

HIV/AIDS and Related Diseases in Australia Annual Report of Behaviour 1999

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HIV/AIDS & Related Diseases in Australia Annual Report of Behaviour



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HIV/AIDS and Related Diseases in Australia

Annual Report of Behaviour 1999

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



National Centre in HIV Social Research

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PREFACE

This report is the first in a planned 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. In the future, data relevant to the related diseases—other sexually transmissible infections and hepatitis C—may also be available.

Unless stated otherwise, all data provided in the report are from 1995-1998.¹ 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). This report brings together information for the period 1995 to the end of 1998 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—that is, information that became available after that reported in the Feachem evaluation.

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

The report is published as a companion to the *Annual Surveillance Report* (National Centre in HIV Epidemiology and Clinical Research [NCHECR], 1999). Some of its tables provide data that overlap with or duplicate those in the NCHECR report. In particular, Tables 1.1.4, 1.1.5, 1.2.1, 2.2, 3.1.2 and 4.2 are derived from the same data as those provided by the NCHSR for inclusion in the NCHECR's *Annual Surveillance 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 La Trobe University, both at the Centre for the Study of Sexually Transmissible Diseases and at the National Centre in HIV Social Research, La Trobe University, now the Australian Research Centre in Sex, Health and Society (ARCSHS).

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.

¹ Much of the information in this report was included in a report provided to the Australian National Council on AIDS and Related Diseases (ANCARD) by the NCHSR at the end of 1998. Since 1996 the NCHSR with funding from the New South Wales Health Department has published six-monthly reports giving data on practices relevant to the transmission of HIV among homosexually active men in New South Wales. Information from these six-monthly reports was converted into annualised information for the purposes of the ANCARD report, and is included in this report.

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

AIDS Action Council of the ACT

AIDS Council of Central Australia

AIDS Council of New South Wales

AIDS Council of South Australia

Australian Federation of AIDS Organisations

Australian National Council on AIDS and Related Diseases

Australian Research Centre in Sex, Health and Society

Commonwealth Department of Health and Aged Care

Department of Human Services, South Australia

Health Department of Western Australia

National Association of People Living with HIV/AIDS

National Centre in HIV Epidemiology and Clinical Research

New South Wales Health Department

New South Wales Users and AIDS Association

Northern Territory AIDS Council

People Living With HIV/AIDS (NSW)

People Living With HIV/AIDS (Victoria)

Queensland AIDS Council

Queensland Health Department

Queensland Intravenous AIDS Association

Queensland Positive People

Tasmanian Council on AIDS and Related Diseases

Victorian AIDS Council/Gay Men's Health Centre

Victorian Department of Human Services

Western Australian AIDS Council

Management and staff of venues and sexual health/medical centres across the country

Many thousands of participants in the research projects

SUMMARY

This report brings together information for the period 1995 to the end of 1998 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 is organised around a number of themes or topics, namely:

1. **Sustaining safe sex behaviour**
2. **Living with HIV**
3. **Drug-related behaviour**
4. **The changing epidemic**

With regard to **sustaining safe sex behaviour**, 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; young tertiary and secondary students; and special groups such as same-sex attracted young people and women who associate with gay men.

Since the mid 1980s there has been a decrease in the practices which risk transmission of HIV and an increase in protective behaviour, particularly condom use, among homosexually active men and young people. These changes happened quite early (that is, by the middle to late 1980s) and appear to have been sustained. There is little evidence of anything other than stability in these practices from the early 1990s to around 1995 (Feachem, 1995). During the period 1995 to 1998, safe sex appears largely to have been sustained.

However as indicated by data detailed in this report, there are signs of small but significant increases in unprotected anal intercourse among homosexually active men since 1996 in some states. The increases in unprotected anal intercourse which have occurred among men in regular relationships are in general of the order of 3%, for example from around 28% to 31% in Sydney. 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 are however, signs of an increase among men in Sydney from around 14% in 1996 to 18% in 1998. HIV-positive men are 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 to uninfected persons as it occurs between HIV-positive partners.

As noted in the **living with HIV** section, retrospective accounts of homosexually active men who have recently seroconverted indicate that about half of the recent seroconversions among homosexually active men in Sydney occurred within regular relationships. The common reasons

given by men for their seroconversion were couched in terms of love and intimacy, as well as breakdowns in trust and communication. The remaining 50% of men attribute their infection to casual encounters that most explain in terms of a 'loss of control' often associated with desire, drugs and alcohol.

Information in this section is also provided relating to the uptake of therapies and other treatment-related issues. Positive homosexually active men in Sydney and Melbourne 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.

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.

Up until the end of 1998, the National Centre in HIV Social Research had obtained some data on **drug-related behaviour**, especially recreational drug use among homosexually active men, secondary students, TAFE students and same-sex attracted young people. The data indicate high levels of drug use, particularly among men who are attached to gay community, with close to 70% reporting the use of at least one non-prescription drug in the six months prior to interview. 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.

More than fifteen years have now elapsed since Australia first responded to HIV. During this time, it has been necessary to respond to **the changing epidemic**. In general, the 'safe sex culture' has been sustained 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 used 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 June 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 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. There is little in the data that speaks to 'complacency' or to 'safe sex fatigue'. However, there has been a small but significant decrease in the level of testing among young gay men and as detailed in section 1 of the report, small though uneven increases in unprotected anal intercourse.

Given the reported increases in unsafe sexual and other risk practices outside Australia, it is important to maintain a close watch on risk practices and renew prevention efforts.

FINDINGS

The following findings are organised according to the four themes listed above.

1. SUSTAINING SAFE SEX BEHAVIOUR

During the period covered by this report (1995 to 1998) much of the work of the NCHSR was concerned with monitoring 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. The theme which provides most detailed information is that of sustaining safe sex behaviour. 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 state-based data. In the Male Call 96 study (Crawford et al., 1998) as 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 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. These two groups differed significantly with respect to many of the indicators included in this report, and hence Male Call 96 data are given for each group separately. In general, data from state-based studies such as the 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, and where 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 have appeared on a six-monthly basis in the Surveillance Reports published by the National Centre in HIV Social Research in association with the New South Wales Department of Health and the AIDS Council of New South Wales since June, 1996 (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). 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), South East Queensland in June, 1998 (Van de Ven et al., 1998b), Perth in October, 1998 (Van de Ven et al., 1999a), and Adelaide in November, 1998 (Van de Ven et al., 1999b). Surveys based on the SMASH study questionnaire were carried out in Melbourne (MMASH, 1996) and in Brisbane and regions (BRASH, 1996) (Prestage et al., 1997).

