIV positive and HIV negative homosexual men in Sydney. *AIDS*, 12, 2508.
- Hopwood, M. & Kippax, S. (2001). An epidemic of difference: a social analysis of hepatitis C-related discrimination. In Anti-Discrimination Board of New South Wales, *C-Change: Report of the Enquiry into Hepatitis C-related Discrimination* (Appendix E, 136-147). Sydney: Anti-Discrimination Board of New South Wales.
- Kippax, S., Campbell, D., Van de Ven, P., Crawford, J., Prestage, G., Knox, S., Culpin, A., Kaldor, J. & Kinder, P. (1998). Cultures of sexual adventurism as markers of HIV seroconversion: A case control study in a cohort of Sydney gay men. *AIDS Care*, 10, 677-688.
- Kippax, S., Crawford, J., Davis, M., Rodden, P. & Dowsett, G. (1993). Sustaining safe sex: A longitudinal study of a sample of homosexual men. *AIDS*, 7, 257-263.
- Kippax, S., Crawford, J., Rodden, P. & Benton, K. (1994). *Report on Project Male Call: National telephone survey of men who have sex with men*. Canberra: Australian Government Publishing Service.
- Kippax, S., Noble, J., Prestage, G., Campbell, D., Baxter, D. & Cooper, D. (1997). Sexual Negotiation in the 'AIDS era': Negotiated safety revisited. *AIDS*, 11, 191-197.
- Knox, S., Van de Ven, P., Prestage, G., Crawford, J. & Kippax, S. (1999a). *Sydney Gay Community Surveillance Report No. 8: Update to June 1999*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Knox, S., Van de Ven, P., Prestage, G., Crawford, J. & Kippax, S. (1999b). *Sydney Gay Community Surveillance Report No. 9: Update to December 1999*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Knox, S., Van de Ven, P., Richters, J., Prestage, G., Crawford, J. & Kippax, S. (1998). *Sydney Gay Community Surveillance Report No. 7: Baseline data and update June 1998*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Lambevski, S., Kippax, S. & Bartos, M. (2000). *Body practices of male pleasure: Post-industrial urbanity, unorthodox masculinities and male corporeal subjectivity*. Paper presented at the Manning the Millennium Conference, Surfers Paradise, Qld.
- Lintzeris, N., Lenne, M. & Ritter, A. (1999). Methadone injecting in Australia: a tale of two cities. *Addiction*, 94, 1175-1178.
- MacDonald, M., Evers, A., Wodak, A. & Kaldor, J. (1999). *Prevalence of HCV antibody among methadone injectors in Australia*. Paper presented at the 2nd Australasian Conference on Hepatitis C, 17-19 August, Christchurch, New Zealand.
- National Centre in HIV Epidemiology and Clinical Research. (2002). *HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia: Annual Surveillance Report*. Sydney: NCHECR.
- National Centre in HIV Social Research (1999). *HIV/AIDS and Related Diseases in Australia: Annual Report of Behaviour*. Sydney: National Centre in HIV Social Research, The University of New South Wales.

References

- National Centre in HIV Social Research (2000). *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- National Centre in HIV Social Research (2001). *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Prestage, G., Kippax, S., Benton, K., French, J., Knox, S. & Van de Ven, P. (1996). *A demographic and behavioural comparison by age in a sample of homosexually active men in Melbourne, Australia*. Sydney: HIV AIDS and Society Publications.
- Prestage, G., Knox, S., Kippax, S., Benton, K., Mahat, M., Crawford, J., Richters, J., French, J. & Van de Ven, P. (1997). *A demographic and behavioural comparison of three samples of homosexually active men in Sydney, Melbourne and Brisbane*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Prestage, G., Van de Ven, P., Mahat, M., Wong, K. & McMahon, T. (2000). *Asian Gay Men in Sydney: December 1999–January 2000*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Rawstorne, P., Van de Ven, P., Prestage, G., Kippax, S., Horn, G., Kennedy, M., & Voon, D. (2001). *Gay Community Periodic Survey: Melbourne 2001*. Sydney: 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). *Queensland Gay Community Periodic Survey: June 2001*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Richters, J., Bebbington, M., Prestage, G., Ellard, J. & Cassar, L. (2001). *Women in Contact with Gay and Lesbian Community: Sydney Women and Sexual Health Survey 1996, 1998 and 2000*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Richters, J., Knox, S., Van de Ven, P., Prestage, G., Crawford, J. & Kippax, S. (1998). *Sydney Gay Community Surveillance Report No. 6: Update to December 1997*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Richters, J., Van de Ven, P., Campbell, D., Prestage, G., Crawford, J. & Kippax, S. (1996). *Sydney Gay Community Surveillance Report No. 3: Update to June 1996*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Richters, J., Van de Ven, P., Campbell, D., Prestage, G., Crawford, J. & Kippax, S. (1997). *Sydney Gay Community Surveillance Report No. 4: Update to December 1996*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Richters, J., Van de Ven, P., Knox, S., Prestage, G., Crawford, J. & Kippax, S. (1997). *Sydney Gay Community Surveillance Report No. 5: Update to June 1997*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Rodden, P. (1999). *Changing times: AIDS-related loss and grief in 1993 and 1999*. Unpublished Master of Clinical Psychology project, Macquarie University.
- Rodden, P., Crawford, J., Kippax, S. & French, J. (1996). Sexual practice and understanding of 'safe' sex: Assessing change among 18 to 19 year old Australian tertiary students, 1988-1994. *Australian and New Zealand Journal of Public Health*, 20, 643-649.

