

NCHSR

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Related Diseases in Australia

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Edited by

National Centre in HIV Social Research

in collaboration with

Australian Research Centre in Sex, Health and Society

National Centre in HIV Epidemiology and Clinical Research

Preface

This report is the third 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 five-year period 1996–2000. In this way, this annual report builds on the previous reports by comparing data from the last year with data from the previous four. 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 two four-year periods (1995–1998 and 1996–1999, respectively) after the Feachem evaluation were presented in the two earlier reports in this series, *HIV/AIDS and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 1999) and *HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour* (National Centre in HIV Social Research, 2000).

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], 2001). Some of the tables herein provide data which 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 2000 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) and HIV/AIDS, Hepatitis C and Related Diseases in Australia: Annual Report of Behaviour (National Centre in HIV Social Research, 2000). 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 middle 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 small but significant 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 7–10%, for example from around 28% to 35% in Sydney *Gay Community Periodic Survey* data. 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 in Sydney from around 14% in 1996 to 23% in 2000, based on *Gay Community Periodic Survey* data. 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.

Summary

There has been a small decline among HIV negative homosexually active men in HIV testing, consistent across most of the areas studied. For example, the percentage of Sydney men tested 'in the last six months' decreased from 55% in 1996 to 47% in 2000, based on *Gay Community Periodic Survey* data. The decline in frequency of HIV testing was quite consistent across studies and across the country.

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. In a similar fashion, the accounts of men who have requested post exposure prophylaxis (PEP) point to risks within regular relations, particularly in the case of PEP within regular relationships known to be HIV serodiscordant.

Information in this section is also provided relating to the uptake of therapies and other treatment-related issues. 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 essentially been maintained.

The need for adherence to 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.

Up until the end of 2000, 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 50–70% (depending on location) reporting the use of at least one non-prescription drug in the six months prior to 2000 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. However, for some homosexually active men there is a significant association between HIV optimism and unprotected anal intercourse, notably with casual partners.

Based on extensive data from the *Sydney Gay Community Periodic Surveys*, patterns of risk management among men in serodiscordant regular relationships and in casual partnerships emerged. Among men who had unprotected anal intercourse which involved ejaculation inside, there was a pattern of strategic positioning based on serostatus—HIV positive men tended to be receptive and HIV negative men tended to be insertive. Some men practised consistent withdrawal (rather than sometimes ejaculation inside) during unprotected anal intercourse with serodiscordant regular partners or with casual partners. Among these men there was also a pattern, though less pronounced, of HIV positive/receptive and HIV negative/insertive behaviour. Such risk reduction strategies herald a more complex landscape for HIV education.

1

Sexual Practice

During the period covered by this report (1996 to 2000) 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 specially 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 NGCA.¹ 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 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.

The most complete State-based data are from Sydney where *SMASH* was available as a source of information to 1999, 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

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 pornography 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 pornography 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 pornography 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.

Sexual Practice

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) and February 2000 (Aspin et al., 2000a), Queensland in June 1998 (Van de Ven et al., 1998b), June 1999 (Van de Ven, Prestage, Kippax et al., 1999) and June 2000 (Aspin et al., 2000b), 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) and November 1999 (Van de Ven, Prestage, Kippax et al., 2000), 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 in 1999 and 2000. 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 throughout.

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, *HIV Futures II*, of 1999 (Grierson et al., 2000).

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 2000. 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 two 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 both *SMASH* and from the *Periodic Surveys*) show remarkable 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 *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 2000, fairly consistent with previous years for GCA men but generally higher than in previous years among NGCA men.

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	
	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		
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
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	63.2
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		
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		
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
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
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

Table 1.1.1 (continued)

Source	1996		1997		1998		1999		2000	
	N	%	N	%	N	%	N	%	N	%
(b) Men with casual partner/s (continued)										
Adelaide										
Periodic					552	60.5	463	61.8		
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		
Periodic	2238	57.0	2630	42.1	3037	42.6	3343	42.1	2916	42.4
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
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	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		
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.

¹ Based 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 sexual 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.

Table 1.1.2 : Men engaging in any anal intercourse

Source	1996		1997		1998		1999		2000	
	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		
Periodic	2238	82.5	2630	82.4	3037	83.5	3343	82.4	2916	84.0
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
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
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		
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 2000. This indicator varied considerably from sample to sample reflecting differences between samples with respect to sex with regular partners as shown in Table 1.1.1(a) above. Nevertheless, there was an overall trend—across all regions and for both GCA and NGCA men—toward a greater proportion of men engaging in any unprotected anal intercourse. (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	
	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		
Periodic	2238	35.0	2630	39.8	3037	41.7	3343	43.1	2916	48.3
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
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
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		
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.

¹Figure 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 2000.

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 small (but statistically significant) increases in levels of unprotected anal intercourse with casual partners. More detailed analyses of the data from the Sydney *Periodic Surveys* pinpoint that the upturn was significant for the five 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	
	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		
Periodic										
Total sample	2238	14.0	2630	18.3	3037	18.2	3343	18.5	2916	23.0
4 consistent sites	1042	17.6	1168	25.3	1274	23.2	1103	27.3	995	31.9
Fair Days	1034	10.1	1088	12.3	1156	12.7	1436	12.5	1162	14.5
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
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
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		
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.

¹Figure to be treated with caution; see text.

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

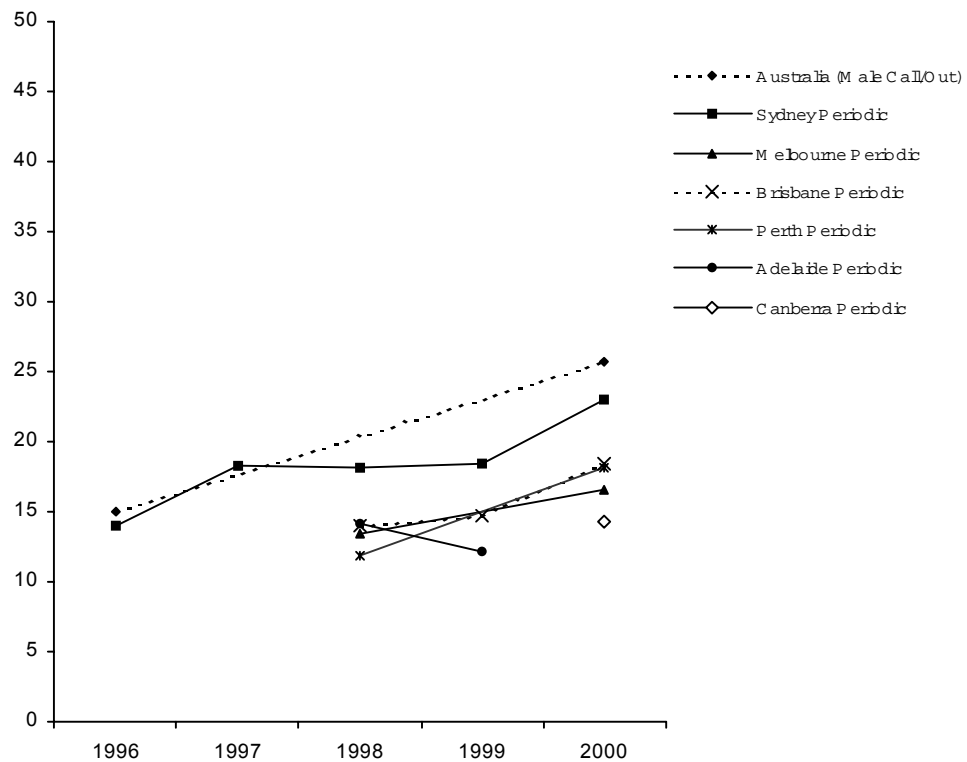


Table 1.1.4b, based on those men who had casual partners, shows the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation (‘withdrawal’)—with casual partners during the six months prior to the survey for the years 1996 to 2000. 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.