It is only for Sydney that information can be provided for more than one data point, that is on a year-by-year basis, through SMASH and periodic survey data. Data for gay community attached men and non gay community attached men in the Male Call 96 survey (October-December 1996) (Crawford et al., 1998) 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* (Ezzy et al., 1998).

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 1.1.7 show the percentages of men who engaged in the above practices over the period 1995 to 1998. 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 the SMASH project was terminated in mid 1998. Male Call 96 provides baseline data for 1996 which can be used to examine change between 1996 and 1998 for those cities where periodic surveys were carried out in 1998.

The information in these tables suggests that there has been no dramatic change in these indicators over the period from 1995 to 1998.

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.

The gay community samples (from both Male Call 96 and from the other studies) 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; around 75% report sex with a casual partner; and around 40% report sex with both regular and casual partners. There is no suggestion that these figures are changing over time.

There is considerable variation from these figures when examining men who were not attached to gay community in the Male Call 96 study. Non gay community attached men (NGCA) are much less likely than those attached to gay community to report sex with a regular partner (or partners). The two groups of men have very similar rates of sex with casual partners. It is clear from the Male Call 96 data that the majority of men who have sex with men and who are not attached to gay community are engaging in male-to-male sex only with casual partners.

There is some variation from place to place regarding the percentage who reported engaging in sex with a casual partner. Perth and Adelaide periodic surveys had the lowest percentages and South Eastern Queensland (the BRASH study) the highest.²

² The figure for the Sydney periodic survey in 1996 is also high due to the fact that the way questions were asked in this survey resulted in sometimes inconsistent data. The questionnaire was subsequently changed.

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

Source	1995		1996		1997		1998	
(a) Men with regular partner/s	N	%	N	%	N	%	N	%
Australia (Male Call 96)								
GCA			2253	62.5				
NGCA			786	32.1				
Sydney								
SMASH	746	61.0	699	60.5	625	61.9	393	63.9
Periodic			2238	69.5	2630	62.0	3037	61.3
GCA (Male Call 96)			513	56.9				
NGCA (Male Call 96)			138	36.2				
Melbourne								
MMASH			406	62.8				
Periodic							1891	64.3
GCA (Male Call 96)			395	65.8				
NGCA (Male Call 96)			88	36.4				
Southern Queensland								
BRASH			299	50.5				
Periodic							1341	61.6
GCA (Male Call 96)			204	66.7				
NGCA (Male Call 96)			53	34.0				
Perth								
Periodic							846	62.3
GCA (Male Call 96)			198	62.6				
NGCA (Male Call 96)			84	21.4				
Adelaide								
Periodic							552	65.4
GCA (Male Call 96)			187	62.0				
NGCA (Male Call 96)			69	26.1				
(b) Men with casual partner/s								
Australia (Male Call 96)								
GCA			2253	75.7				
NGCA			786	74.3				
Sydney								
SMASH	746	76.8	699	77.4	625	74.1	393	76.0
Periodic			2238	82.6	2630	73.5	3037	75.3
GCA (Male Call 96)			513	81.9				
NGCA (Male Call 96)			138	77.5				
Melbourne								
MMASH			406	77.3				
Periodic							1891	72.0
GCA (Male Call 96)			395	74.7				
NGCA (Male Call 96)			88	75.0				

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

Source	1995		1996		1997		1998	
(b) Men with casual partner/s								
Southern Queensland								
BRASH			299	83.6				
Periodic							1341	71.7
GCA (Male Call 96)			204	66.7				
NGCA (Male Call 96)			53	73.6				
Perth								
Periodic							846	65.1
GCA (Male Call 96)			198	76.8				
NGCA (Male Call 96)			84	81.0				
Adelaide								
Periodic							552	60.5
GCA (Male Call 96)			187	74.3				
NGCA (Male Call 96)			69	75.4				
(c) Men with both regular and casual partner/s								
Australia (Male Call 96)								
GCA			2253	41.3				
NGCA			786	16.0				
Sydney								
SMASH	746	42.0	699	43.2	625	41.7	393	44.9
Periodic			2238	57.0	2630	42.1	3037	42.6
GCA (Male Call 96)			513	41.1				
NGCA (Male Call 96)			138	22.5				
Melbourne								
MMASH			406	41.9				
Periodic							1891	42.0
GCA (Male Call 96)			395	43.3				
NGCA (Male Call 96)			88	20.5				
Southern Queensland								
BRASH			299	37.1				
Periodic							1341	42.7
GCA (Male Call 96)			204	38.2				
NGCA (Male Call 96)			53	11.3				
Perth								
Periodic							846	40.0
GCA (Male Call 96)			198	44.9				
NGCA (Male Call 96)			84	9.5				
Adelaide								
Periodic							552	36.1
GCA (Male Call 96)			187	40.1				
NGCA (Male Call 96)			69	11.6				

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 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.

This indicator appears to be fairly stable for the period 1995 to 1998. Generally, around 83% of gay community attached homosexually active men engaged in any anal intercourse during the six months prior to interview. In *Male Call 96* (Crawford et al., 1998) it was reported that there had been an increase from 69.0% in 1992 to 79.7% in 1996 in the percentage of men engaging in anal intercourse. For gay community attached men in the Male Call studies, this increase was from 73.4% to 83.8%. In the SMASH study, levels were slightly lower than for the gay community attached men in Male Call 96, and these levels were stable over time.

Table 1.1.2: Men engaging in any anal intercourse, 1995-1998

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia (Male Call 96)								
GCA			2253	83.8				
NGCA			786	68.1				
Sydney								
SMASH	746	78.4	699	76.0	624	78.7	393	78.6
Periodic			2238	82.5	2630	82.4	3037	83.5
GCA (Male Call 96)			513	83.0				
NGCA (Male Call 96)			138	71.0				
Melbourne								
MMASH			406	82.5				
Periodic							1891	79.5
GCA (Male Call 96)			395	86.3				
NGCA (Male Call 96)			88	63.6				
Southern Queensland¹								
BRASH			299	81.9				
Periodic							1341	77.4
GCA (Male Call 96)			204	84.8				
NGCA (Male Call 96)			53	67.9				
Perth								
Periodic							846	70.7
GCA (Male Call 96)			198	74.2				
NGCA (Male Call 96)			84	63.1				
Adelaide								
Periodic							552	75.0
GCA (Male Call 96)			187	79.7				
NGCA (Male Call 96)			69	71.0				

¹ BRASH and South-Eastern Queensland periodic surveys covered Brisbane and the Sunshine Coast and Gold Coast of South-Eastern Queensland.

