

HIV antibody testing

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The purpose of this paper is to:

- review existing research on HIV testing among gay men, including changes in HIV testing patterns;
- summarise existing guidelines on HIV testing; and
- outline the reasons for, and meanings of, HIV testing among gay men;

This paper does not describe other tests for HIV apart from the HIV antibody test. A summary of these tests and their implications can be found in 'Diagnostic tests for HIV infection', *HIV Australia* vol. 1. no. 2. (which can be accessed online at www.afao.org.au).

In 1998 the peak Australian advisory bodies on HIV/AIDS reviewed national policy in relation to HIV testing as set out in the national HIV/AIDS strategies. This review endorsed the existing guiding principles. These are:

- voluntary testing with counselling is fundamental to the response to HIV
- testing should be of the highest possible standard
- testing must be accessible to those at greatest risk of HIV infection
- testing policy is critical to determining the extent and location of HIV infection in the community¹

HIV antibody testing among gay men

Overall HIV testing among gay men is common among Australian gay men. The proportion of gay community-attached men in Australia who have ever had an HIV test is 85 per cent compared to only 58 per cent for England & Wales.

Data on HIV antibody testing is usually reported in two different ways: the proportion who have *ever* had an HIV test and the proportion who have *recently* had an HIV test (within the last 6 or 12 months). The national *Male Out* survey of 2000 showed that compared to previous surveys conducted in 1992 and 1996 a greater proportion of men reported that they have had at least one HIV test.² That is, a greater proportion of men in 2000 had been tested for HIV than ever before.³

The *Male Out* survey includes a large group of men who have sex with men (MSM) who are not closely attached to gay community (measured by indicators such as the amount of free time spent with gay men and proportion of friends who are gay) so in this particular study it is possible to look at differences between these men and their more gay community-attached (GCA) counterparts.

Overall, non-GCA men were approximately twice as likely as their gay community-attached counterparts to be *without* HIV test results (33.9 percent compared to 15.4 percent). That is, they had never been tested, or if so, had never received the results of that test. There was no change from 1996 to 2000 in the proportion of GCA men who had ever had an HIV test. Among non-GCA men however, the proportion who had ever had an HIV test increased from 58 per cent in 1996 to 67 per cent in 2000).

There has however been a downward trend among younger GCA men (under 25 years) having ever been tested for HIV. This is in contrast to the trend among younger non-GCA men that indicates an *increasing* proportion reporting that they have ever had an HIV test

[In both Sydney and Perth there has been a downward trend in men under 25 who have ever had an HIV test, which matches the trend among GCA men in the *Male Out/Call* surveys.⁴]

Testing frequency

According to the data from *Male Out* 2000, although a greater proportion of men in 2000 had ever had an HIV test, a smaller proportion had done so in the previous 12 months than in either the 1992 or 1996 surveys. This decreased from 56 per cent in 1992 to 51 per cent in 1996 to 45 per cent in 2000. And this change was seen both in men who were attached to gay community and men who were not. Among GCA men the proportion who had had a test in the past year declined from 66 per cent in 1992 to 64 per cent in 1996 to 51 per cent in 2000. Among non GCA men the proportion who had had an HIV test in the past year declined from 44 per cent in 1992 to 38 per cent in 1996 to 34 per cent in 2000. This indicates a significant downward trend in the frequency of HIV testing.

This downward trend however is not evident in the gay community periodic surveys conducted in Sydney where the rate of testing in the previous 12 months has remained consistent since 1996. Neither is there any difference between men over 25 and less than 25 in terms of testing for HIV in the previous 12 months, although the figures for young gay men tend to vary from year to year.⁵ The corresponding surveys in Melbourne and Queensland have not detected a decrease in the proportion of gay men testing for HIV in the previous 12 months either.