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	
	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		
Periodic										
Total sample	1848	16.9	1932	24.8	2287	24.1	2350	26.4	2122	31.6
4 consistent sites	907	20.2	1001	29.5	1094	27.0	927	32.5	841	37.7
Fair Days	820	12.7	703	19.1	780	18.8	876	20.8	732	23.0
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
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
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		
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.

¹Figure 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 2000.

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.

Sexual Practice

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	
	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		
Periodic										
Total sample	2238	27.9	2630	33.3	3037	30.4	3343	34.0	2916	35.0
4 consistent sites	1043	22.2	1168	25.0	1274	25.1	1103	30.5	995	28.2
Fair Days	1034	33.1	1088	32.3	1156	35.5	1450	38.0	1162	39.8
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
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
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		
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.

¹Figure 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%.)

Figure 2 : Percentage of men engaging in unprotected anal intercourse with regular partners

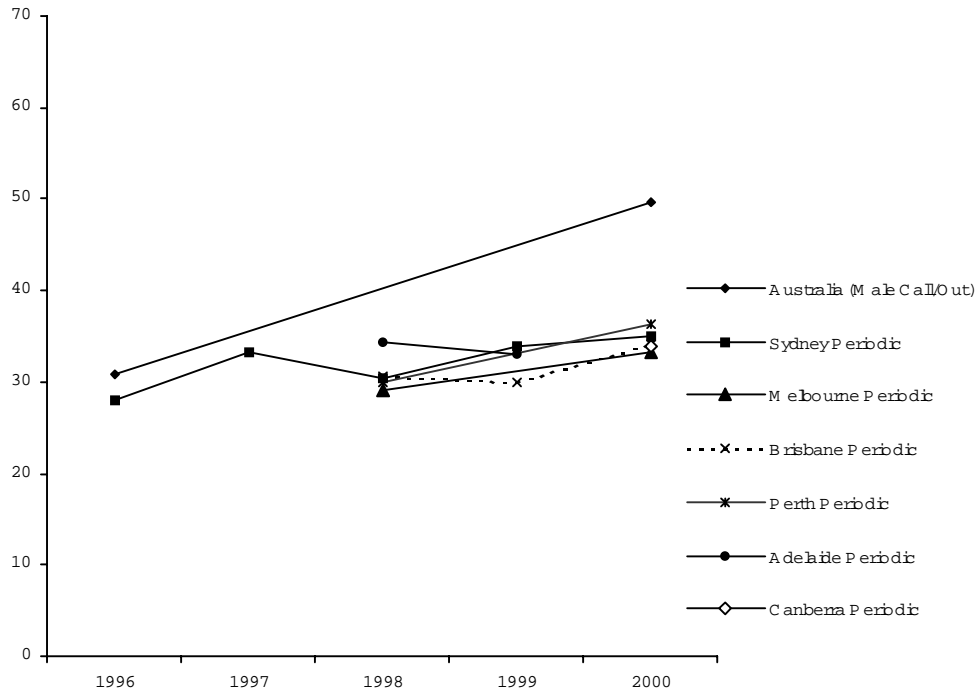


Table 1.1.5b, based on those men who had regular partners, shows the number and percentage of men who reported that they had engaged in unprotected anal intercourse—including anal intercourse without ejaculation (‘withdrawal’)—with regular partners during the six months prior to the respective survey for the years 1996 to 2000. 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.

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	
	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		
Periodic										
Total sample	1557	40.1	1631	45.7	1862	49.3	2227	51.0	1867	54.6
4 consistent sites	661	35.1	664	44.0	700	45.7	669	50.2	549	51.2
Fair Days	778	44.0	728	48.2	797	51.4	1049	52.5	821	56.4
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
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	812	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		
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.

¹Figure 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, use of sex toys, cock rings, engaging in sadomasochistic (dominance/bondage) 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 and those who did not report any unprotected anal intercourse. N refers to the number from which the mean was calculated. (No new data for 2000 were available.)

Table 1.1.6 : Mean of esoteric practices¹

Source	1996		1997		1998		1999	
	N	Mean	N	Mean	N	Mean	N	Mean
Australia (Male Call)								
Any unprotected anal intercourse	1141	2.21						
No unprotected anal intercourse	1898	1.47						
Sydney								
SMASH								
Any unprotected anal intercourse	283	2.02	282	2.10	172	2.46	198	2.19
No unprotected anal intercourse	416	1.26	343	1.33	221	1.34	173	1.21
Male Call								
Any unprotected anal intercourse	224	2.46						
No unprotected anal intercourse	427	1.63						
Melbourne								
MMASH								
Any unprotected anal intercourse	175	1.94						
No unprotected anal intercourse	231	1.19						
Male Call								
Any unprotected anal intercourse	188	2.20						
No unprotected anal intercourse	295	1.60						
Brisbane								
BRASH								
Any unprotected anal intercourse	124	1.52						
No unprotected anal intercourse	175	1.14						
Male Call								
Any unprotected anal intercourse	110	2.07						
No unprotected anal intercourse	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 shows 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	
	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)										
GCA	2253	84.3							1181	85.5
NGCA	786	57.6							651	67.0
Sydney										
Periodic	2238	86.1	2630	88.9	3037	87.9	3343	90.1	2916	89.2
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
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	1284	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		
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. These data indicate a significant decline in the frequency of testing, among GCA as well as NGCA men.

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	
	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		
Periodic	1525	55.1	1771	51.5	2035	49.8	2381	48.3	2094	47.1
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
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	52.4	942	50.7	981	50.2
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		
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. Sydney and Perth *Periodic Survey* figures confirm a downward trend, matched by GCA men in the *Male Call/Out* surveys. However, in the overall Australian *Male Call/Out* dataset there is a significant increase in the proportion of NGCA younger men tested.

