National Centre in HIV Epidemiology and Clinical Research

Australian HIV Surveillance Report

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Epidemiological and social research findings reported at the 14th International AIDS Conference

7 – 12 July 2002. Barcelona, Spain.

At the 14th International AIDS Conference, held in Barcelona, Spain, on 7 – 12 July 2002, the overwhelming scale of the global HIV pandemic was highlighted. In the Asia-Pacific region, an estimated 6.6 million people were living with HIV/AIDS in 2001, including 1 million adults and children newly infected in 2001. India was the country most affected by HIV/AIDS in the Asia-Pacific region, with 3.97 million people living with HIV/AIDS in 2001. Sub-Saharan Africa is the worst affected region in the world. In 2001, an estimated 3.5 million people were newly infected in 2001 and 2.2 million people died following AIDS. An estimated 28.5 million people were living with HIV/AIDS in Sub-Saharan Africa at the end of 2001 and 11 million children had been orphaned, due to HIV/AIDS. These numbers highlight the urgency for "knowledge and commitment for action", the theme of the 14th International AIDS Conference. Here, we report selected epidemiological, clinical and social research findings presented at the Conference.

Ongoing HIV epidemics and interventions for reducing transmission

Over-arching the specifics of many areas of intense research was the enormity of what is happening in the HIV epidemic. To appreciate this, the UNAIDS report included in each delegate's satchel told the story as well as any speaker. The figures are mind-numbing, and force a treatment imperative. Simply spoken, if we do not treat people already infected, then the future of many sub-Saharan African countries is in doubt. Even the bubonic plague didn't wipe out 50% of the population, but HIV has that potential if left untreated. It was estimated that South Africa, Zimbabwe and Botswana would soon experience negative population growth, due to deaths following AIDS and reduced total fertility rates. The female population in Zimbabwe had already started to decline.

The National Centre is funded by the Commonwealth Department of Health and Ageing and is affiliated with the Faculty of Medicine, The University of New South Wales. Its work is overseen by the Australian National Council on AIDS, hepatitis C and related diseases.

Announcements

National meetings

The **Australasian Society for HIV Medicine Conference 2002 Complex Problems: Emerging Solutions** will be held in Sydney, New South Wales, on 23 – 26 October 2002.
Further information may be obtained from OzAccom Conference Services,
PO Box 164 Fortitude Valley QLD 4006.
Telephone: 07 3854 1611
Facsimile: 07 3854 1507
E-mail: ashm2002@ozaccom.com.au
Website: www.ashm.org.au

The **10th National Symposium on Hepatitis B and C** will be held at St Vincent's Hospital, Melbourne on Saturday 23 November 2002. Further information may be obtained from Eleanor Belot.
Telephone: 03 9288 3580
Facsimile: 03 9288 3590
E-mail: belote@svhm.org.au

International meeting

The **11th International Symposium on Viral Hepatitis and Liver Disease** will be held in Sydney, New South Wales, on 6 – 10 April 2003. Further information may be obtained from ISVHLD 2003, Tour Hosts Pty Limited
GPO Box 128 Sydney NSW 2001 Australia.
Telephone: (61) 2 9248 0800
Facsimile: (61) 2 9248 0894
E-mail: isvhld@tourhosts.com.au

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A rapidly evolving HIV epidemic was reported in Russia. HIV prevalence in the general population had increased four hundred fold, from 0.001% in 1995 to 0.4% in 2001. Among people with a history of injecting drug use, HIV prevalence had increased from 0% in 1995 to 6.5% in 2001. HIV prevalence was also increasing among low risk groups such as blood donors and pregnant women.

Successful implementation of HIV prevention programs was reported in a number of countries. In Thailand, a national program of prevention of mother to child HIV transmission reported that more than 500,000 women gave birth in the year from October 2000 to September 2001, and 5,768 women were diagnosed with HIV infection. HIV prevalence was substantially higher among women without antenatal care (5.9%) than among women who received antenatal care (1.1%). The majority of women with HIV infection in antenatal care (77%) received zidovudine antenatally and the majority of their children also received zidovudine. In Kenya, an HIV/STD surveillance program among women attending antenatal clinics demonstrated significant declines in the prevalence of gonorrhoea, chlamydia and syphilis. HIV prevalence among women aged less than 20 years also declined significantly, from 21.2% in 1993 to 8.2% in 2001. The decline in prevalence of specific sexually transmissible infections was attributed to behavioural changes including significant declines in the number of women reporting sex work, declines in the number of sex partners and increases in condom knowledge and use.

Subtypes of HIV-1 infection

Subtype B, the predominant subtype of HIV-1 in industrialised countries, subtypes A, C and D, circulating in East Africa, and the circulating recombinant forms (CRF) 01_AE and CRF 02 _AG, are the most prevalent subtypes of HIV-1 in the pandemic. The distribution of these subtypes and recombinant forms must be considered in the process of vaccine development. Analysis of HIV subtypes in countries in East Africa, by near full-genome sequencing or multi-region hybridisation assay, indicated substantial variation in the distribution of subtypes. Subtype A predominated in Kenya (57%), subtype C in Tanzania (30%) and subtype D (55%) in Uganda. In South America, subtypes B (84%) and F (16%) were the subtypes most frequently detected; small number of other subtypes and circulating recombinant forms were also detected. Subtype B was the most frequent subtype detected in Colombia (100%), Chile (100%), Peru (98.1%), Ecuador (97.8%), and Bolivia (93.8%), and was associated with transmission through male homosexual contact, whereas subtype F predominated in Argentina (53.4%) and Uruguay (55.7%) and was associated with heterosexual transmission. In the United States, a sentinel surveillance system established in 10 cities and 31 sites, found that the majority of people newly diagnosed with HIV infection in 1997 – 2001 had subtype B. Of 22 cases of non-subtype B infection, diagnosed in 7 of the 10 cities, 4 were born in the United States and had not travelled overseas; 16 were born overseas. The majority of cases of non-subtype B infection reported a history of heterosexual contact only and none reported a history of male homosexual contact. Analysis of the rate of CD4 cell decline in the first two years following HIV diagnosis, in an ethnically diverse population in South London, suggested that the rate of HIV disease progression did not differ by subtype. However, people with a non-subtype B infection had a lower initial virological response to antiretroviral therapy.

Monitoring newly acquired HIV infection

HIV incidence is a key piece of information for monitoring patterns of HIV transmission but is very difficult to measure. A newly available HIV antibody testing strategy can identify newly acquired HIV infection in a single specimen, by a non-reactive result on a less-sensitive assay and a reactive result on a sensitive assay. Detuned testing among homosexually active men in San Francisco indicated that HIV incidence had increased from 1.3% in 1997 to 3.9% in 2000. In this population, the annual number of diagnoses of early syphilis and gonorrhoea had steadily increased in 1997 – 2000 and the proportion of men reporting unprotected anal intercourse had also increased. HIV incidence was also reported, using the detuned test, to have increased significantly among homosexually active men seen at sexual health clinics in Amsterdam. Results from simulation studies of HIV transmission among homosexually active men suggested that incidence density in a tested population may be overestimated, if a "seroconversion effect" such as an HIV seroconversion illness or recognition of a high risk exposure in a recently infected person, is associated with the frequency of testing.