1.1.3 Percentage engaging in any unprotected anal intercourse

The following table 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 1995 to 1998. This indicator varied considerably from sample to sample and to some extent over time. Some of this variation reflects the difference between samples with respect to sex with regular partners as shown in Table 1.1.1(a) above. There was no consistent tendency for this indicator to increase or decrease over the observation period.

From the Male Call 96 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. This is largely a reflection of the lower percentage of NGCA men who had sex with regular partners as shown in Table 1.1.1a above. In general, as seen in Tables 1.1.4 and 1.1.5 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, 1995-1998

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Australia (Male Call 96)								
GCA			2253	41.5				
NGCA			786	26.1				
Sydney								
SMASH	746	40.2	699	40.4	625	45.1	393	42.4
Periodic			2238	35.0	2630	39.8	3037	41.7
GCA (Male Call 96)			513	38.0				
NGCA (Male Call 96)			138	21.0				
Melbourne								
MMASH			406	43.1				
Periodic							1891	36.8
GCA (Male Call 96)			395	43.5				
NGCA (Male Call 96)			88	18.2				
Southern Queensland								
BRASH			299	41.5				
Periodic							1341	38.3
GCA (Male Call 96)			204	47.1				
NGCA (Male Call 96)			53	26.4				

Table 1.1.3: Men engaging in unprotected anal intercourse, 1995-1998 (Continued)

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Perth								
<i>Periodic</i>							846	36.1
GCA (<i>Male Call 96</i>)			198	28.8				
NGCA (<i>Male Call 96</i>)			84	21.4				
Adelaide								
<i>Periodic</i>							552	41.7
GCA (<i>Male Call 96</i>)			187	41.2				
NGCA (<i>Male Call 96</i>)			69	29.0				

1.1.4 Percentage engaging in unprotected anal intercourse with casual partners

The following table 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 1995 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. Data from other sources provide evidence of similar levels of unprotected anal intercourse with casual partners. Male Call 96 gave a figure of 15.3% for the whole Australian sample, and subsamples of gay community attached men varied little from this overall figure. There is a small (but statistically significant) increase from 14.0% to 18.2% in the Sydney Periodic Surveys.³ It was also found as reported in the Male Call 96 Report (Crawford et al., 1998) that this indicator had increased significantly from 11.5% in 1992 to 15.3% in 1996.

Values of this indicator from periodic surveys in Melbourne, South-East Queensland and Perth taken in 1998 on the whole differed little from the values for these areas found in Male Call 96. In the case of Perth, there is a slight (but non-significant) increase from 8.6% in the gay community attached sample from Male Call in 1996 to 11.8% from the periodic survey in 1998.

³ More detailed analyses of these data pinpoint that the increase was not significant for three consecutive Fair Day samples, but was specific to men recruited from clinics and venues.

Table 1.1.4: Men engaging in unprotected anal intercourse with casual partners

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Australia (<i>Male Call 96</i>)								
GCA			2253	15.0				
NGCA			786	16.2				
Sydney								
<i>SMASH</i>	746	13.8	699	12.3	625	15.0	393	14.8
<i>Periodic</i>			2238	14.0	2630	18.3	3037	18.2
GCA (<i>Male Call 96</i>)			513	15.6				
NGCA (<i>Male Call 96</i>)			138	11.6				
Melbourne								
<i>MMASH</i>			406	15.0				
<i>Periodic</i>							1891	13.4
GCA (<i>Male Call 96</i>)			395	15.7				
NGCA (<i>Male Call 96</i>)			88	9.1				
Southern Queensland								
<i>BRASH</i>			299	19.1				
<i>Periodic</i>							1341	14.0
GCA (<i>Male Call 96</i>)			204	15.2				
NGCA (<i>Male Call 96</i>)			53	17.0				
Perth								
<i>Periodic</i>							846	11.8
GCA (<i>Male Call 96</i>)			198	8.6				
NGCA (<i>Male Call 96</i>)			84	17.9				
Adelaide								
<i>Periodic</i>							552	14.1
GCA (<i>Male Call 96</i>)			187	15.5				
NGCA (<i>Male Call 96</i>)			69	18.8				

1.1.5 Percentage engaging in unprotected anal intercourse with regular partners

The following table 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 survey for the years 1995 to 1998⁴.

⁴ The different samples that provided data for this indicator varied in terms of the percentage of men in the samples who reported sex with regular partners. The reliability of the information regarding sex with regular partners also varied. For data from the SMASH, MMASH and BRASH studies, and from *Male Call 96*, are more reliable since interviews were conducted either face-to-face or by telephone. Periodic survey data are less reliable since they come from self-complete questionnaires where inconsistencies cannot be questioned and remedied at the time.

There is a suggestion from the Sydney data (both SMASH and Sydney periodic surveys) that values for this indicator increased between 1995 and 1998. In the case of the Sydney periodic surveys this increase is statistically significant.

Data from other areas of Australia did not show a consistent pattern of either increase or decrease. The Queensland samples showed great variation in values for this indicator—35.8% for the gay community attached men in Brisbane from Male Call 96, 26.4% for men in the BRASH study undertaken at much the same time, and 30.6% for men in the South-East Queensland periodic survey in 1998.

Table 1.1.5: Men engaging in unprotected anal intercourse with regular partners

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Australia (Male Call 96)								
GCA			2253	30.8				
NGCA			786	12.3				
Sydney								
SMASH	746	30.0	699	30.5	625	33.7	393	33.6
Periodic			2238	27.9	2630	33.3	3037	30.4
GCA (Male Call 96)			513	26.3				
NGCA (Male Call 96)			138	15.2				
Melbourne								
MMASH			406	32.8				
Periodic							1891	29.1
GCA (Male Call 96)			395	31.1				
NGCA (Male Call 96)			88	10.2				
Southern Queensland								
BRASH			299	26.4				
Periodic							1341	30.6
GCA (Male Call 96)			204	35.8				
NGCA (Male Call 96)			53	11.3				
Perth								
Periodic							846	30.0
GCA (Male Call 96)			198	22.2				
NGCA (Male Call 96)			84	4.8				
Adelaide								
Periodic							552	34.4
GCA (Male Call 96)			187	29.9				
NGCA (Male Call 96)			69	11.6				

1.1.6. Percentage engaging in anal intercourse with casual partners by serostatus

This table 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 1995 to 1998. 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 1.1.9 addresses the related issue of agreements reached between regular partners regarding protection for anal intercourse within and outside the relationship.

