

Annual Surveillance Report



2001

HIV/AIDS, viral hepatitis
& sexually transmissible
infections in Australia



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National Centre in HIV Epidemiology and Clinical Research
376 Victoria Street, Darlinghurst NSW 2010 Australia

Telephone: **02 9332 4648** Facsimile: **02 9332 1837** International prefix: 612 E-mail: recept@nchecr.unsw.edu.au



Annual Surveillance Report

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edited by

Ann McDonald and Jennie Musto

National Centre in HIV Epidemiology and Clinical Research

in collaboration with

Australian Gonococcal Surveillance Programme

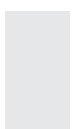
Communicable Diseases Network Australia

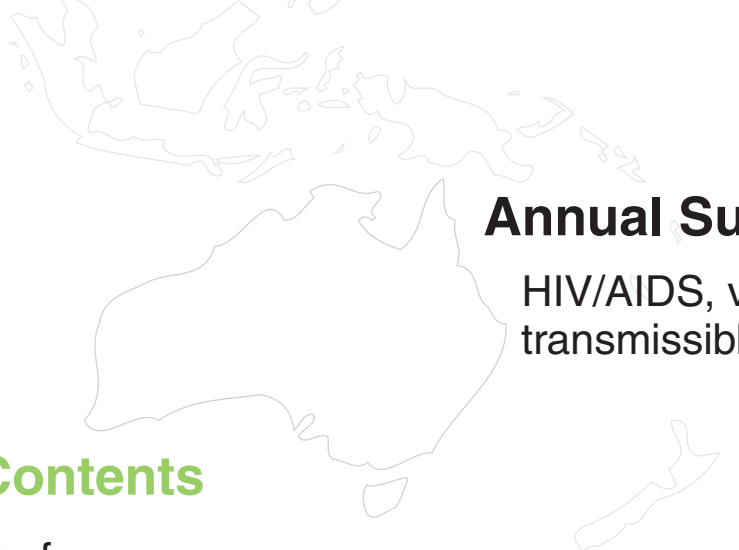
National Centre in HIV Social Research

National Serology Reference Laboratory, Australia

and collaborating networks in surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections

The National Centre in HIV Epidemiology and Clinical Research is funded by the Commonwealth Department of Health and Aged Care 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 (ANCAHRD).





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Preface

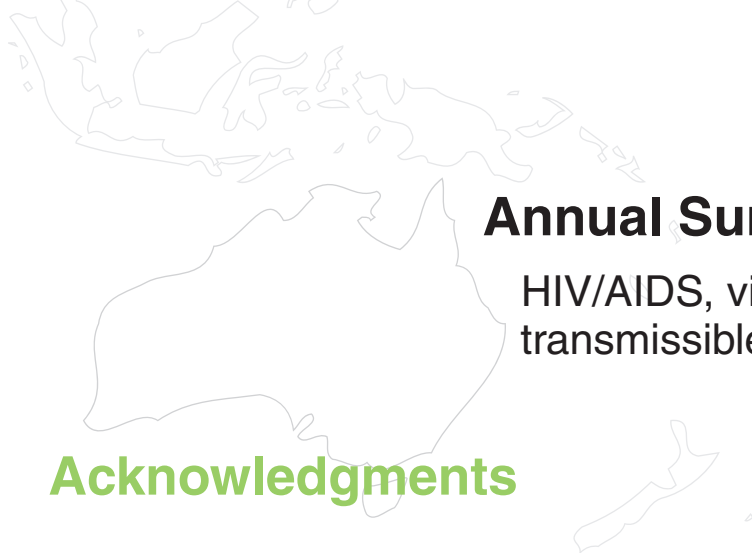
This report is the fifth annual review of available surveillance data pertaining to the occurrence of HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia. It is intended to be a reference document for organisations and individuals interested in the occurrence of these infectious diseases in Australia, drawing together relevant data from many sources into a single comprehensive report. The report is also available at Internet address <http://www.med.unsw.edu.au/nchecr>

The main findings of the report are presented as text, supported by figures. The underlying data are presented as tables and follow the main report. The tables are provided with no commentary, except for brief explanatory footnotes. A methodological summary follows the tables, along with references to other documents and reports which provide further information.

Some of the information regarding behavioural monitoring which appears in this report is also published, along with further behavioural data, in the report *HIV/AIDS, Hepatitis C and related diseases in Australia Annual Report of Behaviour 2001*, edited by the National Centre in HIV Social Research. Specifically, data reported in Tables 5.1.1 and 6.1.2 of *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2001* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2000, as reported by 31 March 2001.

This report could not have been prepared without the collaboration of a large number of organisations involved in health services throughout Australia. The ongoing contribution of all collaborating organisations, listed in the following section, to national surveillance for HIV/AIDS, viral hepatitis and sexually transmissible infections is gratefully acknowledged.



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Acknowledgments

National organisations

- Australia and New Zealand Liver Transplant Register, Sydney, NSW
- Australian Defence Force, Department of Defence, Canberra, ACT
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- Communicable Diseases Network Australia
- Commonwealth Department of Health and Aged Care, Canberra, ACT
- National Centre in HIV Social Research, The University of New South Wales, NSW
- National Centre for Research into the Prevention of Drug Abuse, Perth, WA
- National Drug and Alcohol Research Centre, The University of New South Wales, Sydney, NSW
- National Serology Reference Laboratory, Australia, Fitzroy, VIC

State/Territory health departments

- Communicable Disease Control Program, ACT Department of Health and Community Care, Canberra, ACT
- Area Public Health Units, NSW Health Department, North Sydney, NSW
- AIDS/STD Unit, Communicable Diseases Centre, Darwin, NT
- Queensland Health, Brisbane, QLD
- Sexually Transmitted Diseases (STD) Services, Internal Medicine Service, Royal Adelaide Hospital, SA
- Department of Community and Health Services, Hobart, TAS
- STD/Blood-Borne Virus Program, Infectious Diseases Unit, Department of Human Services, Melbourne, VIC; Macfarlane Burnet Centre for Medical Research, Fairfield, VIC
- Communicable Diseases Control Unit, Health Department of WA, Perth, WA

Australian Gonococcal Surveillance Programme

Reference Laboratories:

- Microbiology Department, Canberra Hospital, Woden, ACT
- Department of Microbiology, Prince of Wales Hospital, Randwick, NSW
- Microbiology Laboratory, Royal Darwin Hospital, Casuarina, NT
- Queensland Health Scientific Services, Coopers Plains, Brisbane, QLD
- Infectious Diseases Laboratories, Institute of Medical and Veterinary Science, Adelaide, SA
- Department of Microbiology and Infectious Diseases, Royal Hobart Hospital, Hobart, TAS
- The Microbiological Diagnostic Unit, University of Melbourne, Melbourne, VIC
- Microbiology Department, Royal Perth Hospital, Perth, WA

Collaborative group on sentinel HIV surveillance in sexual health clinics

- Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
- Livingstone Road Sexual Health Centre, Marrickville, NSW
- Clinic 34, Darwin, NT
- Brisbane Sexual Health Clinic, Brisbane, QLD
- Gold Coast Sexual Health Clinic, Miami, QLD
- Clinic 275, Adelaide, SA
- Melbourne Sexual Health Centre, Melbourne, VIC

State/Territory Departments of Corrections

- ACT Corrective Services, Woden, ACT
- Corrections Health Service, Matraville, NSW
- Department of Correctional Services, Darwin, NT
- Queensland Corrective Services Commission, Brisbane, QLD
- South Australian Forensic Health Services, Adelaide, SA
- Corrective Services Division, Department of Justice, Hobart, TAS
- Department of Human Services, Melbourne, VIC;
- Strategic and Specialist Services, Ministry of Justice of Western Australia, Perth, WA

Australian Red Cross Blood Services

- Australian Red Cross Blood Service, Fitzroy, VIC
- ACT Red Cross Transfusion Service, ACT
- NSW Red Cross Blood Transfusion Service, NSW
- NT Red Cross Blood Transfusion Service, NT
- Queensland Red Cross Blood Transfusion Service, QLD
- Australian Red Cross Blood Service South Australia, SA
- Red Cross Blood Transfusion Service, TAS
- Red Cross Blood Bank Victoria, VIC
- Australian Red Cross Blood Transfusion Service Western Australia, WA

Australian HIV Observational Database

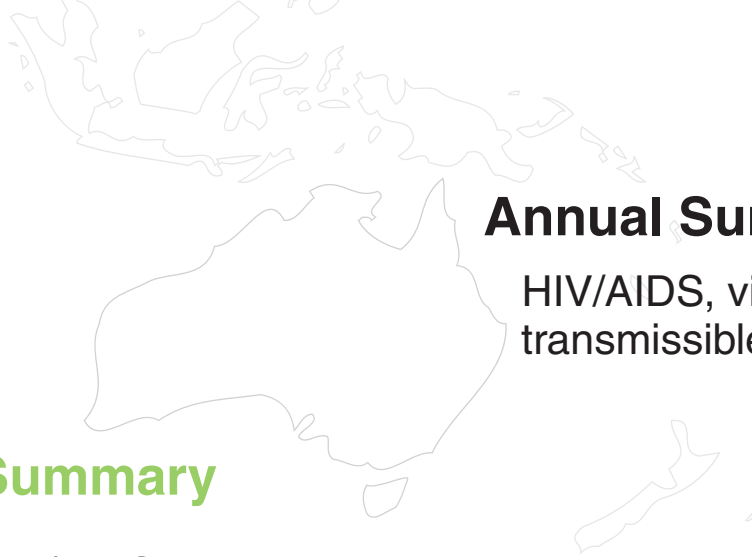
- Bligh Street Clinic, Tamworth; Blue Mountains Sexual Health Clinic, Katoomba; Holdsworth House General Practice, Darlinghurst; Illawarra Sexual Health, Wollongong; Livingstone Road Sexual Health Centre, Marrickville; Nepean Sexual Health and HIV Clinic, Penrith; Sexual Health Clinic, Gosford; SHAIDS, Lismore; St Vincent's Hospital, Darlinghurst; The Medical and Vein Centre, Coffs Harbour; Taylor Square, Darlinghurst; 407 Bourke Street, Surry Hills; NSW
- Royal Darwin Hospital, Darwin, NT
- AIDS Medical Unit, North Quay; Blackall Terrace Specialist Group, Blackall Terrace; Brunswick Street Medical Centre, New Farm; Gold Coast Sexual Health Clinic, Miami; Sexual Health Program, Cairns Base Hospital, Cairns, QLD
- The Alfred Hospital, Prahran, Prahran Market Clinic, South Yarra, The Centre Clinic, St Kilda, The Carlton Clinic, Carlton, VIC
- Department of Clinical Immunology, Royal Perth Hospital, Perth

Collaboration of Australian Needle and Syringe Programs

- ACT IV League; Drug Referral Information Centre, ACT
- Drug Intervention Services and Street Youth Program, Cabramatta; Kirketon Road Centre and K2, Kings Cross; Northern Rivers Health Service; Resource and Education Program for IDU, Redfern and Canterbury; St George NSP, Kogarah; The Exchange, Manly and Ryde; Wentworth HIV and Sexual Health Service; Western Sydney AIDS Prevention Service, Auburn, Blacktown and Parramatta, NSW
- AIDS Council of Central Australia, Alice Springs; Northern Territory AIDS Council, Darwin, NT
- Bodyline, Brisbane; Community Alcohol and Drug Services, BIALA; Cairns Base Hospital; Gold Coast AIDS Association & Injectors Newsline (GAIN); Gold Coast Hospital; Kobi House, Toowoomba; QuIVva; SCIVAA, QLD
- Christies Beach National Pharmacy; Clovelly Park NSP; Midnight Pharmacy, Adelaide; Morphettville Medical Centre Pharmacy, Glenelg East; Noarlunga Community Health Service; Northern Metropolitan Community Health Service NSP and Shopfront; Parks Community Health Service; Port Adelaide Community Health Service; South Australian Drug and Alcohol Services Council; The AIDS Council of South Australia - SAVIVE; Threadgold's Pharmacy; Warrinilla Clinic; William Jelfs Pharmacy, Woodville, SA
- Tasmanian AIDS & Related Diseases Council, Hobart; Tasmanian User's Health Support League, TAS
- Ballarat Community Health Services, Ballarat; Geelong Community Health Services, Geelong; Melbourne Inner Needle Exchange, Collingwood; St Kilda NSP; SHARPS, Frankston; Western Region AIDS and Hepatitis Prevention; VIC AIDS Council of Western Australia, Perth; Western Australia User's Association, Perth; WA
- St Vincent's Hospital, Sydney NSW: Alcohol and Drug Service; Centre for Immunology

Periodic surveys of gay and other homosexually active men

- AIDS Action Council of the Australian Capital Territory, Canberra, ACT
- AIDS Council of New South Wales, Sydney, NSW
- PLWHA (NSW)
- Queensland AIDS Council, Brisbane, QLD
- Queensland Positive People (QPP), Brisbane, QLD
- AIDS Council of South Australia, Adelaide, SA
- PLWHA (VIC)
- Victorian AIDS Council/Gay Men's Health Centre, Melbourne, VIC
- Western Australian AIDS Council, Perth, WA



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Summary

HIV/AIDS

It is estimated that 12,440 people were living with HIV infection in Australia by the end of 2000. The decline in annual AIDS incidence observed since 1994, due to the fall in HIV transmission rates a decade earlier, has been substantially accelerated over the past four years by improvements in treatment for HIV infection.

Transmission of HIV in Australia continues to occur primarily through sexual contact between men. There is no evidence of recent change in rates of transmission via this route, or any increase in the very low rates of transmission through injecting drug use, or heterosexual contact. Close to half the cases attributed to heterosexual contact are now in people from countries with high HIV prevalence or their sexual partners.

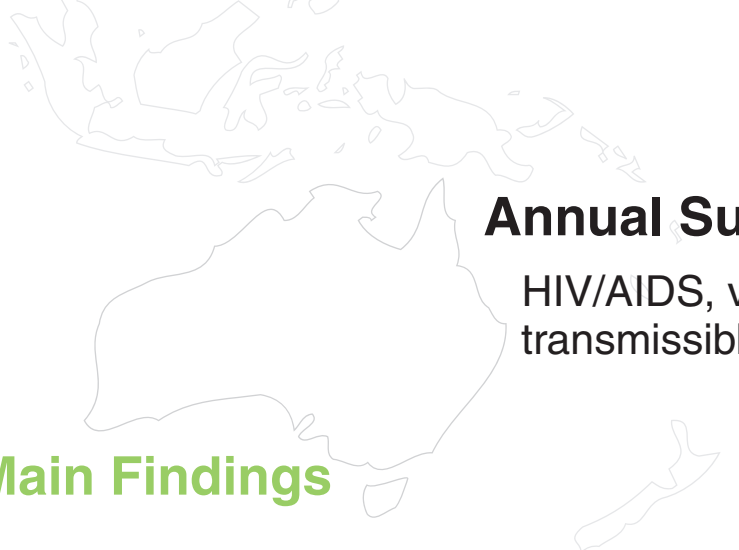
Around 43% of AIDS cases in 2000, up from 19% in 1996, occurred in people who had been diagnosed with HIV infection within the preceding three months, and had therefore been unable to benefit from antiretroviral therapy or prophylaxis for opportunistic infection. Survival following AIDS has substantially increased from 19.6 months for AIDS cases diagnosed in 1994 to 37.6 months among AIDS cases diagnosed in 1997.

Viral hepatitis

The high number of diagnoses of hepatitis C infection recorded in 2000 continued to make this infection the most frequently reported notifiable infection in Australia. Increases in the population rate of diagnoses of hepatitis C infection in younger age groups, including diagnoses of newly acquired hepatitis C infection, and increasing hepatitis C prevalence in 1998 – 2000 among people who have injected drugs for less than three years, indicate continuing hepatitis C transmission in Australia. However, the percentage of injecting drug users seen at needle and syringe programs who reported use of a syringe after someone else in the last month dropped from 31% in 1995 to 16% in 2000.

Sexually transmissible infections

The *per capita* number of diagnoses of chlamydia doubled over the past five years, from 45.6 per 100,000 population in 1996 to 90.6 per 100,000 population in 2000 whereas the population rate of diagnoses of gonorrhoea and syphilis in 2000 was 31.3 and 10.3, respectively. The number of diagnoses of donovanosis has dropped from 50 in 1996 to 16 in 2000. Indigenous people continue to be diagnosed with these infections at much higher rates than non-Indigenous people.



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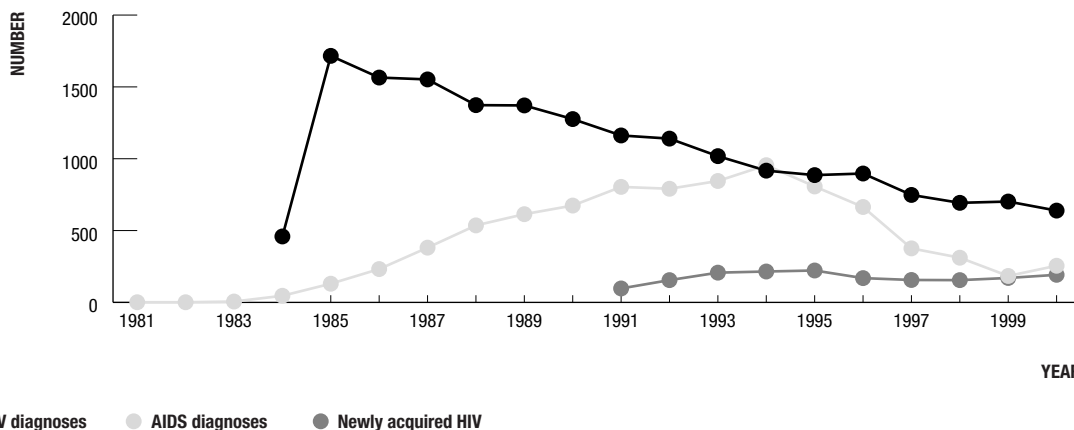
Main Findings

General patterns

HIV/AIDS

The annual number of AIDS diagnoses in Australia, after adjustment for reporting delay, peaked in Australia in 1994 with 955 AIDS diagnoses, and is estimated to have declined to 255 cases in 2000 (Figure 1). The decrease in the number of AIDS diagnoses has been due to the decline in HIV incidence that took place in the mid 1980s and the use, since around 1996, of effective combination antiretroviral therapy, including protease inhibitors, for the treatment of HIV infection. A similar pattern of declining AIDS incidence has been reported in other industrialised countries such as the United States, Canada and in a number of European countries. There has been an increase in AIDS incidence in Australia from 1999 to 2000, which may be due to more complete reporting of AIDS diagnoses in 2000 compared to the previous year.

Figure 1 Number of diagnoses of HIV infection¹ and AIDS in Australia

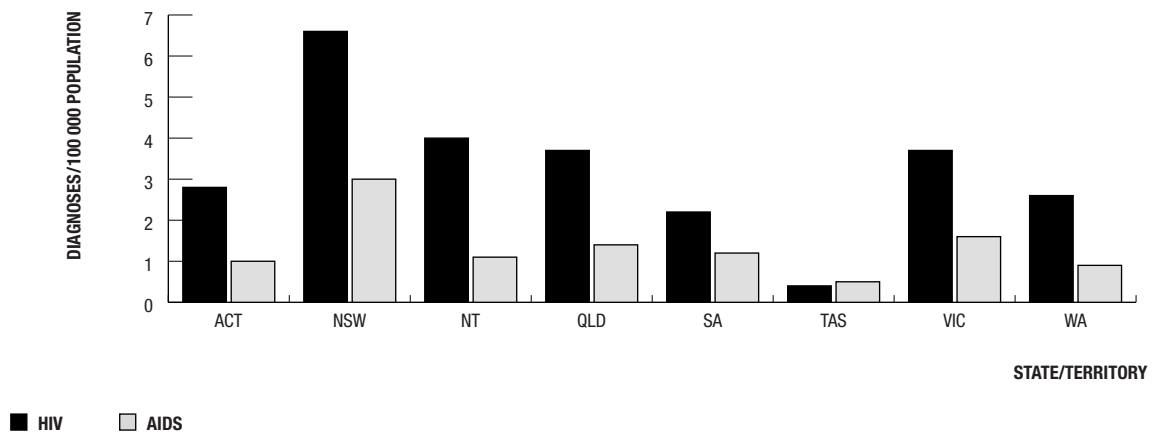


¹ HIV diagnoses adjusted for multiple reporting. AIDS diagnoses adjusted for reporting delays.

At the end of 2000, the cumulative number of HIV infections that had been diagnosed in Australia was estimated to have been 18,147, with an estimated 12,440 people living with HIV infection. Assuming that the overall benefit of antiretroviral treatment in slowing progression to AIDS remains at the 2000 level, AIDS incidence is predicted to remain steady at around 255 cases per year until 2004.

Approximately 50% of all people living with HIV infection are receiving antiretroviral treatment. If this proportion were to increase substantially, then AIDS incidence would be expected to decline further in the short term. However, the long-term effectiveness of antiretroviral treatment remains unknown, and if treatments begin to fail for a substantial proportion of people, then AIDS incidence could increase again.

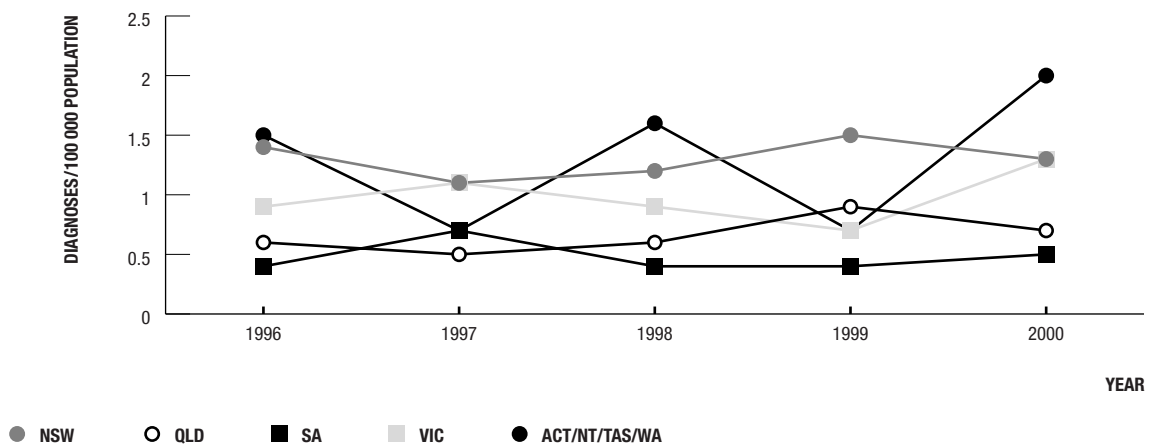
Figure 2 Average annual incidence of diagnoses of HIV infection and AIDS, 1996 – 2000, by State/Territory



Over the past five years, the *per capita* number of diagnoses of AIDS and HIV infection has been highest in New South Wales at 3.0 and 6.6 diagnoses, respectively, per 100,000 population. In 1996 – 2000, population rates of HIV diagnosis were similar in the Northern Territory (4.0), Victoria (3.7) and Queensland (3.7). Lower rates of HIV diagnosis were recorded in the Australian Capital Territory (2.8), Western Australia (2.6) and Tasmania (0.4) (Figure 2).

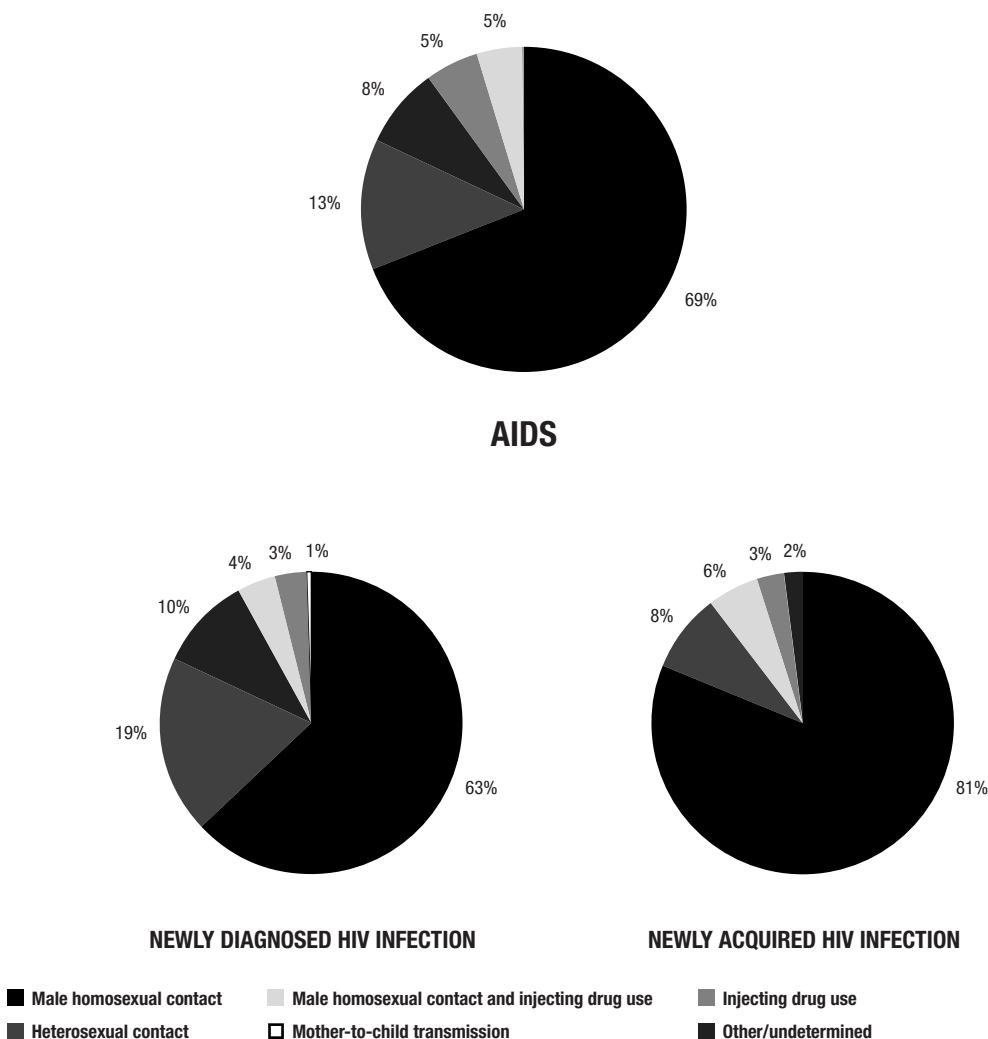
The annual number of HIV diagnoses in Australia has continued to decline substantially to around 650 in 2000 (Figure 1). However, new HIV infections continue to occur. Within the total number of HIV diagnoses, around 150 – 200 each year have been in people who had acquired HIV infection within the past year (Figure 1). These reported cases give a lower limit to the number of cases of HIV transmission that have actually occurred in Australia over this time.