A recent analysis of data from all the gay community periodic surveys conducted in Australia from 1996 to 2001 suggests there has been a decline in recent HIV testing over this period (from 62.8 percent to 54.7 percent in the last 12 months) although the authors propose that the reasons for this decline are complex and in fact may be related to changes in the sample over time or to broader changes in the gay community.⁶ The reason they take this view is that the year the survey was conducted appears as a predictor of recent HIV testing in a univariate analysis but fall out when a multivariate analysis is performed. (A multivariate analysis is a technique that looks at the pattern of relationships between several variables simultaneously, rather than looking at each variable on its own.)

Other strong predictors of HIV testing, apart from the year the survey was conducted, included: UAI in the last six months; more sexual partners in the last six months; having an HIV positive partner; and a higher proportion of friends who are gay. Being younger and living in Sydney were also associated with an increased likelihood of being tested.

This analysis also found that among those men at highest risk of HIV infection, HIV testing continues at very high levels. This reflects the guiding principles underpinning Australia's national *HIV Testing Policy* which state that those at risk should be encouraged to be tested.⁷

Table 1: HIV testing among gay men in 2000

	Ever tested	Tested in previous 6 months
Adelaide ¹	84.9%	43.3%
Canberra	83.7%	33.7%
Brisbane & SE Qld	90.9%	50.2%
Melbourne	85.6%	41.5%
Perth	80.5%	40.9%
Sydney	89.2%	47.1%

¹Adelaide survey conducted in 1999

Source: *HIV/AIDS, Hepatitis C & Related Diseases in Australia Annual Report of Behaviour 2001*
National Centre in HIV Social Research

A survey conducted among Asian gay men in Sydney over December 1999 to January 2000 found that a quarter had either never been tested for HIV or not received the results of an HIV

test. About one third of those men who had arrived in Australia in the previous two years had not been tested for HIV. Of those who had been tested, 45.7 percent had done so in the previous six months. This represents only approximately 35.7 percent of the total sample of Asian men who completed the survey.⁸

Current guidelines

Mot policy work in relation to HIV testing that has been undertaken within the community sector relates to voluntary, mandatory and compulsory testing as well as ensuring confidentiality, informed consent, and adequate and consistent pre and post test counselling.

There are few national, state or organisational guidelines in relation to frequency of HIV testing for gay men. The exception is NSW where guidelines for HIV antibody testing in the context of broader STI screening have recently been developed. The recent National Gay Men's Education Consultation also recommended that ANET, in collaboration with key stakeholders and member organisations, develops and distributes guidelines for sexually transmitted infections screening for gay men (based on the existing NSW guidelines).

The number of HIV antibody tests performed in public health laboratories does appear as a performance indicator in various state HIV/AIDS strategies and public health agreements.

Table 2: Policies on HIV testing

	Policies/guidelines	Implementation
ACT	<ul style="list-style-type: none"> ▪ AIDS Action Council currently drafting an HIV testing policy (due August 2002) 	<ul style="list-style-type: none"> ▪ Working in conjunction with Canberra Sexual Health Centre and the Division of General Practice to conduct an Outreach Testing Program at a SOPV and AAC
NSW	<ul style="list-style-type: none"> ▪ All men who have had any sex with another man in the previous year should be offered annual HIV antibody testing (in addition to syphilis, hep A, hep B, gonorrhoea & Chlamydia). More frequent screening recommended for men with frequent changes of partners eg. those who SOPVs Guidelines developed by the Sexually Transmitted Infections in Gay Men Action Group (STIGMA). Endorsed by Australasian College of Sexual Health Physicians. ▪ Strengthening of HIV testing messages, particularly those targeted at gay men under 25 and people from NESB backgrounds (appropriate to risk behaviour) ▪ Increased promotion of HIV testing among groups identified as late presenters 	<ul style="list-style-type: none"> ▪ Promotion of HIV testing (in context of broader sexual health screening) every 6 – 12 months for gay men through booklet/poster ▪ Demonstration project to promote HIV testing amongst young gay men – Western Sydney Area Health Service ▪ Targeted promotion of HIV testing among those at risk of HIV infection esp. those less likely to perceive themselves to be at risk
Vic		Pre and post test counselling guidelines currently being reviewed/piloted