Table 1.1.6: Men engaging in unprotected anal sex with casual partner by serostatus¹

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia (HIV Futures, i.e. positive men)					834	23.4		
Australia (Male Call 96)								
Positive			152	25.7				
Negative			2209	13.7				
Sydney								
SMASH								
Positive	143	29.4	135	21.5	117	24.8	74	27.0
Negative	536	10.1	507	10.8	464	12.9	306	12.1
Periodic								
Positive			391	26.1	566	32.0	613	31.5
Negative			1531	11.4	1777	14.5	2041	14.9
Melbourne								
MMASH								
Positive			42	31.0				
Negative			323	14.9				
Periodic								
Positive							160	28.1
Negative							1413	11.5

Table 1.1.6: Men engaging in unprotected anal sex with casual partner by serostatus (Continued)

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Southern Queensland								
<i>BRASH</i>								
Positive			36	19.4				
Negative			223	13.9				
<i>Periodic</i>								
Positive							113	23.0
Negative							1021	12.6
Perth								
<i>Periodic</i>								
Positive							45	24.4
Negative							662	10.7
Adelaide								
<i>Periodic</i>								
Positive							34	35.3
Negative							420	12.9

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 beyond the 0.01 level except for the BRASH survey data, where the level of significance is 0.05.

1.1.7 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 1.1.7 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.

Table 1.1.7: Mean of esoteric practices, 1995-1998¹

Source	1995 N	Mean	1996 N	Mean	1997 N	Mean	1998 N	Mean
Australia (Male Call 96)								
Any unprotected anal intercourse			1141	2.21				
No unprotected anal intercourse			1898	1.47				
Sydney								
SMASH								
Any unprotected anal intercourse	300	2.13	283	2.02	282	2.10	172	2.46
No unprotected anal intercourse	446	1.23	416	1.26	343	1.33	221	1.34
Male Call 96								
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 96								
Any unprotected anal intercourse			188	2.20				
No unprotected anal intercourse			295	1.60				
Southern Queensland								
BRASH								
Any unprotected anal intercourse			124	1.52				
No unprotected anal intercourse			175	1.14				
Male Call 96								
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.

1.1.8 Testing for HIV among homosexually active men

Table 1.1.8 shows that, among homosexually active men who are socially attached to gay community (GCA) a very large percentage, around 85% of those in each sample, have been tested for HIV. The only data for non gay community attached men (NGCA) come from Male Call 1996 which show that in the national sample, only 57.6% of such men had been tested. Data from SMASH are not included in this table as it is a cohort study. In general, with the exception of the Sydney periodic surveys, there appears to be a consistent slight decrease over time in the percentage of men tested, although differences are small.

Further information regarding recency of testing and testing among young men is provided in section 4 (The changing epidemic) below.

Table 1.1.8: Percentage of men who had ever been tested for HIV

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia (Male Call 96)								
GCA			2253	84.3				
NGCA			786	57.6				
Sydney								
<i>Periodic</i>			2238	86.1	2630	88.9	3037	87.9
GCA (Male Call 96)			513	88.7				
NGCA (Male Call 96)			138	58.7				
Melbourne								
<i>MMASH</i>			406	91.1				
<i>Periodic</i>							1891	83.0
GCA (Male Call 96)			395	87.3				
NGCA (Male Call 96)			88	55.7				
Southern Queensland								
<i>BRASH</i>			299	90.0				
<i>Periodic</i>							1341	84.9
GCA (Male Call 96)			204	87.7				
NGCA (Male Call 96)			53	55.1				
Perth								
<i>Periodic</i>							846	82.9
GCA (Male Call 96)			198	84.8				
NGCA (Male Call 96)			84	47.6				
Adelaide								
<i>Periodic</i>							552	84.6
GCA (Male Call 96)			187	87.7				
NGCA (Male Call 96)			69	55.1				

1.1.9 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 1.1.9 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' (Kippax et al., 1993; Kippax, Noble, Prestage et al., 1997; Van de Ven et al., 1999). Findings from this research show that a very high proportion of men keep their agreements.

Only men with regular partners were included in Table 1.1.9. 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.

Data from 1998 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 Sydney periodic surveys that this percentage may be increasing but so far this result is not statistically significant. 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. 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 1.1.9: Men with regular partners with 'safe sex agreements' by seroconcordance¹

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Australia (Male Call)								
Seroconcordant			1061	70.7				
Non concordant			457	33.3				
Sydney								
<i>SMASH</i>								
Seroconcordant	288	76.5	274	79.9	263	79.8	167	86.2
Non concordant	93	35.5	93	47.3	93	45.2	68	45.6
<i>Periodic</i>								
Seroconcordant			677	69.3	815	69.6	847	72.6
Non concordant			415	39.5	421	39.2	534	38.6
<i>Male Call</i>								
Seroconcordant			223	69.5				
Non concordant			89	30.3				
Melbourne								
<i>MMASH</i>								
Seroconcordant			148	80.4				
Non concordant			49	42.9				
<i>Periodic</i>								
Seroconcordant							545	72.8
Non concordant							351	30.5
<i>Male Call</i>								
Seroconcordant			202	70.8				
Non concordant			65	24.6				
Brisbane								
<i>BRASH</i>								
Seroconcordant			88	76.1				
Non concordant			33	42.4				
<i>Periodic</i>								
Seroconcordant							395	75.2
Non concordant							228	28.1
<i>Male Call</i>								
Seroconcordant			102	78.4				
Non concordant			40	42.5				

Table 1.1.9: Men with regular partners with 'safe sex agreements' by seroconcordance (Cont'd)

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Perth								
<i>Periodic</i>								
Seroconcordant							224	71.9
Non concordant							134	33.6
<i>Male Call</i>								
Seroconcordant			84	70.2				
Non concordant			52	40.4				
Adelaide								
<i>Periodic</i>								
Seroconcordant							171	67.8
Non concordant							83	27.7
<i>Male Call</i>								
Seroconcordant			75	65.3				
Non concordant			43	41.9				

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

1.2 Young heterosexual people

A limited amount of information is available about young heterosexual people during the period covered by this report. The only data available on an annual basis come from the annual surveys of students in a course at Macquarie University carried out by the NCHSR. Data have been collected since 1988 and have been reported in previous Annual Surveillance Reports (National Centre in HIV Epidemiology and Clinical Research). Data for the period up to 1995 were published earlier (Rodden, Crawford, Kippax et al., 1996; Crawford, Turtle & Kippax, 1990). Data on secondary school students were collected in 1992 and 1997 (Smith et al., 1995; Lindsay et al., 1998).