References

- Smith, A., Reichler, H. & Rosenthal, D. (1995). *Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96 Technical Appendix 5: An Analysis of Trends over Time in Social and Behavioural Factors Related to the Transmission of HIV among the General Community, Sex Workers and Sex Travellers*. Canberra: Australian Government Publishing Services.
- Southgate, E., Kippax, S., Bammer, G., Isaac-Toua, G., MacDonald, M., Hopwood, M., & Aspin, C. (2001). *Methadone Injection in New South Wales*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Sunjic, S. & Howard, J. (1996). "Non-injectables": methadone syrup and benzodiazepine injection by methadone-maintained clients. *Drug and Alcohol Review*, 15, 245-250.
- Van de Ven, P., Bartholow, B., Rawstorne, P., Crawford, J., Kippax, S., Grulich, A., Prestage, G., Woodhouse, M. & Murphy, D. (under review). *Scaling HIV vaccine attitudes among gay men in Sydney*.
- Van de Ven, P., Campbell, D., Prestage, G., Crawford, J. & Kippax, S. (1995). *Sydney Gay Community Surveillance Report No. 1: Baseline data January 1993-June 1995*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Van de Ven, P., Crawford, J., Kippax, S., Knox, S. & Prestage, G. (2000). A scale of optimism-scepticism in the context of HIV treatments. *AIDS Care*, 12, 171-176.
- Van de Ven, P., French, J., Crawford, J. & Kippax, S. (1999). Sydney gay men's agreements about sex. In P. Aggleton, G. Hart & P. Davies (Eds.), *Families and Communities Responding to AIDS* (pp 133-146). London: UCL Press.
- Van de Ven, P., Kippax, S., Crawford, J., Rawstorne, P., Prestage, G., Grulich, A. & Murphy, D. (under review). *Patterns in gay men's sexual practice indicate strategic positioning for perceived risk reduction rather than unbridled sex*. Manuscript submitted for publication.
- Van de Ven, P., Kippax, S., Knox, S., Prestage, G. & Crawford, J. (1999). HIV treatments optimism and sexual behaviour among gay men in Sydney and Melbourne. *AIDS*, 13, 2289-2294.
- Van de Ven, P., Nakamura, T., Crawford, J., Kippax, S., Prestage, G., & Grulich, A. (2002). Sydney gay men's willingness to participate in HIV vaccine trials: the Health in Men cohort. Paper presented at the HIV/AIDS, Hepatitis and Related Diseases (HHARD) Social Research Conference, 28-31 May, Sydney, Australia.
- Van de Ven, P., Prestage, G., Kippax, S., French, J., Benzie, T. & Clementson, C. (1998b) *South East Queensland Gay Community Periodic Survey: June 1998*. Monograph 4/1998. Sydney: National Centre in HIV Social Research, Macquarie University.
- Van de Ven, P., Prestage, G., Kippax, S., French, J., Bonello, J. & Kay, P. (1999b) *Adelaide Gay Community Periodic Survey: November 1998*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Van de Ven, P., Prestage, G., Kippax, S., French, J., Derrin, L. & Bebbington, M. (1999a) *Perth Gay Community Periodic Survey: September/October 1998*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Van de Ven, P., Prestage, G., Kippax, S., French, J., Horn, G. & Brotherton, A. (1998a) *Melbourne Gay Community Periodic Survey: February 1998*. Sydney: National Centre in HIV Social Research, Macquarie University.

References

- Van de Ven, P., Prestage, G., Kippax, S., Knox, S., Benzie, T., Sorrentino, J. & 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., Prestage, G., Kippax, S., Knox, S., Nicholas, G., Horwood, B. & Petersen, K. (2000). *Adelaide Gay Community Periodic Survey: November 1999*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Van de Ven, P., Rawstorne, P., Crawford, J. & Kippax, S. (2001). *Facts & Figures: 2000 Male Out Survey*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Van de Ven, P., Richters, J., Campbell, D., Prestage, G., Crawford, J. & Kippax, S. (1996). *Sydney Gay Community Surveillance Report No. 2: Baseline data and update January 1993-December 1995*. Sydney: National Centre in HIV Social Research, Macquarie University.
- Williams, P. (2001). *Illicit Drug Use in Regional Australia: No. 192*. Canberra: Australian Institute of Criminology.