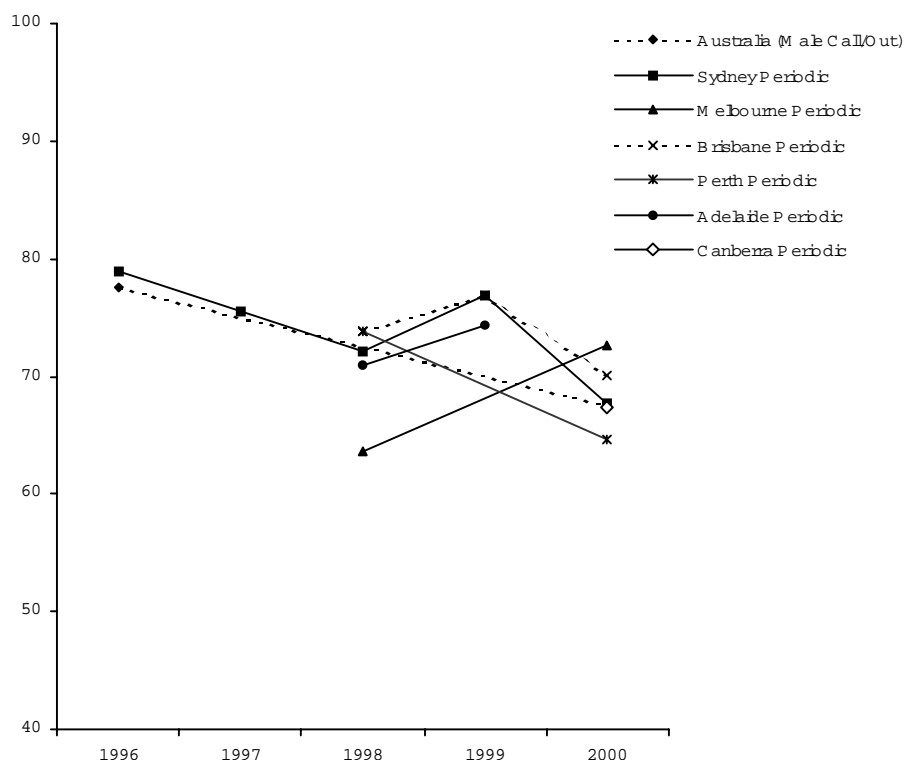
Table 1.1.9 : Men under 25 ever tested for HIV

Source	1996		1997		1998		1999		2000	
	N	%	N	%	N	%	N	%	N	%
Australia (Male Call/Out)										
GCA	429	77.5							71	67.6
NGCA	90	38.9							65	52.3
Sydney										
Periodic	298	79.0	278	75.5	320	72.2	346	76.9	260	67.7
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
GCA (Male Call/Out)	58	82.5							10	–
Brisbane										
BRASH	78	78.2								
Periodic					233	73.8	212	76.9	291	70.1
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		
GCA (Male Call/Out)	34	70.6							5	–
Canberra										
Periodic									52	67.3

Note : 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 ANAL INTERCOURSE WITH CASUAL PARTNERS BY SEROSTATUS

This table (1.1.10) shows the number and percentage of men who engaged in unprotected anal intercourse with casual partners by serostatus during the six months prior to the survey for the years 1996 to 2000. It confirms that men who are HIV seropositive are more likely to engage in unprotected anal intercourse with casual partners than men who are HIV seronegative. 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. This information is not available from other surveys.

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	
	N	%	N	%	N	%	N	%	N	%
Australia										
HIV Futures										
Positive ²			777	25.0			795	26.3		
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		
Periodic										
Positive	324	31.5	435	41.6	502	38.4	481	43.2	404	51.5
Negative	1282	13.7	1297	19.8	1526	19.9	1647	21.9	1519	27.3
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
Negative					1019	15.9			864	22.2
Brisbane										
BRASH										
Positive	30	23.3								
Negative	183	16.9								
Periodic										
Positive					86	30.2	74	27.0	65	44.6
Negative					735	17.6	696	19.5	696	24.9
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		
Negative					260	20.8	216	18.5		
Canberra										
Periodic										
Positive									10	— ⁴
Negative									175	21.7

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

¹This 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 Perth 2000 Periodic Survey data.

²HIV 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.

³Figure to be treated with caution; see text.

⁴Number 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 some suggestion from the data across time for *SMASH* and the other surveys that this percentage may be 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 1999 and 2000 data. 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 question/s. 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	
	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		
Periodic										
Seroconcordant	677	69.3	815	69.6	847	72.6	1029	73.1	865	70.9
Non concordant	415	39.5	421	39.2	534	38.6	563	37.7	460	38.7
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
Non concordant					351	30.5			232	28.0
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	361	70.4
Non concordant					228	28.1	229	36.7	230	27.4
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		
Non concordant					83	27.7	74	40.5		
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 an 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, 2000; National Centre in HIV Epidemiology and Clinical Research, 2000). 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. There is little indication of change over this period in any of the indicators. Fluctuations in the percentage of students who use 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 have been 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).

Sexual Practice

Table 1.2.1 : Sexual practice among 17 to 19-year-old¹ first-year university students

	1996 N=377	1997 N=381	1998 N=336	1999 N=206
Male	97	85	92	52
Female	280	296	244	154
Number of partners ever	%	%	%	%
0	44.9	39.3	45.2	42.2
1	24.9	26.7	23.5	27.7
2-4	21.4	27.5	26.5	21.8
>4	8.8	6.4	4.8	8.3
Ready access to condoms²				
Male	52.6	56.0	65.4	58.8
Female	42.2	30.3	40.6	44.0
Condom use with regular partner in the last month (total samples)				
Never	12.8	14.9	10.4	14.6
Sometimes	4.4	4.6	5.4	4.4
Most times	4.7	6.2	5.1	5.3
Every time	10.0	18.6	13.4	14.1
No partner or no intercourse	68.1	55.7	65.8	61.7
Condom use with regular partner in the last month (based on those with a regular partner)	n=116	n=139	n=104	n=89
Never	37.1	36.0	31.7	38.8
Sometimes	12.1	11.0	16.3	10.2
Most times	14.7	13.2	13.5	12.2
Every time	24.1	35.3	30.8	29.6
No intercourse	12.1	4.4	7.7	9.2
Condom use with casual partners in the last 6 months (total samples)				
Never	1.9	2.4	1.2	2.9
Sometimes	1.1	0.8	1.2	1.5
Most times	2.8	1.3	3.9	3.9
Every time	11.3	9.4	8.9	7.8
No partner or no intercourse	82.9	86.1	84.8	84.0
Condom use with casual partners in the last 6 months (based on those with casual partners)	n=58	n=40	n=50	n=42
Never	6.9	10.0	6.0	11.9
Sometimes	5.2	5.0	8.0	7.1
Most times	15.5	12.5	26.0	21.4
Every time	69.0	67.5	58.0	50.0
No intercourse	3.4	5.0	2.0	9.5
Sexual practice, ever				
Vaginal sex	50.4	56.7	49.1	51.0
Regular partner	47.4	54.2	46.5	50.0
Casual partner	23.4	21.0	14.3	16.5
Anal sex	3.0	7.6	5.7	5.8
Regular partner	2.6	6.1	4.8	5.8
Casual partner	0.3	1.8	1.8	0.5
Any form of sex (oral, vaginal anal)	60.6	66.4	57.4	60.7

¹ Includes 17-year-old students turning 18 in the year.