Pre test discussion and post test counselling

An important recommendation of the 1998 *HIV Testing Policy* produced by ANCAHRD/IGCAHRD was the adoption of the term “pre test discussion”. This change was to reflect the expanded role of the health care worker to assess risk, obtain consent, arrange follow-up, determine and assess referral, and identify other needs which are not encapsulated by the term “pre test counselling”.⁹ This policy document included a recommendation that the national guidelines on testing and counselling in HIV/AIDS, which were produced by a Commonwealth working party in 1992, be reviewed and updated. It is unclear to what extent the recommendations of this document are reflected in state legislation and in practice.

Why does testing matter?

Periodic testing among those at risk allows for:

- pre and post test counselling [or discussion] and information provision
- decision-making about the management of their HIV infection, if they are HIV positive
- reduced likelihood of HIV transmission by individuals who are unaware that they are infected
- more effective negotiation of HIV risk reduction strategies¹⁰

The availability of quality surveillance data on HIV test results and on those being tested for HIV is of primary importance to program development in AIDS Councils, IDU and sex worker organisations and PLWHA groups.

One reason for the promotion of regular HIV testing among those at risk is to enable people to make decisions about managing HIV infection if they are HIV positive. This was probably seen as very important in the late 1990s when HIV treatment guidelines reflected a “hit early, hit hard” approach. New treatment guidelines suggest a deferred approach is acceptable. However for those in primary or acute infection ie. recently infected their may be benefits to treating in terms of increasing viral suppression.

Another reason for testing is related to managing HIV risk. This is of added significance if risk practices in the community are increasing – which we know to be the case across the country. If condoms are used by everyone, all the time, then it could be argued that testing decreases in importance. However gay men are practising particular strategies to reduce risk of HIV transmission that are dependent on knowledge of at least their own (and sometimes their partner’s) HIV antibody status. So, if this is the case, shouldn’t we expect an increase in HIV antibody testing frequency, not a plateau or decline?

One of these strategies is Negotiated Safety in which seroconcordant negative partners agree not to use condoms within the relationship and to either have no casual partners at all or to have only protected sex with casual partners. Another strategy is Strategic Positioning. This is the term used to describe the adoption of insertive or receptive roles for *unprotected* anal sex by gay men based on HIV status. In situations where the serostatus of sexual partners is discordant or unknown HIV-positive men are more likely to report that they were the receptive partner and HIV (known or assumed) negative men are more likely to report that they were the insertive partner, and this trend is strongest among men with regular partners ie. where the serostatus of partners is likely to be known rather than assumed. [This trend of insertive/negative and receptive/positive is not apparent when *all* reported anal sex (including sex with condoms) is analysed, so it cannot be accounted for by preference alone.]

Focusing on men who know they are HIV positive may also be somewhat of a distraction. As a study conducted in 2000 concluded, the practice of insertive unprotected anal sex by men who assume themselves to be HIV-negative (not tested) “may be a significant site of risk”.¹¹ And as Duffin points out, all “first wave” HIV epidemics among gay men were all epidemics of primary infections ie. where the source of infection was predominantly people who were themselves recently infected.

Late presenters

Another consideration in HIV testing policy is late diagnoses of HIV infection. In Australia since the mid-1990s there has been a doubling of the proportion of new AIDS cases in people with late HIV diagnosis (ie. developing AIDS within three months of an HIV diagnosis).¹² Late presentation occurs disproportionately among men and women with heterosexual contact and men with an undetermined exposure category. Late presentation is also associated with

region of birth – a higher proportion of cases occurred among people born in Asia and sub-Saharan Africa and among European countries other than the UK and Ireland.

Meanings of HIV antibody testing

Is it reasonable to assume that the HIV test has the same meaning at this point in the epidemic as it did 15, or even five, years ago? And if not, would we expect this to result in changes to HIV testing rates? The answer to the first of these questions is probably no, although some of the shifts in meanings in relation to testing HIV positive and risk assessment (or management) have not necessarily been obvious to HIV-negative gay men. The most significant shift is the development of other tests to measure HIV and the impact they have had on eclipsing the importance of the HIV antibody test.