Injecting drug use

Among injecting drug users admitted to hospital detoxification programs in Barcelona, HIV prevalence had declined significantly, from 48% among those who commenced injecting prior to 1987, to 17% among those who began injecting in 1992. Among injecting drug users aged less than 21 years, HIV prevalence declined from 54% among those who first injected prior to 1992, to 18% among those who commenced injecting in 1992 or later. The declining prevalence of HIV infection was attributed to awareness of AIDS, introduction of large scale preventative measures and treatment for substance abuse. In another study of injecting drug users in Barcelona, hepatitis C prevalence was 52% among those reporting less than six months of injecting; 11% had both HIV and hepatitis C infection. Among injecting drug users aged 13 – 24 years, monitored through the Vancouver Injecting Drug Users Study, hepatitis C and HIV prevalence was 46% and 10%, respectively. Factors associated with hepatitis C infection included being of Indigenous origin, incarceration in the previous six months and daily heroin, cocaine and speedball injecting.

In a cross-sectional survey carried out in April 2000 among young injecting drug users (mean age 20 years) in urban areas in Quang ninh province in Vietnam, HIV prevalence was among 32%. Risk factors for HIV infection were age over 20 years, injecting at least 14 times per week and an injecting history of at least three years.

Social and behavioural studies of gay men

Most presentations at the Conference on gay and other homosexually active men focussed on populations in industrialised countries. Homosexually active men in developing countries remain almost invisible, despite evidence for HIV transmission within some populations. In 2001, HIV prevalence among 122 homosexually active men and 28 transgender people in Mumbai, India, was 30% and 68%, respectively. Newly visible gay communities in Eastern and Central Europe were at risk of HIV infection. Among men surveyed in 2000 – 2001 at gay-identified meeting places in St Petersburg, Russia, in Budapest, Hungary and in Sofia, Bulgaria, more than 50% reported unprotected anal intercourse in the past three months, most reported multiple sexual partners and less than 50% reported condom use at last intercourse.

Increasing levels of unprotected anal intercourse and changing seroincidence rates were reported in a number of studies of gay men in Canada, Spain, the United Kingdom and the United States. The increases in unprotected anal intercourse were reported among HIV-positive and HIV-negative men, as well as among men who had not been tested for HIV. Despite reports to the contrary, young men did not emerge from these studies as being more likely to increase their risk behaviour – indeed, where age was a factor it was usually the case that older gay men were more likely to do so.

Beliefs about the HIV status of sexual partners and the adoption of risk reduction strategies such as negotiated safety, positive-positive sex and strategic positioning (in which sexual partners take the insertive or receptive position based on knowledge of their HIV status) were considered to play a role in sexual behaviour. Australian studies suggested that gay men introduce medico-scientific knowledge into their decisions about sex and that most unprotected sex was not actually unsafe.

A concern was expressed that the availability of HIV treatments may lead to complacency about the risk of transmission. However, several studies indicated that those on treatments tended to be less risky in their sexual behaviour.

Evidence was presented from diverse sites in the United States and Europe of a resurgent syphilis epidemic among gay men, at levels not seen since the late 1970s. In cities such as Amsterdam, major public sexual health clinics have diagnosed hundreds of cases in the last couple of years, when they diagnosed only a case or two a year before this. In England, the rate of diagnosis of infectious syphilis among men had more than doubled since 1997, with men aged 35 – 44 years and 25 – 34 years being most affected. Co-infection with HIV, high rates of partner change and use of sex clubs and cruising grounds were identified as the risk factors for syphilis in England. In Parisian sexual health clinics, the number of diagnoses of early syphilis increased from 8 in 2000 to 31 in 2001 and the majority of diagnoses were among homosexually active men. Syphilis has great potential to increase HIV transmission through the characteristic genital ulceration that it causes.

HIV transmission through oral sex

Some excellent research was presented in Barcelona on the low risk of HIV transmission through oral sex. Sexual behaviour and HIV transmission was monitored over the years 1987 – 1999 in a cohort of 292 HIV discordant heterosexual couples (242 couples with a male index case and 50 couples with a female index case) in Madrid, Spain. A total of 135 couples reported no unprotected anal or vaginal intercourse or condom breakage or slipping.

Among these couples, 9,270 acts of cunnilingus were reported, 6,545 of fellatio with no ejaculation, and 3,501 of fellatio with ejaculation in the mouth. No case of HIV transmission was diagnosed among these couples. The risk of oral HIV transmission was low, even among gay men. No case of HIV transmission was documented among 239 homosexually active men in San Francisco who reported receptive oral intercourse only, with a median of three partners, including 28% with a partner known to have HIV infection. However, Australian data raised the possibility that genital piercing may allow a portal of entry for HIV. Of five homosexually active men, for whom oral sex was judged to be a possible route of HIV transmission, three reported insertive fellatio with a genital piercing.

Post-exposure prophylaxis

Information presented at the Conference indicated that a few thousand prescriptions for post-exposure prophylaxis had been taken following non-occupational exposure to HIV, with possibly one HIV seroconversion due to treatment failure. More controversially, pre-exposure prophylaxis in high risk individuals is now actively being investigated. It is thought that monotherapy may be sufficient in this situation, and a newly available nucleotide analogue, tenofovir, may be an ideal candidate because of its long half-life and low toxicity. If the therapy is less than 100% effective, and it results in increased risk behaviour, it may do more harm than good. If used in association with behavioural risk reduction, pre-exposure prophylaxis may be an important additional intervention for minimising transmission.

Clinical management of HIV infection

In industrialised countries, widespread availability of antiretroviral therapy has resulted in a shift in clinical management of HIV infection. Treatment-related complications, and co-morbidities such as chronic viral hepatitis infection, have become key areas of current clinical management. The changing nature of HIV disease was also indicated by the altered spectrum of causes of death among people with HIV infection. The percentage of deaths associated with non-HIV/AIDS related causes had increased in recent years. In San Francisco, significant increases were observed in the percentage of deaths due to chronic liver disease, viral hepatitis, obstructive lung disease, septicaemia, coronary artery disease and pancreatitis.