1.2.1 Sexual behaviour and condom availability of first year university students

Table 1.2.1 contains data from Table 7.2.1 of the *Annual Surveillance Report* (National Centre in HIV Epidemiology and Clinical Research, 1999) for the period 1995 to 1998 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 5-6% of students reported any unprotected intercourse.

There appears to have been an increase in the percentage of men reporting that condoms are available—from 59% in 1995 to 65% in 1998, and for women a decrease from 49% to 41%. These results need to be seen in the context of the whole period from 1988 to 1998 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 *Annual Surveillance Report*, NCHECR, 1999 and Rodden et al., 1996).

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

	1995 N=297	1996 N=377	1997 N=381	1998 N=336
Male	57	97	85	92
Female	240	280	296	244
Number of partners, ever	%	%	%	%
0	49.8	44.9	39.3	45.2
1	27.1	24.9	26.7	23.5
2-4	16.5	21.4	27.5	26.5
>4	6.5	8.8	6.4	4.8
Ready access to condoms ²				
Male	59.3	52.6	56.0	65.4
Female	49.4	42.2	30.3	40.6
Condom use with regular partner in the last month				
Never	13.7	12.8	14.9	10.4
Sometimes	4.5	4.4	4.6	5.4
Most times	5.2	4.7	6.2	5.1
Every time	8.2	10.0	18.6	13.4
No partner or no intercourse	68.4	68.1	55.7	65.8
Condom use with casual partner in the last 6 months				
Never	3.1	1.9	2.4	1.2
Sometimes	1.0	1.1	0.8	1.2
Most times	1.7	2.8	1.3	3.9
Every time	7.5	11.3	9.4	8.9
No partner or no intercourse	86.6	82.9	86.1	84.8
Sexual practice, ever				
<i>Vaginal sex</i>	43.4	50.4	56.7	49.1
Regular partner	39.5	47.4	54.2	46.5
Casual partner	16.3	23.4	21.0	14.3
<i>Anal sex</i>	4.5	3.0	7.6	5.7
Regular partner	4.0	2.6	6.1	4.8
Casual partner	1.1	0.3	1.8	1.8
Any form of sex (oral, vaginal anal)	57.6	60.6	66.4	57.4

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 Sexual behaviour and condom availability reported by secondary students in Australia 1992 and 1997

Although not falling within the period covered by this report, this section provides data from the 1992 national survey of secondary students in order to allow comparison with 1997 data. For this reason, the label 1992 on the column in the following table is given in brackets. The percentage of students reporting different kinds of sexual experience had changed very little in 1997 compared with 1992. (Table 1.2.2). On the other hand, the 1997 survey suggested that of those who had ever had sex, there was a decrease in the percentage who reported three or more partners in the previous year and an increase (over 10%) in the percentage who reported that they used condoms 'always' (Table 1.2.2) (Rosenthal et al., 1998).

The 1997 survey of secondary students, compared with the 1992 survey, (Lindsay et al., 1998) found an increase in the percentage of female year 10 and year 12 students who reported having a condom available on the last occasion they had sex and using a condom on that occasion. (Table 1.2.2). This increase did not appear to have taken place among male students.

Table 1.2.2: Sexual behaviour and condom availability reported by secondary students in Australia 1992 and 1997

	(1992) N=1741		1997 N=3550	
		%		%
Sexual experience				
Kissing passionately on the mouth		80.2		82.2
Sexual touching		68.9		69.4
Sex without a condom		22.1		18.3
Sex with a condom		30.4		31.2
Ever had sex		64.9		66.3
Sexual practices in the previous year¹				
No sex in past year		7.0		6.4
1 person		52.7		57.3
2 people		18.2		20.5
3 or more		22.1		15.8
Condom use in the previous year¹				
Always		42.9		53.5
Sometimes		42.4		37.3
Never		14.7		9.2
Condoms available on the last occasion they had sex²	n		n	
Male Year 10 students	106	80.3	191	82.7
Female Year 10 students	104	70.1	160	81.9
Male Year 12 students	172	73.6	357	72.8
Female year 12 students	224	61.2	485	66.9

Table 1.2.2: Sexual behaviour and condom availability reported by secondary students in Australia 1992 and 1997 (Continued)

	(1992) N=1741		1997 N=3550	
	n	%	n	%
Condoms used on the last occasion they had sex²				
Male Year 10 students	106	75.8	191	82.4
Female Year 10 students	104	55.9	160	74.6
Male Year 12 students	172	69.9	357	71.1
Female year 12 students	224	48.0	485	57.9

¹ Percentages based on those with sexual experience. N=606 in 1992 and 1193 in 1997

² In this portion of the table, the sexually experienced students have been divided into male and female year 10 and year 12 students. The four subsamples (in the columns labelled 'N') add up to 606 for 1992 and 1193 for 1997.

1.3 Special groups

1.3.1 Same-sex attracted secondary school students compared with opposite-sex attracted secondary school students (1997)

Data from the secondary students survey were analysed by Smith et al (in press) to examine sexual behaviour, drug injection and binge drinking among same-sex attracted young people compared with opposite-sex attracted young people. Among year 10 students, 5.3% of both male and female students were same-sex attracted. Among year 12 students, 5.4% of male students and 8.4% of female students were same-sex attracted.

Same-sex attracted young people were more likely to have engaged in a range of practices, both sexual and drug using practices, which may place them at risk for HIV infection. Note, however, that rates of injecting drug use and of unprotected sexual intercourse are not high in either group. Male students who were same-sex attracted were also much more likely than opposite-sex attracted male students to report having been diagnosed with a sexually transmissible infection and both hepatitis A and hepatitis B. (Table 1.3.1). This was not true for same-sex attracted female students.