UK researcher, Paul Flowers, has described three periods of risk management in the HIV epidemic, marked by advances in testing technology.¹³ The second of these stages, which he has called the somatic period, began in the mid-1980s, and was associated with the availability of the HIV antibody test. This enabled HIV risk to be linked for the first time to individual bodies rather than high risk *groups*, as had been the case in the earlier, “confused” period. It also meant an absolute distinction could be drawn between a body tested positive to HIV antibodies and a body tested negative to HIV antibodies, or put another way, a distinction between those posing a risk and those being at risk. The focus therefore shifted away from the social and towards the individual body and its behaviours, and so to individual choice as well. Education for gay men during this period however did not necessarily encourage HIV antibody testing, which was seen to be unnecessary if they assumed that both they and their partners were HIV-positive.

Even though condom use was promoted on the basis of a difference between positive and negative, it also attempted to dissolve this distinction in the mind of its target audience. This was seen as crucial to preventing discrimination against those with HIV and this theme has re-emerged occasionally in more recent times eg. ‘You don’t have to divulge to indulge’ (Queensland AIDS Council).

Based on a qualitative study with gay men in Australia, Marsha Rosengarten, formerly of the National Centre in HIV Social Research, has described this stage of the epidemic as focussed on “promoting a set of practices to deal with biological effects – the main one being ‘use a condom every time’.”¹⁴ Another was ‘choose safe sex’, which also assumed control in all sexual situations.

Designer HIV

A more recent phase is the technological period associated with the impact of social and medical technologies (especially combination therapy and viral load testing) on the management of HIV and AIDS risks.¹⁵ The characteristics of this period are a shift in the location of risk from *between* (positive and negative) bodies to *within* the body and more specifically towards a distinction marked by high viral load versus low (or no) viral load. Therefore, what was previously *qualitatively* different become *quantitatively* different. New testing technologies and treatments have created the conditions for new responses to risk management, with HIV-positive men at least developing individualised positions reflecting their health status and sexual situations. And as a result, universal HIV risk management messages have now become less relevant.¹⁶ These individualised responses have been well documented both in the UK and here in Australia. What Rosengarten described in 2000 as the “serodivide” was not only the differentiation of bodies according to the presence or absence of antibodies to the virus (ie. being HIV-positive or HIV-negative), but also a division according to the measure/quantification of the virus among those with HIV. This also means of course that those who are being advised of their HIV status through a collection of tests are experiencing different meanings of HIV than those who have little or no engagement with the medicalisation of HIV.

Further fragmentation?

In more recent times, further technological developments have meant that the body has perhaps become ever more fragmented, with HIV now conceptualised as more site specific eg. blood vs. semen, and the various so-called reservoirs or sanctuaries such as the brain, lymph nodes, etc. The ability to measure viral resistance has also further strengthened both the idea of a highly individualised virus and its myriad possible locations and mutations within the body. “The virus you get this year is not the virus you got 10 years ago”, is a comment referred to by Rosengarten to illustrate this notion of the individualised virus.¹⁷ However this conception of the body as made up of separate spaces has not yet circulated very widely among those living with HIV so low or undetectable virus in blood may still be understood as applying to the whole body eg. genital tract and semen. Indeed some gay men report that knowledge of blood viral load informs their assessment of their infectivity to sexual partners.¹⁸ These changes will necessarily have an effect on HIV education and the assessment and management of HIV risk.

Conclusion

Moving back to the issue of HIV antibody testing among gay men, we might then ask: is a downward trend in the frequency of HIV testing (if it proves to be real) a crisis, or even a concern? Yes, possibly, if risk behaviours are increasing and gay men are employing risk reduction strategies such as “strategic positioning” for anal sex with casual partners. And especially if treatments and viral load testing has allowed for HIV-positive gay men to develop individualised risk reduction strategies that HIV-negative gay men are not aware of.