The relationship between antiretroviral therapy, particularly protease inhibitors, and hyperlipidaemia, has raised concerns regarding a possible increased risk of cardiovascular morbidity among people with HIV infection. The incidence of coronary artery disease was measured in a randomised controlled trial comparing highly active antiretroviral therapy (HAART) including a protease inhibitor versus HAART without a protease inhibitor, over three years of follow up. Features of lipodystrophy developed in 21% of the protease inhibitor group and in 3% of the group without a protease inhibitor ($p<0.001$). Overall incidence of coronary artery disease was higher in the protease inhibitor group (9.8/100 person-years versus 0.8/100 person-years, $p<0.001$), including a higher incidence of myocardial infarction (5.1/100 person-years versus 0.4/100 person-years, $p<0.001$). Risk factors for coronary artery disease included hyperlipidaemia (odds ratio =14.2, 95% confidence interval 3.1-26.7), lipodystrophy (odds ratio =26.9; 95% confidence interval 8.3-43.5), and smoking (odds ratio = 9.7; 95% confidence interval 3.5-16.7). It was suggested that HAART containing a protease inhibitor should only be prescribed following a careful cardiologic screen.

The risk of hyperlipidaemia does not appear to be uniform for all protease inhibitors. A study in which people with HIV infection were switched from nelfinavir-containing regimens to a newer protease inhibitor, atazanavir, showed improvements in cholesterol and trygliceride profiles.

Various therapies are being studied for management of hyperlipidaemia. A randomised controlled trial carried out in the United States, comparing fenofibrate and pravastatin, showed that changes in cholesterol and tryglyceride profiles over the initial 12 weeks were insufficient to reach National Cholesterol Education Program goals in the vast majority of patients. Ongoing aspects of the study are examining the efficacy of dual fenofibrate and pravastatin therapy.

Timing of initiation of antiretroviral treatment for HIV infection

Fashions for initiating antiretroviral treatment in people with chronic HIV infection have changed, from "hit hard, hit early", to more conservative approaches involving later initiation, and treatment interruptions, which are currently in vogue due to the serious, long-term toxicities of treatments including the lipodystrophy syndrome. However, evidence as to when to initiate treatment remains thin, with essentially no randomised data.

In a session devoted to this topic, the risk of AIDS or death following initiation of HAART was estimated using data from the ART Cohort Collaboration, a collaborative study that made use of data from several observational cohort studies. The risk of AIDS or death was much greater in people who initiated HAART at a CD4 count of 200 cells/μl or fewer. Outcomes in people who initiated HAART at a CD4 count above 200 cells/μl did not differ significantly. Despite the problems of interpretation of observational data for this question (including the issue of lead time biases), the ART Cohort Collaboration contributes to a growing body of observational data, including analyses based on the Australian HIV Observational Database, which suggests that HAART should be initiated prior to CD4 counts falling below 200 cells/μl. At what CD4 count above 200 cells/μl to initiate treatment remains very much an open question.

HIV and hepatitis C co-infection

In a late breaker session, preliminary results were presented from a randomised controlled trial carried out in France, of the efficacy of treatments for HIV and hepatitis C co-infection. The end-of-treatment (48 weeks) virological response rate was significantly higher in the pegylated interferon alfa-2b plus ribavirin group compared with the standard interferon plus ribavirin group (44% versus 27%, $p = 0.009$). The true test of treatment success in hepatitis C infection is a sustained virological response, measured by absence of viral detection six months following completion of therapy. The percentage of people with a sustained virological response will almost certainly be lower than the response measured at end-of-treatment, due to relapse during the initial months after treatment completion. However, it appears likely that pegylated interferon plus ribavirin will be shown to be the more efficacious therapy for people with HIV and hepatitis C co-infection.

Concerns have been raised that people with HIV and hepatitis C co-infection may be at increased risk of hyperlactaemia due to concomitant use of HIV nucleoside analogue therapies and hepatitis C therapy, particularly ribavirin. The antiviral efficacy of pegylated interferon and ribavirin was assessed in a multinational randomised clinical trial, including sites in Australia. People with HIV and hepatitis C co-infection, on stable antiretroviral therapy, were randomised (1:1:1) to standard interferon plus ribavirin, pegylated interferon alfa-2a monotherapy, and pegylated interferon alfa-2a plus ribavirin. Six people developed symptomatic hyperlactaemia, a rate of 1/100 person-years, which was comparable to rates in other antiretroviral treated populations. The final results from these two randomised controlled trials should be available next year, with important implications for the management of HIV and hepatitis C co-infection.

HIV-specific immune responses

A case report of super infection with a different strain of HIV raised concerns with respect to vaccine development. A person with a history of symptomatic HIV infection, being monitored while receiving treatment interruptions, was found to have a second infection with a strain of HIV different from the original infecting strain. While super infection had been previously reported, the concern in this case was that the person had actually generated very high levels of HIV-specific responses through the use of structured treatment interruptions. The HIV-specific responses were apparently able to control the initial strain of HIV but were not able to prevent infection with the second strain.

A number of studies contributed to the current debate as to the relative value of generating HIV-specific cytotoxic T lymphocyte responses or HIV-specific CD4 immune recovery for the long-term control of viraemia in people with chronic HIV infection. A higher number of HIV-specific memory cells was found in people who were classified as cases of long-term non-progression compared to people who were classified as cases of HIV progression. However, perforin expression was much higher in those who progressed, suggesting that measuring HIV-specific cytotoxic T lymphocyte numbers rather than function is a better predictor of control of disease progression. The first evidence was presented suggesting that therapeutic DNA vaccines could be effective in late stage HIV infection. In chronically infected macaques, control of viral load rebound during structured treatment interruption of HAART was achieved through use of a topical DNA vaccine.

HIV vaccine efficacy trials – methodological issues

A common theme that emerged from the talks and posters on methodological issues in the design and analysis of vaccine efficacy trials was the ability to differentiate between three possible vaccine effects. The first of these would be what is conventionally thought of as vaccine efficacy, the reduction in risk of a vaccinated individual becoming infected. Second, there is the possible effect of vaccination on slowing the progression rate of HIV disease in vaccinated individuals who become infected. Third, there is the possible reduction in the risk of HIV transmission from a vaccinated individual who becomes infected. Estimating the different possible effects of a vaccine would require different study designs. For example, to estimate the effect of a vaccine on the ongoing risk of HIV transmission would require partner studies, probably with a cluster randomisation. There were also several mathematical models presented assessing vaccine implementation strategies depending on the different possible vaccine effects. Although the precise results from the models depend, of course, on technical differences between models and the assumptions made, a generally common outcome was that widespread vaccination only of high-risk groups, such as sex workers or injecting drug users, if this could be achieved, would be a cost-effective vaccination strategy. It is likely that both the second and third of the possible vaccine effects would probably be estimable to some extent through decreased HIV viral load as a surrogate marker. Analysis of viral load data from vaccine efficacy trials appeared to show important improvements in power and precision compared with standard intention to treat analyses. These methods, however, did not allow for treatment of some infected individuals during their primary HIV infection, as would be likely, raising the possibility of further work in this area.