Figure 3 Newly acquired HIV, 1996 – 2000, by year and State/Territory



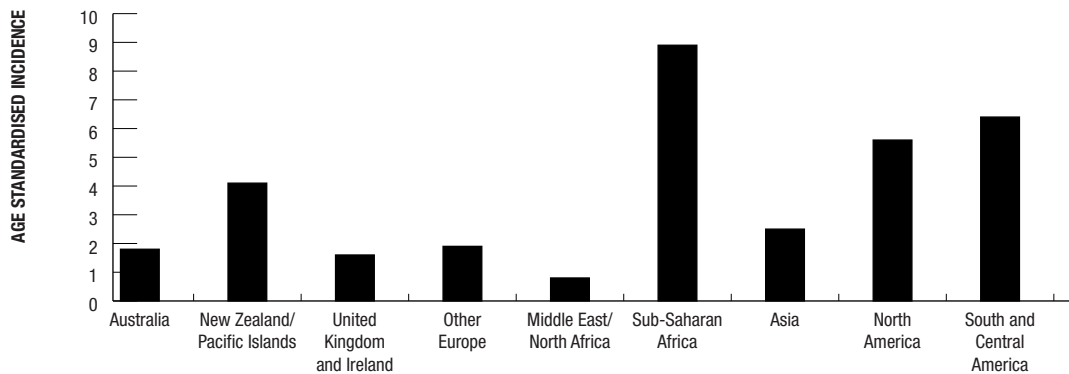
In 2000, the number of diagnoses of newly acquired HIV infection increased in Victoria following a declining rate of diagnosis in 1997 – 1999. The rate of diagnoses of newly acquired HIV infection remained relatively stable in New South Wales, Queensland and South Australia in 1996 – 2000 (Figure 3).

Figure 4 Diagnoses of AIDS, HIV infection and newly acquired HIV infection, 1996 – 2000, by HIV exposure category



Transmission of HIV in Australia continues to be mainly through sexual contact between men (Figure 4). A history of male homosexual contact was reported in more than 85% of cases of newly acquired HIV infection diagnosed in 1996 – 2000. Exposure to HIV may also be through male homosexual contact in other cases of HIV/AIDS, as more than 90% of cases for which the source of HIV exposure was not specified in the surveillance reports were among males. A small percentage of diagnosed infections were associated with a history of injecting drug use or heterosexual contact only. Mother-to-child transmission of HIV infection remains rare in Australia.

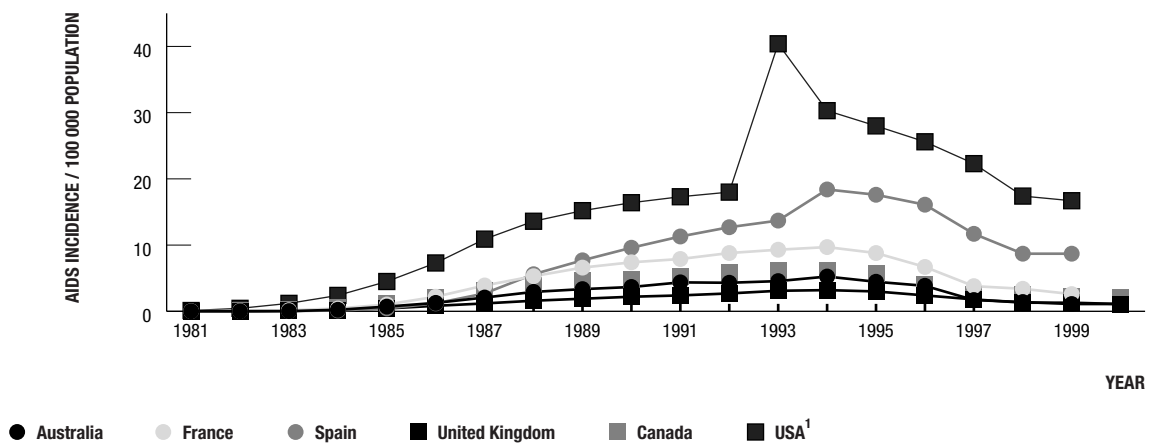
Figure 5 AIDS incidence in Australia, 1996 – 2000, by region of birth



People born in Australia accounted for 70% of AIDS diagnoses in Australia in 1996 – 2000. AIDS incidence among people born in countries other than Australia was highest for sub-Saharan Africa (Figure 5).

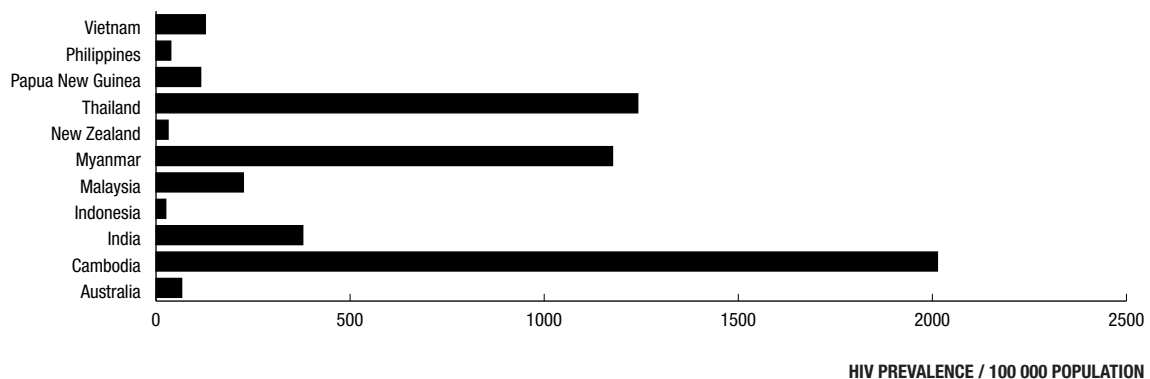
In 2000, AIDS incidence in Australia (1.4 per 100,000 population) was higher than that in the United Kingdom (1.1 per 100,000 population). Substantially higher AIDS rates are reported in a number of other Western countries including Canada (2.3 per 100,000 population), Spain (8.7 per 100,000 population in 1999) and the United States (16.7 per 100,000 population in 1999) (Figure 6).

Figure 6 AIDS incidence in selected industrialised countries by year



1 US AIDS case definition changed in 1993 to include people with a CD4+ count of <200

Figure 7 HIV prevalence in selected countries in the Asia-Pacific region



In the Asia-Pacific region, HIV prevalence in Cambodia, Thailand and Myanmar was substantially higher than that in Australia (Figure 7). HIV prevalence in India, Malaysia and Vietnam was also higher than that in Australia in 2000 whereas HIV prevalence in the Philippines and New Zealand was lower than that in Australia.

Viral hepatitis

In Australia, the population rate of reported diagnoses of hepatitis A infection dropped from 16.8 per 100,000 in 1997 to less than 5 per 100,000 in 2000. A similar decline in the rate of diagnosis of hepatitis A infection occurred in New South Wales.

Reported diagnoses of newly acquired hepatitis B infection have gradually increased from 1.2 per 100,000 population in 1996 to 2.2 per 100,000 population in 2000. The population rate of diagnosis of newly acquired hepatitis B infection was similar across State/Territory health jurisdictions (Figure 8). The highest rate of diagnosis of newly acquired hepatitis B infection occurred in the 20 – 29 year age group (Figure 9).

Figure 8 Newly acquired hepatitis B in Australia by year and State/Territory

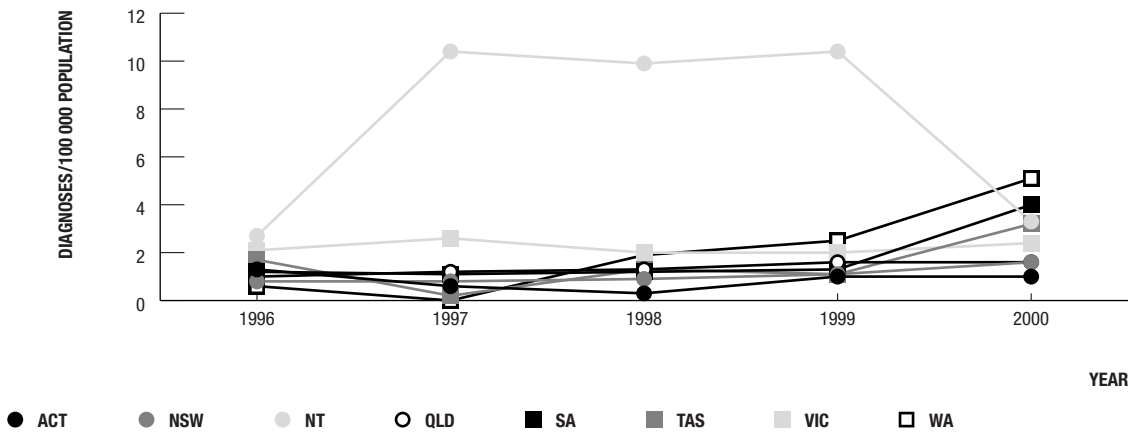
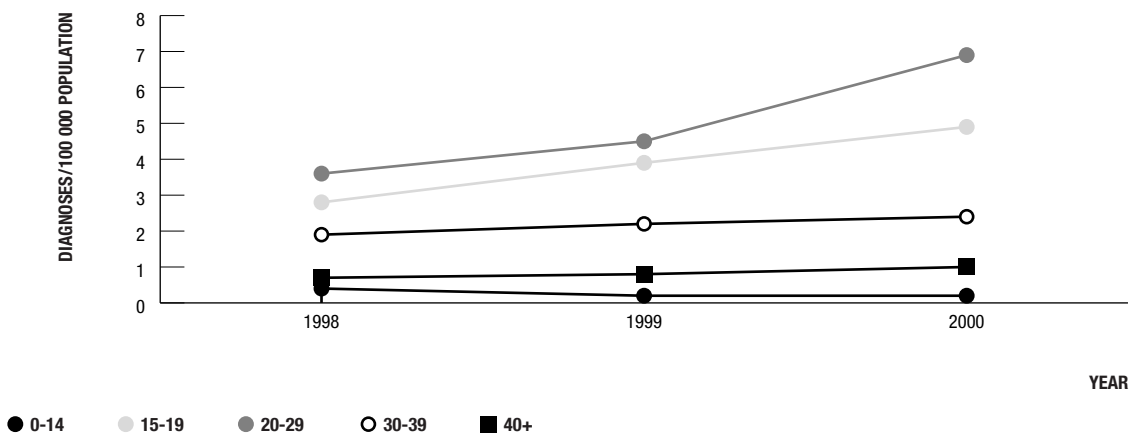
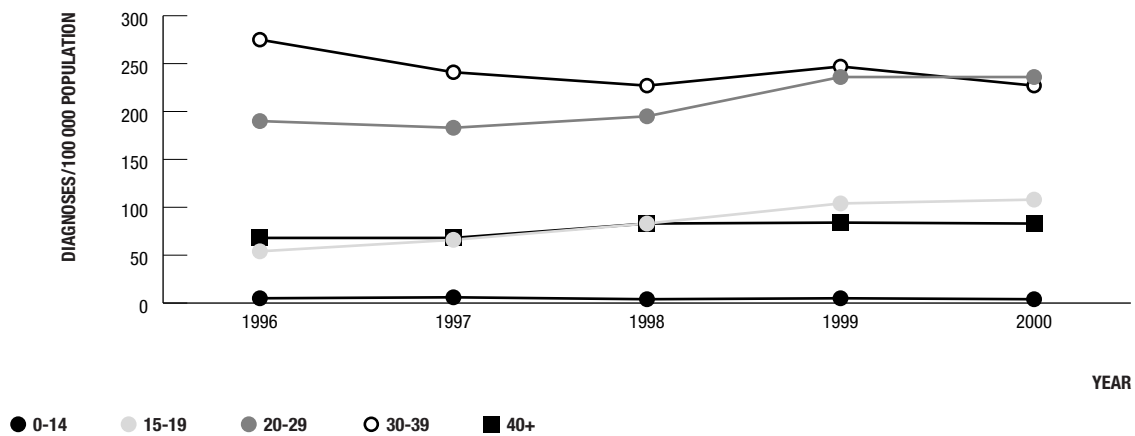


Figure 9 Newly acquired hepatitis B in Australia by year and age group



Hepatitis C continues to be the most frequently reported notifiable infection in Australia. During 2000, 20,926 cases were reported, bringing the total number of notified cases of hepatitis C in Australia to more than 160,000 since antibody testing became available in 1990. The number of notifications over the period 1996 – 2000 has remained relatively stable in the range 18,000 – 22,000 per year. Although there may be some duplicate reporting of hepatitis C diagnoses, it is likely that many people with hepatitis C infection remain undiagnosed.

Figure 10 Hepatitis C notifications in Australia by year and age group

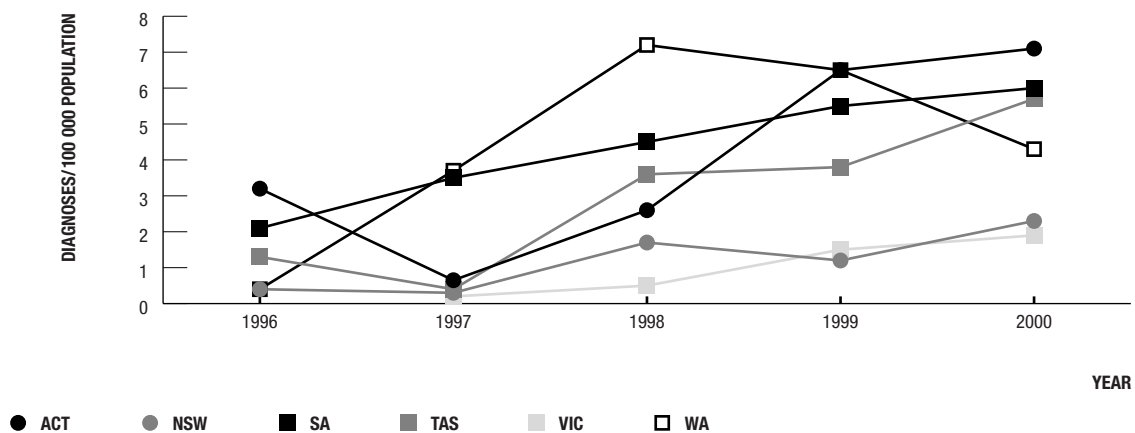


The *per capita* rate of diagnosis of hepatitis C infection was highest in the 20 – 29 and 30 – 39 year age groups (Figure 10). The rate of hepatitis C diagnosis over the past five years has doubled among people aged 15 – 19 years, from 54 per 100,000 population in 1996 to 108 per 100,000 population in 2000. Substantial increases in the population rate of diagnosis of hepatitis C were also seen among people aged 20 – 29 years and 40 years or older. The increasing rate of diagnosis of hepatitis C infection among people aged 15 – 19 years and 20 – 29 years is consistent with the relatively high population rate of diagnosis of newly acquired infection in these age groups (Figure 12) and with the rising hepatitis C prevalence among people with a history of injecting drug use of less than three years, seen at needle and syringe programs. The increasing rate of hepatitis C diagnosis in the older age groups may be partly due to presentation with symptomatic liver disease.

Overall, the male to female ratio of hepatitis C notifications remained stable at 1.7:1. In the 15 – 19 year age group, however, approximately equal numbers of male and female cases were reported.

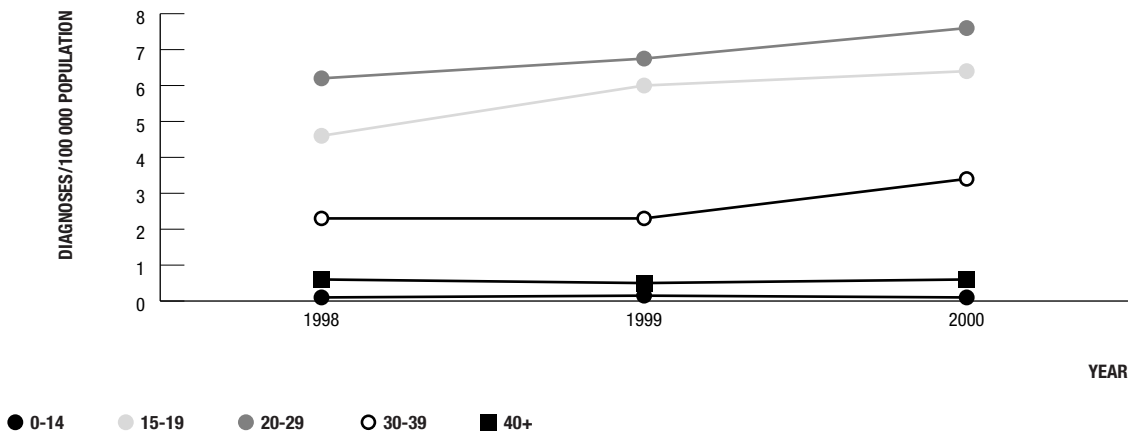
The vast majority of notifications have been of hepatitis C infection of unknown duration. Prior to 1997, less than 100 notifications of newly acquired hepatitis C infection were made per year. State/Territory health authorities have increased their efforts to monitor newly acquired hepatitis C infection. In 1999 and 2000, the number of reported cases was more than 350, which is still only a small fraction of the estimated 10,000 – 11,000 cases of newly acquired hepatitis C infections that currently occur in Australia each year. The population rate of diagnosis of newly acquired hepatitis C infection was relatively low in New South Wales and Victoria, compared with the substantially higher rates observed in South Australia, Tasmania and the Australian Capital Territory (Figure 11).

Figure 11 Newly acquired hepatitis C by year and State/Territory¹



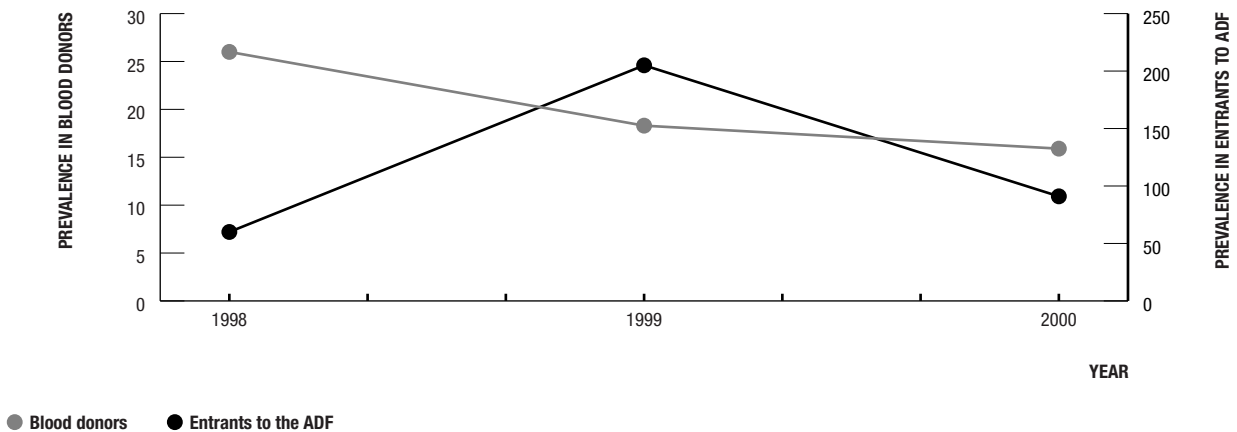
¹ Data not available from NT and QLD

Figure 12 Newly acquired hepatitis C in Australia by year and age group



Blood donors and entrants into the Australian Defence Force are considered to be at lower risk for hepatitis C infection. Hepatitis C prevalence in 2000 was substantially lower among blood donors (15.9 per 100,000 donations) and entrants into the Australian Defence Force (91 per 100,000 entrants) than the estimated prevalence of hepatitis C infection in the Australian population (1,257 per 100,000 population).

Figure 13 Hepatitis C prevalence¹ in blood donors and entrants to the Australian Defence Force by year



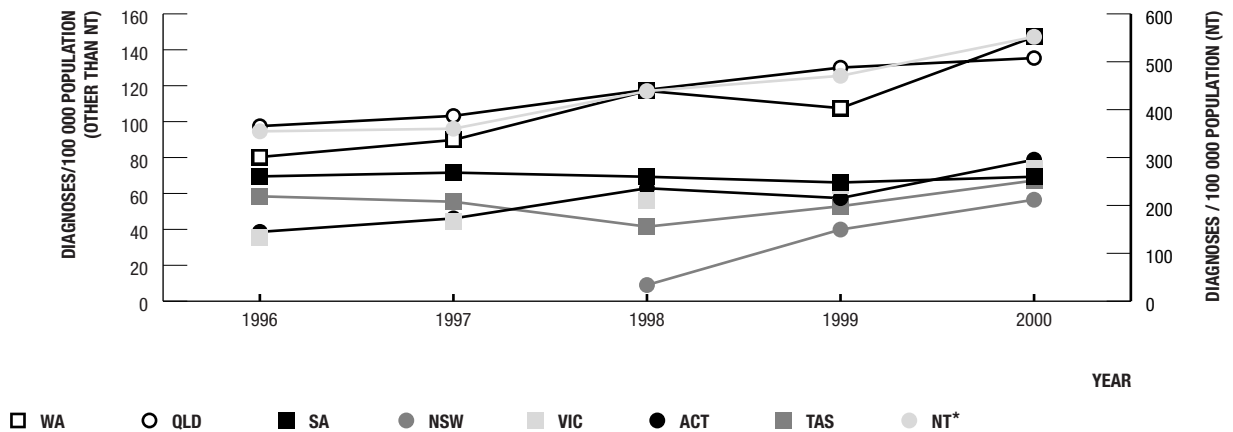
¹ Hepatitis C prevalence per 100 000 donations in blood donors, per 100 000 entrants to the ADF

One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 192 people who had a liver transplantation in 1999 – 2000, 37 (19%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 16% of people having liver transplantation.

Sexually transmissible infections other than HIV

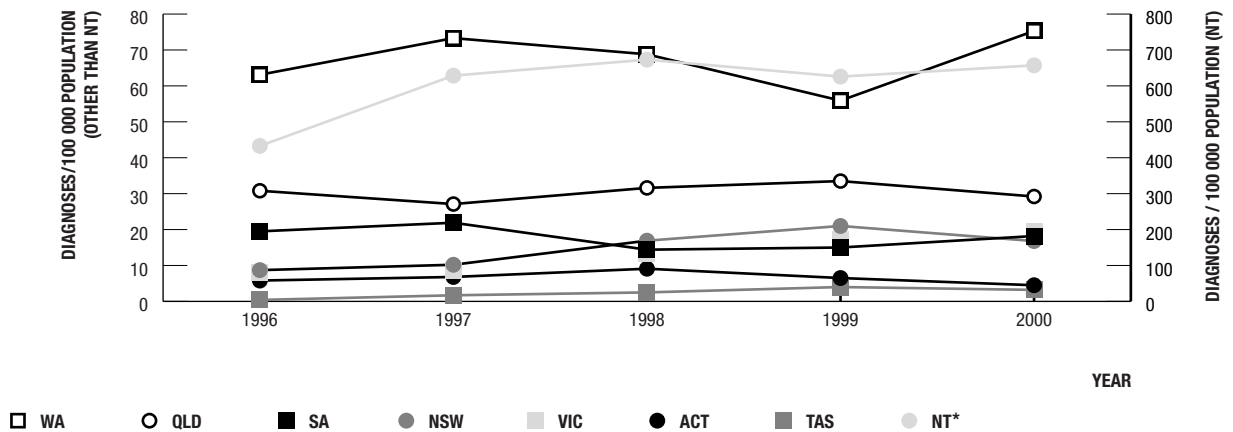
Over the past five years, the population rate of reported diagnoses of chlamydia doubled, from 45.6 per 100,000 population in 1996 to 90.6 in 2000 and the rate of diagnosis of gonorrhoea has increased from 22.6 in 1996 to 31.3 in 2000 (Figures 14 and 15). There was no change in the rate of syphilis diagnoses (Figure 16). The rates of notification of chlamydia, gonorrhoea and syphilis in the Northern Territory were substantially higher than those in other State/Territory health jurisdictions. Increases in the population rate of diagnoses of gonorrhoea and chlamydia may be partly attributable to use of diagnostic tests with greater sensitivity in both asymptomatic and symptomatic populations.

Figure 14 Chlamydia diagnoses by year and State/Territory



*NT on right axis

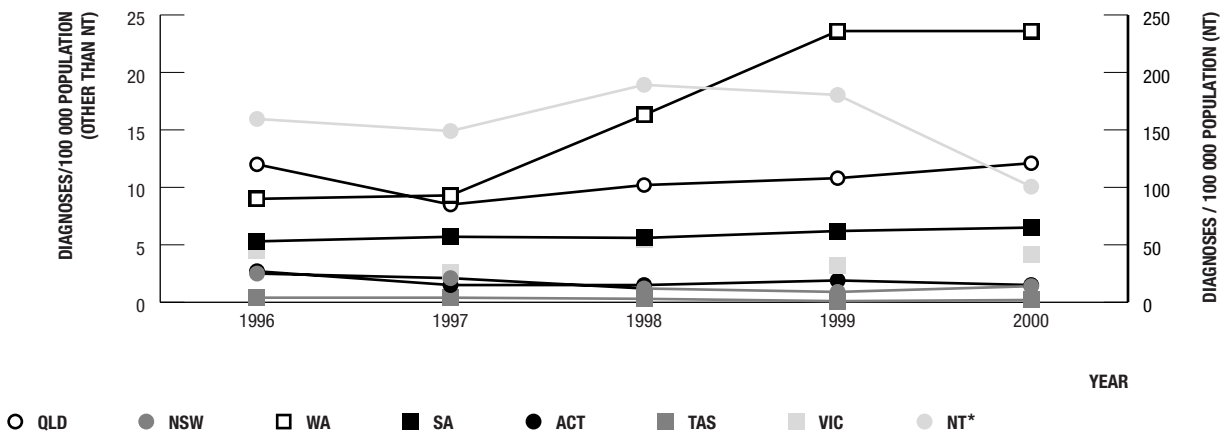
Figure 15 Gonorrhoea diagnoses by year and State/Territory



*NT on right axis

The number of diagnoses of donovanosis declined over time, from 82 cases in 1995 to 16 cases in 2000. Given the extensive effort at case finding in recent years, combined with the availability of more effective treatment, this decline is almost certainly a real one.