Table 1.3.1: Same-sex attracted secondary school students compared with opposite-sex attracted secondary school students (1997)

	Male same sex attracted N=74	Male opposite sex attracted N=1347	Female same sex attracted N=126	Female opposite sex attracted N=1703
Sexual experience¹	%	%	%	%
Kissing passionately on the mouth	83.3	82.3	88.7	82.3
Sexual touching	71.2	71.2	82.1	67.6
Sex without a condom	44.8	15.9	28.2	19.8
Sex with a condom	41.6	31.5	41.3	31.0
Number of sexual partners in the past year ^{1,2}				
1	40.5	57.5	51.8	66.1
2	35.1	23.2	27.6	20.6
3 or more	24.4	19.3	20.5	13.3
Condom use in past year ^{1,2}				
Never	6.7	5.1	9.7	5.6
Sometimes	46.6	31.3	50.8	45.7
Always	46.7	63.6	39.5	48.7
Possible risk ¹				
Had unwanted sex because too drunk or high	38.2	21.1	41.5	25.9
Not used condom because too drunk or high	26.2	17.5	35.0	21.2
Ever diagnosed with STD	23.4	2.3	12.7	3.2
Ever diagnosed with hepatitis A	10.4	0.9	-	-
Ever diagnosed with hepatitis B	6.8	0.7	-	-

¹ Smith, A.M.A., Rosenthal, D., and Lindsay, J. unpublished

² Percentages of those with sexual experience

1.3.2 Same-sex attracted young people: sexual behaviour

Information is available regarding sexual and other practices from a national survey of same-sex attracted young people (aged 14 to 21 years) carried out in 1997 by researchers at La Trobe University (Hillier et al., 1998). Table 1.3.2 shows the proportion of same-sex attracted young people who engaged in a number of sexual practices with same-sex and opposite-sex partners.

In the lower section of this table, those with sexual experience have been divided into: bisexually active young people, where information is available on protection with both same-sex and opposite-sex partners; homosexually active young people where information is provided on use of dental dams for female-to-female sex and use of condoms for male-to-male sex; and heterosexually active young people where information is available on use of condoms.

Around half of the respondents reported consistent use of condoms for sex between two men and for sex between men and women.

Table 1.3.2: Patterns of sex of same-sex attracted young people compared with opposite-sex attracted young people (1997)

	Young women N=379		Young men N=369	
Gender of sexual partners		%		%
Both sexes		28.2		20.0
Men only		23.0		42.4
Women only		20.8		10.0
Haven't had sex		26.4		26.8
Use of protection¹ 'always'	n		n	
Bisexually active—sex with women	107	7.5	74	50.0
Bisexually active—sex with men	107	59.8	74	51.4
Homosexually active—sex with same sex	79	13.9	157	45.8
Heterosexually active—sex with opposite sex	87	42.5	37	51.4

¹ 95% nominated condoms/dams as protection

1.3.3 Women in contact with the gay and lesbian community

In 1996 and 1998, researchers at the National Centre in HIV Social Research and the AIDS Council of New South Wales conducted surveys of women who were in contact with the gay and lesbian community (Richters et al., 1999). In both years, around 7% of respondents reported sex with a gay or bisexual man in the six months prior to the survey. In 1996, 3.4% of 554 respondents reported unprotected vaginal or anal intercourse with a gay or bisexual male partner in the six months prior to the survey. In 1998, this figure was almost identical (3.2% of 774 respondents). Although small in terms of a percentage of the total sample, these figures represent the fact that almost 50% of the women in these groups who knowingly have sex with gay and bisexual men do so without condoms.

2. LIVING WITH HIV

On a national basis, only one study (*HIV Futures*, Ezzy et al., 1998) 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. The national survey of homosexually active men (Male Call 96) contained only a small percentage of positive men, and thus a small sample size for such men. For this reason, results from Male Call 96 are reported in Table 2.1 on a national basis only. Regional information is available from other surveys of homosexually active men.

2.1 Sexual practice

With respect to sexual practice, only one data point (1997) is available on a national basis for people living with HIV generally, and so trends over time cannot be 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. For men, however, the baseline data are substantially in agreement with other data relating to positive men. For example, in Table 1.1.6 above, 23.4% of all the men in the *HIV Futures* survey reported unprotected anal intercourse with casual partners in the six months prior to the survey. In Table 2.1, this result is shown as 53.7% out of the restricted sample of 371 men who reported casual male partners.

Further data from the *HIV Futures Study* indicated that, of those who responded to questions regarding sex with regular male partners, 69% of those with a positive regular partner reported unprotected anal intercourse and 21% of those with a negative partner (Table 2.1). The number of men with regular female partners is small, but the results suggest that for men with female partners the percentage reporting unprotected intercourse with regular female partners is similar to those for regular male partners.

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

	Men		Women	
	N=834		N=84	
Partner type	n	% of n	n	% of n
Casual male	371	53.7	6	50.0
Casual female	18	39.0		
Regular male (HIV positive)	146	68.5	13	61.5
Regular male (HIV negative)	199	21.0	15	46.7
Regular female (HIV positive)	5	60.0		
Regular female (HIV negative)	23	13.0		

¹ Shows the number and the percentage of people living with HIV/AIDS in 1997 who reported unprotected intercourse (vaginal or anal) with casual and regular partners in the six months prior to the survey (*HIV Futures Study*, Ezzy et al., 1998). In this table, 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).

Sexual practice among homosexually active men who are HIV seropositive from other studies (Table 1.1.6 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 pattern of change over time. Information from periodic surveys in Sydney suggests that there may have been an increase in this percentage (Table 1.1.6 above).

2.2 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 2.2), uptake was rapid. By the end of 1997, 63.6% of positive men were on combination therapy, and this remained essentially steady up to the middle of 1998. Data from the Sydney periodic survey suggest that among positive men who attend clinics and venues in Sydney the percentage is higher, and in Melbourne higher still. In the national sample from the *HIV Futures Study*, 76% of positive people reported being on combination antiretroviral therapy. The different percentages in Table 2.2 to some extent reflect different definitions of 'combination antiretroviral therapy' as indicated by the footnotes to this table.

Table 2.2: People living with HIV/AIDS on combination therapy

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia <i>HIV Futures</i>					925	76.0		
Sydney <i>SMASH</i> ¹ <i>Periodic</i> ²	146	2.1	135	22.3	118 265	63.6 74.7	74 606	60.8 72.4
Melbourne <i>MMASH</i> ³ <i>Periodic</i> ²			42	40.5			155	82.6
Southern Queensland <i>BRASH</i> ³ <i>Periodic</i> ²			36	27.8			112	68.8
Perth <i>Periodic</i> ²							45	62.1
Adelaide <i>Periodic</i> ²							34	64.7

¹ 'Combination therapy' means more than two antiretrovirals

² 'Combination therapy' means 'combination antiviral therapy'

³ 'Combination therapy' means more than one antiretroviral.

2.3 Compliance

The Positive Living using Treatment Options (PLUTO) Project, which interviewed 38 PLWHA in NSW, suggests that in general PLWHA understood the need for a high level of adherence to combination antiretroviral therapy regimes, in terms of the relationship between non-adherence and the development of viral resistance. Despite concerns around toxicity, the experience of side effects, and demanding dosing schedules, most of the participants gave accounts that reflected a high level of commitment to adherence, sometimes involving significant alteration of plans or movements. Dosing was associated with 'personal' contexts, and differently produced contexts (such as work, socialising, or being busy) were constructed as problematic in terms of adherence.