Reported by

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Revised Australian case definition for human immunodeficiency virus infection

From 1985, HIV infection has been diagnosed in Australia on the basis of detection of HIV antibody (ANCA 1994). However, HIV antibody is not detectable immediately following infection. The duration of time between HIV infection and first detection of HIV antibody ("window period") has gradually declined over time, from 8 – 10 weeks with first generation assays to 2 – 3 weeks using third generation assays. Nucleic acid tests, which can detect specific elements of the virus before the development of HIV antibody, may also be used to reduce the window period.

HIV transmission may occur from a person in the window period for HIV antibody detection. In 1999, the first recognised case of transfusion acquired HIV infection in Australia since 1985 was diagnosed, following receipt of blood from a person who had been recently infected and was HIV antibody negative. At about the same time, it was recognised that people receiving antiretroviral treatment for symptomatic HIV infection had a substantially delayed HIV antibody response. HIV infection could not be diagnosed in these cases, due to the lack of the characteristic HIV antibody response, although they were infected.

Revision of the case definition for HIV infection was coordinated by the National Centre in HIV Epidemiology and Clinical Research, within the framework of the Communicable Diseases Network Australia case definition development process. The National Serology Reference Laboratory, Australia, the NSW State Reference Laboratory for HIV, the Public Health Laboratory Network and the Victorian Infectious Diseases Reference Laboratory all contributed to the revision of the case definition. The revised Australian definition for HIV infection is similar to that implemented in the United States in January 2000 (Council of State and Territorial Epidemiologists 1999).

The revised Australian definition of HIV infection includes cases with virological evidence of HIV, in addition to cases with HIV antibody included in the original definition. It is expected, however, that HIV infection will continue to be diagnosed on the basis of detection of HIV antibody in the vast majority of cases with a small number of cases being diagnosed on the basis of virological evidence only.

The revised Australian definition of HIV infection outlines the basis for HIV diagnosis separately for adults, adolescents and children aged 18 months or older at the time of blood sample collection, and for children aged less than 18 months. Both confirmed cases of HIV infection, with definitive laboratory evidence, and probable cases, with suggestive laboratory evidence, are permitted under the revised definition. Both confirmed and probable diagnoses are notifiable cases of HIV infection. The revised Australian definition for HIV infection became effective from 1 July 2002.

References

Australian National Council on AIDS. Definition of HIV infection and AIDS-defining illnesses. ANCA Bulletin No 18, April 1994

Council of State and Territorial Epidemiologists. Appendix: Revised surveillance case definition for HIV infection. *Morbidity and Mortality Weekly Report* 1999; 48 (RR13); 29-31

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Table 1.1 Revised Australian case definition for human immunodeficiency virus infection

A. Adults, adolescents and children aged 18 months or older at the time of blood sample collection

A.1 Confirmed case
Laboratory definitive evidence

HIV infection is diagnosed by any ONE of the following three combinations of evidence:

1. Repeatedly reactive result on a screening test for HIV antibody followed by a positive result on a western blot. A positive result for a western blot is defined by the presence of a glycoprotein band (gp41, gp120 or gp160) and at least three other HIV specific bands.

OR

2. Both of the following:

2(a). Repeatedly reactive result on a screening test for HIV antibody followed by a group IV indeterminate western blot. A group IV indeterminate western blot is defined by the presence of a glycoprotein band (gp41, gp120 or gp160) and one or two other HIV specific bands

AND

2(b). Detection of HIV by at least one of the following virological assays:
- nucleic acid testing for proviral DNA
- HIV p24 antigen, with neutralisation
- direct detection of HIV by virus isolation

OR

3. Detection of HIV by at least two of the above virological assays (nucleic acid testing for proviral DNA, p24 antigen or virus isolation) in at least two separate blood samples.

A.2 Probable case
Laboratory suggestive evidence

1. Detection of HIV by virological assays (nucleic acid testing for proviral DNA, p24 antigen or virus isolation) in one blood sample.

B. Children aged less than 18 months at the time of blood sample collection

B.1 Confirmed case
Laboratory definitive evidence

1. Detection of HIV by at least two virological assays in at least two separate blood samples (not including cord blood)
   - nucleic acid testing for proviral DNA
   - HIV p24 antigen, with neutralisation, in a child older than one month
   - direct detection of HIV by virus isolation

B.2 Probable case
Laboratory suggestive evidence

1. Detection of HIV by virological assays (nucleic acid testing for proviral DNA, p24 antigen or virus isolation) in one blood sample (not cord blood) and no subsequent negative HIV virologic or antibody tests

National AIDS Registry

Table 2.1 Cases of AIDS and deaths following AIDS by sex and State/Territory in which diagnosis of AIDS was made, cumulative to 31 March 2002, and for two previous yearly intervals

Cases

	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
State/Territory	Male	Female	Male	Female	Male	Female	Total†	%
ACT	2	0	0	0	88	9	97	1.1
NSW	78	13	54	4	4 827	208	5 048	57.4
NT	2	0	1	0	38	0	38	0.4
QLD	34	2	21	2	891	52	945	10.7
SA	6	0	13	4	369	29	398	4.5
TAS	1	0	0	0	45	3	48	0.5
VIC	43	2	30	5	1 729	79	1 817	20.6
WA	10	1	17	2	384	30	416	4.7
Total	**176**	**18**	**136**	**17**	**8 371**	**410**	**8 807**	**100.0**

Deaths

	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
State/Territory	Male	Female	Male	Female	Male	Female	Total†	%
ACT	2	0	2	0	71	4	75	1.2
NSW	60	3	33	2	3 348	122	3 479	56.4
NT	0	0	1	0	25	0	25	0.4
QLD	12	1	8	2	593	35	630	10.2
SA	3	1	9	2	244	18	262	4.3
TAS	0	0	0	0	30	2	32	0.5
VIC	24	1	12	5	1 313	57	1 377	22.3
WA	5	1	3	1	266	19	286	4.7
Total	**106**	**7**	**68**	**12**	**5 890**	**257**	**6 166**	**100.0**

† Totals include 26 AIDS cases and 19 deaths following AIDS in people whose sex was reported as transgender.