² 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., 1999). 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 heterosexual.

Injecting drug use in the previous six months was variable over time. The sample of injectors is too small to determine any trends. Women who injected tended to identify as lesbian.

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.

2

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)—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. Of the participants, 362 were from Sydney; 56 from Melbourne; and 7 from elsewhere.² There were 367 gay/bisexual men, 17 heterosexual men, 4 lesbian/bisexual women and 15 heterosexual women (22 others). Sexual practice questions were not included in the baseline *pH* interview schedule.

2.1 SEXUAL PRACTICE

With respect to sexual practice, only two data points (1997, 1999) 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 no 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 between 1997 and 1999, 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			
	Men N=834		Women N=84		Men N=828		Women 89	
	n	%	n	%	n	%	n	%
Casual male	371	53.7	6	50.0	414	52.1	10	10.0
Casual female	18	39.0			22	47.4		
Regular male (HIV positive)	146	68.5	13	61.5	123	83.4	12	61.6
Regular male (HIV negative)	199	21.0	15	46.7	125	34.7	25	41.7
Regular female (HIV positive)	5	60.0			11	70.0		
Regular female (HIV negative)	23	13.0			13	28.6		

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 As most of the *pH* participants were from Sydney, *pH* data in the tables are reported under 'Sydney'.

Sexual practice among homosexually active men who are HIV seropositive 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 show 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 tended to report better overall health, notably men in the *SMASH* cohort. No new data for 2000 were available.

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

Source	1996		1997		1998		1999	
	N	%	N	%	N	%	N	%
Australia								
HIV Futures			914	71.7			949	72.8
Sydney								
SMASH	135	70.4	117	78.6	73	80.8		
pH							425	76.5

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.

Data from the *Gay Community Periodic Surveys* indicate high levels of uptake of combination antiretroviral therapy. Of note, use of therapies was quite stable over time in Sydney and Brisbane whereas there was increasing use in Perth and Adelaide and decreasing use (from a remarkably high base) in Melbourne.

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

Source	1996		1997		1998		1999		2000	
	N	%	N	%	N	%	N	%	N	%
Australia										
HIV Futures			893	77.7			952	73.5		
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
pH ¹							425	72.2		
Melbourne										
MMASH ³	42	40.5								
Periodic ²					155	82.6			138	78.3
Brisbane										
BRASH ³	36	27.8								
Periodic ²					112	68.8	100	67.0	77	66.2
Perth										
Periodic ²					45	62.1			50	74.0
Adelaide										
Periodic ²					34	64.7	34	73.5		
Canberra										
Periodic ²									18	66.7

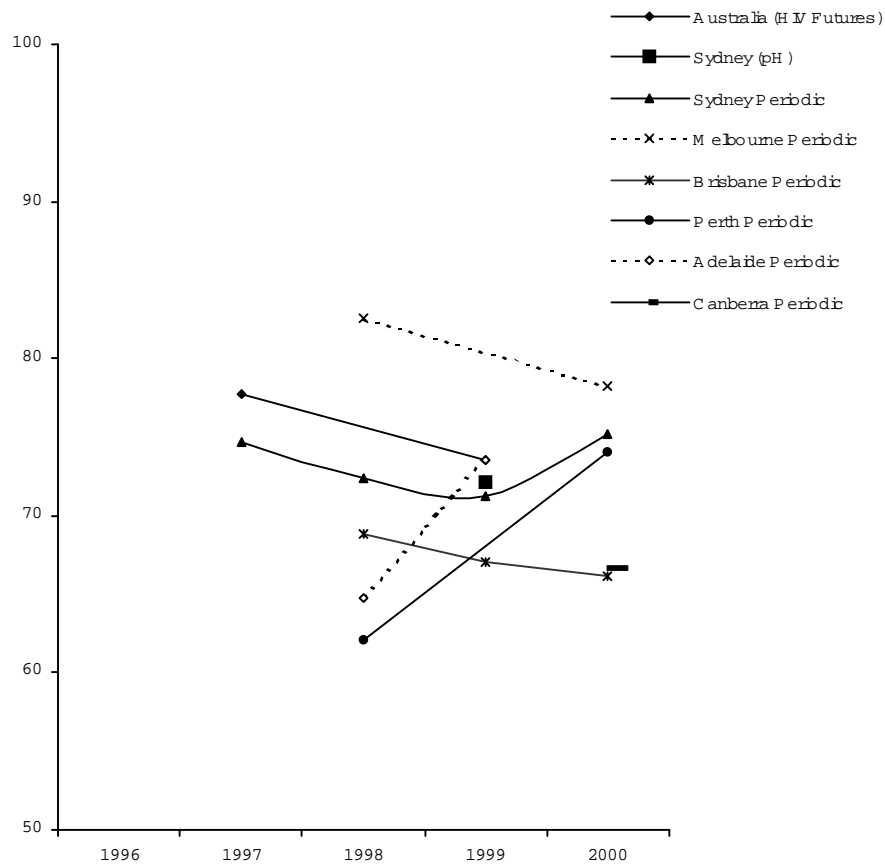
¹ 'Combination therapy' means more than two antiretrovirals.

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



Data from the *HIV Futures* study indicate that almost two-thirds of participants ($N = 948$, 63.1%) used combination antiretroviral therapy continuously since uptake. Of those using combination antiretroviral therapy at the time of the 1999 survey, approximately one-third had ever stopped using therapy ($N = 696$, 63.1%). Between the 1997 and 1999 data collections for the *HIV Futures* study, there was a significant increase in the percentage of participants who had never used combination antiretroviral therapy (1997 $N = 914$, 6.1% vs. 1999 $N = 953$, 13.5%; $p < .01$).

2.4 TREATMENT EXPERIENCES

A significant consideration for people on combination therapy is the experience of side effects. No new data were available for 2000 but previous data on side effects were available from the *HIV Futures* and *pH* studies. In both studies, at least half the participants reported *any* side effects, as shown in the following table. As indicators of side effects, the experience of (a) diarrhoea *or* nausea and (b) anxiety *or* depression *or* fear were computed. In the *pH* study, approximately two-thirds of the participants reported at least one of the side effects in these groupings. In the *HIV Futures* study, the experience of diarrhoea *or* nausea was reported by approximately one-third of participants. The lower percentage in *HIV Futures* was attributable to the way the question was 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 therapy

Source	1996		1997		1998		1999	
	N	%	N	%	N	%	N	%
(a) Diarrhoea/Nausea								
Australia HIV Futures			694	35.5			700	33.5
Sydney pH							336	70.8
(b) Anxiety/Depression/Fear								
Sydney pH							336	67.9
(c) Any side effects								
Australia HIV Futures			693	68.0			708	54.8
Sydney pH							336	73.8

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 *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* study show that almost half of those currently taking antiretrovirals experienced difficulty taking pills on time. In the *pH* study, approximately one-third of participants experienced difficulty taking pills on time (see Table 2.5).