The most prominent theme among those debating beginning therapy was the difficulties this posed to their 'well' identity, in the sense that using medication implied a sick self that seemed at odds with their lived experience of well-being. Realistic concerns about unknown long-term effects were also on issue for participants in this position.

2.4 Seroconversion

The Seroconversion study is a case-control study recruiting men who have recently seroconverted to HIV. It was begun in 1995. One of its major aims is to identify the determinants of seroconversion, the other is to document and analyse the discursive understandings of risk as they are used in the men's narrative accounts to explain the event they believe to be the seroconversion event. Approximately 80 seroconverters have already been interviewed.

The findings from this study indicate that seroconversions are as likely to occur within regular relationships as in casual encounters, with around 50% of the men believing that HIV transmission had occurred within a regular relationship, some of which were known by the partners to be discordant for HIV. This finding has been confirmed by a prospective analysis of Sydney Men and Sexual Health data (Kippax et al., 1998) that found that one of the strongest predictors of seroconversion among this group of men was being in a relationship with a known HIV-positive partner.

The most common reasons given by men in regular relationships for their seroconversion were couched in terms of love and intimacy and in terms of a breakdown of trust and communication. On the other hand, men who believed their HIV seroconversion occurred in a casual sexual encounter were more likely to account for their infection in terms of 'being out of control'—because of desire or lust, drugs or too much to drink.

The most common practice associated with seroconversion was receptive anal intercourse followed by insertive anal intercourse. Very few men believed that they had seroconverted because of oral-genital sex.

3. DRUG RELATED BEHAVIOUR

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 (Table 3.1.1). This information comes from Male Call 96 and also from the SMASH, BRASH and MMASH studies. Close to 70% of these men (more among men in the SMASH study) 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 cohort and around 50% in Melbourne and Brisbane surveys. Recreational drug use is one variable which shows strong regional variation, though the level of use as measured in the percentages reported here appears to be fairly stable over the time period observed.

Table 3.1.1: Recreational drug use among homosexually active men

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
(a) Any Drug use								
Australia (Male Call 1996)								
GCA			2253	58.7				
NGCA			786	36.6				
Sydney								
SMASH	746	78.7	699	77.5	625	80.3	393	77.9
GCA (Male Call 96)			513	68.8				
NGCA (Male Call 96)			138	46.4				
Melbourne								
MMASH			406	69.7				
GCA (Male Call 96)			395	60.0				
NGCA (Male Call 96)			88	31.8				
Southern Queensland								
BRASH			299	71.2				
GCA (Male Call 96)			204	50.5				
NGCA (Male Call 96)			53	39.6				

Table 3.1.1: Recreational drug use among homosexually active men (Continued)

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
(b) Used more than one drug								
Australia (Male Call 96)								
GCA			2253	36.8				
NGCA			786	12.8				
Sydney								
SMASH	746	65.0	699	63.7	625	62.7	393	64.1
GCA (Male Call 96)			513	52.4				
NGCA (Male Call 96)			138	19.6				
MMASH			406	50.7				
GCA (Male Call 96)			395	39.7				
NGCA (Male Call 96)			88	11.3				
Southern Queensland								
BRASH			299	48.5				
GCA (Male Call 96)			204	27.5				
NGCA (Male Call 96)			53	9.4				

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 and region 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.

The longitudinal data available from SMASH suggest that the level of injecting drug use has remained relatively stable over the reporting period.

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

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Australia (Male Call 96)								
GCA			2253	5.4				
NGCA			786	1.8				
Sydney								
SMASH	746	11.5	699	9.6	625	10.7	393	12.0
Periodic							836	12.4 ¹
GCA (Male Call 96)			513	6.8				
NGCA (Male Call 96)			138	2.2				
Melbourne								
MMASH			406	5.9				
GCA (Male Call 96)			395	6.8				
NGCA (Male Call 96)			88	1.1				
Southern Queensland								
BRASH			299	15.7				
GCA Male Call 96)			204	3.4				
NGCA (Male Call 96)			53	0.0				

¹ Information relating to injecting drug use was available only from the August 1998 periodic survey.

3.1.3 In-depth information relating to drug use and gay men (DUGM)

The Drug Use and Gay Men (DUGM) project interviewed 67 gay community attached men and 10 key service providers. It found that participants regarded drug use as normal, and reported levels of use varying from daily to occasional. Two patterns of gay men's drug use emerged: one centring on dance parties and clubs and the other sex venues. A principal finding was that participants engaged in harm reduction strategies that constituted a 'folk pharmacology'.

With respect to injecting, three main categories of gay men were identified: those who inject once or twice to experiment; those who inject occasionally (e.g. several times a year); and those who inject regularly. Although some participants who did not inject characterised those who did as 'out of control', the study's findings did not support this. Gay men who inject were generally competent and controlled users. The most significant issue for gay men who inject is stigmatisation from non-injectors. The report identified gaps in knowledge around blood awareness (Southgate & Hopwood, 1999).

3.2 Other groups

3.2.1 Secondary students and drug use

The secondary schools survey (1997) provided information relevant to the question of drug use among secondary students (Smith et al., in press). Drug injection, whether 'ever' or in the year prior to the survey was much more likely for same-sex attracted students (both male and female students).

Table 3.2.1: Same-sex attracted compared with opposite-sex attracted secondary school students: drug information

	Male same sex attracted N=74	Male opposite sex attracted N=1347	Female same sex attracted N=126	Female opposite sex attracted N=1703
Drug injection ever %	7.8	2.0	4.6	1.5
Drug injection last year %	3.9	1.0	3.0	0.9

3.2.2 Same-sex attracted young people and drug use

Table 3.2.2 is derived from the study of same sex attracted young people carried out at La Trobe University in 1998 (Hillier et al., 1998). Reported rates of heroin use, injecting drugs ('in the six months prior to the survey') and needle sharing are similar to those found among homosexually active men in the Male Call 96 study (Crawford et al., 1998). For example, with respect to injecting in the past six months, 4.7% of same-sex attracted young people were found to have injected in the past six months. Since this is a national sample, the percentage could be compared with that from the Male Call 96 survey of homosexually active men, where it was found that 4.5% reported injecting (any) drug in the six months prior to the survey.