Table 2.2 Incidence of AIDS per million current population[1] by sex and State/Territory of diagnosis for the two most recent yearly intervals

State/Territory	1 Apr 2000 – 31 Mar 2001			1 Apr 2001 – 31 Mar 2002		
	Male	Female	Total	Male	Female	Total
ACT	12.7	0.0	6.3	0.0	0.0	0.0
NSW	24.0	3.9	13.9	16.4	1.2	8.9
NT	19.3	0.0	10.1	9.6	0.0	5.0
QLD	19.0	1.1	10.0	11.6	1.1	6.3
SA	8.0	0.0	4.0	17.3	5.2	11.2
TAS	4.3	0.0	2.1	0.0	0.0	0.0
VIC	18.3	0.8	9.6	12.6	2.0	7.2
WA	10.6	1.1	5.8	17.8	2.1	9.9
Total	**18.4**	**1.9**	**10.1**	**14.0**	**1.7**	**7.9**

1 Population estimates by sex, State/Territory and calendar period from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Table 2.3 Cases of AIDS and deaths following AIDS by sex and age group, cumulative to 31 March 2002, and for two previous yearly intervals

Cases[1]

Age group (years)	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	*0*	*1*	*0*	*1*	*9*	*9*	*18*	*0.2*
2–12	*0*	*0*	*0*	*1*	*20*	*10*	*30*	*0.3*
0–12	0	1	0	2	29	19	48	0.5
13–19	0	0	0	0	27	4	31	0.4
20–29	13	3	12	2	1 362	102	1 477	16.8
30–39	69	10	49	8	3 507	151	3 667	41.6
40–49	53	3	44	2	2 352	67	2 421	27.5
50–59	25	0	24	3	822	34	858	9.7
60+	16	1	7	0	272	33	305	3.5
Total	**176**	**18**	**136**	**17**	**8 371**	**410**	**8 807**	**100.0**

Deaths[2]

Age group (years)	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
	Male	Female	Male	Female	Male	Female	Total†	%
0–2	*0*	*0*	*0*	*1*	*5*	*6*	*11*	*0.2*
2–12	*0*	*0*	*1*	*0*	*17*	*6*	*23*	*0.4*
0–12	0	0	1	1	22	12	34	0.6
13–19	1	0	0	0	14	3	17	0.3
20–29	7	1	2	1	680	45	736	11.9
30–39	37	3	23	5	2 363	93	2 462	39.9
40–49	40	0	23	1	1 871	44	1 917	31.1
50–59	15	1	8	4	705	29	734	11.9
60+	6	2	11	0	235	31	266	4.3
Total	**106**	**7**	**68**	**12**	**5 890**	**257**	**6 166**	**100.0**

1 Cases are classified by age at diagnosis.

2 Deaths are classified by age at death.

Table 2.4 Cases of AIDS by sex and exposure category, cumulative to 31 March 2002, and for two previous yearly intervals

	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
Exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**	**%**
Male homosexual/ bisexual contact	120	–	100	–	6 951	–	6 951	82.0
Male homosexual/bisexual contact and injecting drug use	11	–	3	–	382	–	382	4.5
Injecting drug use	7	1	3	3	182	90	272	3.2
Heterosexual	*4*	*0*	*2*	*2*	*117*	*69*	*186*	
Not further specified	*3*	*1*	*1*	*1*	*65*	*21*	*86*	
Heterosexual contact	21	15	20	11	345	216	561	6.6
Sex with injecting drug user	*0*	*1*	*0*	*0*	*7*	*22*	*29*	
Sex with bisexual male	*–*	*2*	*–*	*0*	*–*	*41*	*41*	
From a high prevalence country	*5*	*5*	*4*	*6*	*64*	*47*	*111*	
Sex with person from a high prevalence country	*6*	*1*	*5*	*0*	*55*	*15*	*70*	
Sex with person with medically acquired HIV	*0*	*0*	*0*	*0*	*2*	*10*	*12*	
Sex with HIV infected person, exposure not specified	*2*	*5*	*3*	*0*	*32*	*27*	*59*	
Not further specified	*8*	*1*	*8*	*5*	*185*	*54*	*239*	
Haemophilia/coagulation disorder	2	0	1	0	116	3	119	1.4
Receipt of blood/tissue	0	0	0	0	78	63	141	1.7
Health care setting	0	0	0	0	1	3	4	0.0
Total Adults/Adolescents	**161**	**16**	**127**	**14**	**8 055**	**375**	**8 430**	**99.4**
Children (under 13 years at AIDS diagnosis)								
Mother with/at risk for HIV infection	0	1	0	2	13	16	29	0.3
Haemophilia/coagulation disorder	0	0	0	0	5	0	5	0.1
Receipt of blood/tissue	0	0	0	0	11	3	14	0.2
Total children	**0**	**1**	**0**	**2**	**29**	**19**	**48**	**0.6**
Sub-total	**161**	**17**	**127**	**16**	**8 084**	**394**	**8 478**	**100.0**
Other/undetermined[1]	15	1	9	1	287	16	329	
Total	**176**	**18**	**136**	**17**	**8 371**	**410**	**8 807**	

1 The 'Other/undetermined' exposure category includes 26 AIDS cases in people whose sex was reported as transgender. The category was excluded from the calculation of the percentage of cases attributed to each exposure category.

Table 2.5 Deaths following AIDS by sex and exposure category, cumulative to 31 March 2002, and for two previous yearly intervals

	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
Exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**	**%**
Male homosexual/ bisexual contact	76	–	51	–	4 997	–	4 997	83.9
Male homosexual/bisexual contact and injecting drug use	7	–	5	–	268	–	268	4.5
Injecting drug use	7	2	4	0	110	52	162	2.7
Heterosexual	*3*	*1*	*2*	*0*	*78*	*43*	*121*	
Not further specified	*4*	*1*	*2*	*0*	*32*	*9*	*41*	
Heterosexual contact	6	4	3	9	154	123	277	4.7
Sex with injecting drug user	*1*	*1*	*0*	*0*	*4*	*11*	*15*	
Sex with bisexual male	*–*	*1*	*–*	*1*	*–*	*29*	*29*	
From a high prevalence country	*2*	*0*	*2*	*4*	*15*	*16*	*31*	
Sex with person from a high prevalence country	*1*	*0*	*0*	*0*	*18*	*10*	*28*	
Sex with person with medically acquired HIV	*0*	*0*	*0*	*0*	*2*	*7*	*9*	
Sex with HIV infected person, exposure not specified	*0*	*0*	*0*	*1*	*22*	*15*	*37*	
Not further specified	*2*	*2*	*1*	*3*	*93*	*35*	*128*	
Haemophilia/coagulation disorder	3	0	1	0	92	3	95	1.6
Receipt of blood/tissue	0	0	0	2	68	54	122	2.0
Health care setting	0	0	0	0	1	2	3	0.0
Total Adults/Adolescents	**99**	**6**	**64**	**11**	**5 690**	**234**	**5 924**	**99.4**
Children (under 13 years at death following AIDS)								
Mother with/at risk for HIV infection	0	0	1	1	8	10	18	0.3
Haemophilia/coagulation disorder	0	0	0	0	3	0	3	0.1
Receipt of blood/tissue	0	0	0	0	11	2	13	0.2
Total children	**0**	**0**	**1**	**1**	**22**	**12**	**34**	**0.6**
Sub-total	**99**	**6**	**65**	**12**	**5 712**	**246**	**5 958**	**100.0**
Other/undetermined[1]	7	1	3	0	178	11	208	
Total	**106**	**7**	**68**	**12**	**5 890**	**257**	**6 166**	

1 The 'Other/undetermined' exposure category includes 19 deaths following AIDS in people whose sex was reported as transgender. The category was excluded from the calculation of the percentage of cases attributed to each exposure category.