Table 2.5 : Experience of taking pills

Source	1996		1997		1998		1999	
	N	%	N	%	N	%	N	%
(a) Missed any doses during last two days								
Australia HIV Futures							700	15.9
Sydney pH							336	22.3
(b) Experienced any difficulty taking pills on time								
Australia HIV Futures							699	47.8
Sydney pH							336	34.8

2.6 POST-EXPOSURE PROPHYLAXIS

The *Post-exposure Prophylaxis* (PEP) study is a Sydney-based observational study to document requests for PEP and to monitor the implementation of guidelines recommending HIV post-exposure prophylaxis for non-occupational exposures. The social arm of the study, as with the Seroconversion study described below, collects detailed in-depth accounts of the risk-exposure event in order to provide discursive understandings of risk. A short survey is also administered to each person presenting for PEP, from which information about demographics and risk exposure is recorded.

Almost 200 people presented for PEP in 1999 and 2000, with slightly more people presenting in 2000 than in 1999 (see Table 2.6.1). There were many more men than women who presented, with the proportions remaining steady across the two years. Most presentations in 1999 occurred equally among the age groups 17–29 and 30–39, whereas in 2000 the latter group represented almost 50% of all presentations. Most of the people presenting for PEP were living in gay Sydney suburbs and inner or eastern Sydney, of which there was an equal distribution. The HIV status of the source person was generally unknown to the person presenting for PEP, although a sizable proportion knew that the source person was HIV positive. Male homosexual contact was the risk behaviour associated with the majority of presentations for PEP (see Table 2.6.1), and receptive and insertive anal intercourse were the most frequently reported risk activities, in that order (see Table 2.6.2).

Table 2.6.1 : Demographics of presentations for PEP against HIV, New South Wales

	1999 (N=75)	2000 (N=119)
Sex	N (%)	N (%)
Male	68 (91)	106 (89)
Female	6 (8)	12 (10)
Transgender	1 (1)	1 (1)
Age group (years)		
17–29	31 (42)	31 (27)
30–39	31 (42)	58 (49)
40–49	11 (15)	20 (17)
50–59	1 (1)	9 (7)
Area of residence		
'Gay Sydney' (2010, 2011, 2012)	28 (37)	44 (37)
Inner or Eastern Sydney	26 (34)	43 (36)
Other Metropolitan Sydney	18 (24)	23 (19)
Rural NSW	3 (5)	9 (8)
HIV status of source person		
Known to be HIV positive	33 (44)	53 (44)
Suspected to be HIV positive	–	7 (6)
Of unknown HIV status	42 (56)	59 (50)
HIV risk behaviour of the source person		
Male homosexual contact	58 (77)	90 (76)
Injecting drug use	8 (11)	27 (23)
Other risk (includes heterosexual sex)	10 (13)	14 (12)

Table 2.6.2 : Risk of all reported exposures and presentations for PEP, New South Wales

Risk of Exposure	1999 (N=75)	2000 (N=119)
	N (%)	N (%)
High		
Receptive anal intercourse	35 (47)	42 (35)
Insertive anal intercourse	18 (24)	27 (23)
Receptive vaginal intercourse	3 (4)	4 (3)
Insertive vaginal intercourse	3 (4)	7 (6)
Sharing injecting equipment	2 (3)	4 (3)
Deep needle-stick injury	2 (3)	2 (2)
Medium		
Receptive oral intercourse	1 (1)	9 (8)
Percutaneous exposures including blood to mouth or open wound	3 (4)	6 (5)
Moderate depth needle-stick injury	2 (3)	7 (6)
Low		
Other sex including non-penetrative intercourse	–	2 (2)
Superficial needle-stick injury	1 (1)	4 (3)
Exposure to discarded needle	5 (7)	5 (4)

Note : Sub-categories within each category are not mutually exclusive.

Not all people presenting for PEP participated in the in-depth interviews. The 37 accounts collected in 1999 provide some insights into the ways in which HIV transmission risk is constructed, post Vancouver (1996), i.e. in the presence of antiviral therapies and the possibility of post-exposure prophylaxis. Most requests came from homosexually active men, most of whom identified as gay, and in the great majority of accounts, the sexual practice understood to be the risk event was anal intercourse—both insertive and receptive. Approximately 50% of those requesting PEP stated that they knew their sexual partner to be HIV positive.

In general, the results indicate that PEP is being requested in situations in which the risk is realistic. Issues of love, trust and responsibility are central to the stories. For men in regular relationships, condom breakage plays an important role, and for these men PEP acts as a safety net. What is of concern, however, is that within serodiscordant regular relationships (which as other studies have shown are predictive of seroconversion), PEP may be used to rationalise ‘no condoms’—especially in the presence of ‘undetectable’ viral load. Within casual encounters, the issues become more focused on responsibility. There is less certainty, more ambiguity.

With regard to both regular and casual sexual encounters, there is some evidence that HIV negative men in some circumstances rely on the alleged comparative safety of the insertive position. There is also some reliance on withdrawal as a harm reduction strategy. Past risk taking that has not led to HIV infection also plays a role in current risk taking.

Whether availability of PEP blunts the safe sex message and leads to more risk taking is difficult to assess. It is difficult to separate the impact of PEP from the more general impact of treatments and issues around ‘undetectable’ viral load.

2.7 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 23 men were interviewed post 1996, between 1997 to the end of 2000 (with most of them interviewed in 1997 and 2000).

The findings (as shown in Tables 2.7.1 to 2.7.3) 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.

Table 2.7.1 : Type of sexual relationship at time of seroconversion

	Pre treatment success (1993–1996)	Post treatment success (1997–2000)
Regular relationship in which neither the participant nor his partner had casual sex	21 ¹	1
Regular relationship in which participant and his partner had casual sex	13	10
Regular relationship in which participant had casual sex	4	2
Participant had two regular sexual partners	1	1
TOTAL—REGULAR	39 (60%)	14 (61%)
Casual sexual partners only	26 (40%)	9 (39%)
TOTAL	65	23

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

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 2.7.2 : Assumed HIV status of partner at seroconversion event

HIV Status	Pre treatment success (1993–1996)		Post treatment success (1997–2000)	
	Regular	Casual only	Regular	Casual only
Positive	14	4	6 ¹	
Negative	18	2	7	1
Unknown	7	20	1	8
TOTAL	39	26	14	9

¹Includes a participant who had two regular partners, one of whom he knew to be HIV-positive and the other he assumed was HIV-negative.