Figure 16 Syphilis diagnoses by year and State/Territory



*NT on right axis

HIV and hepatitis C infection in sentinel populations

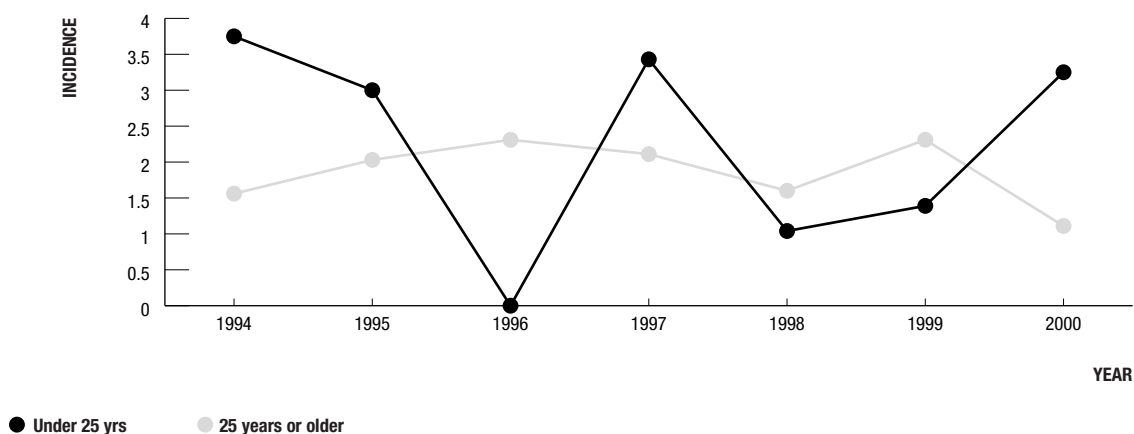
Five population groups at increased risk, compared to the general population in Australia, of HIV infection have been identified, in the *National HIV/AIDS Strategy 1999 – 2000 to 2003–2004*, as priority groups for prevention and health promotion initiatives. Gay and other homosexually active men, Indigenous people, people who have injected drugs, people entering prison and female sex workers were identified as priority groups either because of ongoing HIV transmission or the potential for increases in HIV transmission. The pattern of HIV transmission has also been monitored among people potentially at risk of HIV infection through heterosexual contact, both in Australia and overseas. People living with HIV/AIDS are identified as a priority population for monitoring the pattern of use of currently available treatments and the impact of these treatments on patterns of illness and mortality.

Gay and other homosexually active men

Men with a history of homosexual contact continue to make up the majority of people diagnosed with AIDS and HIV infection in Australia. The overall number of new diagnoses among homosexually active men in 1996 – 2000 was 2,666 and there were 730 diagnoses of newly acquired HIV infection. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (83%) than total HIV diagnoses (66%) in 2000. This difference may be due to greater access to HIV antibody testing among gay and other homosexually active men.

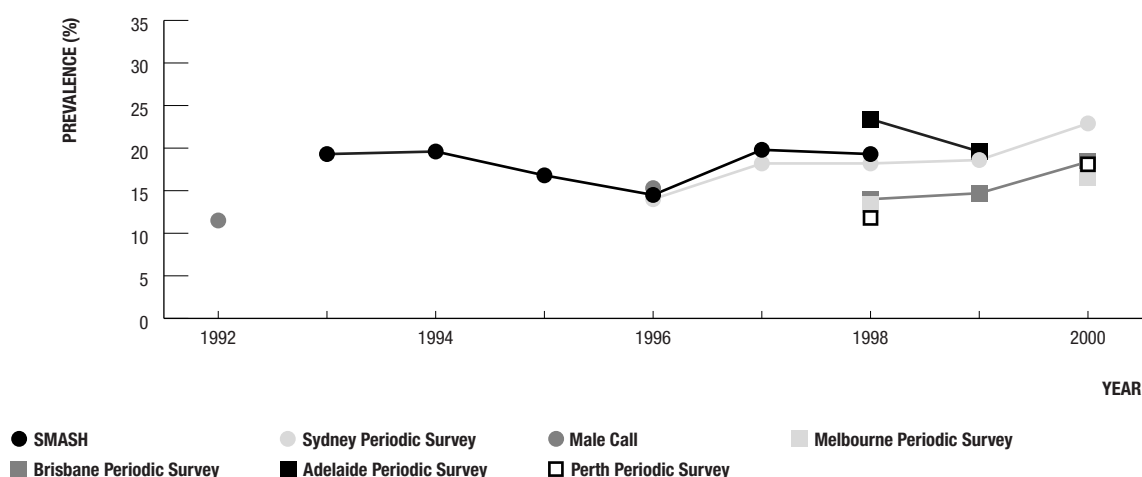
Over the past six years, HIV incidence has been stable among gay and other homosexually active men seen at metropolitan sexual health clinics (Figure 17).

Figure 17 HIV incidence among gay and other homosexually active men seen at sexual health clinics



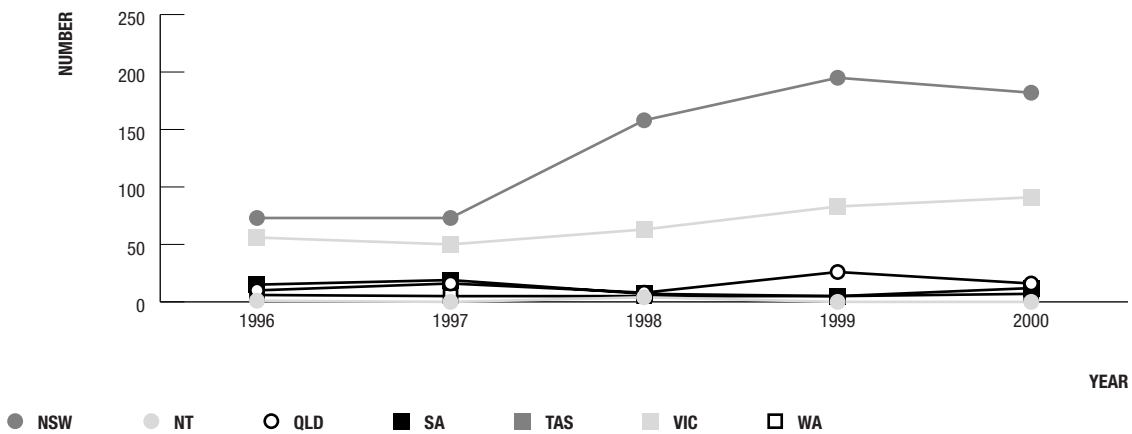
The Sydney Gay Community Periodic Survey, a cross sectional survey of gay and other homosexually active men, indicates that an increasing proportion of respondents reported unprotected anal sex with casual partners. The proportion increased from 17% of respondents with casual partners in 1996 to 24% in 1998, and 32% in 2000 (Figure 18). Similar surveys carried out among gay and other homosexually active men in Brisbane, Melbourne and Perth also indicated increases in unsafe sexual behaviour with casual partners.

Figure 18 Prevalence of unprotected anal intercourse with casual partners reported by gay and other homosexually active men by year and survey



Gonorrhoea surveillance data have provided another indication of a possible increase in sexual risk behaviour among gay and other homosexually active men in Australia. The number of rectal gonococcal isolates in men has increased steadily, from 73 in 1996 to 182 in 2000 in New South Wales, and from 56 in 1996 to 91 in 2000 in Victoria (Figure 19).

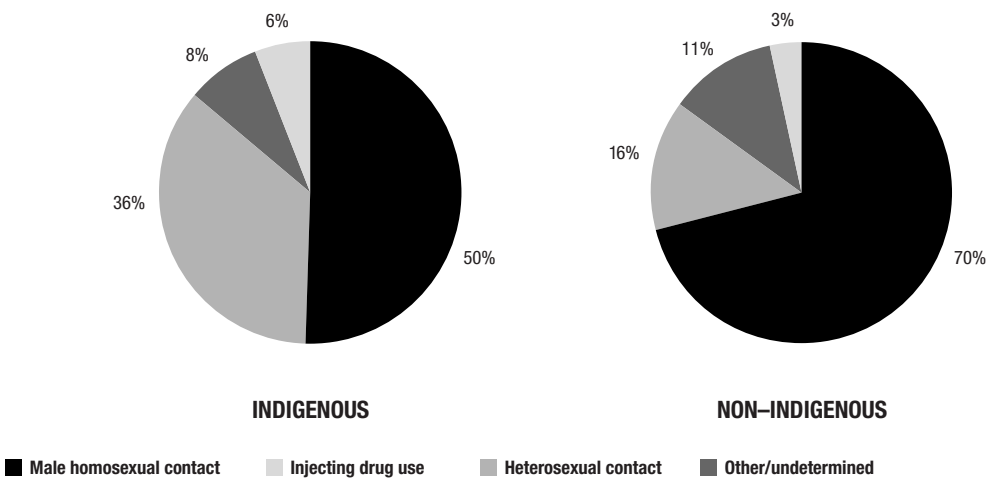
Figure 19 Gonococcal rectal isolates among men by year and State/Territory



Indigenous Australians

Overall rates of HIV and AIDS diagnoses *per capita* have differed little between Indigenous and non-Indigenous people. In both population groups, the most frequently reported route of HIV transmission was male homosexual contact. However, a higher proportion of heterosexually acquired cases of HIV infection has been reported among Indigenous people (Figure 20). Diagnosed HIV infections among Indigenous people also differ from the pattern in non-Indigenous people in that a higher proportion has occurred in women (26.4%, vs 8.5% for the non-Indigenous cases).

Figure 20 HIV diagnoses, 1993 – 2000, by HIV exposure category and Indigenous status



High rates of sexually transmissible infections other than HIV infection were recorded among Indigenous people in the Northern Territory, South Australia and Western Australia. In other States and Territories, interpretation of surveillance data on sexually transmissible infections in Indigenous people was limited by incomplete information on Indigenous status.

People who have injected drugs

Approximately 8% of HIV diagnoses in Australia have been in people with a history of injecting drug use, of whom about half were men who also reported a history of homosexual contact.

HIV prevalence among people attending needle and syringe programs has remained low (less than 2%) except among men who identified themselves as homosexual (Figure 21).

HIV prevalence has also remained low (less than 0.5%) in both men and women seen at metropolitan sexual health centres from 1995 to 2000 who identified themselves as injecting drug users.

Figure 21 HIV and hepatitis C prevalence in people seen at needle and syringe programs, 2000, by sexual orientation

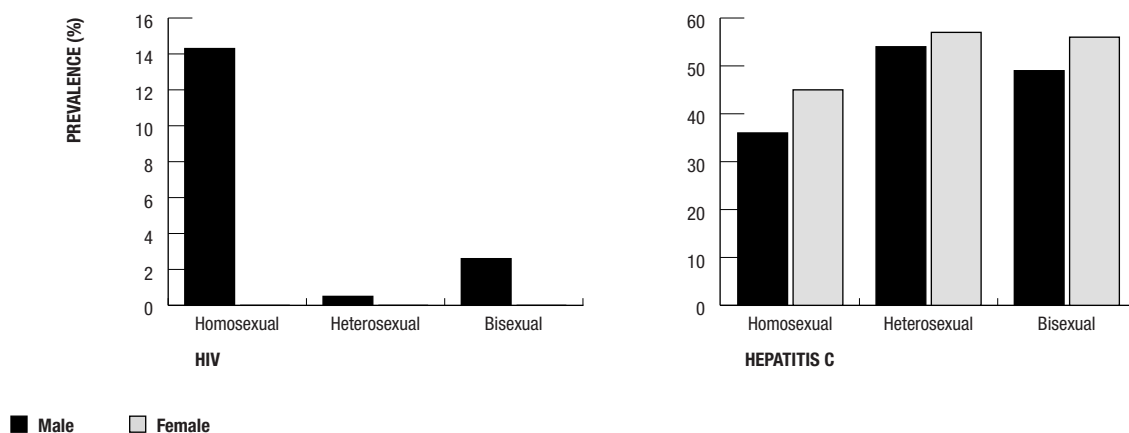
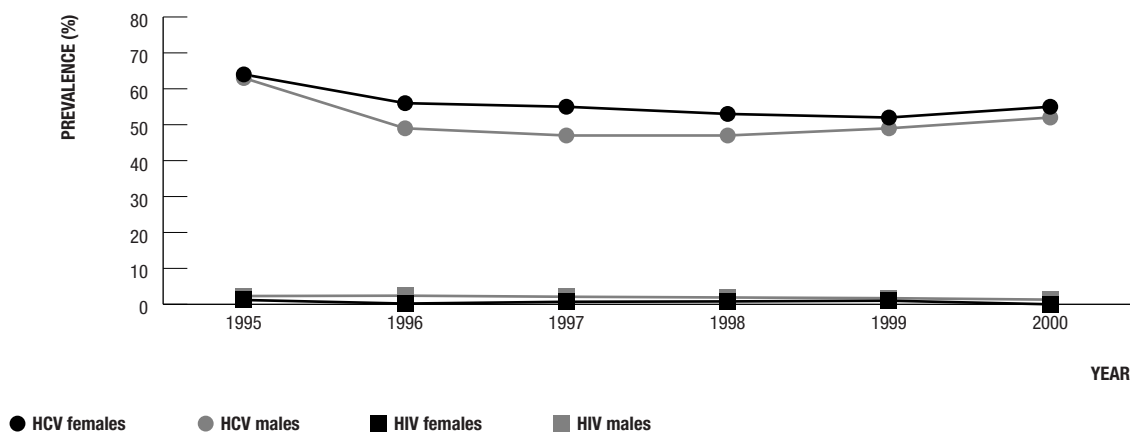


Figure 22 HIV and hepatitis C prevalence in needle and syringe programs by year and sex



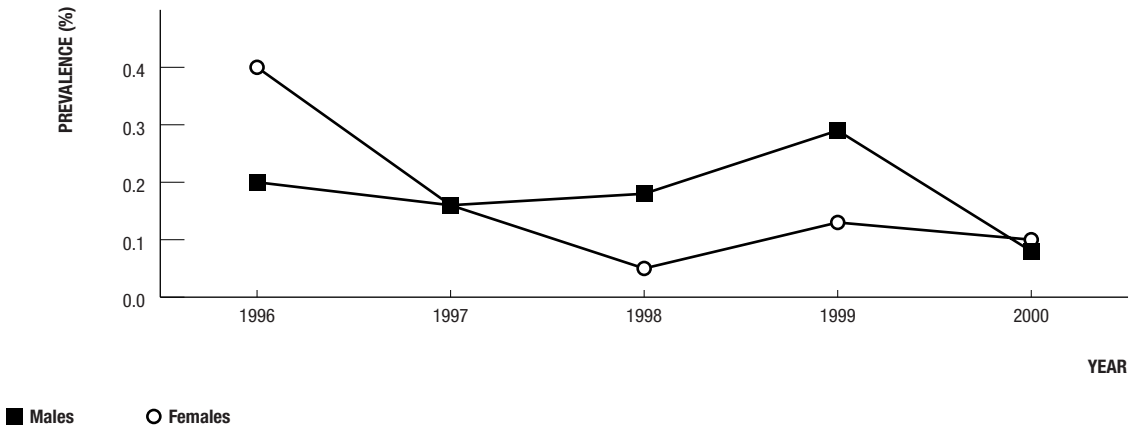
In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs remained high in 2000 (Figure 22). Hepatitis C prevalence increased with duration of injecting in both men and women. Among people who had injected drugs for less than three years, hepatitis C prevalence increased from 13% in 1996 – 1997 to 26% in 2000.

The percentage of injecting drug users seen at needle and syringe programs who reported use of a syringe after someone else in the last month declined from 31% in 1995 to 16% in 2000.

People entering Australian prisons

HIV prevalence among people entering Australian prisons in 1996 to 2000 has been steady, at levels of less than 0.5% (Figure 23). Prevalence differed little between male and female entrants but was higher in New South Wales than in other States and Territories.

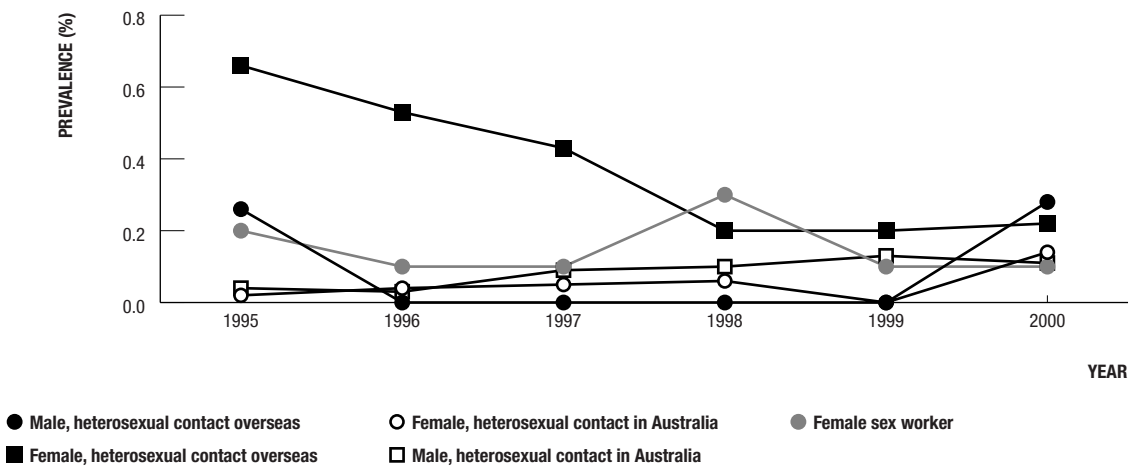
Figure 23 HIV prevalence in prison entrants by year and sex



Female sex workers

Since 1992, information provided through a network of metropolitan sexual health clinics has indicated that among women identifying as sex workers, HIV prevalence remained low, at around 0.1%, with no evidence of an increase in HIV prevalence over this time (Figure 24).

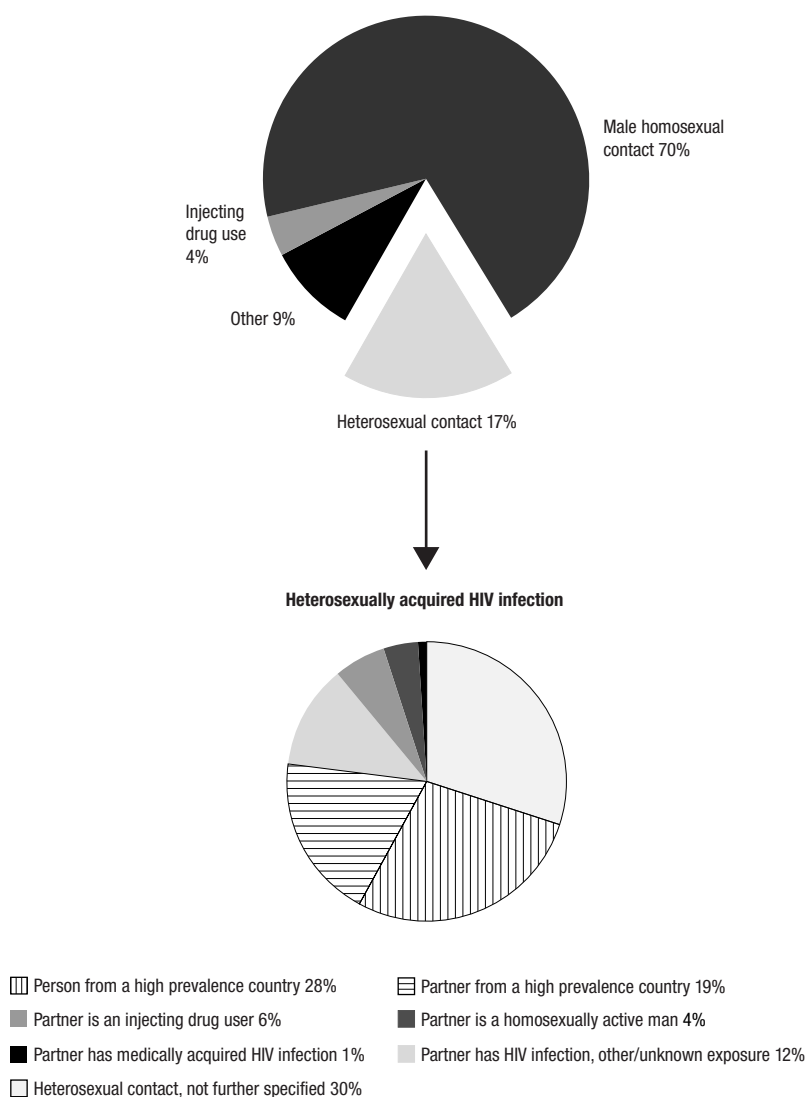
Figure 24 HIV prevalence in people other than homosexually active men seen at sexual health clinics by year, sex and HIV exposure category



Heterosexual transmission of HIV infection

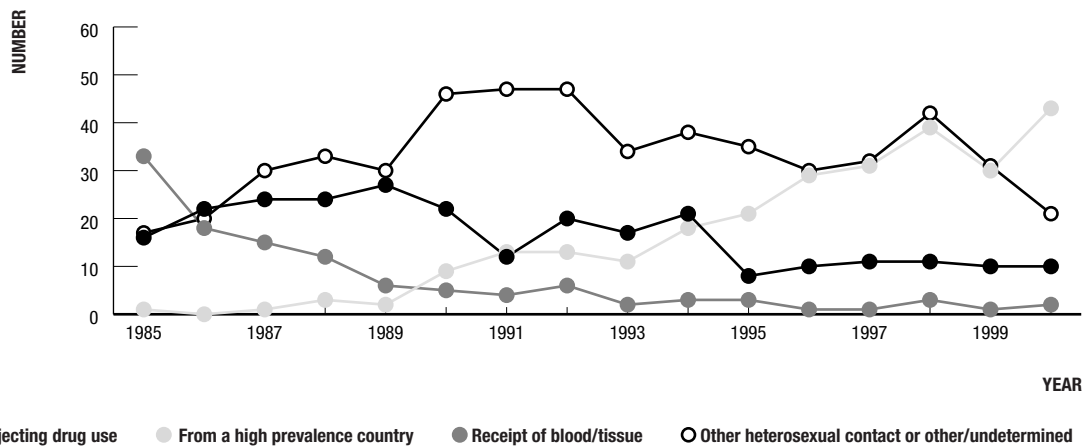
In 1994 – 2000, transmission was attributed to heterosexual contact in 17% of new HIV diagnoses. Among cases attributed to heterosexual contact, almost 50% were in people who were either from countries in sub-Saharan Africa, or Cambodia, Myanmar or Thailand, where HIV is transmitted primarily through heterosexual contact (high prevalence countries with an estimated HIV prevalence of above 1%), or who had a history of heterosexual contact with a person from such countries (Figure 25). The sexual partner's history of exposure to HIV was not specified in 42% of cases attributed to heterosexual contact.

Figure 25 HIV diagnoses, 1994 – 2000, by HIV exposure category



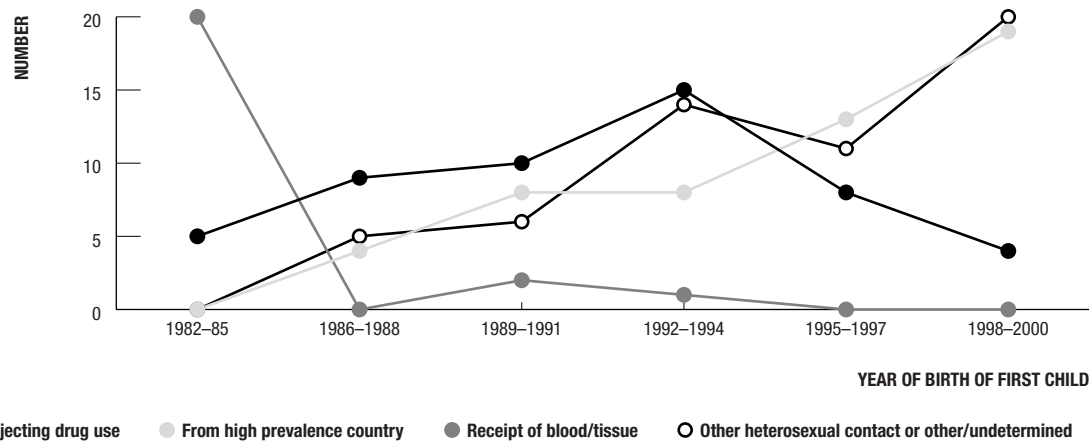
The annual number of HIV diagnoses among women has remained stable over the past 16 years, at around 60 – 80 diagnoses per year (Figure 26). In an increasing number of HIV diagnoses among women, and in the subgroup of women who have had perinatally exposed children (Figure 27), HIV transmission was attributed to heterosexual contact in a high prevalence country or to heterosexual contact with a partner from a high prevalence country.

Figure 26 HIV diagnoses in women by year and exposure category¹



¹ Includes women who reported heterosexual contact with men with the specific HIV exposure

Figure 27 Women with HIV infection who had children by year and HIV exposure category¹



¹ Includes women who reported heterosexual contact with men with the specific HIV exposure

While HIV prevalence is not directly monitored at the national level among people whose only potential exposure to HIV is through heterosexual contact, two groups which provide some information on HIV prevalence in this population are blood donors and entrants to the Australian Defence Force (Figure 28). In blood donors, who undergo a screening interview to exclude people at higher risk of HIV infection, HIV prevalence has been below 1 per 100,000 donations since 1985, with some evidence of a decline during this period, possibly reflecting increasingly effective screening interview procedures. Entrants to the Australian Defence Force are informed that they will undergo HIV testing, and be excluded if found positive. Prevalence in entrants has been very low, with four HIV infected applicants identified between 1988 and 2000 among more than 61,000 people tested.

Figure 28 HIV prevalence¹ in blood donors and entrants to the Australian Defence Force by year²



- 1 HIV prevalence per 100 000 donations in blood donors, per 100 000 entrants to the ADF
- 2 Prevalence estimates are based on three year intervals

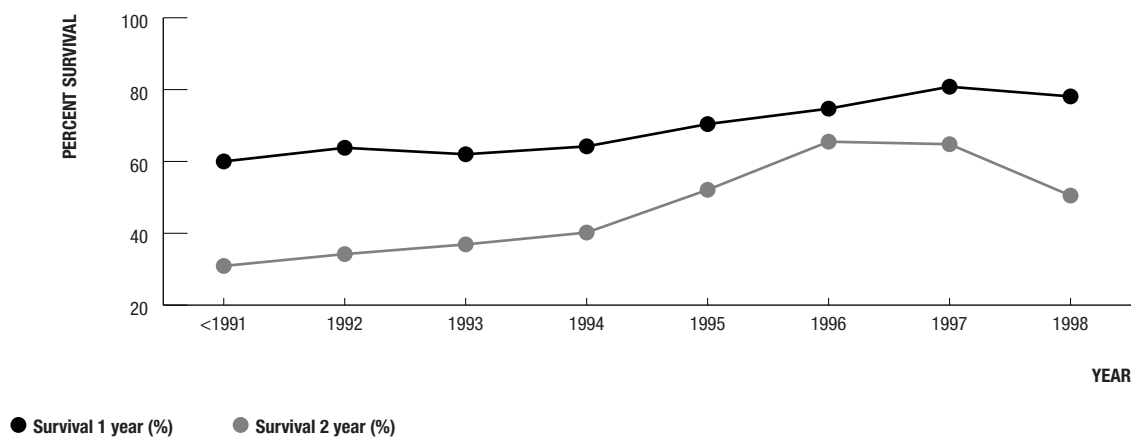
Among people who attend sexual health clinics, HIV prevalence was below 0.5% between 1995 and 2000 in both men and women whose only reported sexual contact was with the opposite sex, either in Australia or overseas, and who gave no history of injecting drug use (Figure 24).

Illness and mortality in people with HIV infection

The effectiveness of combination antiretroviral therapy, demonstrated in controlled clinical trials in the mid 1990s, has now been translated in population settings in several countries, through large reductions in progression to AIDS and AIDS-related mortality.