Although it seems it is too early to tell if HIV testing patterns among gay men are changing, what is not in doubt is that testing HIV-positive is being experienced differently now than it was in the past. HIV-negative men however are not necessarily aware of these shifts and are therefore engaging in sexual practices based on different assumptions and knowledge about serostatus, responsibility and risk from those HIV-positive men who have experienced HIV in the era of treatments, viral load testing and beyond.

In returning to the intentions of this paper, it seems that HIV testing is still common practice among gay men and that recent testing is highest among those reporting highest risk behaviour and those with HIV positive partners. We don't however know much about the meaning of HIV testing, ie. is HIV testing used to confirm the relative risk of risk reduction strategies?; to enable partner selection based on assumed seroconcordance?; as a response to particular risk events for HIV transmission?; or as part of developing agreements about condom use with regular partners? Or all of the above? Likewise, we do not know much about how an HIV diagnosis is experienced at this point in the epidemic.

¹ *HIV Testing Policy*, Australian National Council on AIDS and Related Diseases (ANCARD) & Intergovernmental Committee on AIDS and Related Diseases (IGCARD) Sep 1998

² P Van de Ven, P Rawstorne, J Crawford, S Kippax *Facts & Figures 2000 Male Out Survey* National Centre in HIV Social Research Feb 2001

³ This group includes only those who have ever received the results of an HIV antibody test. Those men who have had an HIV test but have never returned for the results would be included in the “no test / no result” category.

⁴ *HIV/AIDS, Hepatitis C & Related Diseases in Australia Annual Report of Behaviour 2001* National Centre in HIV Social Research

⁵ T Nakamura, P Rawstorne, P Ven de Ven, G Prestage, J Crawford, S Kippax *Sydney Gay Community Periodic Survey: Results from the 12th survey (August 2001)* UNSW December 2001

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- ⁶ F Jin, G Prestage, M Law, S Kippax, P Van de Ven, J Kaldor, A Grulich Predictors of recent HIV testing in homosexual men in Australia (paper presented at *changing risks, changing communities 2002* 28-31 May 2002)
- ⁷ *HIV Testing Policy*, Australian National Council on AIDS and Related Diseases (ANCARD) & Intergovernmental Committee on AIDS and Related Diseases (IGCARD) Sep 1998
- ⁸ G Prestage, P Van de Ven, K Wong, M Mahat, T McMahon *Asian Gay Men in Sydney December 1999 – January 2000* NCHSR Monograph 2/2000
- ⁹ *HIV Testing Policy*, Australian National Council on AIDS and Related Diseases (ANCARD) & Intergovernmental Committee on AIDS and Related Diseases (IGCARD) Sep 1998 p. 31.
- ¹⁰ *Surviving Our Success: NSW HIV/AIDS Health Promotion Plan 2001-2003* NSW Health Department 2001
- ¹¹ M Rosengarten, K Race, S Kippax *Touch wood, everything will be OK: gay men's understandings of clinical markers in sexual practice* National Centre in HIV Social Research Dec 2000
- ¹² *Annual Surveillance Report 2001: HIV/AIDS, viral hepatitis & sexually transmissible infections in Australia* NCHECR
- ¹³ P Flowers 'Gay men and HIV/AIDS risk management' *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 5(1) Jan 2001
- ¹⁴ Rosengarten M, 'Irony and Paradox in HIV Containment' Paper presented at Social Studies of Science Society Conference Boston 1-4 Nov 2001.
- ¹⁵ Flowers op. cit.
- ¹⁶ Ibid.
- ¹⁷ M Flynn 'Resistance Unrest' interview with Mike Youle (Director HIV Research, Royal Free Hospital, London *Positive Nation* (67) Jun 2001
- ¹⁸ Rosengarten et. al. *Touch wood, everything will be OK: gay men's understandings of clinical markers in sexual practice* NCHSR Dec 2000