Table 2.7.3 : Purported seroconversion event: type of sexual practice by partner

Sexual practice	Pre Treatment success (1993–1996)				Post treatment success (1997–2000)			
	Regular	Casual within open relationship	Casual	Total	Regular	Casual within open relationship	Casual	Total
Anal receptive	16	1 ¹	17	34	1	5	6	12
Anal insertive	8	1	2	11	3	1		4
Receptive and insertive	6	2	4	12	1	1	2	4
Other ²	4	1	3	8		2	1	3
TOTAL	34	5	26	65	5	9	9	23

¹This man's regular partner was HIV positive.

²These men believed they had become infected via oral-genital sex (7), sharing a needle (1), esoteric sexual practice involving sado-masochism (2), and blood contact with skin lesions.

2.8 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* cohort study, the *BRASH* and *MMASH* surveys, *Male Call/Out* surveys and the *Periodic* surveys in some State capital cities. In Table 2.8 data on these indicators are presented separately for HIV negative and HIV positive men.

Information from *SMASH* shows 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 somewhat less than their Sydney counterparts.

Information from *SMASH* and other 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/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 2.8 : Indicators of contact with the HIV epidemic

Source	1996		1997		1998		1999		2000	
	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
pH										
HIV positive men							425	97.6		
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
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		
HIV positive men					34	100	33	97.0		
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							-	-

Table 2.8 (continued)

Source	1996		1997		1998		1999		2000	
	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
pH										
HIV positive men							425	62.6 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
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		
HIV positive men					34	91.2	33	81.8		
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, and also from the *SMASH*, *BRASH* and *MMASH* studies. Close to 70% of these men (more among men in the *SMASH*, *pH* 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% in the *SMASH* 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; an exception is 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 Melbourne or Perth, with less extensive use in Brisbane.

Drug use and related issues

Table 3.1.1 : Recreational drug use among homosexually active men

Source	1996		1997		1998		1999		2000	
	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		
Sydney										
SMASH	699	77.5	625	80.3	393	77.9	371	81.4		
Periodic							3343	70.5	2916	73.3
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
pH							367	84.2		
Living as Men ²							528	82.4		
Melbourne										
MMASH	406	69.7								
Periodic									1578	60.4
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
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										
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

Drug use and related issues

Table 3.1.1 (continued)

Source	1996		1997		1998		1999		2000	
	N	%	N	%	N	%	N	%	N	%
(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							738	36.8		
Sydney										
SMASH	699	63.7	625	62.7	393	64.1	371	63.3		
Periodic							3343	51.0	2916	58.6
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
pH							367	61.9		
Living as Men ²							528	69.9		
Melbourne										
MMASH	406	50.7								
Periodic									1578	39.7
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
GCA (Male Call/Out)	204	27.5							99	39.4
NGCA (Male Call/Out)	53	9.4							62	25.8
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										
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.

Drug use and related issues

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 to the others in Table 3.1.2.

The longitudinal data available from *SMASH* suggest that 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	
	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		
Sydney										
SMASH	699	9.6	625	10.7	393	12.0	371	7.8		
Periodic					836	12.4	3343	7.6	2916	6.9
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
pH							367	16.9		
Living as Men ²							524	3.6		
Melbourne										
MMASH	406	5.9								
Periodic									1578	5.1
GCA (Male Call/Out)	395	6.8							258	6.2
NGCA (Male Call/Out)	88	1.1							103	2.9
Living as Men ²							309	4.8		
Brisbane										
BRASH	299	15.7								
Periodic					1341	8.7	1225	9.1	1285	8.6
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					552	8.7	463	7.5		
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 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.

3.2 HEPATITIS AND HEALTH: A SURVEY OF HIGH SCHOOL STUDENTS

The *Hepatitis and Health Project* was conducted in New South Wales during 2000 (Van de Ven, Youdell, et al., 2001). One of its main aims was to determine high school students' knowledge and understandings of hepatitis B and C, principally as they relate to self-perceptions of risk.

Key findings of the survey, based on a stratified random sample of 1330 students, are summarised as:

- Only a small number of students self-report having either hepatitis A (1%), B (1%) or C (0.8%)
- Small proportions of students report having been vaccinated against HAV (13%) and HBV (18%)
- A small proportion of students (10%) believe erroneously that they have been immunised against HCV
- A large proportion of the students have piercings, notably ear piercings (49%); 10 per cent of students have other body piercings
- Most piercings were performed in pharmacies, beautician/hairdressing premises or piercing studios
- Few students (5%) have any tattoos
- Most tattoos were done in a tattoo parlour
- Over 10% of students believe they are likely to contract HBV or HCV
- Many students (88%) incorrectly associate HCV with sexual practice
- The students generally have quite poor knowledge of hepatitis
- Health professionals, teachers and parents are preferred sources of information about hepatitis.

In light of students' current understandings of transmission modes of hepatitis as well as current health policies, the data indicate a need to disseminate more hepatitis information and harm reduction education to high school students. The data provide evidence that some risk behaviours do exist in high school populations alongside confusion about the various forms of hepatitis and their common modes of transmission.

From the items pertaining to the nature of HBV and HCV, there is clear evidence of significant gaps in the knowledge of high school students. Students appear to be confusing hepatitis C with the other forms of hepatitis where 10% students report having been immunised against HCV and 88% of students could not answer correctly that sex is not a common mode of HCV transmission.

3.3 INITIATION AND TRANSITION TO INJECTING AMONG YOUNG PEOPLE

The *Initiation and Transition to Injecting among Young People* study was conducted from June 2000. The 334 participants were 17 to 25 year old young people who had injected any drug within the previous six months and who had started injecting in the last four years.

In an attempt to get a spread of participants, a range of young injecting drug users (IDUs) was recruited, including both urban and rural dwellers, men and women, injectors of various drugs, young offenders, those with experience of drug and alcohol treatment, those involved in street-based drug markets, and those in hidden functional networks of IDUs. Participants were recruited through youth health centres, youth centres, needle exchanges, advertising in fit packs, drug and alcohol treatment centres, methadone clinics, youth and family welfare services, advertising in the street press, posters and flyers distributed at cafes and other venues frequented by young people, and through 'snowballing'. A full report on the findings of the project will be published by the NCHSR late in 2001, with preliminary findings reported here.

The sample consisted of 181 males, 148 females and 2 transsexuals. (Any discrepancies in due to missing data.) Participants came from the greater Sydney area (n = 164), greater Brisbane (n = 122) and Dubbo (n = 48). 171 participants were unemployed, 122 employed at least part-time, and 40 were students. 74 participants had been imprisoned or placed in a juvenile justice centre, 257 never so. 77 participants were currently in some form of drug and alcohol treatment; 92 had ever been in such treatment and 239 had never been. As Table 3.3.1 shows, there were some differences between locations. Sydney participants were more likely to be working and Dubbo participants more likely to be studying. Sydney participants were more likely to be currently (and ever) in drug and alcohol treatment than their counterparts elsewhere.