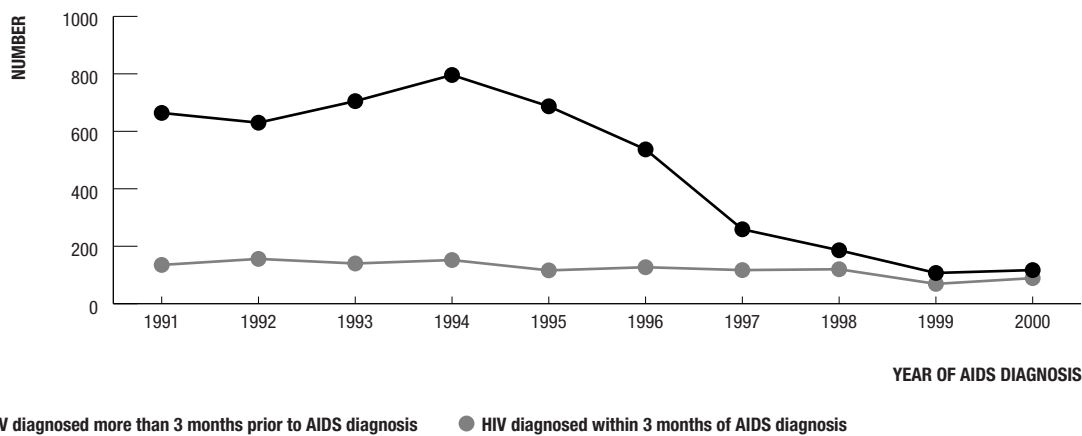
In Australia, further evidence of the benefits of improved therapy has come from the substantial improvement in survival following the diagnosis of AIDS in 1996 and 1997 (Figure 29). Median survival among people diagnosed with AIDS has almost doubled, from 19.6 months in 1994 to more than 37 months in 1996 – 1997.

Figure 29 Survival following AIDS



The impact of improved therapy for HIV infection in delaying progression to AIDS is supported by the striking difference in AIDS incidence trends between people whose HIV diagnosis was at least three months prior to their AIDS diagnosis, and those whose HIV diagnosis took place within three months of AIDS (Figure 30). A rapid decline in AIDS incidence has been observed among people diagnosed at least three months prior to AIDS, while no decline in AIDS incidence has occurred among people with late HIV diagnosis, who by definition would have received therapy for HIV infection for at most three months before developing AIDS.

Figure 30 AIDS incidence by year and timing of HIV diagnosis



These trends have led to a doubling in the proportion of new AIDS cases in people with late HIV diagnosis, since the mid 1990s, with now almost one half of cases having undiagnosed HIV infection until around the time of AIDS diagnosis. Late HIV presentation has disproportionately affected men and women with a history of heterosexual contact and men with an undetermined exposure history (Figure 31). Late HIV presentation was also associated with region of birth. A substantially higher percentage of cases of late presentation occurred among people born in Asia and sub-Saharan Africa and among people born in European countries other than the United Kingdom and Ireland (Figure 32).

Figure 31 AIDS diagnoses, 1996 – 2000, and percent with late HIV presentation, by exposure category

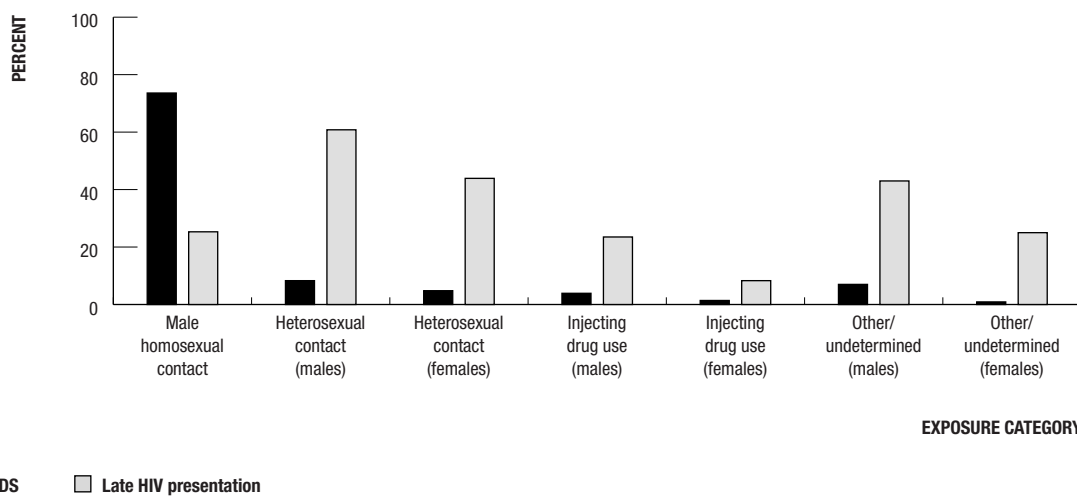
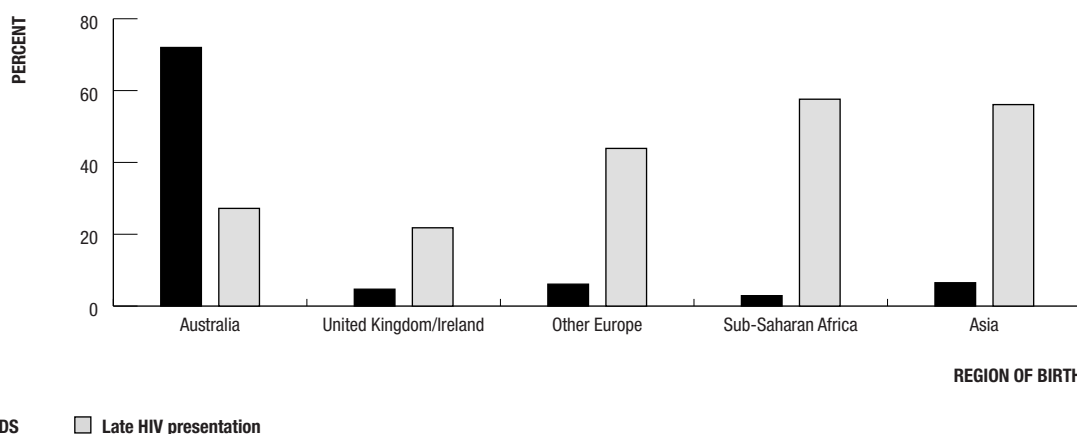
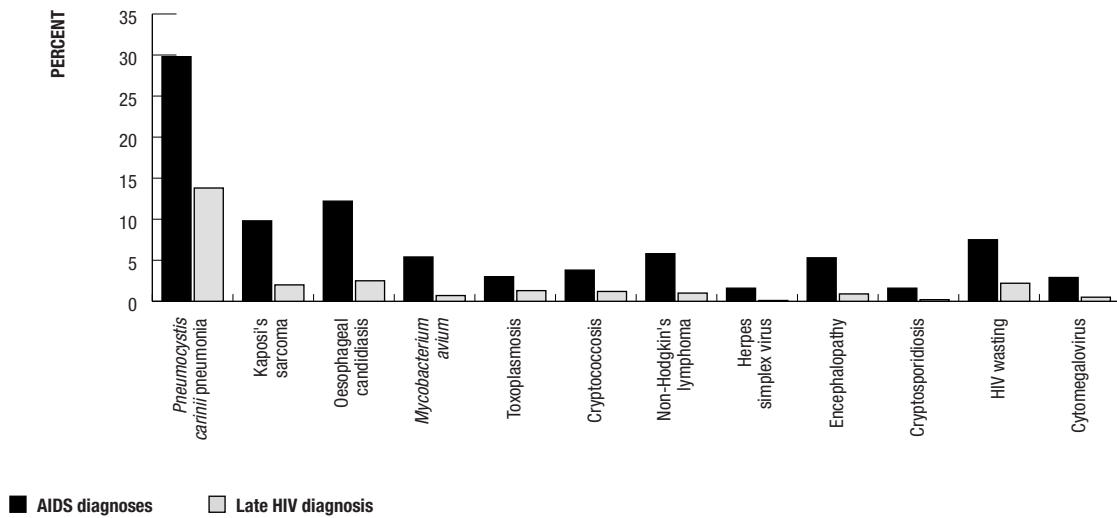


Figure 32 AIDS diagnoses, 1996 – 2000, and percent with late HIV presentation, by selected region of birth



Pneumocystis carinii pneumonia (PCP) was the most common AIDS defining illness among cases diagnosed in 1996 – 2000. Almost 50% of cases with PCP were cases of late HIV presentation.

Figure 33 AIDS diagnoses, 1996 – 2000, by selected AIDS defining illness and timing of HIV diagnosis

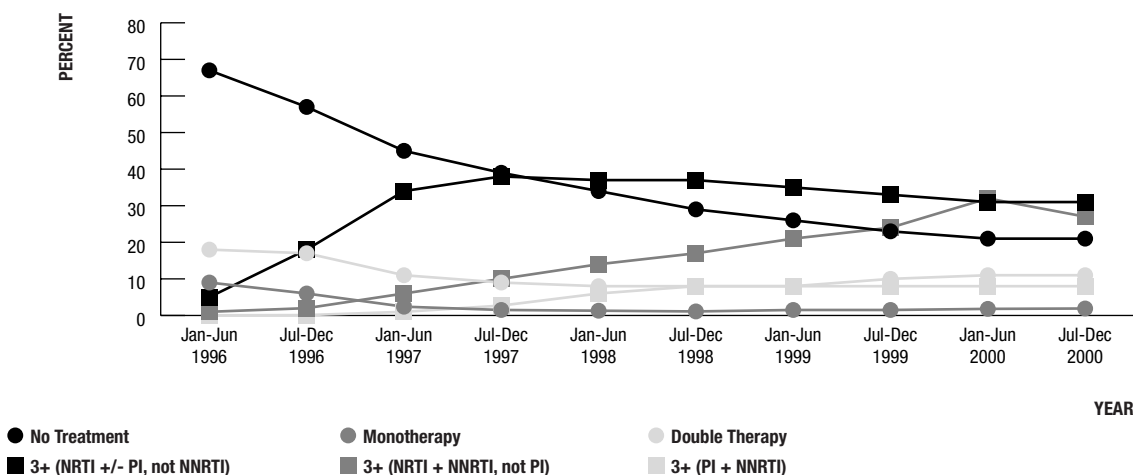


The estimated numbers of people living with AIDS and people living with a CD4+ cell count of less than 500/ μ l and without AIDS are projected to increase through the year 2004. The number of people living with a CD4+ cell count of more than 500/ μ l is expected to decline slightly.

Treatment for HIV infection

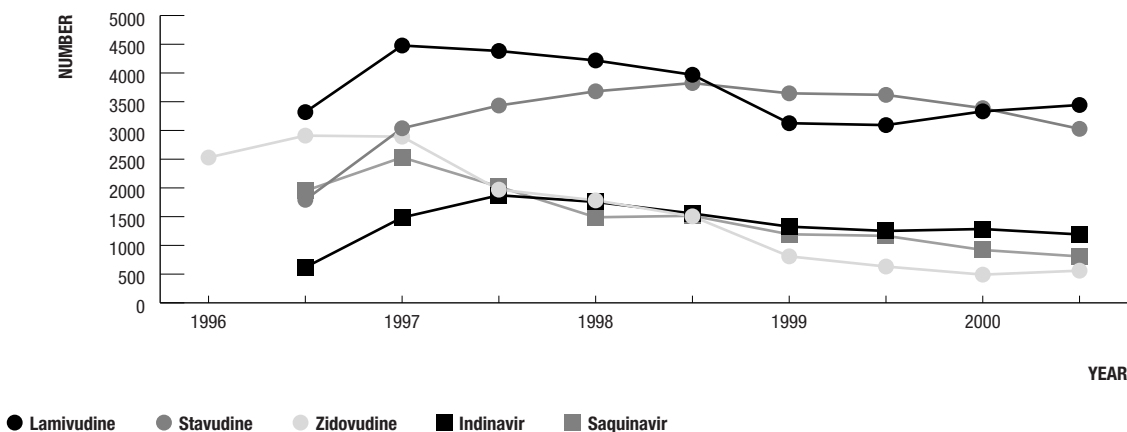
The Australian HIV Observational Database indicated that 65% of 1,819 people attending selected clinical sites was receiving triple combination antiretroviral treatment in 2000 (Figure 34). In the Sydney Gay Community Periodic Survey, 70 – 75% of gay and other homosexually active men with HIV infection reported that they were receiving combination antiretroviral therapy in 1997 – 2000. The percentage of homosexually active men in Brisbane who reported use of combination antiretroviral treatment remained stable in 1998 – 2000 at 66 – 68% whereas in Melbourne, the percentage declined from 78% in 1998 to 67% in 2000.

Figure 34 Antiretroviral treatment¹ among people enrolled on the Australian HIV Observational Database



¹ NRTI: Nucleoside reverse transcriptase inhibitor. NNRTI: Non-nucleoside reverse transcriptase inhibitor. PI: protease inhibitor.

Figure 35 People prescribed antiretroviral treatment through the Highly Specialised Drugs Program



Based on data collated through the Highly Specialised Drugs Program, it is estimated that the total number of people prescribed antiretroviral treatment in Australia has plateaued at around 6,500 during 2000. The number of people prescribed zidovudine decreased from 2,910 in the second half of 1996 to 560 in the second half of 2000, with a commensurate increase in the number of people prescribed stavudine in the same time periods, from 1,793 to 3,028 (Figure 35). The most commonly prescribed protease inhibitors in the second half of 2000 were indinavir (1,190 people) and nelfinavir (1,056).

Annual Surveillance Report

HIV/AIDS, viral hepatitis & sexually transmissible infections in Australia

↓
2001

Tables

1 National surveillance for diagnoses of HIV infection, AIDS and perinatal exposure to HIV 1.1 National AIDS Registry

Table 1.1.1 Characteristics of AIDS cases by year. Number of AIDS diagnoses, median age, and percent of total cases by sex, late HIV diagnosis, State/Territory, HIV exposure category and AIDS defining condition

Characteristic	Year of AIDS diagnosis										Total
	≤91	92	93	94	95	96	97	98	99	00	
Total cases	3 428	791	845	955	807	664	376	308	176	207	8 557
Males (%)	96.7	95.1	94.6	94.9	95.3	95.0	91.8	93.2	88.6	90.3	95.2
Median age (years)											
M	37	38	37	37	37	37	39	39	39	40	37
F	32	32	37	31	35	34	32	35	34	33	33
Late HIV diagnosis (%)											
M	–	19.2	16.3	15.8	14.2	19.2	30.4	38.7	40.4	42.5	20.7
F	–	40.5	19.5	28.9	25.7	18.2	41.9	50.0	31.6	50.0	32.0
State/Territory (%)											
ACT	1.2	1.0	1.1	1.5	1.1	1.3	0.0	1.6	0.0	1.0	1.1
NSW	60.9	54.6	57.0	57.9	58.3	54.8	52.1	54.2	58.0	49.0	57.9
NT	0.3	0.6	0.6	0.3	0.4	0.2	0.8	1.0	1.1	0.5	0.4
QLD	8.3	11.4	10.8	10.4	12.5	11.6	16.0	12.0	17.6	16.5	10.6
SA	3.8	4.2	5.3	5.2	3.7	4.7	6.1	6.2	5.1	2.4	4.4
TAS	0.5	1.3	0.1	0.5	0.2	1.1	0.5	1.0	0.0	0.5	0.6
VIC	20.4	21.1	21.3	19.9	20.1	20.6	20.5	19.8	15.9	26.7	20.5
WA	4.6	5.8	3.8	4.3	3.7	5.7	4.0	4.2	2.3	3.4	4.5
HIV exposure category (%)¹											
Male homosexual contact	86.9	82.1	81.1	83.4	81.2	80.0	74.9	67.5	63.3	68.7	82.3
Male homosexual contact and injecting drug use	3.3	5.0	7.0	5.0	5.4	5.9	3.7	3.1	6.3	4.2	4.5
Injecting drug use ²	2.2	2.2	3.3	3.1	3.6	3.8	5.6	8.4	6.3	7.3	3.3
Heterosexual contact	2.5	6.5	6.3	5.7	6.5	8.3	14.1	18.5	22.8	17.7	6.2
Haemophilia/coagulation disorder	1.7	1.7	1.3	1.1	2.0	1.1	1.1	0.3	0.6	1.6	1.5
Receipt of blood/tissue	3.1	2.0	1.0	1.0	0.8	1.0	0.3	1.4	0.6	0.5	1.9
Mother with/at risk for HIV infection	0.3	0.5	0.0	0.7	0.5	0.0	0.3	0.7	0.0	0.0	0.3
Other/undetermined	2.3	3.2	3.8	3.6	4.3	5.3	5.6	7.1	10.2	6.8	3.7
AIDS defining condition (%)											
<i>Pneumocystis carinii</i> pneumonia (PCP)	35.3	26.8	22.1	22.4	19.8	22.6	25.5	22.4	19.9	29.6	28.0
Kaposi's sarcoma (KS)	13.9	12.2	11.1	9.8	10.9	11.7	9.3	9.7	8.0	5.8	11.9
PCP and other (not KS)	6.1	6.1	3.7	2.5	4.1	4.4	7.2	7.1	8.5	6.3	5.3
Oesophageal candidiasis	6.3	8.7	11.8	14.6	16.5	14.3	10.1	9.7	11.9	13.1	10.1
<i>Mycobacterium avium</i>	3.9	7.1	8.8	5.7	7.4	7.1	3.5	5.2	4.0	5.3	5.5
HIV wasting disease	2.9	6.1	6.2	7.3	8.8	5.0	6.9	10.7	14.2	6.3	5.5
Other conditions	31.6	33.0	36.3	37.7	32.5	34.9	37.5	35.1	33.5	33.5	33.7

1 The 'Other/undetermined' category was excluded from the percentage of cases attributed to each HIV exposure category.

2 Excludes males who also reported a history of homosexual contact.

Source: State/Territory health authorities

Table 1.1.2 Number of AIDS diagnoses adjusted for reporting delay by State/Territory, sex and year

State/Territory	Sex	Year of AIDS diagnosis										Total
		≤91	92	93	94	95	96	97	98 ¹	99 ¹	00 ¹	
ACT	M	38	8	9	13	7	7	0	4	0	1	89
	F	2	0	0	1	2	2	0	1	0	1	9
NSW	M	2 018	408	465	531	454	346	187	158	93	109	4 781
	F	65	22	15	20	15	18	9	10	14	18	206
NT	M	10	5	5	3	3	1	3	3	2	1	36
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	275	85	82	96	96	74	50	35	30	36	861
	F	9	5	8	3	5	3	10	2	2	3	50
SA	M	124	30	42	45	29	30	22	16	7	6	351
	F	6	3	3	5	1	1	1	3	2	0	25
TAS	M	16	9	1	5	2	7	2	2	0	1	45
	F	1	1	0	0	0	0	0	1	0	0	3
VIC	M	683	164	165	177	150	131	70	61	26	67	1 702
	F	15	3	13	12	11	6	7	1	2	2	72
WA	M	151	43	30	36	28	35	11	11	4	8	359
	F	7	3	2	4	1	3	4	2	0	0	26
Total²		3 428	791	845	955	807	664	376	311	184	255	8 616

1 Adjusted for reporting delay; AIDS cases diagnosed in previous years were assumed to be completely reported.

2 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.3 Number of AIDS diagnoses adjusted for reporting delay by HIV exposure category, sex and year

HIV exposure category	Sex	Year of AIDS diagnosis										Total
		≤91	92	93	94	95	96	97	98 ¹	99 ¹	00 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact		2 908	629	659	768	628	503	266	195	104	164	6 838
Male homosexual contact and injecting drug use		111	38	57	46	42	37	13	9	10	10	381
Injecting drug use ²	M	46	10	17	19	20	19	12	19	6	15	183
	F	29	7	10	10	8	5	8	5	4	3	89
Heterosexual contact	M	58	29	26	27	30	31	30	41	24	23	319
	F	25	21	25	26	20	21	20	12	14	19	203
Haemophilia/coagulation disorder	M	51	13	10	10	15	7	4	1	1	4	116
	F	2	0	1	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	55	8	3	5	3	2	0	2	0	0	78
	F	37	6	5	3	3	4	1	2	1	1	63
Health care setting	M	0	0	1	0	0	0	0	0	0	0	1
	F	0	1	0	1	1	0	0	0	0	0	3
Other/undetermined	M	66	22	26	28	31	32	20	20	17	16	279
	F	6	0	0	1	0	3	1	1	1	1	14
Total adults/adolescents³		3 402	786	845	948	803	664	375	309	184	255	8 571
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	5	2	0	3	1	0	0	2	0	0	13
	F	4	2	0	3	3	0	1	0	0	0	13
Haemophilia/coagulation disorder	M	5	0	0	0	0	0	0	0	0	0	5
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt of blood/tissue	M	10	1	0	0	0	0	0	0	0	0	11
	F	2	0	0	1	0	0	0	0	0	0	3
Total children		26	5	0	7	4	0	1	2	0	0	45
Total³		3 428	791	845	955	807	664	376	311	184	255	8 616

1 Adjusted for reporting delay; AIDS cases diagnosed in previous years were assumed to be completely reported.

2 Excludes males who also reported a history of homosexual contact.

3 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.4 Number of deaths following AIDS adjusted for reporting delay by State/Territory, sex and year of death

State/Territory	Sex	Year of death following AIDS										Total
		≤91	92	93	94	95	96	97	98 ¹	99 ¹	00 ¹	
ACT	M	25	9	6	13	7	4	0	0	1	3	68
	F	1	1	0	0	0	0	0	0	1	1	4
NSW	M	1 304	297	356	387	338	256	113	68	62	90	3 271
	F	40	12	13	17	20	5	4	1	1	1	114
NT	M	4	2	8	3	3	2	1	1	0	0	24
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	164	56	76	71	70	63	28	24	13	13	578
	F	7	2	5	5	4	4	1	2	1	2	33
SA	M	63	27	27	31	33	25	7	13	4	5	235
	F	1	1	5	4	2	1	0	1	0	1	16
TAS	M	10	3	5	3	1	3	1	2	1	0	29
	F	1	0	0	1	0	0	0	0	0	0	2
VIC	M	425	153	157	155	140	109	60	37	33	33	1 302
	F	6	3	4	7	13	5	6	3	1	1	49
WA	M	99	31	29	30	18	23	12	3	4	3	252
	F	4	1	1	4	1	2	2	1	0	1	17
Total²		2 158	600	695	737	651	505	236	156	122	157	6 017

1 Adjusted for reporting delay; deaths following AIDS in previous years were assumed to be completely reported.

2 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.5 Number of deaths following AIDS adjusted for reporting delay by HIV exposure category, sex and year

HIV exposure category	Sex	Year of death following AIDS										Total
		≤91	92	93	94	95	96	97	98 ¹	99 ¹	00 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact		1 863	499	570	577	507	391	179	115	85	107	4 893
Male homosexual contact and injecting drug use		63	18	37	42	32	28	17	9	7	7	260
Injecting drug use ²	M	19	9	11	9	16	14	7	5	7	11	108
	F	9	8	11	5	8	4	4	0	0	1	50
Heterosexual contact	M	15	20	21	23	17	25	6	7	7	9	150
	F	13	7	11	22	26	11	7	5	3	5	110
Haemophilia/ coagulation disorder	M	36	5	5	13	9	10	4	0	4	5	91
	F	1	0	0	2	0	0	0	0	0	0	3
Receipt of blood/tissue	M	43	8	5	4	4	2	1	0	0	0	67
	F	32	2	4	5	4	1	0	1	1	0	50
Health care setting	M	0	0	0	0	1	0	0	0	0	0	1
	F	0	0	0	1	1	0	0	0	0	0	2
Other/undetermined	M	42	18	10	24	22	18	7	12	7	10	170
	F	2	1	1	0	0	1	1	1	0	1	8
Total adults/adolescents³		2 142	597	689	732	648	505	235	155	122	157	5 982
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	0	0	3	2	2	0	0	0	0	0	7
	F	3	1	1	2	0	0	1	1	0	0	9
Haemophilia/ coagulation disorder	M	4	0	1	0	0	0	0	0	0	0	5
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt of blood/tissue	M	9	1	1	0	0	0	0	0	0	0	11
	F	0	1	0	1	1	0	0	0	0	0	3
Total children		16	3	6	5	3	0	1	1	0	0	35
Total³		2 158	600	695	737	651	505	236	156	122	157	6 017

1 Adjusted for reporting delay; deaths following AIDS in previous years were assumed to be completely reported.

2 Excludes males who also reported a history of homosexual contact.

3 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.6 Number (percent) of AIDS diagnoses in Australia, 1996 – 2000, and age standardised average annual incidence per 100 000 population¹ by region of birth

Region/ Country of birth	Number	Percent	Age standardised incidence
Australia	1 207	69.8	1.8
Overseas born	470	27.2	2.2
<i>New Zealand/Pacific Islands</i>	77	4.5	4.1
<i>United Kingdom and Ireland</i>	78	4.5	1.6
<i>Other Europe</i>	103	6.0	1.9
<i>Middle East/ North Africa</i>	9	0.5	0.8
<i>Other Africa</i>	48	2.8	8.9
<i>Asia</i>	109	6.3	2.5
<i>North America</i>	21	1.2	5.6
<i>South and Central America</i>	25	1.4	6.4
Not reported	51	3.0	
Total	1 728	100.0	2.0

1 Population estimates by country of birth and age group at 30 June 1996 from the Australian Bureau of Statistics.

Source: State/Territory health authorities

Table 1.1.7 Survival following the diagnosis of AIDS by year

Calendar year of diagnosis	Cases	Deaths to 31 Dec 00 ¹	Alive at 1 Jan 00 ²	Left Australia ³	Other ⁴	Median (months)	% Survival 1 year	2 year
≤91	3 428	3 183	13	38	194	15.8	60.0	30.9
92	791	681	13	14	83	16.8	63.8	34.2
93	845	675	21	4	145	17.5	62.0	36.9
94	955	633	36	4	282	19.6	64.2	40.2
95	807	402	39	0	366	26.1	70.4	52.1
96	664	211	58	0	395	46.7	74.7	65.5
97	376	85	44	0	247	37.6	80.8	64.8
98	308	64	36	0	208	24.4	78.1	50.5
99	176	22	42	1	111	–	–	–
00	207	24	183	0	0	–	–	–
Total	8 557	5 980	485	61	2 031	17.9	64.0	38.0

1 Deaths occurring prior to 1 January 2001.

2 Last medical contact on or after 1 January 2000.

3 Reported as having permanently left Australia with no subsequent report of status.

4 Last medical contact prior to 1 January 2000.

Source: State/Territory health authorities

Table 1.1.8 Number of AIDS diagnoses by AIDS-defining condition, year of diagnosis and sex