The National HIV Database

Table 3.1 Number of new diagnoses of HIV infection by sex[1] and State/Territory, cumulative to 31 March 2002, and for two previous yearly intervals

State/Territory	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
	Male	Female	Male	Female	Male	Female	Total	Rate[2]
ACT	7	1	5	1	232	28	260	80.7
NSW[3]	315	37	330	28	11 656	678	12 597	190.0
NT	1	1	4	1	113	11	124	61.9
QLD	87	14	81	16	2 172	185	2 364	64.7
SA	22	3	36	12	738	76	814	53.7
TAS	2	0	0	0	80	5	85	18.0
VIC[4]	169	22	192	26	4 258	259	4 557	94.2
WA	37	4	30	11	984	134	1 124	58.8
Total[5]	**640**	**82**	**678**	**95**	**20 233**	**1 376**	**21 925[6]**	**112.2**

1 Fifty four people (25 NSW, 7 QLD, 16 VIC and 6 WA) whose sex was reported as transgender are included in the total columns of Tables 3.1 – 3.3

2 Rate per one hundred thousand current population. Population estimates by sex, State/Territory and calendar interval from *Australian Demographic Statistics* (Australian Bureau of Statistics).

3 Cumulative total for NSW includes 238 people whose sex was not reported.

4 Cumulative total for VIC includes 24 people whose sex was not reported.

5 Cumulative total for Australia includes 262 people whose sex was not reported.

6 Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 19 000 (range 18 550 to 19 500). Reference: Law MG, McDonald AM and Kaldor JM. Estimation of cumulative HIV incidence in Australia, based on national case reporting. *Aust NZ J Public Health* 1996; 20: 215 - 217

Table 3.2 Number of new diagnoses of HIV infection for which exposure category was reported, by sex and exposure category, cumulative to 31 March 2002, and for two previous yearly intervals

	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
Exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total[1]**	**%**
Male homosexual/ bisexual contact	454	–	465	–	14 077	–	14 077	77.5
Male homosexual/ bisexual contact and injecting drug use	25	–	30	–	719	–	719	4.0
Injecting drug use	23	3	29	8	612	188	808	4.5
Heterosexual	*15*	*3*	*19*	*7*	*238*	*137*	*376*	
Not further specified	*8*	*0*	*10*	*1*	*374*	*51*	*432*	
Heterosexual contact	83	72	80	80	1 065	884	1 952	10.8
Sex with injecting drug user	*1*	*7*	*2*	*1*	*32*	*92*	*124*	
Sex with bisexual male	*–*	*3*	*–*	*9*	*–*	*119*	*119*	
From a high prevalence country	*27*	*32*	*25*	*38*	*212*	*236*	*449*	
Sex with person from a high prevalence country	*28*	*13*	*16*	*13*	*182*	*99*	*281*	
Sex with person with medically acquired HIV	*0*	*1*	*0*	*0*	*5*	*17*	*22*	
Sex with HIV infected person, exposure not specified	*3*	*10*	*8*	*9*	*62*	*127*	*190*	
Not further specified	*24*	*6*	*29*	*10*	*572*	*194*	*767*	
Haemophilia/coagulation disorder	0	0	1	0	221	4	225	1.2
Receipt of blood/tissue	0	0	0	0	104	102	206	1.1
Health care setting[2]	0	0	0	0	3	8	11	0.0
Total Adults/Adolescents[1]	**585**	**75**	**605**	**88**	**16 801**	**1 186**	**17 998**	**99.1**
Children (under 13 years at HIV diagnosis)								
Mother with/at risk for HIV infection[3]	2	2	0	3	39	31	70	0.4
Haemophilia/coagulation disorder	0	0	0	0	66	0	66	0.4
Receipt of blood/tissue	0	0	0	0	13	8	21	0.1
Total children	**2**	**2**	**0**	**3**	**118**	**39**	**157**	**0.9**
Sub-total	**587**	**77**	**605**	**91**	**16 919**	**1225**	**18 155**	**100.0**
Other/undetermined[4]	53	5	73	4	3 314	151	3 770	
Total[1]	**640**	**82**	**678**	**95**	**20 233**	**1 376**	**21 925[5]**	

1 Total column includes people whose sex was not reported.

2 'Health care setting' includes 5 cases of occupationally acquired HIV infection and 4 cases of HIV transmission in surgical rooms.

3 A total of 261 children were notified as having been born to women with HIV infection, cumulative to 31 March 2002.

4 The 'Other/undetermined' exposure category includes 3 752 adults/adolescents and 18 children. Fifty four people whose sex was reported as transgender were included in the 'Other/undetermined' category. The 'Other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each exposure category.

5 See footnote Table 3.1

Table 3.3 Number of new diagnoses of HIV infection by sex and age group, cumulative to 31 March 2002, and for two previous yearly intervals

Age group (years)	1 Apr 00 – 31 Mar 01		1 Apr 01 – 31 Mar 02		Cumulative to 31 Mar 02			
	Male	Female	Male	Female	Male	Female	Total[1]	%
0–2	*1*	*2*	*0*	*1*	*43*	*20*	*64*	*0.3*
3–12	*1*	*0*	*0*	*2*	*90*	*21*	*111*	*0.5*
0–12	2	2	0	3	133	41	175	0.8
13–19	7	2	11	4	427	88	524	2.4
20–29	150	33	151	34	6 805	559	7 485	34.1
30–39	267	30	280	35	7 512	391	8 007	36.5
40–49	126	9	149	12	3 572	147	3 763	17.2
50–59	61	0	62	4	1 212	53	1 278	5.8
60+	19	3	17	3	394	62	458	2.1
Not reported	8	3	8	0	178	35	235	1.1
Total[1]	**640**	**82**	**678**	**95**	**20 233**	**1 376**	**21 925**	**100.0**

1 See footnotes Table 3.2

Table 3.4 Number of new diagnoses of HIV infection in the year 1 April 2001 to 31 March 2002 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and State/Territory and for two six month intervals of HIV diagnosis

State/Territory	1 Apr 01 – 30 Sep 01		1 Oct 01 – 31 Mar 02		1 Apr 01 – 31 Mar 02		
	Male	Female	Male	Female	Male	Female	Total[1]
ACT	2	0	0	0	2	0	2
NSW[1]	48	3	45	1	93	4	98
NT	1	0	2	0	3	0	3
QLD	9	1	11	2	20	3	23
SA	3	1	5	0	8	1	9
TAS	0	0	0	0	0	0	0
VIC	17	2	33	1	50	3	53
WA	3	1	2	1	5	2	7
Total[1]	**83**	**8**	**98**	**5**	**181**	**13**	**195**

1 Total includes 1 person whose sex was reported as transgender.

Table 3.5 Number of new diagnoses of HIV infection in the year 1 April 2001 to 31 March 2002 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and exposure category and for two six month intervals of HIV diagnosis