Table 3.3.1 : Sample characteristics by location

	Sydney	Brisbane	Dubbo
Gender			
Male	86 (53%)	70 (58%)	24 (51%)
Female	74 (46%)	51 (42%)	23 (49%)
Transgender	2 (1%)	–	–
Employment			
Employed	72 (44%)	45 (37%)	5 (10%)
Unemployed	70 (43%)	68 (56%)	33 (69%)
Student	21 (13%)	9 (7%)	10 (21%)
Imprisonment			
Ever	31 (19%)	32 (26%)	11 (24%)
Never	133 (81%)	89 (74%)	35 (76%)
D&A Treatment			
Currently	44 (27%)	20 (16%)	3 (6%)
Ever	54 (33%)	31 (25%)	7 (16%)
Never	110 (67%)	91 (75%)	38 (84%)

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For 169 participants, heroin was the drug most frequently injected, with amphetamines most often injected for 113, cocaine for 14, methadone for 3, with 33 specifying more than one drug. Drug of choice was more varied and included some non-injected drugs, with 131 preferring heroin, 47 amphetamines, 7 marijuana, 7 cocaine, 7 ecstasy, 3 alcohol, 1 benzodiazepines, 1 magic mushrooms, and 106 preferring more than one drug. The pattern of drug preferences differed by region, as Table 3.3.2 shows, with heroin more preferred and injected in Sydney and Dubbo than in Brisbane, and amphetamines somewhat more prevalent in Brisbane.

Table 3.3.2 : Drug use by location

	Sydney	Brisbane	Dubbo
Drug of choice			
Heroin	73 (45%)	29 (24%)	29 (62%)
Amphetamines	22 (14%)	21 (17%)	4 (9%)
Cocaine	7 (4%)	–	–
Methadone	–	–	–
Benzodiazepines	1 (1%)	–	–
Ecstasy	–	7 (6%)	–
Marijuana	18 (11%)	7 (6%)	3 (6%)
Alcohol	2 (1%)	–	1 (2%)
Mushrooms	–	1 (1%)	–
> 1 drug	39 (24%)	57 (47%)	10 (21%)
Drug most injected			
Heroin	94 (58%)	41 (34%)	34 (71%)
Amphetamines	33 (20%)	72 (59%)	8 (17%)
Cocaine	13 (8%)	1 (1%)	–
Methadone	4 (2%)	–	–
Benzodiazepines	–	–	–
Ecstasy	–	–	–
> 1 drug	19 (12%)	8 (7%)	6 (12%)

In relation to frequency of injecting behaviour, 107 participants injected daily or more often, 107 injected more than once a week but not everyday, 74 injected once a week or less often, 22 had not injected in the last month, while 24 varied in their frequency of injecting. Interestingly, Table 3.3.3 shows little variation in frequency of injecting by location.

Table 3.3.3 : Frequency of injecting by location

	Sydney	Brisbane	Dubbo
Daily or more often	50 (30%)	42 (34%)	15 (31%)
Weekly or more often	58 (35%)	34 (28%)	15 (31%)
Monthly or more often	38 (23%)	29 (24%)	7 (15%)
Not in last month	9 (5%)	9 (7%)	4 (8%)
Variable	9 (5%)	8 (7%)	7 (15%)

3.4 PATTERNS OF DRUG USE IN QUEER SYDNEY CLUB CULTURE

The *Space Project* conducted by the National Centre in HIV Social Research aimed to explore, using ethnographic research methods, sexual and drug use risk practices for blood borne virus transmission in the queer clubbing scene in inner Sydney. This summary focuses on risks for the transmission of hepatitis C.

The study was conducted from January to June 2000. Thirty-one participants were interviewed in-depth about the clubs and special events they attended. Nineteen of these were men and 12 women, including a range of sexual identities from gay, lesbian, straight to bisexual. Most participants were recruited through the internet, using a variation of the snowball (an 'e-ball') technique.

'Queer' was used as a short hand term to describe a clubbing scene where social, sexual and drug using networks are of mixed gender and sexuality. People from Goth, gay and lesbian, S-M and fetish subcultures went to queer clubs as did university students, greenies, artists and musicians and those interested solely in the music. These people formed what Thornton (1995) describes as a 'club culture', coming together for the purposes of dance and socialising, rather than a specific subculture based on style or sexual identity. Participants stated that in queer club spaces there was greater freedom of sexual identity, while illicit drug use was generally viewed as a leisure activity.

A number of issues relating to drug use and the transmission of hepatitis C emerged from the interviews. First, a range of drugs were used including marijuana, speed, ecstasy, cocaine, crystal meth, trips, GHB and special K. The main clubbing drugs were speed and ecstasy. When people clubbed, they used several of these drugs in combination, usually over extended periods on the weekend, sometimes followed by recovery or day clubbing. The high income bracket of many participants meant that they could often afford to give drugs away to friends and acquaintances during a big night out. This indicated a gift economy where free drugs were often readily available.

Injecting drug use appeared to be reasonably common with the networks of people who attended queer clubs. Eleven participants had a history of injecting drug use. Interestingly, twenty-six of the thirty-one knew somebody who injected in the club scene, while twelve participants were considering injecting. Interview data revealed that participants were familiar with and in close contact with the practice of injecting. As one participant stated, "I thought that [I] might try it [injecting] ... I've been planning to for three or four years."

Also flagged was the issue of piercing and blood sports. A few participants spoke of piercing sessions, where people would piece each other multiple times using needles. Others spoke of ritualised cutting sessions where friends or sexual partners would carefully cut each other using scalpels and knives. Participants spoke of the presence of blood in piercing and blood sports scenarios and of coming into contact with blood in the environment where such practices occurred.

Among those considering injecting there was manifest confusion about how hepatitis C was transmitted. While many could recite the "don't share needles" message developed for HIV/AIDS, most participants were confused about the transmission risk for hepatitis C. Most thought

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transmission risks were the same as for hepatitis A and B. Participants thought they could get hepatitis C from toilet seats, sharing cutlery and kissing people. Those who reported blood sports had little knowledge of how hepatitis C was transmitted or of blood awareness issues.

The challenge for education is in its targeting of club culture rather than subculture. Whereas subcultures usually have identifiable social mechanisms to distribute information (a press, political structures, geographic 'tribal' area), queer club culture is diffuse and fluid, comprising of people from diverse subcultural backgrounds. Reaching such dynamic networks may be best accomplished through the medium of email and the internet. Education tailored to club culture should take into account the heterogeneous nature of the networks. In particular, health promotion strategies should recognise and respond to the diffuse nature of the social settings and networks of people who occupy these settings.

4

The Current Climate

In the fifteen years since Australia first responded to HIV, several 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 antiviral 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 great 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 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. 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 optimistic 4 (strongly agree on all items).

An HIV optimism-scepticism scale was included in the *Gay Community Periodic Surveys* in Sydney and Brisbane in 1999 and 2000, in Melbourne in 2000, 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).

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.