AIDS defining condition	Year of AIDS diagnosis								Total ¹
	≤91		92 – 94		95 – 97		98 – 00		
	M	F	M	F	M	F	M	F	
<i>Pneumocystis carinii</i> pneumonia (PCP)	1 178	27	583	28	384	22	155	10	2 393
Kaposi's sarcoma (KS)	471	4	285	0	200	1	56	0	1 018
KS and PCP alone	34	0	20	0	6	0	1	0	61
KS and other (not PCP)	61	0	45	0	18	0	8	0	132
PCP and other (not KS)	200	9	95	7	80	8	44	5	453
Oesophageal candidiasis	208	7	292	15	254	12	70	8	867
Toxoplasmosis	130	4	78	6	49	2	20	1	292
Cryptococcosis	117	2	106	5	63	4	26	3	328
Non-Hodgkin's lymphoma	122	4	92	7	89	5	37	0	356
<i>Mycobacterium avium</i>	107	7	153	10	99	12	29	1	419
Herpes simplex virus	85	8	49	5	37	2	6	2	194
HIV encephalopathy	96	3	89	3	82	7	29	3	313
Cytomegalovirus	111	0	126	3	64	2	9	2	319
HIV wasting disease	91	10	155	14	123	6	61	9	471
Cryptosporidiosis	69	3	70	1	45	1	7	1	197
<i>Mycobacterium tuberculosis</i>	17	3	19	2	7	1	2	2	53
Pulmonary tuberculosis ²	0	0	6	0	17	1	18	7	49
Recurrent pneumonia ²	0	0	20	2	19	1	13	0	56
Cervical cancer ²	0	0	0	3	0	2	0	1	6
Other single diagnoses	38	4	34	4	21	2	5	0	108
Other multiple diagnoses	180	10	140	8	88	8	34	4	472
Total¹	3 315	105	2 457	123	1 745	99	630	59	8 557

1 Includes 24 people whose sex was reported as transgender.

2 Included as an AIDS defining illness in Australia from January 1993.

Source: State/Territory health authorities

1.2 National HIV Database

Table 1.2.1 Characteristics of cases of newly diagnosed HIV infection by year¹. Number of cases, median age, and percent of total cases by sex, State/Territory and HIV exposure category

Characteristic	Year of HIV diagnosis										Total ²
	≤91	92	93	94	95	96	97	98	99	00	
Total cases	12 672	1 241	1 091	1 023	937	926	826	772	734	723	20 955
Males (%)	93.7	92.3	92.5	90.8	91.9	91.7	89.6	87.2	89.5	89.2	92.5
Median age (years)											
Males	32	32	33	32	33	34	34	34	35	35	32
Females	29	29	31	30	28	31	29	30	30	30	29
State/Territory (%)											
ACT	1.2	1.3	0.6	1.4	1.9	0.9	1.0	1.2	1.1	1.4	1.2
NSW	60.8	57.6	55.6	49.8	58.0	50.3	53.3	54.1	53.4	46.3	57.9
NT	0.5	0.5	0.9	0.5	0.2	0.5	1.3	1.6	0.7	0.4	0.6
QLD	8.3	12.4	12.6	16.2	12.3	16.7	13.8	13.6	16.9	16.2	10.7
SA	3.5	2.7	5.0	3.6	3.3	5.0	4.2	4.5	3.0	3.2	3.6
TAS	0.4	0.8	0.2	0.2	0.6	0.3	0.0	0.4	0.4	0.0	0.4
VIC	20.5	20.5	20.4	21.1	17.5	20.2	21.8	18.1	19.1	26.0	20.5
WA	4.8	4.2	4.7	7.2	6.2	6.1	4.6	6.5	5.4	6.5	5.1
HIV exposure category (%)³											
Male homosexual contact	81.7	76.7	79.0	74.3	73.9	75.5	72.6	65.4	65.0	68.4	77.9
Male homosexual contact and injecting drug use	3.5	4.0	3.6	6.2	4.9	3.9	4.4	4.6	6.1	3.6	3.9
Injecting drug use ⁴	4.8	4.8	3.5	3.4	4.5	2.8	3.2	3.4	5.6	4.4	4.5
Heterosexual contact	4.8	12.3	12.8	13.9	15.3	16.8	18.7	25.4	22.4	23.1	10.2
<i>Partner with/at risk of HIV infection</i>	<i>39.0</i>	<i>48.1</i>	<i>50.4</i>	<i>58.2</i>	<i>61.8</i>	<i>71.2</i>	<i>68.6</i>	<i>76.4</i>	<i>70.1</i>	<i>77.9</i>	<i>58.5</i>
<i>Not further specified</i>	<i>61.0</i>	<i>51.9</i>	<i>49.6</i>	<i>41.8</i>	<i>38.2</i>	<i>28.8</i>	<i>31.4</i>	<i>23.6</i>	<i>29.9</i>	<i>22.1</i>	<i>41.5</i>
Haemophilia/coagulation disorder	3.0	0.4	0.0	0.0	0.1	0.0	0.0	0.1	0.5	0.0	1.7
Receipt of blood/tissue	2.0	1.1	0.3	0.8	0.3	0.2	0.1	0.6	0.3	0.0	1.3
Mother with/at risk of HIV infection	0.2	0.4	0.5	1.0	0.8	0.8	0.9	0.4	0.1	0.5	0.4
Health care setting	0.0	0.3	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Other/ undetermined	23.7	11.8	9.4	5.8	8.3	10.6	9.6	9.3	10.5	8.6	18.0

1 Not adjusted for multiple reporting.

2 Total includes 10 cases in males for which the date of HIV diagnosis was not reported.

3 The 'Other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each HIV exposure category.

4 Excludes males who also reported a history of homosexual contact.

Source: State/Territory health authorities

Table 1.2.2 Estimated number of cases of newly diagnosed HIV infection adjusted for multiple reporting by State/Territory, sex and year¹

State/Territory	Sex	Year of HIV diagnosis										Total
		≤91	92	93	94	95	96	97	98	99	00	
ACT	M	134	13	6	12	16	7	5	7	5	8	213
	F	9	3	1	2	2	1	3	2	3	2	28
NSW	M	6 007	670	572	482	526	412	353	349	323	297	9 991
	F	331	33	37	35	35	34	27	43	31	28	634
NT	M	51	6	10	5	2	5	7	11	4	1	102
	F	3	0	0	0	0	0	4	1	1	1	10
QLD	M	983	132	125	153	107	141	94	88	111	96	2 030
	F	49	15	5	10	10	11	19	13	17	14	163
SA	M	394	31	53	34	29	41	28	28	16	19	673
	F	31	4	2	4	1	4	6	6	3	2	63
TAS	M	52	10	2	1	6	3	0	2	2	0	78
	F	2	0	0	1	0	0	0	1	1	0	5
VIC	M	2 335	217	185	183	146	179	170	121	119	167	3 822
	F	89	23	20	18	10	14	13	9	12	20	228
WA	M	557	43	48	57	44	43	32	28	34	36	922
	F	30	10	3	15	14	9	6	20	7	9	123
Total	M	9 933	1 051	943	830	864	823	669	597	625	563	16 845
	F	544	88	68	85	72	73	78	95	75	76	1 254
Total		10 506	1 140	1 018	917	886	897	748	693	702	639	18 147

¹ Numbers given are the estimated number of HIV diagnoses in each year not reported in previous years. Numbers may not sum to totals because of rounding errors, diagnoses in people whose sex was reported as transgender, and diagnoses in more than one State/Territory.

Source: State/Territory health authorities

Table 1.2.3 Characteristics of diagnoses of newly acquired HIV infection¹, 1991 – 2000, by year. Total number of cases, median age, and number of cases by State/Territory, HIV exposure category, evidence of newly acquired HIV infection, sex and year

Characteristic	Sex	Year of HIV diagnosis										Total ²
		91	92	93	94	95	96	97	98	99	00	
Total cases		97	155	207	215	222	169	156	155	170	192	1 738
Males (%)		91.8	94.2	95.7	92.6	95.5	95.3	94.2	97.4	94.7	94.3	94.6
Median age (years)	M	29	29	29	29	31	31	32	31	32	32	31
	F	29	28	27	27	32	22	32	19	30	26	28
State/Territory												
ACT	M	2	2	1	1	6	2	0	2	1	6	23
	F	0	0	0	1	0	0	0	0	0	0	1
NSW	M	23	94	137	112	125	84	67	74	92	79	887
	F	3	5	5	7	3	2	2	0	2	2	31
NT	M	2	0	2	1	0	0	2	2	1	1	11
	F	0	0	0	0	0	0	1	0	0	1	2
QLD	M	12	5	5	18	26	19	18	21	27	21	172
	F	3	1	1	2	2	2	0	0	3	2	16
SA	M	2	3	20	4	11	6	9	6	6	6	73
	F	0	1	0	0	0	0	2	0	0	1	4
TAS	M	1	2	0	1	1	0	0	0	1	0	6
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	41	37	29	59	37	40	47	38	30	58	416
	F	2	2	2	5	3	2	3	1	2	3	25
WA	M	6	3	4	3	6	10	4	8	3	10	57
	F	0	0	0	1	1	2	0	3	1	1	9
HIV exposure category												
Male homosexual contact	M	76	127	174	168	184	146	130	126	128	154	1 413
Male homosexual contact and injecting drug use	M	4	10	6	16	11	5	9	13	14	5	93
Injecting drug use ³	M	1	4	4	4	6	2	2	1	6	6	36
	F	3	4	2	2	1	1	0	2	2	2	19
Heterosexual contact	M	5	3	11	7	8	6	6	8	10	12	76
	F	5	4	6	11	8	7	6	2	6	8	63
Health care setting ⁴	M	0	0	0	1	0	0	0	0	0	0	1
	F	0	1	0	2	0	0	0	0	0	0	3
Other/undetermined	M	3	2	3	3	3	2	0	3	3	4	26
	F	0	0	0	1	0	0	2	0	0	0	3
Evidence of newly acquired infection												
Testing history only	M	71	99	120	105	92	85	68	71	79	74	864
	F	5	5	7	8	5	5	5	3	2	7	52
Illness only	M	9	25	22	37	61	26	37	36	37	57	347
	F	2	1	0	5	2	2	0	0	5	2	19
Testing history and illness	M	9	22	56	57	59	50	42	44	45	50	434
	F	1	3	1	3	2	1	3	1	1	1	17

1 Newly acquired HIV infection was defined as newly diagnosed HIV infection with a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis.

2 Totals include 5 people whose sex was reported as transgender.

3 Excludes males who also reported a history of homosexual contact.

4 'Health care setting' includes 4 cases of occupationally acquired HIV infection.

Source: State/Territory health authorities

Table 1.2.4 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 1995 – 2000, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

Characteristic	Sex	Year of HIV diagnosis					
		1995	1996	1997	1998	1999	2000
State/Territory							
ACT	M	540 (6)	385 (4)	290 (5)	90 (6)	465 (4)	550 (9)
	F	350 (2)	590 (1)	265 (2)	195 (2)	850 (3)	920 (1)
NSW	M	420(186)	420(207)	410(215)	377(184)	418(179)	420 (190)
	F	420 (13)	340 (17)	250 (18)	323 (31)	486 (17)	344 (20)
NT	M	580 (1)	210 (4)	440 (7)	465 (10)	105 (4)	450 (2)
	F	– (0)	– (0)	399 (4)	520 (1)	530 (1)	300 (1)
QLD	M	340 (90)	360(125)	400 (92)	410 (84)	420 (95)	420 (93)
	F	340 (7)	300 (9)	300 (18)	310 (13)	440 (17)	355 (14)
SA	M	500 (24)	421 (34)	350 (29)	334 (27)	432 (17)	446 (19)
	F	810 (1)	689 (3)	600 (6)	233 (6)	121 (3)	208 (2)
TAS	M	285 (4)	100 (3)	– (0)	867 (2)	543 (2)	– (0)
	F	– (0)	– (0)	– (0)	12 (1)	250 (1)	– (0)
VIC	M	450(118)	380(152)	350(143)	360(117)	400(106)	435 (151)
	F	295 (7)	360 (13)	254 (13)	500 (9)	325 (10)	333 (16)
WA	M	468 (27)	357 (35)	390 (28)	400 (27)	334 (24)	324 (34)
	F	572 (12)	531 (8)	276 (5)	344 (19)	624 (4)	377 (9)
Exposure category							
Male homosexual contact ¹		450(403)	425(471)	420(428)	432(353)	470(322)	440 (391)
Injecting drug use ²	M	410 (7)	325 (10)	412 (13)	435 (10)	300 (19)	380 (18)
	F	358 (2)	515 (2)	303 (4)	344 (7)	275 (3)	595 (4)
Heterosexual contact	M	192 (37)	221 (56)	290 (58)	221 (73)	280 (64)	317 (70)
	F	400 (36)	410 (47)	295 (58)	352 (69)	432 (51)	355 (58)
Other/undetermined	M	260 (9)	178 (27)	175 (20)	110 (21)	200 (26)	119 (19)
	F	176 (4)	150 (2)	265 (4)	73 (6)	343 (2)	0 (1)
Newly acquired HIV infection status							
Diagnoses of newly acquired HIV infection ³	M	551(137)	615(124)	610(124)	526(132)	515(124)	560 (157)
	F	420 (6)	750 (8)	637 (8)	610 (4)	650 (7)	660 (9)
Other HIV diagnoses	M	310(319)	310(440)	320(395)	300(325)	348(307)	283 (341)
	F	365 (36)	345 (43)	281 (58)	323 (78)	320 (49)	340 (54)
Total⁴		400(499)	387(616)	370(585)	370(540)	407(489)	409(564)

1 Includes males who also reported a history of injecting drug use.

2 Excludes males who also reported a history of homosexual contact.

3 Newly acquired HIV infection was defined as newly diagnosed HIV infection with a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis.

4 Total includes people whose sex was reported as transgender and people whose sex was not reported.

Source: State/Territory health authorities

Table 1.2.5 Number of cases of newly acquired HIV infection, 1991 – 1999, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis

	Year of HIV diagnosis									Total
	1991	1992	1993	1994	1995	1996	1997	1998	1999	
Newly acquired HIV infection	97	155	207	215	222	169	156	155	171	1 547
AIDS										
Interval between HIV and AIDS diagnosis										
Less than 1 year	2	5	4	5	10	2	4	1	3	36
1 – 2 years	2	3	7	8	7	2	2	1	1	33
2 – 3 years	2	8	8	7	3	1	1	0	–	30
3 – 4 years	2	5	7	1	1	1	1	–	–	18
4 – 5 years	4	4	4	1	0	0	–	–	–	13
5 or more years	6	6	2	5	0	–	–	–	–	19
Total	18	31	32	27	21	6	8	2	4	149

Source: State/Territory health authorities

Table 1.2.6 Number of specimens tested for HIV antibody in public health laboratories, 1991 – 2000, by State/Territory and year of test

State/Territory	Year of HIV antibody test									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ACT	9 855	10 284	10 767	10 300	9 368	7 053	7 044	8 293	6 574	5 653
NSW	351 617	352 391	346 652	344 903	300 944	270 735	286 701	299 434	281 178	292 173
NT	9 322	8 992	10 002	11 283	12 122	13 111	13 424	13 137	15 374	14 555
QLD	128 988	141 896	147 329	137 133	154 992	141 741	156 738	164 388	143 829	174 626
SA	68 666	78 233	82 521	77 628	69 054	60 295	58 363	15 848	53 638	75 702
TAS	10 054	12 617	12 873	14 000	12 628	13 192	11 347	11 883	12 368	12 374
VIC	151 794	163 443	163 497	132 100	108 230	119 360	94 846	113 342	106 502	124 804
WA	70 862	67 257	70 733	76 544	72 317	77 435	73 826	79 308	78 194	87 368
Total	801 158	835 113	844 374	803 891	739 655	702 922	702 289	705 633	697 657	787 255

Source: National Serology Reference Laboratory, Australia

1.3 Estimates of the number of people living with HIV infection

Table 1.3.1 Estimated number of people living with HIV infection¹ by HIV disease stage, 2000 – 2004

Year	Estimated number of people			
	Living with HIV	CD4> 500 cells/µl	CD4<500 cells/µl without AIDS	Living with AIDS ²
2000	12 440	2 080	7 770	2 600
2001	12 730	2 050	7 990	2 700
2002	13 030	2 040	8 190	2 800
2003	13 320	2 030	8 400	2 890
2004	13 610	2 030	8 600	2 990

1 Estimated numbers based on back-projection analyses, including people with diagnosed and undiagnosed HIV infection, and assuming 450 new infections per year since 2000.

2 In 2000, based on reported AIDS diagnoses and deaths following AIDS adjusted for reporting delay. In other years, AIDS incidence and deaths assumed to continue at same rate as in 2000.

Source: State/Territory health authorities

1.4 National monitoring of diagnoses of HIV/AIDS in Indigenous Australians

Table 1.4.1 Characteristics of cases of newly diagnosed HIV infection in Indigenous people¹, 1993 – 2000, by year. Number of cases, median age and percent (number) of total cases for each year by sex, newly acquired infection and HIV exposure category

Characteristic	Year of HIV diagnosis								Total
	1993	1994	1995	1996	1997	1998	1999	2000	
Total cases	18	20	22	19	15	25	9	12	140
Males (%)	77.8	75.0	63.6	78.9	73.3	64.0	66.7	91.7	72.9
Median age (years)	29	29	26	29	36	31	28	37	30
Newly acquired infection (%)	16.7(3)	5.0 (1)	31.8(7)	10.5 (2)	26.7(4)	20.0 (5)	33.3 (3)	8.3(1)	18.6(26)
HIV exposure category (number)									
Male homosexual contact	64.7(11)	26.3 (5)	31.8(7)	58.8(10)	60.0(9)	22.7 (5)	25.0 (2)	50.0(6)	41.7(55)
Male homosexual contact and injecting drug use	0.0(0)	26.3 (5)	18.2(4)	5.9 (1)	6.7(1)	13.6 (3)	12.5 (1)	8.3(1)	12.1(16)
Injecting drug use ²	5.9(1)	0.0 (0)	0.0(0)	11.8 (2)	0.0(0)	13.6 (3)	25.0 (2)	16.7(2)	7.6(10)
Heterosexual contact	29.4(5)	42.1 (8)	50.0(11)	23.5 (4)	33.3(5)	45.5(10)	37.5 (3)	25.0(3)	37.1(49)
Haemophilia/coagulation disorder	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0 (0)	0.0(0)	0.0 (0)
Receipt of blood/tissue	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0 (0)	0.0(0)	0.0 (0)
Mother with/at risk for HIV infection	0.0(0)	5.3 (1)	0.0(0)	0.0 (0)	0.0(0)	4.6 (1)	0.0 (0)	0.0(0)	1.5 (2)
Other/undetermined ³	5.6(1)	5.0 (1)	0.0(0)	10.5 (2)	0.0(0)	12.0 (3)	11.1 (1)	0.0(0)	5.7 (8)

1 Information on Indigenous status was not available from ACT at 31 March 2001. Information on Indigenous status was available in VIC from 1 June 1998.

2 Excludes males who also reported a history of homosexual contact.

3 The 'Other/undetermined' HIV exposure category was excluded from the calculation of the percentage of cases attributed to each category.

Source: State/Territory health authorities

Table 1.4.2 Number of AIDS diagnoses in Indigenous people¹, 1993 – 2000, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis and HIV exposure category

Description	Year of AIDS diagnosis								Total
	1993	1994	1995	1996	1997	1998	1999	2000	
Total cases	7	11	10	10	4	9	5	4	60
Males (%)	57.1	81.8	90.0	80.0	75.0	77.8	100.0	100.0	81.7
Median age (years)	36	32	31	30	38	34	37	37	33
Late HIV diagnosis (number)	28.6(2)	9.1 (1)	20.0(2)	10.0 (1)	25.0(1)	44.4 (4)	40.0 (2)	75.0(3)	26.7(16)
HIV exposure category (number)									
Male homosexual contact	42.9(3)	54.5 (6)	66.7(6)	30.0 (3)	33.3(1)	37.5 (3)	20.0 (1)	100.0(3)	46.4(26)
Male homosexual contact and injecting drug use	14.2(1)	9.1 (1)	22.2(2)	40.0 (4)	0.0(0)	0.0 (0)	40.0 (2)	0.0(0)	17.9(10)
Injecting drug use ²	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0(0)	25.0 (2)	20.0 (1)	0.0(0)	5.3 (3)
Heterosexual contact	42.9(3)	27.3 (3)	11.1(1)	30.0 (3)	66.7(2)	37.5 (3)	20.0 (1)	0.0(0)	28.6(16)
Haemophilia/coagulation disorder	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0 (0)	0.0(0)	0.0 (0)
Receipt of blood/tissue	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0 (0)	0.0(0)	0.0 (0)
Mother with/at risk for HIV infection	0.0(0)	9.1 (1)	0.0(0)	0.0 (0)	0.0(0)	0.0 (0)	0.0 (0)	0.0(0)	1.8 (1)
Other/undetermined ³	0.0(0)	0.0 (0)	10.0(1)	0.0 (0)	25.0(1)	11.1 (1)	0.0 (0)	25.0(1)	6.7 (4)

1 Information on Indigenous status was not available from ACT at 31 March 2001. Information on Indigenous status was available in VIC from 1 June 1998.

2 Excludes males who also reported a history of homosexual contact.

3 The 'Other/undetermined' HIV exposure category was excluded from the calculation of the percentage of cases attributed to each exposure category.

Source: State/Territory health authorities

1.5 Assessment of patient report of exposure to HIV, 1994 – 2000

Table 1.5.1 Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1994 – 2000, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire¹ by State/Territory and year

State/ Territory	Number included in the assessment			Number with returned questionnaire			Number with additional information on HIV exposure history ¹		
	94 – 97	98 – 00	Total	94 – 97	98 – 00	Total	94 – 97	98 – 00	Total
ACT	18	11	29	17	10	27	15	10	25
NSW	566	391	957	256	171	427	208	133	341
NT	11	11	22	10	11	21	10	11	21
QLD	113	110	223	108	80	188	99	78	177
SA	29	30	59	28	28	56	27	26	53
TAS	3	2	5	2	2	4	1	2	3
VIC	149	149	298	148	146	294	135	140	275
WA	97	76	173	77	47	124	72	47	119
Total	986	780	1 766	646	495	1 141	567	447	1 014

1 Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (88), people whose medical condition limited reporting of an HIV exposure history (8) and people who were reported to have died (31).

Source: State/Territory health authorities

Table 1.5.2 Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1994 – 2000, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire¹ by year and HIV exposure category reported at HIV notification

HIV exposure category reported at notification	Number included in the assessment			Number with returned questionnaire			Number with additional information on HIV exposure history ¹		
	94 – 97	98 – 00	Total	94 – 97	98 – 00	Total	94 – 97	98 – 00	Total
Injecting drug use	119	90	209	82	69	151	66	61	127
<i>Heterosexual</i>	75	61	136	61	57	118	55	53	108
<i>Not further specified</i>	44	29	73	21	12	33	11	8	19
Heterosexual contact	543	479	1 022	437	350	787	415	341	756
<i>From a high prevalence country</i>	125	163	288	103	129	232	100	127	227
<i>Partner from a high prevalence country</i>	98	95	193	76	72	148	74	70	144
<i>Other partner with/at risk of HIV infection</i>	130	101	231	113	72	185	108	70	178
<i>Not further specified</i>	190	120	310	145	77	222	133	74	207
Receipt of blood/tissue	15	8	23	13	4	17	13	4	17
Health care setting	4	0	4	4	0	4	4	0	4
Other/undetermined	305	203	508	110	72	182	69	41	110
Total	986	780	1 766	646	495	1 141	567	447	1 014

1 Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (88), people whose medical condition limited reporting of an HIV exposure history (8) and people who were reported to have died (31).