	1 Apr 01 – 30 Sep 01		1 Oct 01 – 31 Mar 02		1 Apr 01 – 31 Mar 02		
Exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total[1]**
Male homosexual/bisexual contact	68	–	86	–	154	–	154
Male homosexual/bisexual contact and injecting drug use	6	–	4	–	10	–	10
Injecting drug use (female and heterosexual male)	4	2	1	0	5	2	7
Heterosexual contact	4	5	6	5	10	10	20
Health care setting	0	0	0	0	0	0	0
Other/undetermined[1]	1	1	1	0	2	1	4
Total[1]	**83**	**8**	**98**	**5**	**181**	**13**	**195**

1 Total includes one person whose sex was reported as transgender.

Table 3.6 Number of new diagnoses of HIV infection in the year 1 April 2001 to 31 March 2002 for which an HIV seroconversion illness was diagnosed or the date of a prior negative test was within one year of diagnosis of HIV infection, by sex and age group and for two six month intervals of HIV diagnosis

	1 Apr 01 – 30 Sep 01		1 Oct 01 – 31 Mar 02		1 Apr 01 – 31 Mar 02		
Age Group (years)	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total[1]**
13–19	0	0	4	0	4	0	4
20–29	17	4	29	1	46	5	51
30–39[1]	38	0	47	4	85	4	90
40–49	23	2	12	0	35	2	37
50–59	5	1	5	0	10	1	11
60+	0	1	1	0	1	1	2
Total[1]	**83**	**8**	**98**	**5**	**181**	**13**	**195**

1 Totals include one person whose sex was reported as transgender.

Sentinel surveillance of HIV infection in sexual health clinics

Table 4.1 Number of people seen, number of people tested for HIV antibody and number of people newly diagnosed with HIV infection, by sex and sexual health clinic, during the quarter 1 January to 31 March 2002

	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
Sexual health clinic	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**
Sydney Sexual Health Centre, NSW	1 491	1 095	614	415	3	0	3
Livingstone Road Sexual Health Centre, Marrickville, NSW	338	355	168	131	0	0	0
Brisbane Sexual Health Clinic, QLD	975	874	310	306	1	0	1
Gold Coast Sexual Health Clinic, QLD	437	583	149	229	1	0	1
Clinic 275, Adelaide, SA	1 044	819	759	525	1	0	1
Melbourne Sexual Health Centre, VIC	1 829	1 451	805	631	7	0	7
Total	**6 114**	**5 177**	**2 805**	**2 237**	**13**	**0**	**13**

Table 4.2 Number of people seen[1] who had a *previous negative HIV antibody test,* percent retested for HIV antibody and number (percent) newly diagnosed with HIV infection, by sex and exposure category, during the quarter 1 January to 31 March 2002

	Previous negative HIV antibody test		% retested for HIV antibody		Newly diagnosed with HIV infection			
Exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**	**%**
Male homosexual/ bisexual contact	645	–	58.0	–	2	–	2	0.5
Male homosexual/bisexual contact and injecting drug use	69	–	63.8	–	2	–	2	4.5
Injecting drug use (female and heterosexual male)	157	105	51.6	48.6	0	0	0	0.0
Heterosexual contact	1 357	1 317	45.2	38.4	1	0	1	0.1
outside Australia	*197*	*145*	*61.9*	*55.2*	*0*	*0*	*0*	*0.0*
within Australia only	*1 160*	*1 172*	*42.3*	*36.3*	*1*	*0*	*1*	*0.1*
Sex worker	–	282	–	59.9	–	0	0	0.0
Sex worker and injecting drug use	–	30	–	43.3	–	0	0	0.0
Other/undetermined	25	70	52.0	42.9	0	0	0	0.0
Total	**2 253**	**1 804**	**49.9**	**42.6**	**5**	**0**	**5**	**0.3**

1 Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

Table 4.3 Number of people seen[1] with *no previous HIV antibody test*, percent tested for HIV antibody for the first time, and number (percent) newly diagnosed with HIV infection, by sex and exposure category, during the quarter 1 January to 31 March 2002

Exposure category	No previous HIV antibody test		% tested for HIV antibody		Newly diagnosed with HIV infection			
	Male	Female	Male	Female	Male	Female	Total	%
Male homosexual/ bisexual contact	293	–	51.2	–	0	–	0	0.0
Male homosexual/bisexual contact and injecting drug use	18	–	66.7	–	0	–	0	0.0
Injecting drug use (female and heterosexual male)	56	49	62.5	55.1	0	0	0	0.0
Heterosexual contact	1 235	1 522	52.2	43.1	1	0	1	0.1
outside Australia	*141*	*165*	*61.7*	*60.0*	*0*	*0*	*0*	*0.0*
within Australia only	*1 094*	*1 357*	*51.0*	*41.0*	*1*	*0*	*1*	*0.1*
Sex worker	–	116	–	73.3	–	0	0	1.0
Sex worker and injecting drug use	–	27	–	66.7	–	0	0	0.0
Other/undetermined	194	178	17.0	28.7	0	0	0	0.0
Total	**1 796**	**1 892**	**48.7**	**44.2**	**1**	**0**	**1**	**0.1**

1 Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

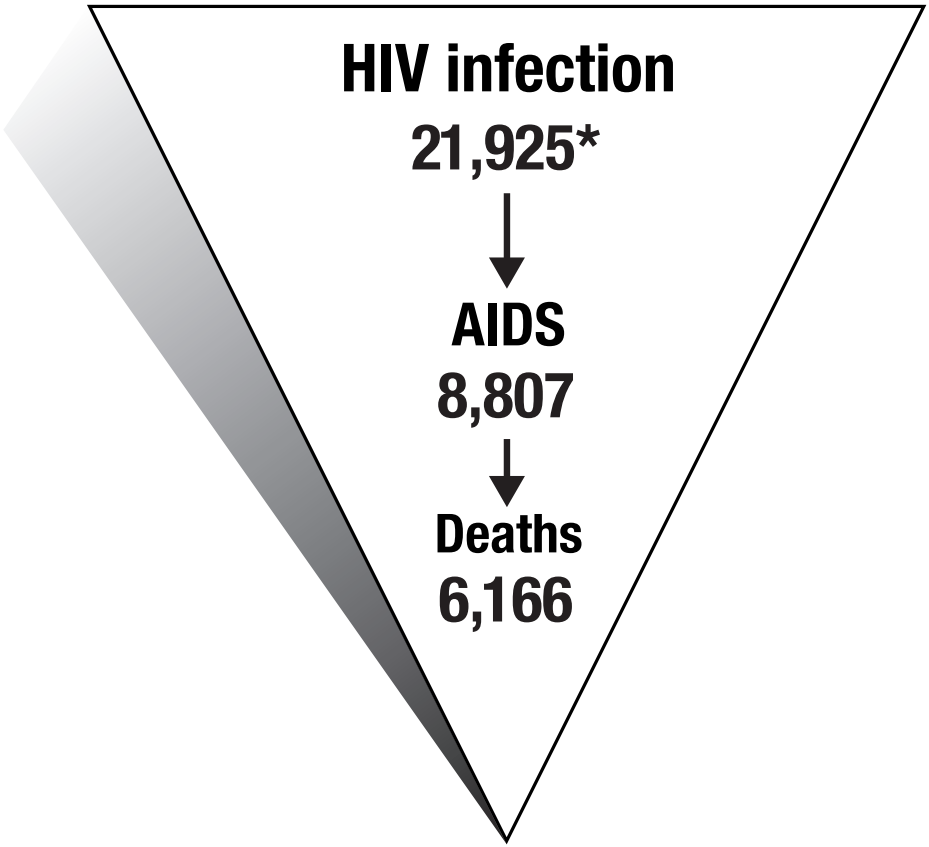
Table 4.4 Number of people seen[1], number of people tested for HIV antibody and number of people newly diagnosed with HIV infection, by sex and age group, during the quarter 1 January to 31 March 2002