Table 3.2.2: Same-sex attracted young people and drug use¹

Total N	749
	%
Heroin use 'ever'	5.7
Injected drugs ('ever')	10.7
Injected drugs (in past six months)	4.7
Shared injecting equipment	3.3

¹ The percentages in this table were calculated from information provided in Hillier et al., 1998. The information was adapted to make it comparable with information collected from other studies on which this report is based, particularly studies of homosexually active men. Since the questions asked were not the same, the comparisons made should be treated with caution.

3.2.3 TAFE students and drug use

In a national study of TAFE students, Grunseit (1999) included information regarding injecting drug use. Table 3.2.3 shows the percentages of male and female TAFE students who had ever injected drugs, and the percentages of those who had injected who had ever shared needles. The percentage for injecting is high compared with levels among opposite-sex attracted secondary students (Table 3.2.1 above).

Table 3.2.3: Injecting drug use among TAFE students: percentage of male and female students injecting drugs ever

	Men N=2284	Women N=1751
Injected drugs ever	8.0	6.9
Shared needles ever ¹	19.3	20.9

¹ Of those who have injected drugs ever

3.2.4 Women in contact with the gay and lesbian community and drug use

Table 3.2.4 shows percentages of women in contact with the gay and lesbian community who had injected and who had shared injecting equipment in the six months prior to the surveys in 1996 and 1998. These are very high percentages, compared with those for homosexually active men (see Table 3.1.2 above) and for same-sex attracted young people (see Tables 3.2.1 and 3.2.2 above). These high rates of injecting in part reflect the fact that around 7% of 1996 and 1998 samples was recruited through a needle and syringe exchange service. Around two-thirds of the injectors in these surveys came from this service.

There is a lower rate of sharing injecting equipment in the six months prior to the survey in 1998 compared with 1996. It is not clear whether this is a real decrease or due to differences in sampling. In either case, the high rates of sharing injecting equipment are cause for concern, both for HIV risk and for hepatitis C transmission risk (Richters et al., 1998).

Table 3.2.4: Women in contact with the gay and lesbian community: drug use in last six months

	1996 N=583	1998 N=774
	%	%
Injected drugs in last six months	12.1	7.8
Shared needles in last six months ¹	56.3	37.7

¹ Of those who have injected drugs ever

4. THE CHANGING EPIDEMIC

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 on most people living with HIV and AIDS: there are fewer deaths and, despite often serious side effects, less debilitating illness among PLWHA.

4.1 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. One indicator which may be important in monitoring change is a measure of contact with the epidemic which is available from the SMASH cohort study and from the BRASH and MMASH surveys. Information from SMASH (Table 4.1) shows that contact with the epidemic has decreased between 1995 and 1998. This is measured in terms of the number of people known by respondents who had AIDS, or had died from AIDS, or who had been cared for by them in the year prior to the interview.

A different measure of contact with the epidemic was used in the Male Call surveys, and the Male Call 96 Report (Crawford et al., 1998) found no decrease in 1996 compared with 1992. This measure, however, referred to 'ever' knowing or caring for someone with HIV/AIDS, and hence was less sensitive to change than the measure mentioned above which refers to 'in the past year'.

Evidence that this kind of contact with the epidemic is decreasing among Sydney men reflects both the fact that the peak of the AIDS epidemic is past and that new combination therapies are beginning to have an effect. So far the decline is modest, and does not appear to have been accompanied by widespread change in behaviour as the above results have shown.

Table 4.1 shows contact with the epidemic among homosexually active men. Mean score on a scale of Contact with the Epidemic (based on information regarding the number of friends, lovers, ex-lovers, who had AIDS, had been cared for and supported, and who had died from AIDS).

Table 4.1: Contact with the epidemic among homosexually active men

Source	1995		1996		1997		1998	
	N	Mean	N	Mean	N	Mean	N	Mean
Sydney								
SMASH	746	7.20	699	7.13	625	6.52	393	6.25
Melbourne								
MMASH			406	6.30				
Southern Queensland								
BRASH			299	6.02				

4.2 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 4.2 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?': the percentages are derived by counting those whose responses indicated that they had been tested within six months prior to the respective surveys. These data indicate a small decline in the frequency of testing.

Table 4.2: Homosexually active men who are HIV negative: tested for HIV within the six months prior to the survey

Source	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia (Male Call 96)								
GCA			1762	59.0				
NGCA			445	50.1				
Sydney								
SMASH	536	50.8	507	50.4	464	45.7	310	50.0
Periodic			1525	55.1	1771	51.5	2035	49.8
GCA (Male Call 96)			409	57.9				
NGCA (Male Call 96)			78	59.0				
Melbourne								
MMASH			323	49.3				
Periodic							1413	44.6
GCA (Male Call 96)			318	57.9				
NGCA (Male Call 96)			49	48.9				

Table 4.2: Homosexually active men who are HIV negative: tested for HIV within the six months prior to the survey (Continued)

Source	1995 N	%	1996 N	%	1997 N	%	1998 N	%
Southern Queensland								
BRASH			223	58.8				
Periodic							1021	52.4
GCA (Male Call 96)			155	72.3				
NGCA (Male Call 96)			37	62.1				
Perth								
Periodic							662	45.2
GCA (Male Call 96)			158	49.3				
NGCA (Male Call 96)			44	52.3				
Adelaide								
Periodic							420	46.7
GCA (Male Call 96)			151	60.2				
NGCA (Male Call 96)			37	43.2				

4.3 Testing among men under 25

One of the findings from *Male Call 96* (Crawford et al., 1998) was a significant decline in 1996 compared with 1992 in the percentage of young men under the age of 25 who had been tested. Table 4.3 confirms that even among young men who are gay community attached, around 25 to 30% remain untested. Sydney periodic survey figures suggest that there may have been a further decline since 1996, although the change in percentage is not statistically significant.

Table 4.3: Men under 25 ever tested for HIV

Source of information	1995		1996		1997		1998	
	N	%	N	%	N	%	N	%
Australia (Male Call 96)								
GCA			429	77.5				
NGCA			90	38.9				
Sydney								
Periodic			316	79.1	300	77.0	345	73.3
GCA (Male Call 96)			93	81.7				
Melbourne								
MMASH			55	83.6				
Periodic							286	63.6
GCA (Male Call 96)			58	82.5				
Southern Queensland								
BRASH			78	78.2				
Periodic							233	73.8
GCA (Male Call 96)			54	75.9				
Perth								
Periodic							119	73.9
GCA (Male Call 96)			35	74.3				
Adelaide								
Periodic							103	70.9
GCA (Male Call 96)			34	70.6				

4.4. 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. While 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 casual partners.

Future research at the National Centre in HIV Social Research will continue to focus on this issue and carefully monitor any changes in sexual practice and testing behaviour.

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