Source: State/Territory health authorities

Table 1.5.3 Number of cases of newly diagnosed HIV infection, 1994 – 2000, by HIV exposure category reported on the questionnaire, year and sex

HIV exposure category documented on the questionnaire	1994		1995		1996		1997		1998		1999		2000		Total		Total ¹
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Injecting drug use	9	8	14	4	10	3	12	4	12	4	20	4	14	4	91	31	122
<i>Heterosexual</i>	8	6	13	4	10	2	10	2	10	3	14	4	13	4	78	25	103
<i>Not further specified</i>	1	2	1	0	0	1	2	2	2	1	6	0	1	0	13	6	19
Heterosexual contact	56	54	53	46	52	49	54	55	59	62	55	49	59	45	388	360	749
<i>Sex with injecting drug user</i>	2	8	1	2	1	6	1	7	0	4	1	2	0	6	6	35	41
<i>Sex with bisexual male</i>	–	6	–	7	–	5	–	3	–	6	–	5	–	2	–	34	34
<i>From a high prevalence country</i>	15	12	15	13	20	19	14	20	21	25	22	15	22	20	129	124	253
<i>Sex with a person from a high prevalence country</i>	13	9	8	4	16	7	11	2	14	7	12	11	21	7	95	47	142
<i>Sex with person with medically acquired HIV</i>	1	1	0	0	1	0	0	0	0	0	0	0	0	2	2	3	5
<i>Sex with HIV infected person, exposure not specified</i>	4	13	3	9	0	6	0	14	3	15	3	7	4	7	17	71	89
<i>Not further specified</i>	21	5	26	11	14	6	28	9	21	5	17	9	12	1	139	46	185
Receipt of blood/tissue	4	1	0	2	1	1	0	1	1	2	0	1	0	0	6	8	14
Health care setting ²	2	2	0	1	0	0	0	0	0	0	0	0	0	0	2	3	5
Other/undetermined	16	2	17	0	15	0	15	4	12	1	25	1	15	1	115	9	124
Total¹	87	67	84	53	78	53	81	64	84	69	100	55	88	50	602	411	1 014

1 Totals include 1 case whose sex was not reported.

2 Includes 2 cases of occupationally acquired HIV infection and 3 cases of HIV transmission in a health care setting.

Source: State/Territory health authorities

1.6 National surveillance for perinatal exposure to HIV, 1982 – 2000

Table 1.6.1 Number of women with perinatally HIV exposed children, cumulative to 31 December 2000, and number and population rate of women with perinatally HIV exposed children, 1994 – 2000, by State/Territory of the woman's HIV diagnosis

State/ Territory	1994 – 2000		Cumulative to 31 Dec 2000	
	Number	Rate ¹	Number	%
ACT	6	0.75	9	5.0
NSW	47	0.25	87	47.8
NT	1	0.32	1	0.5
QLD	20	0.36	30	16.5
SA	2	0.09	8	4.4
TAS	0	0.0	0	0.0
VIC	13	0.15	26	14.3
WA	17	0.43	21	11.5
Total	106	0.25	182	100.0

1 Average annual rate per 100 000 women in the age group 15 - 49 years, June 1996 population. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: Australian Paediatric Surveillance Unit; State/Territory health authorities

Table 1.6.2 Number of women with perinatally HIV exposed children, 1982 – 2000, by time of the woman's HIV diagnosis relative to the first exposed child's birth

First exposed child's year of birth	Interval of the woman's HIV diagnosis					Total
	Before the birth (years)				At or after the birth	
	< 1	1–2	> 2	Total		
1982 – 1985	2	0	0	2	23	25
1986 – 1988	3	1	0	4	14	18
1989 – 1991	7	4	5	16	10	26
1992 – 1994	9	2	9	20	18	38
1995 – 1997	10	1	7	18	14	32
1998 – 2000	18	5	15	38	5	43
Total	49	13	36	98	84	182

Source: Australian Paediatric Surveillance Unit; State/Territory health authorities

Table 1.6.3 Number of women with perinatally HIV exposed children, 1982 – 2000, and number of perinatally exposed children, by the woman’s HIV exposure category

HIV exposure category	Number of women with exposed children	Number of exposed children
Injecting drug use	31	40
Heterosexual contact	126	157
<i>Sex with injecting drug user</i>	20	25
<i>Sex with bisexual male</i>	14	17
<i>From high prevalence country</i>	34	41
<i>Sex with person from a high prevalence country</i>	17	21
<i>Sex with person with medically acquired HIV</i>	4	5
<i>Sex with person with HIV infection, other exposure</i>	16	22
<i>Not further specified</i>	21	26
Receipt of blood/tissue	20	24
Other/undetermined	5	7
Total	182	228

Source: Australian Paediatric Surveillance Unit; State/Territory health authorities

Table 1.6.4 Number of perinatally exposed children, 1982 – 2000, and number with diagnosed HIV infection by year of the child’s birth and time of the woman’s HIV diagnosis relative to the child’s birth

Child’s year of birth	Interval of the woman’s HIV diagnosis				Total	
	Before the birth		At or after the birth		Number exposed	Number with HIV
	Number exposed	Number with HIV	Number exposed	Number with HIV		
1982 – 1985	3	0	25	6	28	6
1986 – 1988	4	0	15	10	19	10
1989 – 1991	21	7	14	9	35	16
1992 – 1994	27	6	21	8	48	14
1995 – 1997	26	7	16	10	42	17
1998 – 2000	50	0	6	3	56	3
Total	131	20	97	46	228	66

Source: Australian Paediatric Surveillance Unit; State/Territory health authorities

2 National monitoring of diagnoses of viral hepatitis

2.1 Notification of viral hepatitis to the National Notifiable Diseases Surveillance System

Table 2.1.1 Number and rate¹ of diagnoses of hepatitis A infection, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	62	20.1	53	17.2	53	17.2	8	2.6	5	1.6
NSW	980	15.8	1 455	23.4	924	14.9	415	6.7	201	3.2
NT	76	41.8	92	50.6	45	24.7	89	48.9	44	24.2
QLD	416	12.5	894	26.8	998	29.9	353	10.6	121	3.6
SA	38	2.6	94	6.4	98	6.6	121	8.2	54	3.7
TAS	9	1.9	3	0.6	8	1.7	5	1.1	3	0.6
VIC	460	10.1	363	8.0	171	3.7	269	5.9	193	4.2
WA	109	6.2	122	6.9	146	8.3	292	16.5	183	10.4
Total	2 150	11.7	3 076	16.8	2 443	13.3	1 552	8.5	804	4.4

¹ Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 2.1.2 Number of diagnoses of hepatitis A infection, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	64	61	126	86	65	151	78	57	137	59	55	114	33	21	54
5 – 14	182	187	371	257	245	503	202	211	415	146	156	302	67	60	127
15 – 19	91	61	152	129	97	226	110	91	202	70	70	140	24	25	50
20 – 29	481	159	642	559	311	871	478	259	737	284	190	477	156	79	235
30 – 39	374	130	504	420	228	650	313	141	455	151	112	264	100	57	157
40 – 49	134	43	177	225	139	365	184	83	267	74	49	124	53	33	86
50 – 59	63	35	98	110	61	171	85	45	131	29	24	53	21	23	44
60+	33	37	71	64	70	134	43	43	87	36	39	75	29	21	50
Not reported	4	5	9	3	2	5	8	4	12	2	0	3	1	0	1
Total	1 426	718	2 150	1 853	1 218	3 076	1 501	934	2 443	851	695	1 552	484	319	804

¹ Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate¹ of diagnoses of newly acquired hepatitis B infection, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	4	1.3	2	0.6	1	0.3	3	1.0	3	1.0
NSW	47	0.8	50	0.8	53	0.9	68	1.1	98	1.6
NT	5	2.8	19	10.4	18	9.9	19	10.4	6	3.3
QLD	34	1.0	40	1.2	44	1.3	52	1.6	52	1.6
SA	18	1.2	16	1.1	18	1.2	19	1.3	30	2.0
TAS	8	1.7	1	0.2	6	1.3	5	1.1	15	3.2
VIC	98	2.1	119	2.6	89	2.0	93	2.0	111	2.4
WA	11	0.6	0	0.0	33	1.9	45	2.5	90	5.1
Total	225	1.2	247	1.3	262	1.4	304	1.7	405	2.2

¹ Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 2.1.4 Number of diagnoses of newly acquired hepatitis B infection, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T	M	F	T	M	F	T ¹	M	F	T ¹	M	F	T
0 – 4	0	0	0	1	1	2	2	1	3	0	2	2	1	0	1
5 – 14	3	4	7	5	2	7	5	6	11	2	3	5	5	3	8
15 – 19	12	20	32	25	21	46	19	17	36	24	26	50	22	41	63
20 – 29	58	28	86	54	35	89	60	40	100	88	37	126	117	76	193
30 – 39	47	10	57	36	18	54	38	16	55	42	21	63	52	17	69
40 – 49	13	5	18	18	3	21	20	7	27	25	8	33	22	10	32
50 – 59	8	3	11	10	5	15	11	3	14	9	6	15	18	7	25
60+	6	8	14	3	9	12	9	5	14	7	3	10	9	5	14
Not reported	0	0	0	1	0	1	2	0	2	0	0	0	0	0	0
Total	147	78	225	153	94	247	166	95	262	197	106	304	246	159	405

¹ Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number and rate¹ diagnoses of hepatitis C infection, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	270	87.6	318	103.2	298	96.7	299	97.0	240	77.9
NSW	8 677	139.8	7 371	118.8	7 702	124.1	9 361	150.9	8 318	134.1
NT	217	119.3	341	187.5	297	163.3	231	127.0	191	105.0
QLD	2 884	86.4	2 953	88.4	2 910	87.2	2 978	89.2	3 199	95.8
SA	1 179	80.0	963	65.3	926	62.8	935	63.4	959	65.0
TAS	291	61.3	236	49.7	280	59.0	324	68.3	341	71.9
VIC	4 597	100.8	4 940	108.3	5 691	124.8	6 235	136.7	5 911	129.6
WA	1 146	64.9	1 137	64.4	1 252	70.9	1 137	64.4	1 767	100.1
Total	19 261	105.2	18 259	99.7	19 356	105.7	21 500	117.4	20 926	114.3

¹ Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 2.1.6 Number of diagnoses of hepatitis C infection, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	66	65	135	93	80	188	60	51	113	61	54	124	46	40	90
5 – 14	44	27	73	32	23	58	32	24	57	37	27	66	27	26	55
15 – 19	340	344	689	415	399	847	492	543	1 053	655	649	1 327	681	685	1 375
20 – 29	3 241	2 076	5 348	3 085	1 834	5 153	3 279	2 092	5 454	4 154	2 361	6 636	4 249	2 357	6 646
30 – 39	5 175	2 761	7 980	4 246	2 342	6 984	4 126	2 385	6 569	4 567	2 503	7 163	4 246	2 310	6 595
40 – 49	2 331	1 020	3 372	2 302	978	3 469	2 697	1 232	3 968	3 088	1 404	4 539	3 142	1 327	4 495
50 – 59	356	279	636	344	217	583	431	248	690	498	277	787	560	275	842
60+	483	424	915	411	351	833	463	380	857	407	373	791	382	363	755
Not reported	65	34	113	66	37	144	346	226	595	32	17	67	38	23	73
Total	12 101	7 030	19 261	10 994	6 261	18 259	11 926	7 181	19 356	13 499	7 665	21 500	13 371	7 406	20 926

¹ Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of newly acquired hepatitis C infection, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis ¹				
	1996	1997	1998	1999	2000
ACT	10	2	8	20	22
NSW	22	19	107	77	144
NT	3	1	–	–	–
QLD	–	–	–	–	–
SA	31	52	66	81	88
TAS	6	2	17	18	27
VIC	–	9	21	70	87
WA	7	66	127	114	76
Total	79	151	346	380	444

1 Dashes (–) indicate that data were not available.

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number of newly acquired hepatitis C infection, 1998 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis								
	1998			1999			2000		
	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	3	1	4	1	0	1	1	0	1
5 – 14	0	0	0	1	4	5	0	2	3
15 – 19	27	32	59	38	38	77	33	49	82
20 – 29	97	76	174	134	56	190	114	101	215
30 – 39	46	20	67	48	18	67	60	38	98
40 – 49	18	13	31	17	11	28	29	9	38
50 – 59	6	1	7	4	2	6	4	1	5
60+	0	3	3	2	4	6	1	1	2
Not reported	1	0	1	0	0	0	0	0	0
Total	198	146	346	245	133	380	242	201	444

1 Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

2.2 National monitoring of diagnoses of viral hepatitis in Indigenous Australians

Table 2.2.1 Number (percent) of diagnoses of hepatitis A infection, 2000, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	4 (80.0)	1 (20.0)	5
NSW	2 (1.0)	115 (57.2)	84 (41.8)	201
NT	8 (18.0)	35 (79.5)	1 (2.3)	44
QLD	8 (6.6)	0 (0.0)	113 (93.4)	121
SA	13 (24.1)	32 (59.2)	9 (16.7)	54
TAS	0 (0.0)	0 (0.0)	3(100.0)	3
VIC	0 (0.0)	11 (5.7)	182 (94.3)	193
WA	36 (19.7)	118 (64.5)	29 (15.8)	183
Total	67 (8.3)	315 (39.2)	422 (52.5)	804

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2000, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	3(100.0)	0 (0.0)	3
NSW	8 (8.1)	45 (45.9)	45 (45.9)	98
NT	5 (83.3)	1 (16.7)	0 (0.0)	6
QLD	1 (1.9)	0 (0.0)	51 (98.1)	52
SA	2 (6.7)	28 (93.3)	0 (0.0)	30
TAS	1 (6.7)	0 (0.0)	14 (93.3)	15
VIC	2 (1.8)	92 (82.9)	17 (15.3)	111
WA	15 (16.7)	67 (74.4)	8 (8.9)	90
Total	34 (8.4)	236 (58.3)	135 (33.3)	405

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2000, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	11 (4.6)	178 (74.2)	51 (21.3)	240
NSW	109 (1.3)	1 034 (12.4)	7 175 (86.2)	8 318
NT	15 (7.8)	128 (67.0)	48 (25.1)	191
QLD	8 (0.3)	1 (0.0)	3 190 (99.7)	3 199
SA	95 (9.9)	835 (87.1)	29 (3.0)	959
TAS	7 (2.0)	1 (0.3)	333 (97.7)	341
VIC	6 (0.1)	252 (4.3)	5 653 (95.6)	5 911
WA	53 (3.0)	576 (32.6)	1 138 (64.4)	1 767
Total	304 (1.5)	3 005 (14.4)	17 617 (84.2)	20 926

Source: National Notifiable Diseases Surveillance System

2.3 Incidence of hepatitis C infection among injecting drug users

2.3.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1996 – 2000

	Person years at risk	Number newly diagnosed	Incidence per 100 person years
1996			
less than 20 years	16.2	5	30.9
20 – 29 years	72.0	8	11.1
30+ years	35.0	2	5.7
Total	123.1	15	12.2
1997			
less than 20 years	14.3	6	42.1
20 – 29 years	58.3	11	18.9
30+ years	41.3	3	7.3
Total	113.9	20	17.6
1998			
less than 20 years	10.8	8	73.9
20 – 29 years	48.2	10	20.8
30+ years	38.6	2	5.2
Total	97.6	20	20.5
1999			
less than 20 years	6.0	4	66.9
20 – 29 years	30.2	6	19.9
30+ years	35.0	2	5.7
Total	71.2	12	16.8
2000			
less than 20 years	1.8	0	0.0
20 – 29 years	14.9	4	26.9
30+ years	18.9	2	10.6
Total	35.5	6	16.9

Source: Kirketon Road Centre

2.4 Long term outcomes among people with chronic viral hepatitis

Table 2.4.1 Number (percent) of liver transplants, 1985 – 2000, by year and primary cause of liver disease

Year	hepatitis B	hepatitis C	hepatitis B and C	hepatocellular carcinoma	other ¹	Total
1985 – 1991	23 (8.7)	11 (4.2)	2 (0.7)	9 (3.4)	220 (83.0)	265
1992	9 (10.0)	4 (4.4)	–	1 (1.1)	76 (84.4)	90
1993	10 (11.4)	10 (11.4)	–	–	68 (77.3)	88
1994	6 (5.8)	15 (14.6)	–	1 (1.0)	81 (78.6)	103
1995	5 (4.8)	21 (20.2)	–	1 (1.0)	77 (74.0)	104
1996	13 (11.9)	18 (16.5)	–	2 (1.8)	76 (69.7)	109
1997	13 (10.6)	20 (16.2)	2 (1.6)	4 (3.3)	84 (68.3)	123
1998	14 (10.5)	29 (21.8)	1 (0.8)	9 (6.8)	80 (60.2)	133
1999	18 (15.3)	21 (17.8)	1 (0.8)	2 (1.7)	76 (64.4)	118
2000 ²	12 (16.2)	16 (21.6)	–	4 (5.4)	42 (56.8)	74
Total	123 (10.2)	165 (13.7)	6 (0.5)	33 (2.7)	880 (72.9)	1 207

1 Includes other causes of chronic liver disease and fulminant hepatitis.

2 Data available to 30 June 2000.

Source: Australia and New Zealand Liver Transplant Register

3 National monitoring of diagnoses of sexually transmissible infections

3.1 Notification of specific sexually transmissible infections to the National Notifiable Diseases Surveillance System

Table 3.1.1 Number and rate¹ of diagnoses of chlamydia, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	119	38.6	142	46.1	194	62.9	177	57.4	243	78.8
NSW ²	–	–	–	–	560	9.0	2 478	39.9	3 508	56.5
NT	645	354.7	655	360.2	798	438.8	856	470.7	1 004	552.1
QLD	3 254	97.5	3 447	103.2	3 931	117.7	4 342	130.1	4 522	135.4
SA	1 025	69.5	1 055	71.6	1 022	69.3	974	66.1	1 022	69.3
TAS	277	58.4	263	55.4	197	41.5	251	52.9	319	67.2
VIC	1 614	35.4	2 029	44.5	2 569	56.3	2 941	64.5	3 367	73.8
WA	1 417	80.3	1 585	89.8	2 067	117.1	1 898	107.5	2 599	147.2
Total	8 351	45.6	9 176	50.1	11 338	61.9	13 917	76.0	16 584	90.6

1 Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

2 Chlamydia was a notifiable condition in New South Wales from 1998.

Source: National Notifiable Diseases Surveillance System

Table 3.1.2 Number of diagnoses of chlamydia, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	30	39	69	20	32	52	58	56	114	33	47	80	40	46	86
5 – 14	15	64	79	18	64	82	36	132	168	28	156	184	15	161	177
15 – 19	362	1 659	2 027	431	1 732	2 166	580	2 102	2 687	680	2 440	3 127	821	2 857	3 685
20 – 29	1 653	3 029	4 689	1 881	3 308	5 196	2 383	3 692	6 090	2 908	4 508	7 428	3 525	5 196	8 741
30 – 39	528	564	1 095	565	620	1 186	817	706	1 524	1 229	977	2 209	1 524	1 150	2 682
40 – 49	159	121	281	198	152	350	275	179	454	387	227	615	554	312	871
50 – 59	38	15	53	55	28	83	147	52	200	135	50	185	156	63	220
60+	23	7	30	13	11	24	25	16	41	44	20	64	66	22	90
Not reported	14	14	28	13	22	37	32	25	60	9	14	25	16	15	32
Total	2 822	5 512	8 351	3 194	5 969	9 176	4 353	6 960	11 338	5 453	8 439	13 917	6 717	9 822	16 584

1 Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.1.3 Number of diagnoses of donovanosis, 1996 – 2000, by State/Territory¹ and year

State/Territory	Year of diagnosis				
	1996	1997	1998	1999	2000
NT	21	31	18	6	7
QLD	5	2	2	3	6
VIC	0	0	0	0	0
WA	24	12	7	7	3
Total	50	45	27	16	16

¹ Donovanosis is notifiable only in the Northern Territory, Queensland, Victoria and Western Australia.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 – 14	0	1	1	0	0	0	0	3	3	0	0	0	0	1	1
15 – 19	0	6	6	2	6	8	0	3	3	1	2	3	0	0	0
20 – 29	5	7	12	3	16	19	1	9	10	0	5	5	3	4	7
30 – 39	6	8	14	3	4	7	2	1	3	0	1	1	1	4	5
40 – 49	3	7	10	1	5	6	0	2	2	1	3	4	3	0	3
50+	3	4	7	2	2	4	1	5	6	0	3	3	0	0	0
Not reported	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Total	17	33	50	12	33	45	4	23	27	2	14	16	7	9	16

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate¹ of diagnoses of gonorrhoea, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	18	5.8	21	6.8	28	9.1	20	6.5	14	4.5
NSW	538	8.7	636	10.3	1 049	16.9	1 306	21.0	1 041	16.8
NT	787	432.8	1 143	628.6	1 224	673.1	1 138	625.8	1 195	657.2
QLD	1 028	30.8	906	27.1	1 054	31.6	1 117	33.5	976	29.2
SA	288	19.5	323	21.9	213	14.4	221	15.0	268	18.2
TAS	2	0.4	8	1.7	12	2.5	19	4.0	15	3.2
VIC	366	8.0	386	8.5	603	13.2	785	17.2	887	19.5
WA	1 114	63.1	1 294	73.3	1 215	68.8	987	55.9	1 329	75.3
Total	4 141	22.6	4 717	25.8	5 398	29.5	5 593	30.6	5 725	31.3

¹ Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 3.1.6 Number of diagnoses of gonorrhoea, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	9	25	34	52	56	108	20	27	47	21	25	47	9	11	20
5 – 14	33	72	105	79	133	212	37	97	134	31	92	123	18	108	126
15 – 19	444	423	867	388	512	901	472	526	1 001	488	531	1 020	488	614	1 102
20 – 29	1 146	661	1 807	1 191	753	1 948	1 408	775	2 191	1 488	713	2 206	1 521	703	2 228
30 – 39	673	204	877	778	256	1 037	1 037	299	1 337	1 176	274	1 459	1 162	276	1 439
40 – 49	240	65	305	259	70	329	367	84	452	433	71	507	444	79	523
50 – 59	76	16	92	84	15	99	101	20	122	142	17	161	163	29	193
60+	28	2	30	27	4	31	47	10	57	44	3	48	41	7	48
Not reported	17	7	24	37	15	52	39	12	57	17	5	22	35	11	46
Total	2 666	1 475	4 141	2 895	1 814	4 717	3 528	1 850	5 398	3 840	1 731	5 593	3 881	1 838	5 725

¹ Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate¹ of diagnoses of syphilis, 1996 – 2000, by State/Territory and year

State/Territory	Year of diagnosis									
	1996		1997		1998		1999		2000	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	14	4.5	8	2.6	17	5.5	10	3.2	13	4.2
NSW	745	12.0	528	8.5	630	10.2	668	10.8	752	12.1
NT	290	159.5	271	149.0	344	189.2	328	180.4	183	100.6
QLD	301	9.0	309	9.3	545	16.3	787	23.6	789	23.6
SA	37	2.5	31	2.1	18	1.2	14	0.9	13	0.9
TAS	13	2.7	7	1.5	7	1.5	9	1.9	7	1.5
VIC	18	0.4	16	0.4	12	0.3	6	0.1	7	0.2
WA	94	5.3	101	5.7	98	5.6	110	6.2	115	6.5
Total	1 512	8.3	1 271	6.9	1 671	9.1	1 932	10.6	1 879	10.3

¹ Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 3.1.8 Number of diagnoses of syphilis, 1996 – 2000, by age group, year and sex

Age group (years)	Year of diagnosis														
	1996			1997			1998			1999			2000		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	9	2	11	5	2	8	4	5	11	5	7	12	5	0	5
5 – 14	7	9	16	2	7	9	4	21	25	4	11	15	6	8	14
15 – 19	81	138	219	47	117	164	93	105	199	69	111	181	48	64	112
20 – 29	225	279	505	171	209	383	184	254	444	229	332	562	162	284	447
30 – 39	161	148	311	151	144	296	183	193	377	229	211	445	228	205	433
40 – 49	143	55	200	95	63	158	150	75	228	184	102	286	199	108	309
50 – 59	71	25	97	99	15	116	118	32	152	122	53	176	192	56	248
60+	97	46	144	96	38	134	150	63	215	148	96	247	216	91	307
Not reported	4	3	9	1	2	3	13	6	20	4	4	8	1	2	4
Total	798	705	1 512	667	597	1 271	899	754	1 671	994	927	1 932	1 057	818	1 879

¹ Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

3.2 National monitoring of diagnoses of sexually transmissible infections in Indigenous Australians

Table 3.2.1 Number and rate¹ of diagnosis of chlamydia, 1993 – 2000, by State/Territory², Indigenous status and year

		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1993	Number	299	353	48	708	164	618	511	1 679
	Rate	603	267	226	49	303	36	409	51
1994	Number	364	358	65	662	237	610	666	1 630
	Rate	734	270	306	46	438	36	533	49
1995	Number	315	227	152	617	366	660	833	1 504
	Rate	636	172	715	42	677	39	667	46
1996	Number	400	245	175	850	422	995	997	2 090
	Rate	807	185	823	58	781	58	798	63
1997	Number	390	270	197	858	429	1 160	1 016	2 288
	Rate	787	204	926	59	794	68	813	69
1998	Number	485	313	138	884	619	1 448	1 242	2 645
	Rate	978	236	649	61	1145	85	994	80
1999	Number	528	328	128	846	505	1 393	1 161	2 567
	Rate	1 065	248	602	58	934	81	930	78
2000	Number	665	339	168	854	675	1 924	1 508	3 117
	Rate	1 342	256	790	59	1 249	112	1 207	95

1 Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.2 Number (percent) of diagnoses of chlamydia, 2000, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	2 (0.8)	86 (35.4)	155 (63.8)	243
NSW	72 (2.1)	120 (3.4)	3 316 (94.5)	3 508
NT	665 (66.2)	230 (22.9)	109 (10.9)	1 004
QLD	82 (1.8)	81 (1.8)	4 359 (96.4)	4 552
SA	168 (16.4)	845 (82.7)	9 (0.9)	1 022
TAS	1 (0.3)	1 (0.3)	317 (99.4)	319
VIC	0 (0.0)	0 (0.0)	3 367(100.0)	3 367
WA	675 (26.0)	1 211 (46.6)	713 (27.4)	2 599
Total	1 665 (10.1)	2 574 (15.5)	12 345 (74.4)	16 584

Source: National Notifiable Diseases Surveillance System

Table 3.2.3 Number and rate¹ of diagnosis of gonorrhoea, 1993 – 2000, by State/Territory², Indigenous status and year

		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1993	Number	496	187	92	55	608	185	1 196	427
	Rate	1 001	141	433	4	1 125	11	958	13
1994	Number	527	209	95	63	670	173	1 292	445
	Rate	1 063	158	447	4	1 239	10	1 034	13
1995	Number	453	94	189	63	840	196	1 482	353
	Rate	914	71	889	4	1 554	12	1 187	11
1996	Number	620	167	214	74	778	336	1 612	577
	Rate	1 251	126	1 006	5	1 439	20	1 291	18
1997	Number	876	267	217	106	808	486	1 901	859
	Rate	1 767	202	1 020	7	1 495	28	1 522	26
1998	Number	902	322	134	79	866	349	1 902	750
	Rate	1 820	243	630	5	1 602	20	1 523	23
1999	Number	913	225	138	83	701	286	1 752	594
	Rate	1 841	170	649	6	1 296	17	1 403	18
2000	Number	1 005	190	172	96	831	498	2 008	784
	Rate	2 028	144	809	7	1 537	29	1 608	36

1 Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.4 Number (percent) of diagnoses of gonorrhoea, 2000, by State/Territory and Indigenous status

State/ Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	8 (57.1)	6 (42.9)	14
NSW	23 (2.2)	56 (5.4)	962 (92.4)	1 041
NT	1 005 (84.1)	106 (8.9)	84 (7.0)	1 195
QLD	30 (3.1)	22 (2.3)	924 (94.7)	976
SA	172 (64.2)	96 (35.8)	0 (0.0)	515
TAS	0 (0.0)	0 (0.0)	15 (100.0)	15
VIC	2 (0.2)	721 (81.3)	164 (18.5)	887
WA	831 (62.5)	249 (18.7)	249 (18.7)	1 329
Total	2 063 (36.0)	1 258 (22.0)	2 404 (42.0)	5 725

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Number and rate¹ of diagnosis of syphilis, 1993 – 2000, by State/Territory², Indigenous status and year

		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1993	Number	605	34	59	4	91	60	755	98
	Rate	1 221	26	277	0.3	168	4	605	3
1994	Number	420	31	47	4	54	50	521	85
	Rate	847	23	221	0.3	100	3	417	3
1995	Number	335	15	37	3	105	25	477	43
	Rate	676	11	174	0.2	194	2	382	1
1996	Number	260	30	29	8	36	58	325	96
	Rate	525	23	136	0.6	67	3	260	3
1997	Number	246	23	31	0	35	51	312	74
	Rate	496	17	146	0.0	65	3	250	2
1998	Number	319	25	18	0	46	52	383	77
	Rate	644	19	85	0.0	85	3	306	2
1999	Number	297	31	12	2	40	70	349	103
	Rate	599	23	56	0.1	74	4	279	3
2000	Number	152	31	13	0	55	60	220	91
	Rate	307	23	61	0	102	3	176	2.8

1 Rate per 100 000 population at 30 June 1996. Population estimates by State/Territory and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.6 Number (percent) of diagnoses of syphilis, 2000, by State/Territory and Indigenous status

State/ Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	1 (7.7)	7 (53.9)	5 (69.2)	13
NSW	101 (13.4)	257 (34.2)	394 (52.4)	752
NT	152 (83.1)	20 (10.9)	11 (6.0)	183
QLD	22 (2.8)	8 (1.0)	759 (96.2)	789
SA	13 (100.0)	0 (0.0)	0 (0.0)	13
TAS	1 (14.3)	1 (14.3)	5 (71.0)	7
VIC	0 (0.0)	0 (0.0)	7 (100.0)	7
WA	55 (47.8)	58 (50.4)	2 (1.7)	115
Total	345 (18.4)	351 (18.7)	1 183 (62.7)	1 879

Source: National Notifiable Diseases Surveillance System

3.3 Gonococcal isolates

3.3.1 Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2000 by State/Territory, sex and site, and antibiotic sensitivity by State/Territory

Sex and Site	State/Territory						Total ¹
	NSW	NT	QLD	SA	VIC	WA	
Males							
Urethra	892	128	413	62	620	224	2 352
Rectal	182	0	16	12	91	7	308
Pharynx	91	1	8	5	44	2	152
Other/not specified	22	127	22	4	8	20	203
Total	1 187	256	459	83	763	253	3 015
Females							
Cervix	57	147	151	3	33	55	447
Other/not specified	8	42	10	7	6	9	82
Total	65	189	161	10	39	64	529
Total¹	1 252	445	620	93	802	317	3 544

¹ Total includes gonococcal isolates from ACT and TAS.