Age group (years)	Seen at Clinic		Tested for HIV antibody		Newly diagnosed with HIV infection		
	Male	Female	Male	Female	Male	Female	Total
13–19	143	466	77	169	0	0	0
20–29	1 703	1 975	909	884	4	0	4
30–39	1 360	821	615	365	1	0	1
40–49	646	310	242	129	1	0	1
50–59	300	125	113	51	0	0	0
60+	133	29	44	8	0	0	0
Total	**4 285**	**3 726**	**2000**	**1 606**	**6**	**0**	**6**

1 Data from the Melbourne Sexual Health Centre, VIC, not available for this quarter.

The HIV Epidemic in Australia

A cumulative profile to 31 March 2002



* Estimated number of new diagnoses of HIV infection, adjusted for multiple reports, was 19,000 (range 18,550 to 19,500), cumulative to 31 March 2002.

National Centre in HIV Epidemiology and Clinical Research

Australian HIV Surveillance Update

Vol 18 No 3 July 2002

Diagnoses in the first quarter

1 January – 31 March

- a total of 192 diagnoses of HIV infection, 32 diagnoses of AIDS and 12 deaths following AIDS were reported, by 30 June 2002, to have occurred in the first quarter of 2002
- following adjustment for reporting delay, the estimated numbers of AIDS diagnoses and deaths following AIDS occurring in the first quarter of 2002 were 52 and 22
- in comparison, 196 diagnoses of HIV infection, 36 diagnoses of AIDS and 15 deaths following AIDS were reported, by 30 June 2002, to have occurred in the first quarter of 2001

New HIV infection

During the first quarter of 2002, 50 cases were reported as having newly acquired HIV infection identified by a negative test within the 12 months prior to diagnosis or the diagnosis of HIV seroconversion illness. A history of male homosexual contact, with or without a history of injecting drug use, was reported in 45 (90.0%) of cases.

Diagnoses in the year to 31 March 2002

- 777 diagnoses of HIV infection
- 154 diagnoses of AIDS
- 80 deaths following AIDS were reported by 30 June 2002

HIV diagnoses

People diagnosed with HIV infection in the year to 31 March 2002 had an average age of 36 years and 2.0% was in the age group 13 – 19 years

- 87.3% were male, 12.2% were female and sex was reported as transgender for 0.4% and was not reported for 0.1% of cases.
- of 699 cases of HIV infection, newly diagnosed in the year to 31 March 2002 for which exposure to HIV was recorded, a history of male homosexual contact, with or without a history of injecting drug use, was reported in 70.8%.

Total diagnoses to 31 March 2002

- 21,925 diagnoses of HIV infection
- 19,000 diagnoses of HIV infection following adjustment for multiple reporting
- 8,807 diagnoses of AIDS
- 6,166 deaths following AIDS were reported by 30 June 2002

HIV testing in sexual health clinics

Six sexual health clinics in Adelaide, Brisbane, Gold Coast, Melbourne and Sydney tested 5,042 people in the quarter 1 January – 31 March 2002 who were not previously known to have HIV infection

- of 1,712 people reported as having been tested for the first time, 1 (0.1%) was found to have HIV infection
- of 1,894 people reported as having been retested following a previous negative test, 5 (0.3%) were found to have HIV infection
- of 418 men who reported a history of homosexual contact, with or without a history of injecting drug use, who were retested following a previous negative test, 4 (1.0%) were newly diagnosed with HIV infection

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Australian HIV Surveillance Report

National Centre in HIV Epidemiology and Clinical Research

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NOTES

The National AIDS Registry is maintained by NCHECR on behalf of the National HIV Surveillance Committee, which consists of representatives from NCHECR, and the Health Departments of each State and Territory and the Commonwealth of Australia. The Registry is based on reports from doctors who diagnose AIDS, made to the Health Department in the State/Territory of diagnosis. Date of birth and a name code (first two letters of first and last name) are used to minimise duplicate registration, while maintaining confidentiality.

The National HIV Database is maintained by NCHECR on behalf of the National HIV Surveillance Committee. It is based on reports of new diagnoses of HIV infection from HIV Reference Laboratories (ACT, NSW, TAS, VIC), or from a combination of Reference Laboratory and diagnosing doctors (NT, QLD, SA, WA). In order to avoid counting the same case more than once, only diagnoses which are determined to be new by the diagnosing laboratory or doctor are reported for the purposes of national surveillance.

Sentinel surveillance is carried out by six sexual health clinics in five Australian cities, which send quarterly reports on HIV antibody testing to NCHECR. Tabulations from the National AIDS Registry, the National HIV Database and Sentinel HIV Surveillance in sexual health clinics are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information.

Abbreviations: HIV is the human immunodeficiency virus, and unless otherwise specified, refers to HIV-1 only. AIDS is the acquired immunodeficiency syndrome and STI stands for sexually transmissible infection. High prevalence countries are those of sub-Saharan Africa, the Caribbean and specific countries in South East Asia (Cambodia, Myanmar and Thailand), where HIV prevalence is above 1% and transmission is believed to be predominantly heterosexual. The Australian States and Territories are: Australian Capital Territory (ACT), New South Wales (NSW), Northern Territory (NT), Queensland (QLD), South Australia (SA), Tasmania (TAS), Victoria (VIC) and Western Australia (WA). NCHECR is the National Centre in HIV Epidemiology and Clinical Research.

All data in this report are provisional and subject to future revision.

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State/Territory publications of surveillance data, available through the Internet, are listed below:

NSW Public Health Bulletin	www.health.nsw.gov.au/public-health/phb/phb.html
The Northern Territory Disease Control Bulletin	www.nt.gov.au/nths/publich/cdc/bulletin.htm
Sexually Transmitted Diseases in South Australia	www.stdservices.on.net/publications
Victorian Infectious Diseases Bulletin	www.dhs.vic.gov.au/phd/vidb/
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