The Current Climate

In the *2000 Male Out* data, HIV positive men were more optimistic than HIV negative men as they were in the 1999 Sydney *Periodic* dataset. Across all the relevant datasets, those who engaged in UAIC were significantly more optimistic than those who did not. The relationship between HIV optimism and UAIR was less clear-cut and achieved significance only in the *2000 Male Out* and the Sydney 1999 and Brisbane 1999 *Periodic* datasets.

Table 4.1 : Mean scores on HIV optimism scale

Source	1999		2000	
	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 (Periodic)				
HIV Optimism score (total sample)	894	1.69	1906	1.58
HIV status (p < .05—1999)				
Negative	599	1.65	1405	1.56
Positive	222	1.75	317	1.59
UAIR (p < .05—1999)				
No UAIR	589	1.66	1226	1.57
Some UAIR	305	1.74	680	1.62
UAIC (p < .001)				
No UAIC	663	1.63	1515	1.55
Some UAIC	231	1.84	391	1.72
Melbourne (Periodic)				
HIV Optimism score (total sample)			1490	1.56
HIV status				
Negative			1138	1.54
Positive			139	1.52
UAIR				
No UAIR			990	1.55
Some UAIR			500	1.59
UAIC (p < .001)				
No UAIC			1240	1.53
Some UAIC			250	1.70
Brisbane (Periodic)				
HIV Optimism score (total sample)	1164	1.62	1173	1.56
HIV status				
Negative	902	1.61	908	1.52
Positive	99	1.57	80	1.61
UAIR (p < .001—1999)				
No UAIR	814	1.58	762	1.55
Some UAIR	350	1.70	411	1.58
UAIC (p < .001)				
No UAIC	994	1.58	954	1.53
Some UAIC	170	1.80	219	1.70

Note : Scale developed in 1999. Six-item short form of scale used in Sydney, Melbourne and Brisbane (*Periodic Surveys*) in 2000 and three-item short form of scale used in the *2000 Male Out Survey*.

4.2 GAY MEN'S HIV RISK REDUCTION STRATEGIES BASED ON MODALITY OF ANAL INTERCOURSE AND WITHDRAWAL

Prompted by findings of Rosengarten and colleagues (Rosengarten et al., 2000), data from the Sydney *Gay Community Periodic Surveys* over the five-year period to August 2000 ($n = 14165$) were examined (Van de Ven et al., under review). The focus was on patterns of risk taking and risk management, among men in serodiscordant regular relationships and in casual partnerships. The analyses were aimed at uncovering patterns in unprotected anal intercourse which might provide additional evidence of risk reduction strategies adopted by gay men.

Among men who had unprotected anal intercourse which involved ejaculation inside with a serodiscordant regular partner, there was a clear pattern of strategic positioning based on serostatus (see Table 4.2.1). Few couples reciprocated i.e. were both receptive and insertive. Most HIV positive men were receptive and most HIV negative men were insertive.

Table 4.2.1 : Unprotected anal intercourse which included ejaculation inside between men in serodiscordant regular relationships by serostatus (n = 146)

	HIV positive (n = 71)		HIV negative (n = 75)	
	n	%	n	%
Both receptive and insertive	15	21.1	16	21.3
Receptive only	49	69.0	7	9.3
Insertive only	7	9.9	52	69.3

Some men practised consistent withdrawal (rather than sometimes ejaculation inside) during unprotected anal intercourse with a serodiscordant regular partner. Among these men there was a less clear-cut pattern of strategic positioning as one might expect for this lower risk practice. More of these men (than their counterparts who included ejaculation inside in their repertoire) reciprocated. Nevertheless, among the remainder, there was a pattern toward HIV positive/receptive and HIV negative/insertive behaviour (see Table 4.2.2).

Table 4.2.2 : Unprotected anal intercourse, involving consistent withdrawal, between men in serodiscordant regular relationships by serostatus (n = 104)

	HIV positive (n = 61)		HIV negative (n = 43)	
	n	%	n	%
Both receptive and insertive	27	44.3	16	37.2
Receptive only	19	31.1	9	20.9
Insertive only	15	24.6	18	41.9

The Current Climate

Among those men who had unprotected anal intercourse which involved ejaculation inside with casual partners, there was a pattern of strategic positioning (see Table 4.2.3). Many couples reciprocated, i.e. were both receptive and insertive, especially HIV positive men. Among the remainder, HIV positive men tended to be receptive and HIV negative men tended to be insertive.

Table 4.2.3 : Unprotected anal intercourse which included ejaculation inside between men in casual partnerships by serostatus (n = 1171)

	HIV positive (n = 491)		HIV negative (n = 680)	
	n	%	n	%
Both receptive and insertive	250	50.9	249	36.6
Receptive only	159	32.4	129	19.0
Insertive only	82	16.7	302	44.4

Some men practised consistent withdrawal (rather than sometimes ejaculation inside) during unprotected anal intercourse with casual partners. Among these men, there was a less clear-cut pattern of strategic positioning. As shown in Table 4.2.4, HIV positive men tended to reciprocate, as did HIV negative men to a lesser extent. Among the remainder, HIV positive men adopted receptive and insertive positions with almost the same frequency whereas HIV negative men were more likely to be exclusively insertive.

Table 4.2.4 : Unprotected anal intercourse, involving consistent withdrawal, between men in casual partnerships by serostatus (n = 1139)

	HIV positive (n = 375)		HIV negative (n = 764)	
	n	%	n	%
Both receptive and insertive	177	47.2	305	39.9
Receptive only	104	27.7	125	16.4
Insertive only	94	25.1	334	43.7

References

- 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.
- 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.
- 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(2), 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.
- 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 Future 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.
- Gulich, 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.

References

- 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(6), 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(2), 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(2), 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.
- National Centre in HIV Epidemiology and Clinical Research. (2001). *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.
- 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.
- 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.
- Richters, J., Bergin, S., French, J., Lubowitz, S. & Prestage, G. (1999). *Women in Contact with Gay and Lesbian Community: Sydney Women and Sexual Health Survey 1996 and 1998*. Sydney: National Centre in HIV Social Research, The University of New South Wales.

References

- 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(6), 643-649.
- Rosengarten, M., Race, K. & Kippax, S. (2000). *"Touch Wood, Everything Will Be OK": Gay Men's Understandings of Clinical Markers in Sexual Practice*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- 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.
- Thornton, S. (1995). *Club Cultures*. Cambridge: Polity Press.
- 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 some gay men's sexual risk 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., 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.

References

- 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.
- 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., Rawstone, P., Crawford, J. & Kippax, S. (2001). *Facts & Figures: 2000 Male Out Survey*. Monograph 2/2001. 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.
- Van de Ven, P., Youdell, D., Smith, A., Mistler, G. & Pan, Y. (2001). *Hepatitis and Health: A Survey of High School Students in New South Wales*. Sydney: National Centre in HIV Social Research, The University of New South Wales.
- Williams, P. (2001). *Illicit Drug Use in Regional Australia: No. 192*. Canberra: Australian Institute of Criminology.