Source: Australian Gonococcal Surveillance Programme

3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1992 – 2000, by sex, site and year

Sex and Site	Year of diagnosis								
	1992	1993 ¹	1994	1995	1996	1997	1998	1999	2000
Males									
Urethra	490	409	336	442	530	706	1 023	1 133	892
Rectal	75	87	56	60	73	72	158	195	182
Pharynx	32	48	30	38	36	52	63	80	91
Other/not specified	4	14	6	3	6	3	6	6	22
Total	601	558	428	543	645	833	1 250	1 414	1 187
Females									
Cervix	95	53	61	55	82	63	121	103	57
Rectal	0	0	1	0	0	0	3	4	2
Pharynx	7	5	4	5	2	6	12	4	5
Other/not specified	1	0	6	1	2	0	0	3	4
Total	103	58	72	61	86	69	136	114	68
Total	704	616	500	604	731	902	1 386	1 528	1 255

¹ Total includes isolates from people whose sex was not reported.

Source: Australian Gonococcal Surveillance Programme

4 Surveillance for HIV, hepatitis B and hepatitis C in sentinel populations

4.1 Sentinel HIV surveillance in sexual health clinics¹, 1995 – 2000

Table 4.1.1 Number of people seen at selected metropolitan sexual health clinics in Australia, 1995 – 2000, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, clinic and year

		Sexual health clinic						
Males		Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Clinic 34 Darwin, NT	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC
1995	Seen	5 134	–	810	2 944	–	3 586	5 738
	Tested	2 797	–	354	964	–	2 853	4 373
	Newly diagnosed (%)	16 (0.6)	–	1 (0.3)	4 (0.4)	–	10 (0.4)	20 (0.5)
	Previously negative (%)	6 (0.4)	–	–	3 (0.6)	–	6 (0.4)	4 (0.3)
1996	Seen	4 878	–	986	2 786	–	3 572	5 902
	Tested	2 419	–	393	1 191	–	2 832	4 245
	Newly diagnosed (%)	18 (0.7)	–	2 (0.5)	4 (0.3)	–	7 (0.2)	22 (0.5)
	Previously negative (%)	8 (0.6)	–	–	0 (0.0)	–	6 (0.4)	4 (0.2)
1997	Seen	4 721	–	1 187	2 776	1 145	3 485	6 419
	Tested	2 491	–	463	1 214	687	2 766	4 303
	Newly diagnosed (%)	27 (1.1)	–	2 (0.4)	5 (0.4)	5 (0.7)	8 (0.3)	18 (0.4)
	Previously negative (%)	14 (1.0)	–	–	5 (0.7)	1 (0.9)	6 (0.4)	3 (0.2)
1998	Seen	4 433	–	–	2 579	1 084	3 604	6 138
	Tested	2 152	–	–	1 057	665	2 823	3 747
	Newly diagnosed (%)	15 (0.7)	–	–	3 (0.3)	1 (0.1)	5 (0.2)	16 (0.4)
	Previously negative (%)	8 (0.7)	–	–	2 (0.3)	0 (0.0)	5 (0.3)	5 (0.3)
1999	Seen	3 465	761	–	2 662	1 076	3 211	5 620
	Tested	1 682	399	–	1 156	489	2 435	3 453
	Newly diagnosed (%)	19 (1.1)	2 (0.5)	–	4 (0.3)	6 (1.2)	4 (0.2)	16 (0.5)
	Previously negative (%)	8 (0.8)	0 (0.0)	–	4 (0.6)	1 (0.8)	3 (0.2)	3 (0.2)
2000	Seen	3 885	942	–	2 835	1 033	2 907	5 178
	Tested	1 787	506	–	1 071	470	2 321	3 405
	Newly diagnosed (%)	16 (0.9)	0 (0.0)	–	2 (0.2)	6 (1.3)	6 (0.3)	55 (1.6)
	Previously negative (%)	3 (0.5)	0 (0.0)	–	1 (0.3)	1 (0.8)	6 (0.4)	12 (0.7)

		Sexual health clinic						
Females		Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Clinic 34 Darwin, NT	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC
1995	Seen	3 082	–	458	1 938	–	2 375	4 034
	Tested	1 700	–	257	576	–	1 875	3 371
	Newly diagnosed (%)	4 (0.2)	–	0 (0.0)	0 (0.0)	–	0 (0.0)	3 (0.1)
	Previously negative (%)	1 (0.1)	–	–	0 (0.0)	–	0 (0.0)	0 (0.0)
1996	Seen	3 081	–	672	1 789	–	2 357	4 039
	Tested	1 569	–	212	653	–	1 853	3 384
	Newly diagnosed (%)	3 (0.2)	–	0 (0.0)	1 (0.2)	–	0 (0.0)	2 (0.1)
	Previously negative (%)	1 (0.1)	–	–	0 (0.0)	–	0 (0.0)	0 (0.0)
1997	Seen	3 177	–	788	1 733	1 198	2 321	4 574
	Tested	1 668	–	333	644	707	1 751	3 790
	Newly diagnosed (%)	4 (0.2)	–	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	3 (0.1)
	Previously negative (%)	2 (0.2)	–	–	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
1998	Seen	2 915	–	–	1 632	1 363	2 475	4 732
	Tested	1 364	–	–	563	905	1 832	3 230
	Newly diagnosed (%)	5 (0.4)	–	–	1 (0.2)	0 (0.0)	1 (0.1)	1 (0.03)
	Previously negative (%)	2 (0.3)	–	–	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
1999	Seen	2 196	869	–	1 773	1 302	2 289	4 542
	Tested	1 011	402	–	632	636	1 645	2 968
	Newly diagnosed (%)	1 (0.1)	1 (0.2)	–	0 (0.0)	1 (0.2)	0 (0.0)	2 (0.7)
	Previously negative (%)	0 (0.0)	0 (0.0)	–	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2000	Seen	2 430	1 085	–	1 737	1 359	2 051	4 123
	Tested	998	529	–	623	661	1 530	2 937
	Newly diagnosed (%)	3 (0.3)	2 (0.4)	–	0 (0.0)	1 (0.2)	0 (0.0)	5 (0.2)
	Previously negative (%)	2 (0.8)	0 (0.0)	–	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)

1 Data from Clinic 34, Darwin, NT, not available for 1998, 1999 and 2000. Clinic 34, Gold Coast Sexual Health Clinic, and Livingstone Road Sexual Health Centre joined the network in 1995, 1997 and 1999, respectively.

Source: Collaborative group on sentinel HIV surveillance in sexual health clinics

Table 4.1.2 Number of people seen at selected metropolitan sexual health clinics in Australia¹, 1995 – 2000, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, HIV exposure category and year

HIV exposure category								
Males		Male homosexual contact ²	Male homosexual contact ² , age <25 years	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males	Total
1995	Seen	3 305	756	1 009	1 297	10 713	1 078	17 402
	Tested	2 260	573	708	772	6 689	558	10 987
	Newly diagnosed (%)	41 (1.8)	7 (1.2)	1 (0.1)	2 (0.26)	3 (0.04)	3 (0.5)	50 (0.5)
	Previously negative (%)	19 (1.4)	3 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	19 (0.4)
1996	Seen	3 350	706	951	1 188	10 124	1 525	17 138
	Tested	2 191	531	692	723	6 386	695	10 687
	Newly diagnosed (%)	40 (1.8)	7 (1.3)	2 (0.3)	0 (0.0)	2 (0.03)	7 (1.0)	51 (0.5)
	Previously negative (%)	17 (1.1)	2 (0.7)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	18 (0.3)
1997	Seen	3 805	728	1 009	1 232	10 524	1 976	18 546
	Tested	2 568	561	744	789	6 526	834	11 461
	Newly diagnosed (%)	50 (1.9)	7 (1.2)	0 (0.0)	0 (0.0)	6 (0.09)	7 (0.8)	63 (0.5)
	Previously negative (%)	27 (0.8)	6 (1.0)	0 (0.0)	0 (0.0)	2 (0.07)	0 (0.0)	29 (0.3)
1998	Seen	3 936	739	1 021	1 226	9 928	1 727	17 838
	Tested	2 448	561	753	707	5 868	668	10 444
	Newly diagnosed (%)	28 (1.1)	2 (0.4)	0 (0.0)	0 (0.0)	6 (0.10)	6 (0.9)	40 (0.4)
	Previously negative (%)	16 (0.5)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.07)	2 (0.5)	20 (0.2)
1999	Seen	3 844	680	921	1 245	9 336	1 449	16 795
	Tested	2 346	503	642	776	5 334	516	9 614
	Newly diagnosed (%)	41 (1.7)	5 (1.0)	1 (0.2)	0 (0.0)	7 (0.13)	2 (0.4)	51 (0.5)
	Previously negative (%)	17 (1.1)	3 (1.2)	1 (0.3)	0 (0.0)	1 (0.04)	0 (0.0)	19 (0.4)
2000	Seen	3 804	616	679	1 042	9 615	1 640	16 780
	Tested	2 361	461	485	712	5 298	704	9 560
	Newly diagnosed (%)	45 (1.9)	5 (1.1)	0 (0.0)	2 (0.28)	6 (0.11)	32 (4.5)	85 (0.89)
	Previously negative (%)	19 (1.4)	3 (1.7)	0 (0.0)	0 (0.0)	2 (0.09)	2 (1.1)	23 (0.53)

HIV exposure category

Females		Sex worker ^a	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females	Total
1995	Seen	1 075	484	746	8 115	1 009	11 429
	Tested	916	344	458	5 246	558	7 522
	Newly diagnosed (%)	2 (0.2)	1 (0.3)	3 (0.66)	1 (0.02)	0 (0.0)	7 (0.09)
	Previously negative (%)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.03)
1996	Seen	1 098	457	658	7 809	1 244	11 266
	Tested	973	328	380	5 119	659	7 459
	Newly diagnosed (%)	1 (0.1)	0 (0.0)	2 (0.53)	2 (0.04)	1 (0.2)	6 (0.08)
	Previously negative (%)	0 (0.0)	0 (0.0)	1 (0.52)	0 (0.0)	0 (0.0)	1 (0.03)
1997	Seen	991	684	820	8 869	1 639	13 003
	Tested	893	496	464	5 793	914	8 560
	Newly diagnosed (%)	1 (0.1)	1 (0.2)	2 (0.43)	3 (0.05)	1 (0.1)	8 (0.09)
	Previously negative (%)	0 (0.0)	1 (0.2)	1 (0.45)	0 (0.0)	0 (0.0)	2 (0.03)
1998	Seen	858	708	908	8 894	1 749	13 117
	Tested	700	521	493	5 397	783	7 894
	Newly diagnosed (%)	2 (0.3)	0 (0.0)	1 (0.20)	3 (0.06)	2 (0.3)	8 (0.10)
	Previously negative (%)	2 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.03)
1999	Seen	956	665	904	8 991	1 455	12 971
	Tested	773	408	493	5 019	601	7 294
	Newly diagnosed (%)	1 (0.1)	2 (0.3)	1 (0.20)	0 (0.0)	1 (0.2)	5 (0.07)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2000	Seen	1 214	468	766	8 808	1 529	12 785
	Tested	1 007	323	451	4 829	668	7 278
	Newly diagnosed (%)	1 (0.1)	0 (0.0)	1 (0.22)	7 (0.14)	2 (0.3)	11 (0.15)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.14)	0 (0.0)	3 (0.09)

1 Sydney Sexual Health Centre, Livingstone Road Sexual Health Centre, Brisbane Sexual Health Clinic, Gold Coast Sexual Health Clinic, Clinic 275 and Melbourne Sexual Health Centre only.

2 Includes males who also reported a history of injecting drug use.

3 Includes females who also reported a history of injecting drug use.

Source: Collaborative group on sentinel HIV surveillance in sexual health clinics

Table 4.1.3 Number of people seen at selected metropolitan sexual health clinics in Australia¹, 1995 – 2000, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, age group and year

		Age group (years)						Unknown	Total
Males		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+		
1995	Seen	725	7 969	5 191	2 314	796	403	4	17 402
	Tested	475	5 212	3 186	1 405	485	221	3	10 987
	Newly diagnosed (%)	1 (0.2)	17 (0.3)	19 (0.6)	8 (0.6)	2 (0.4)	3 (1.4)	0 (0.0)	50 (0.5)
	Previously negative (%)	0 (0.0)	7 (0.3)	9 (0.5)	1 (0.1)	1 (0.4)	1 (0.9)	0 (0.0)	19 (0.4)
1996	Seen	665	7 750	5 261	2 282	816	363	1	17 138
	Tested	442	5 123	3 155	1 334	441	191	1	10 687
	Newly diagnosed (%)	0 (0.0)	19 (0.4)	24 (0.8)	8 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	51 (0.5)
	Previously negative (%)	0 (0.0)	6 (0.2)	11 (0.6)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	18 (0.3)
1997	Seen	708	8 131	5 687	2 603	975	440	2	18 546
	Tested	478	5 387	3 354	1 466	547	229	0	11 461
	Newly diagnosed (%)	0 (0.0)	24 (0.4)	21 (0.6)	11 (0.8)	5 (0.9)	2 (0.9)	-	63 (0.5)
	Previously negative (%)	0 (0.0)	14 (0.3)	11 (0.3)	2 (0.3)	1 (0.2)	1 (0.4)	-	29 (0.3)
1998	Seen	678	7 801	5 512	2 378	1 035	428	6	17 838
	Tested	449	5 006	3 016	1 219	529	222	3	10 444
	Newly diagnosed (%)	0 (0.0)	7 (0.1)	21 (0.7)	8 (0.7)	2 (0.4)	2 (0.9)	0 (0.0)	40 (0.4)
	Previously negative (%)	0 (0.0)	2 (0.04)	8 (0.2)	7 (0.5)	2 (0.3)	1 (0.4)	0 (0.0)	20 (0.2)
1999	Seen	592	6 954	5 349	2 411	1 024	460	5	16 795
	Tested	378	4 268	2 945	1 260	539	224	0	9 614
	Newly diagnosed (%)	1 (0.3)	17 (0.4)	22 (0.7)	7 (0.6)	3 (0.6)	1 (0.4)	-	51 (0.5)
	Previously negative (%)	1 (1.1)	7 (0.4)	8 (0.4)	2 (0.3)	1 (0.3)	0 (0.0)	-	19 (0.4)
2000	Seen	518	6 566	5 731	2 391	1 076	496	2	16 780
	Tested	317	4 056	3 049	1 272	591	275	0	9 560
	Newly diagnosed (%)	1 (0.3)	26 (0.6)	41 (1.3)	13 (1.0)	3 (0.5)	1 (0.4)	-	85 (0.9)
	Previously negative (%)	0 (0.0)	10 (0.7)	8 (0.5)	4 (0.6)	1 (0.3)	0 (0.0)	-	23 (0.5)

		Age group (years)							
Females		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Unknown	Total
1995	Seen	1 567	6 218	2 421	897	253	69	4	11 429
	Tested	966	4 155	1 627	590	153	30	1	7 522
	Newly diagnosed (%)	3 (0.3)	2 (0.05)	1 (0.06)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	7 (0.09)
	Previously negative (%)	0 (0.0)	1 (0.05)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.03)
1996	Seen	1 532	6 251	2 306	874	236	62	5	11 266
	Tested	958	4 215	1 515	589	151	31	0	7 459
	Newly diagnosed (%)	0 (0.0)	5 (0.1)	1 (0.07)	0 (0.0)	0 (0.0)	0 (0.0)	-	6 (0.08)
	Previously negative (%)	0 (0.0)	1 (0.05)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-	1 (0.03)
1997	Seen	1 580	7 294	2 702	1 051	306	64	6	13 003
	Tested	931	4 929	1 791	697	183	29	0	8 560
	Newly diagnosed (%)	0 (0.0)	6 (0.1)	1 (0.06)	1 (0.2)	0 (0.0)	0 (0.0)	-	8 (0.09)
	Previously negative (%)	0 (0.0)	1 (0.02)	1 (0.05)	0 (0.0)	0 (0.0)	0 (0.0)	-	2 (0.03)
1998	Seen	1 586	7 260	2 757	1 132	307	70	5	13 117
	Tested	870	4 453	1 664	707	175	25	0	7 894
	Newly diagnosed (%)	0 (0.0)	6 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	-	8 (0.1)
	Previously negative (%)	0 (0.0)	2 (0.04)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-	2 (0.03)
1999	Seen	1 485	7 043	2 897	1 147	314	82	3	12 971
	Tested	746	4 012	1 692	656	158	29	1	7 294
	Newly diagnosed (%)	0 (0.0)	1 (0.02)	4 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.07)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-	0 (0.0)
2000	Seen	1 359	6 949	2 879	1 122	371	103	2	12 785
	Tested	676	4 061	1 657	662	181	41	0	7 278
	Newly diagnosed (%)	0 (0.0)	4 (0.1)	5 (0.3)	2 (0.3)	0 (0.0)	0 (0.0)	-	11 (0.15)
	Previously negative (%)	0 (0.0)	1 (0.06)	1 (0.1)	1 (0.3)	0 (0.0)	0 (0.0)	-	3 (0.09)

1 Sydney Sexual Health Centre, Livingstone Road Sexual Health Centre, Brisbane Sexual Health Clinic, Gold Coast Sexual Health Clinic, Clinic 275 and Melbourne Sexual Health Centre only.

Source: Collaborative group on sentinel HIV surveillance in sexual health clinics

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4.2 National monitoring of HIV infection among entrants into Australian prisons

Table 4.2.1 Number of receptions into Australian prisons, 1996 – 2000, proportion tested for HIV antibody at reception and number (%) with diagnosed HIV infection by year and Corrections jurisdiction of reception

Year of reception	State/Territory Corrections jurisdiction								Total
	ACT ¹	NSW	NT	QLD	SA	TAS	VIC ²	WA	
1996									
Number of receptions	381	8 718	1 359	7 834	4 326	1 131	3 903	4 670	32 322
Number (%) male	336 (88)	7 976 (91)	1 273 (94)	7 004 (89)	3 806 (88)	1 063 (94)	3 590 (92)	4 199 (90)	29 247 (91)
Tested for HIV antibody (%)	3.9	39.9	91.7	100.0	74.1	68.8	80.1	42.7	67.2
% males tested	4.5	40.5	91.1	100.0	75.5	68.9	83.0	43.0	67.2
Number (%) with HIV	0 (0.0)	21 (0.6)	0 (0.0)	8 (0.1)	4 (0.3)	0 (0.0)	11 (0.3)	0 (0.0)	44 (0.2)
Number (%) male	0 (0.0)	15 (0.5)	0 (0.0)	8 (0.1)	4 (0.3)	0 (0.0)	10 (0.3)	0 (0.0)	37 (0.2)
1997									
Number of receptions	387	9 767	2 165	8 073	4 224	1 010	3 031	4 560	33 217
Number (%) male	339 (88)	8 995 (92)	1 954 (90)	7 196 (89)	3 789 (90)	945 (94)	3 031 (100)	3 969 (87)	30 218 (91)
Tested for HIV antibody (%)	2.8	44.5	100.0	100.0	85.6	64.9	64.2	44.7	78.7
% males tested	3.2	44.5	100.0	100.0	74.2	66.5	64.2	64.2	67.4
Number (%) with HIV	0 (0.0)	9 (0.2)	4 (0.2)	14 (0.2)	2 (0.1)	1 (0.2)	3 (0.2)	2 (0.1)	35 (0.1)
Number (%) male	0 (0.0)	9 (0.2)	4 (0.2)	11 (0.2)	2 (0.1)	1 (0.2)	3 (0.2)	2 (0.1)	32 (0.2)
1998									
Number of receptions	–	10 253	2 607	10 123	4 356	1 950	4 519	5 276	39 084
Number (%) male	–	9 304 (91)	2 284 (88)	9 074 (90)	3 883 (89)	1 881 (96)	4 519 (100)	4 594 (87)	35 539 (91)
Tested for HIV antibody (%)	–	41.0	100.0	100.0	28.3	70.9	59.7	40.0	60.7
% males tested	–	41.6	100.0	100.0	30.2	70.1	100.0	40.8	62.7
Number (%) with HIV	–	19 (0.5)	2 (0.1)	15 (0.2)	3 (0.5)	0 (0.0)	–	0 (0.0)	39 (0.2)
Number (%) male	–	19 (0.5)	2 (0.1)	14 (0.2)	3 (0.5)	0 (0.0)	–	0 (0.0)	38 (0.2)
1999									
Number of receptions	254	15 206	2 587	10 975	4 016	2 233	1 994	5 958	43 223
Number (%) male	223 (88)	13 504 (89)	2 287 (88)	9 778 (89)	3 544 (88)	2 084 (93)	1 994 (100)	5 105 (86)	38 519 (89)
Tested for HIV antibody (%)	5.5	28.9	100.0	100.0	28.5	58.1	68.5	55.5	58.0
% males tested	6.3	30.3	100.0	100.0	30.5	55.8	72.0	57.0	59.2
Number (%) with HIV	0 (0.0)	38 (0.9)	4 (0.2)	16 (0.1)	3 (0.3)	0 (0.0)	7 (0.5)	0 (0.0)	68 (0.3)
Number (%) male	0 (0.0)	36 (0.9)	4 (0.2)	16 (0.2)	2 (0.2)	0 (0.0)	7 (0.5)	0 (0.0)	65 (0.3)
2000									
Number of receptions	137	11 087	2 067	9 148	3 446	1 403	–	6 555	33 843
Number (%) male	125 (91)	9 978 (90)	1 921 (93)	8 088 (88)	3 098 (90)	1 333 (95)	–	5 659 (86)	30 202 (89)
Tested for HIV antibody (%)	15.3	34.9	97.4	100.0	26.1	42.2	–	47.7	58.1
% males tested	16.8	36.1	96.8	100.0	27.4	42.2	–	48.3	58.1
Number (%) with HIV	0 (0.0)	5 (0.1)	2 (0.1)	7 (0.1)	2 (0.2)	0 (0.0)	–	1 (0.0)	17 (0.1)
Number (%) male	0 (0.0)	4 (0.1)	2 (0.1)	6 (0.1)	2 (0.2)	0 (0.0)	–	1 (0.0)	15 (0.1)

1 The corrections centre in the ACT is a remand centre only. HIV antibody testing is carried out on prisoner request. Data not available for 1998, the first 6 months of 1999 and the first 9 months of 2000.

2 Data available from VIC on males only in the interval 1 January – 30 September 1997, 1 January – 31 December 1998 and 1 January 1999 – 30 June 1999. Information on number of HIV diagnoses not available in 1998. Data not available from VIC for 2000.

Source: State/Territory Departments of Corrections

4.3 HIV and hepatitis C seroprevalence among people who have injected drugs

Table 4.3.1 Number of participating needle and syringe programs (NSP), 1995 – 2000, number of injecting drug users tested for HIV or hepatitis C antibody (percent of clients seen) and number (percent) with HIV or hepatitis C antibody by year, State/Territory and sex

1995

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
NSW	4	254 (38)	152 (50)	412 (40)	6 (2.4)	3 (2.0)	10 (2.4)	219 (86)	124 (82)	348 (85)
QLD	4	223 (55)	82 (57)	309 (56)	4 (1.8)	1 (1.2)	5 (1.6)	84 (38)	37 (45)	124 (40)
VIC	5	77 (23)	41 (33)	118 (25)	1 (1.3)	0 (0.0)	1 (0.8)	43 (56)	20 (49)	63 (53)
Other	8	85 (45)	52 (53)	140 (43)	4 (4.7)	0 (0.0)	4 (2.9)	54 (64)	27 (52)	83 (59)
Total	21	639 (40)	327 (49)	979 (41)	15 (2.3)	4 (1.2)	20 (2.0)	400 (63)	208 (64)	618 (63)
Prevalence²		–	–	–	2.6	0.9	2.0	64	60	63

1996

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
NSW	4	316 (47)	161 (51)	482 (47)	8 (2.5)	5 (3.1)	13 (2.7)	229 (72)	114 (71)	347 (72)
QLD	5	358 (69)	125 (67)	489 (69)	7 (2.0)	1 (0.8)	8 (1.6)	107 (30)	54 (43)	162 (33)
VIC	3	127 (44)	62 (48)	190 (45)	3 (2.4)	1 (1.6)	4 (2.1)	56 (44)	35 (56)	92 (48)
Other	8	169 (51)	111 (61)	284 (53)	2 (1.2)	0 (0.0)	2 (0.7)	85 (50)	54 (49)	143 (50)
Total	20	970 (53)	459 (53)	1 445 (54)	20 (2.1)	7 (1.5)	27 (1.9)	477 (49)	257 (56)	744 (51)
Prevalence²		–	–	–	2.1	1.6	1.9	52	57	54

1997

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
NSW	6	384 (61)	254 (79)	639 (66)	6 (1.6)	1 (0.4)	7 (1.1)	259 (67)	176 (69)	436 (68)
QLD	5	327 (72)	150 (76)	479 (74)	7 (2.1)	2 (1.3)	9 (1.9)	86 (26)	51 (34)	138 (29)
VIC	4	294 (39)	141 (61)	436 (44)	4 (1.4)	1 (0.7)	5 (1.1)	140 (48)	81 (57)	221 (51)
Other	8	182 (69)	76 (64)	260 (64)	7 (3.8)	0 (0.0)	7 (2.7)	84 (46)	35 (46)	120 (46)
Total	23	1 187 (57)	621 (72)	1 814 (60)	24 (2.0)	4 (0.6)	28 (1.5)	569 (48)	343 (55)	915 (50)
Prevalence²		–	–	–	2.1	0.5	1.6	50	54	51

1998

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
ACT	1	87 (73)	50 (85)	137 (77)	0 (0.0)	0 (0.0)	0 (0.0)	46 (53)	22 (44)	68 (50)
NSW	11	542 (32)	368 (48)	916 (37)	5 (0.9)	1 (0.3)	6 (0.7)	368 (68)	264 (72)	635 (69)
NT	2	65 (61)	22 (69)	87 (62)	4 (6.2)	0 (0.0)	4 (4.6)	28 (43)	6 (27)	34 (39)
QLD	5	472 (48)	196 (56)	670 (50)	4 (0.8)	1 (0.5)	5 (0.7)	114 (24)	76 (39)	192 (29)
SA	5	96 (44)	71 (50)	168 (46)	1 (1.0)	1 (1.4)	2 (1.2)	28 (29)	17 (24)	45 (27)
TAS	2	35 (59)	8 (47)	43 (52)	1 (2.9)	0 (0.0)	1 (2.3)	14 (40)	4 (50)	18 (42)
VIC	4	193 (30)	90 (45)	283 (35)	0 (0.0)	0 (0.0)	0 (0.0)	104 (54)	48 (53)	152 (54)
WA	2	76 (37)	48 (45)	126 (40)	1 (1.3)	1 (2.0)	2 (1.6)	32 (42)	19 (40)	52 (41)
Total	32	1 566 (40)	853 (51)	2 430 (42)	16 (1.0)	4 (0.5)	20 (0.8)	734 (47)	456 (53)	1 196 (49)
Prevalence²		-	-	-	0.9	0.5	0.8	49	53	49

1999

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
ACT	1	48 (39)	42 (86)	90 (53)	0 (0.0)	1 (2.4)	1 (1.1)	30 (63)	24 (57)	54 (60)
NSW	14	536 (38)	312 (49)	853 (41)	8 (1.5)	1 (0.3)	9 (1.1)	321 (60)	198 (63)	523 (61)
NT	1	64 (59)	15 (45)	79 (55)	3 (4.7)	0 (0.0)	3 (3.8)	36 (56)	3 (20)	39 (49)
QLD	6	531 (47)	268 (58)	804 (51)	11 (2.1)	2 (0.8)	13 (1.6)	191 (36)	115 (43)	307 (38)
SA	6	142 (67)	96 (83)	238 (70)	2 (1.4)	4 (4.2)	6 (2.5)	61 (43)	37 (39)	98 (41)
TAS	1	18 (30)	6 (35)	24 (28)	0 (0.0)	0 (0.0)	0 (0.0)	7 (39)	4 (67)	11 (46)
VIC	3	135 (23)	69 (36)	205 (26)	2 (1.5)	0 (0.0)	2 (1.0)	81 (60)	40 (58)	122 (60)
WA	2	53 (40)	32 (51)	85 (43)	0 (0.0)	0 (0.0)	0 (0.0)	28 (53)	15 (47)	43 (51)
Total	34	1 527 (42)	840 (55)	2 378 (45)	26 (1.7)	8 (1.0)	34 (1.4)	755 (49)	436 (52)	1 197 (50)
Prevalence²		-	-	-	1.4	0.6	1.0	53	54	53

2000

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)			Number with HIV antibody (%)			Number with hepatitis C antibody (%)		
		Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
ACT	1	120 (57)	42 (52)	162 (55)	0 (0.0)	0 (0.0)	0 (0.0)	65 (54)	27 (64)	92 (57)
NSW	13	535 (42)	325 (45)	865 (43)	11 (2.1)	0 (0.0)	11 (1.3)	347 (65)	223 (69)	574 (66)
NT	2	70 (64)	19 (67)	90 (65)	1 (1.4)	0 (0.0)	1 (1.1)	32 (46)	6 (32)	38 (42)
QLD	6	464 (56)	249 (58)	719 (57)	7 (1.5)	0 (0.0)	8 (1.1)	170 (37)	109 (44)	282 (39)
SA	7	200 (62)	92 (66)	294 (64)	0 (0.0)	0 (0.0)	0 (0.0)	96 (48)	42 (46)	138 (47)
TAS	1	17 (24)	8 (47)	25 (27)	1 (5.9)	0 (0.0)	1 (4.0)	9 (53)	1 (13)	10 (40)
VIC	3	177 (33)	115 (78)	293 (43)	1 (0.6)	0 (0.0)	1 (0.3)	114 (64)	68 (59)	183 (62)
WA	2	56 (72)	19 (62)	75 (68)	0 (0.0)	0 (0.0)	0 (0.0)	26 (46)	5 (26)	31 (41)
Total	35	1 639 (48)	869 (55)	2 523 (50)	21 (1.3)	0 (0.0)	22 (0.9)	859 (52)	481 (55)	1 348 (53)
Prevalence²		-	-	-	1.4	0.0	0.7	55	54	53

1 Totals include people whose sex was reported as transgender and people whose sex was not reported.

2 Prevalence adjusted for sample size in each State/Territory.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.3.2 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1995 – 2000, and number with HIV or hepatitis C antibody by year, history of injecting drug use, type of drug last injected among those reporting less than 3 years of drug injection, and sex

1995

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	77	53	131	1.3	0.0	0.8	18	28	22
3 to 5 years	103	60	165	1.9	0.0	1.2	33	37	35
6 or more years	445	212	665	2.7	1.9	2.6	77	80	78
Not reported	14	2	18	0.0	0.0	0.0	64	50	61
Total	639	327	979	2.3	1.2	2.0	63	64	63

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	38	27	66	2.6	0.0	1.5	11	26	17
Heroin	24	15	39	0.0	0.0	0.0	33	33	33
Other /not reported	15	11	26	0.0	0.0	0.0	13	27	19
Total	77	53	131	1.3	0.0	0.8	18	28	22

1996

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	162	74	238	1.2	2.7	1.7	11	16	13
3 to 5 years	175	102	280	1.7	1.0	1.4	14	31	22
6 to 10 years	208	91	303	1.4	2.2	1.6	48	58	51
10 or more years	388	178	571	2.8	1.1	2.3	82	83	82
Not reported	37	14	53	2.7	0.0	1.9	57	86	60
Total	970	459	1 445	2.1	1.5	1.9	49	56	51

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	72	26	99	2.8	0.0	2.0	11	8	9
Heroin	62	38	100	0.0	2.6	1.0	8	18	12
Other /not reported	28	10	39	0.0	10.0	2.6	25	30	15
Total	162	74	238	1.2	2.7	1.7	11	16	13

1997

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	193	126	320	1.0	0.0	0.6	12	16	13
3 to 5 years	234	132	366	0.8	0.0	0.5	21	36	26
6 to 10 years	250	143	393	2.4	0.7	1.8	36	58	44
10 or more years	477	212	694	2.7	1.4	2.3	82	59	84
Not reported	33	8	41	3.0	0.0	2.4	48	50	49
Total	1 187	621	1 814	2.0	0.6	1.5	48	55	50

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	80	39	120	0.0	0.0	0.0	6	8	7
Heroin	80	70	150	1.3	0.0	0.7	21	20	21
Other opiates	3	7	10	0.0	0.0	0.0	0	29	10
Combination	10	7	17	10	0.0	5.9	0	14	6
Other /not reported	20	3	23	0.0	0.0	0.0	5	0	4
Total	193	126	320	1.0	0.0	0.6	12	16	13

1998

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	273	182	457	0.7	0.5	0.7	15	20	17
3 to 5 years	298	178	476	0.0	0.0	0.0	25	34	29
6 to 10 years	361	186	549	0.8	0.0	0.5	38	56	44
10 or more years	598	296	899	1.8	1.0	1.6	77	84	80
Not reported	36	11	49	0.0	0.0	0.0	50	55	53
Total	1 566	853	2 430	1.0	0.5	0.8	47	53	49

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	96	59	156	2.1	1.7	1.9	4	7	5
Heroin	121	91	213	0.0	0.0	0.0	23	25	24
Other opiates	7	13	20	0.0	0.0	0.0	0	31	20
Combination	29	18	47	0.0	0.0	0.0	24	28	26
Other /not reported	20	1	21	0.0	0.0	0.0	10	0	10
Total	273	182	457	0.7	0.5	0.7	15	20	17

1999

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	238	155	393	0.9	0.7	0.8	16	28	20
3 to 5 years	297	177	475	0.7	2.3	1.3	29	33	30
6 or more years	951	491	1 448	2.2	0.6	1.7	64	66	65
Not reported	41	17	62	2.4	0.0	1.6	49	59	52
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	110	57	167	1.8	1.7	1.8	4	9	5
Heroin	84	85	169	0.0	0.0	0.0	32	39	36
Other opiates	5	3	8	0.0	0.0	0.0	20	0	13
Combination	15	5	20	0.0	0.0	0.0	33	40	35
Other /not reported	24	5	29	0.0	0.0	0.0	0	50	7
Total	238	155	393	0.9	0.7	0.8	16	28	20

2000

History of injecting drug use	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
Less than 3 years	207	127	334	1.9	0.0	1.2	25	28	26
3 to 5 years	302	213	517	1.3	0.0	0.8	33	48	39
6 to 10 years	398	235	637	0.5	0.0	0.3	47	54	50
10 or more years	689	276	969	1.6	0.0	1.2	73	74	73
Not reported	43	18	66	0.0	0.0	0.0	40	61	47
Total	1 639	869	2 523	1.3	0.0	0.9	52	55	53

Last drug injected among those reporting less than 3 years of drug injection

Amphetamines	66	39	105	1.5	0.0	1.0	12	8	10
Heroin	97	69	166	3.1	0.0	1.8	35	35	35
Other opiates	4	2	6	0.0	0.0	0.0	25	0	17
Combination	20	12	32	0.0	0.0	0.0	40	58	47
Other /not reported	20	5	25	0.0	0.0	0.0	5	20	8
Total	207	127	334	1.9	0.0	1.2	25	28	26

¹ Totals include people whose sex was reported as transgender and people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.3.3 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1995 – 2000, and number with HIV or hepatitis C antibody by year, sexual orientation, age group and sex

1995

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	538	233	775	0.7	0.9	0.9	64	64	64
Bisexual	37	64	104	2.7	1.6	1.9	49	64	59
Homosexual	42	23	69	23.8	4.3	15.9	52	57	54
Not reported	22	7	31	0.0	0.0	0.0	64	86	71
<i>Age group</i>									
Less than 20 years	36	28	65	0.0	0.0	0.0	19	36	28
20 to 24 years	127	94	226	3.2	1.1	2.2	32	47	39
25 to 29 years	133	63	198	2.3	1.6	2.0	60	68	63
30 to 34 years	163	73	237	1.8	2.7	2.1	75	73	75
35+ years	174	68	246	2.9	0.0	2.4	83	85	84
Not reported	6	1	7	0.0	0.0	0.0	67	0	57
Total	639	327	979	2.3	1.2	2.0	63	64	63

1996

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	802	319	1 130	0.5	1.6	0.8	50	58	52
Bisexual	68	89	158	4.4	0.0	1.9	49	48	48
Homosexual	68	38	106	19.1	2.6	13.2	40	47	42
Not reported	32	13	51	0.0	7.7	2.0	59	69	65
<i>Age group</i>									
Less than 20 years	81	56	138	0.0	0.0	0.0	12	23	18
20 to 24 years	239	114	356	0.8	1.7	1.1	17	30	21
25 to 29 years	203	99	305	1.5	1.0	1.3	45	65	51
30 to 34 years	177	101	283	3.4	2.0	2.8	65	75	69
35+ years	267	89	358	3.4	2.2	3.1	82	78	71
Not reported	3	0	5	0.0	-	0.0	33	-	20
Total	970	459	1 445	2.1	1.5	1.9	49	56	51

1997

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	1 004	418	1 426	0.5	0.7	0.6	49	58	52
Bisexual	77	130	208	2.6	0.8	1.4	42	49	47
Homosexual	54	58	112	31.5	0.0	15.2	37	41	39
Not reported	52	15	68	0.0	0.0	0.0	46	93	57
<i>Age group</i>									
Less than 20 years	96	91	187	0.0	0.0	0.0	15	22	19
20 to 24 years	306	158	465	0.3	0.0	0.2	18	34	23
25 to 29 years	250	149	402	2.4	0.7	1.7	39	58	47
30 to 34 years	210	103	313	2.9	2.9	2.9	62	75	66
35+ years	324	120	446	3.4	0.0	2.5	84	87	84
Not reported	1	0	1	0.0	-	0.0	-	-	-
Total	1 187	621	1 814	2.0	0.6	1.5	48	55	50

1998

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	1 339	620	1 963	0.3	0.3	0.3	48	56	51
Bisexual	88	139	228	2.3	1.4	1.7	42	45	43
Homosexual	69	74	144	14.5	0.0	6.9	32	45	39
Not reported	70	20	95	0.0	0.0	0.0	47	60	51
<i>Age group</i>									
Less than 20 years	138	117	255	0.0	0.0	0.0	20	26	22
20 to 24 years	386	235	622	0.0	0.4	0.2	22	31	25
25 to 29 years	353	176	533	0.9	0.0	0.6	38	53	43
30 to 34 years	273	124	400	2.2	1.6	2.0	58	78	64
35+ years	414	201	618	1.7	0.5	1.3	80	81	81
Not reported	2	0	2	0.0	-	0.0	0.0	-	0.0
Total	1 566	853	2 430	1.0	0.5	0.8	47	53	49

1999

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	1 242	553	1 795	0.8	1.3	1.0	51	51	51
Bisexual	104	187	297	1.9	0.5	1.0	41	55	51
Homosexual	70	52	124	17.1	0.0	9.7	34	38	35
Not reported	111	48	162	1.8	0.0	1.2	52	60	54
<i>Age group</i>									
Less than 20 years	130	114	244	0.8	0.9	0.8	19	39	28
20 to 24 years	324	201	527	0.3	0.5	0.4	30	29	29
25 to 29 years	380	192	575	0.3	0.5	0.3	38	45	40
30 to 34 years	285	139	425	3.9	2.2	3.3	58	70	62
35+ years	406	193	601	3.0	1.0	2.3	80	77	79
Not reported	2	1	6	0.0	0.0	0.0	-	-	50
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50

2000

Sexual orientation/Age group	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
Heterosexual	1 374	556	1 933	0.5	0.0	0.4	54	57	55
Bisexual	77	196	275	2.6	0.0	0.7	49	56	54
Homosexual	84	71	160	14.3	0.0	8.1	36	45	41
Not reported	104	46	155	0.0	0.0	0.0	45	50	47
<i>Age group</i>									
Less than 20 years	111	111	222	0.0	0.0	0.0	24	44	34
20 to 24 years	326	235	564	0.3	0.0	0.2	34	46	39
25 to 29 years	389	189	579	1.5	0.0	1.0	43	48	45
30 to 34 years	295	143	442	2.0	0.0	1.4	56	72	61
35+ years	507	190	700	1.6	0.0	1.3	75	68	73
Not reported	11	1	16	0.0	0.0	0.0	45	-	50
Total	1 639	869	2 523	1.3	0.0	0.9	52	55	53

¹ Totals include people whose sex was reported as transgender and people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

4.4 National monitoring of diagnoses of HIV, hepatitis B and hepatitis C antibody in blood donors, 1985 – 2000

4.4.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody¹, 1985 – 2000, by State/Territory and years of donation

State/ Territory	1985 ² – 1991			1992 – 1994			1995 – 1997 ³		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT	119 722	0	0.0	46 218	1	2.2	20 613	0	0.0
NSW	1 989 724	28	1.4	872 134	4	0.5	836 540	5	0.6
NT	59 517	0	0.0	26 725	0	0.0	24 814	1	4.0
QLD	1 102 387	11	1.0	560 218	7	1.2	486 906	5	1.0
SA	660 623	2	0.3	287 631	1	0.3	247 869	1	0.4
TAS	168 191	0	0.0	76 440	0	0.0	75 113	1	1.3
VIC	1 774 112	10	0.6	756 692	4	0.5	640 257	2	0.3
WA	503 697	5	1.0	236 598	1	0.4	253 823	1	0.4
Total	6 377 973	56	0.9	2 862 656	18	0.6	2 585 935	16	0.6

State/ Territory	1998 – 2000 ⁴			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT	–	–	–	186 553	1	0.5
NSW	888 325	0	0.0	4 586 723	37	0.8
NT	8 715	0	0.0	119 771	1	0.8
QLD	571 257	5	0.9	2 720 768	28	1.0
SA	259 925	2	0.8	1 456 048	6	0.4
TAS	40 433	0	0.0	360 177	1	0.3
VIC	718 308	1	0.1	3 889 369	17	0.4
WA	287 530	3	1.0	1 281 648	10	0.8
Total	2 774 493	11	0.4	14 601 057	101	0.7

1 Prevalence per 100 000 donations.

2 From 1 May 1985.

3 HIV antibody testing of blood donors in the ACT carried out in NSW from 1 July 1996.

4 HIV antibody testing of blood donors in TAS carried out in VIC from 1 July 1999.

Source: Australian Red Cross Blood Service; National Serology Reference Laboratory, Australia

4.4.2 Number of blood donors in Australia with HIV antibody, 1985 – 2000, by HIV exposure category and sex, and number of new HIV infections in blood donors with a previous donation negative for HIV antibody by years of donation

HIV exposure category	1985 – 1991		1992 – 1994		1995 – 1997		1998 – 2000		All years		
	M	F	M	F	M	F	M	F	M	F	Total
Male homosexual contact	14 ¹	–	3	–	2	–	1 ¹	–	20	–	20
Injecting drug use	1	0	0	0	1	0	1	0	3	0	3
Heterosexual contact	15	12	2	2	4	2	0	5	21	21	42
Person from a high prevalence country	0	0	0	0	0	0	0	1	0	1	1
Receipt of blood/tissue	1	1	0	0	0	0	0	0	1	1	2
Other	0	1	0	2	0	1	0	1	0	5	5
Undetermined	9	2	9	0	6	0	1	1	25	3	28
Total	40	16	14	4	13	3	3	8	70	31	101
New HIV infection²	16	6	3	4	4	2	1	2	24	14	38

1 Includes one male who also reported a history of injecting drug use.

2 Year of HIV infection was estimated as the midpoint between the date of last HIV negative donation and the date of HIV positive donation.

Source: Australian Red Cross Blood Service

4.4.3 Number of donations tested for hepatitis B antibody at blood services, number of donations positive for hepatitis B antibody and prevalence of hepatitis B antibody¹, by State/Territory and year of donation

State/ Territory	1998			1999			2000		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ²	9 080	2	22.0	–	–	–	–	–	–
NSW	269 226	31	11.5	271 622	52	19.1	305 769	39	12.8
NT	9 140	2	21.9	9 714	0	0.0	8 715	2	22.9
QLD	192 138	29	15.1	189 468	26	13.7	195 940	22	11.2
SA	87 280	10	11.5	88 529	4	4.5	87 828	1	1.1
TAS ³	26 219	0	0.0	13 013	0	0.0	–	–	–
VIC	233 181	35	15.0	242 543	27	11.1	258 014	24	9.3
WA	92 001	11	12.0	100 379	16	15.9	99 718	17	17.0
Total	918 265	120	13.1	915 268	125	13.7	955 984	105	11.0

1 Prevalence per 100 000 donations.

2 Hepatitis B antibody testing of blood donors in the ACT carried out in NSW from 1 July 1998.

3 Hepatitis B antibody testing of blood donors in TAS carried out in VIC from 1 July 1999.

Source: Australian Red Cross Blood Service

4.4.4 Number of donations tested for hepatitis C antibody at blood services, number of donations positive for hepatitis C antibody and prevalence of hepatitis C antibody¹, by State/Territory and year of donation

State/ Territory	1998			1999			2000		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ²	9 080	0	0.0	–	–	–	–	–	–
NSW	268 339	63	23.5	271 622	61	22.5	305 769	40	13.1
NT	9 140	1	10.9	9 714	0	0.0	8 715	6	68.8
QLD	192 060	85	44.3	189 392	53	28.0	195 940	41	20.9
SA	87 843	11	12.5	88 549	6	6.8	87 828	7	8.0
TAS ³	26 219	5	19.1	13 013	0	0.0	–	–	–
VIC	234 403	50	21.3	243 126	27	11.1	258 014	39	15.1
WA	92 001	24	26.1	100 379	21	20.9	99 718	19	19.0
Total	919 085	239	26.0	915 795	168	18.3	955 984	152	15.9

1 Prevalence per 100 000 donations.

2 Hepatitis C antibody testing of blood donors in the ACT carried out in NSW from 1 July 1998.

3 Hepatitis C antibody testing of blood donors in TAS carried out in VIC from 1 July 1999.

Source: Australian Red Cross Blood Service

4.5 National monitoring of HIV and hepatitis C antibody among entrants to the Australian Defence Force

Table 4.5.1 Prevalence of HIV infection among entrants to the Australian Defence Force, 1988 – 2000

	Apr 88 – Dec 92	Jan 93 – Dec 93	Jan 94 – Dec 94	Jan 95 – Dec 95	Jan 96 – Dec 96	Jan 97 – Dec 97	Jan 98 – Dec 98	Jan 99 – Dec 99 ¹	Apr 00 – Mar 01 ²	Total
Number of entrants tested	27 255	1 353	5 002	5 583	5 431	3 897	5 163	3 211	4 401	61 296
Number positive for HIV antibody	2	1	0	1	0	0	0	0	0	4
HIV prevalence per 100 000 entrants	8	74	0	18	0	0	0	0	0	7

1 Data from the Royal Australian Air Force available for October – December 1999 only.

2 Data not available for January – March 2001.

Source: Australian Defence Force

Table 4.5.2 Prevalence of hepatitis C antibody among entrants to the Australian Defence Force, 1997 – 2000

	Jun 97 – Dec 97 ^{1,2}	Jan 98 – Dec 98 ^{1,2}	Jan 99 – Dec 99 ³	Apr 00 – Mar 01 ⁴	Total
Number of entrants tested ¹	1 676	3 352	4 379	4 384	13 791
Number positive for hepatitis C antibody ²	1	2	9	4	16
Hepatitis C prevalence per 100,000 entrants	60	60	205	91	116

1 Data on HCV antibody testing available from the Royal Australian Army and the Royal Australian Navy only.

2 Data on results of HCV antibody testing available from the Royal Australian Navy only.

3 Data on HCV antibody testing and results available from the Royal Australian Army, the Royal Australian Navy and the Royal Australian Air Force. Data from the Royal Australian Air Force available for October to December 1999 only.

4 Data not available for January – March 2001.

Source: Australian Defence Force

5 Monitoring behaviour

5.1 Monitoring sexual, injecting and HIV antibody testing behaviour in gay and other homosexually active men

5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 1996 – 2000, prevalence of anal intercourse by city and year of survey, partner type and condom use, and prevalence of injecting drug use and HIV antibody testing by city and year of survey

	Sydney					Brisbane			Melbourne		Perth		Canberra
	1996	1997	1998	1999	2000	1998	1999	2000	1998	2000	1998	2000	2000
Sample size	2 238	2 630	3 037	3 343	2 916	1 341	1 225	1 285	1 891	1 578	846	1 035	350
Anal intercourse with regular partners													
No regular partner	30.2	38.2	38.7	34.2	36.0	38.4	29.6	37.5	35.7	36.2	37.7	34.4	38.6
No anal intercourse	10.3	7.4	6.0	8.2	7.8	7.5	14.0	6.8	8.9	7.2	10.9	9.9	8.9
Always with condom	31.7	26.0	25.5	24.9	21.2	23.4	26.6	20.8	26.3	23.4	21.4	19.4	18.6
Any without condom	27.9	28.4	30.3	32.5	35.0	30.6	29.8	34.2	29.1	33.2	30.0	36.3	34.0
Anal intercourse with casual partners													
No casual partners	17.3	27.7	24.7	29.9	27.2	28.3	11.0	29.3	28.0	29.6	34.9	34.0	35.7
No anal intercourse	23.7	17.2	18.9	16.9	14.9	21.6	35.1	18.4	21.0	17.6	23.8	19.7	16.0
Always with condom	45.0	37.0	38.3	34.7	34.9	36.2	39.2	33.9	37.7	36.1	29.6	28.2	34.0
Any without condom	14.0	18.2	18.2	18.6	22.9	14.0	14.7	18.4	13.4	16.6	11.8	18.1	14.3
Injecting drug use¹	–	–	–	7.0	6.9	8.7	9.1	8.6	–	4.9	6.7	5.1	–
HIV antibody testing²	64.1	64.3	63.3	63.2	62.4	61.0	59.9	61.1	51.0	53.2	53.1	51.9	48.2

1 Injecting drug use in the previous 6 months.

2 HIV antibody testing in the previous 12 months among men not diagnosed with HIV infection.

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; State AIDS Councils; People living with HIV/AIDS

5.2 Monitoring sexual and injecting behaviour in injecting drug users

Table 5.2.1 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1995 – 2000, percent reporting HIV and HCV tests within the past twelve months, number reporting drug injection in the past month, and percent reporting use of a needle and syringe after someone else in the last month by year, sex, history of injecting drug use and last drug injected

1995

History of injecting drug use	Number of participants			% reporting recent HIV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T
Less than 3 years	77	53	131	49	58	53	69	48	118	22	29	25
More than 3 years	548	272	830	69	75	71	507	257	774	29	36	32
Not reported	14	2	18	71	100	72	13	2	17	31	50	35
<i>Last drug injected</i>												
Heroin/opiates	424	219	649	71	74	72	398	209	613	29	36	32
Amphetamine	131	71	206	49	72	57	114	65	183	27	32	30
Combination	57	25	85	77	64	74	54	22	79	33	50	37
Other/not reported	27	12	39	59	75	64	23	11	34	4	9	6
Total¹	639	327	979	67	73	69	589	307	909	28	35	31

1996

History of injecting drug use	Number of participants			% reporting recent HIV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T
Less than 3 years	161	74	237	51	64	55	148	67	217	19	28	22
More than 3 years	775	381	1 167	69	78	72	728	355	1 093	28	30	29
Not reported	36	11	49	67	73	67	34	11	47	38	27	34
<i>Last drug injected</i>												
Heroin/opiates	635	343	987	69	80	73	607	323	938	27	29	28
Amphetamines	193	73	269	55	56	55	176	61	239	24	25	25
Combination	90	35	126	76	74	75	85	34	120	40	47	42
Other/not reported	54	15	71	50	87	58	43	15	60	12	33	17
Total¹	972	466	1 453	66	76	69	910	433	1 357	27	30	28

1997

History of injecting drug use	Number of participants			% reporting recent HIV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T
Less than 3 years	186	121	308	44	62	51	166	117	284	11	21	15
More than 3 years	900	444	1 349	70	73	71	838	418	1 260	13	15	14
Not reported	33	9	42	70	78	71	28	9	37	11	22	14
<i>Last drug injected</i>												
Heroin/opiates	769	428	1 200	70	73	71	724	409	1 135	14	18	15
Amphetamines	214	96	312	49	60	53	185	85	272	9	9	9
Combination	69	35	104	75	80	77	66	35	101	23	17	21
Other/not reported	67	15	83	61	73	63	57	15	73	2	20	5
Total¹	1 119	574	1 699	66	71	67	1 032	544	1 581	13	16	14

1998

History of injecting drug use	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
Less than 3 years	273	182	457	52	63	56	50	65	56	257	173	432	13	24	17
More than 3 years	1 258	660	1 925	65	71	67	66	70	70	1 194	624	1 824	17	20	18
Not reported	35	11	48	57	55	54	49	82	54	27	7	34	19	14	18
<i>Last drug injected</i>															
Heroin/opiates	978	581	1 562	66	71	68	68	73	70	946	559	1 508	16	21	18
Amphetamines	354	155	510	52	62	55	47	55	49	315	137	453	9	12	10
Combination	155	88	247	68	67	68	68	64	69	152	83	239	29	29	29
Other/not reported	79	29	111	64	76	67	54	76	59	65	25	90	17	24	19
Total¹	1 566	853	2 430	63	69	65	62	69	65	1 478	804	2 290	16	21	18

1999

History of injecting drug use	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
Less than 3 years	238	155	393	52	66	58	52	67	58	218	146	364	20	24	22
3 to 5 years	297	177	475	59	58	62	61	69	64	271	169	441	17	25	20
6 or more years	951	491	1 448	65	66	65	66	70	67	884	456	1 346	21	20	21
Not reported	41	17	62	49	71	53	18	65	50	29	11	40	21	27	23
<i>Last drug injected</i>															
Heroin/opiates	896	522	1 424	67	69	68	67	73	69	848	500	1 354	20	22	21
Amphetamines	401	212	614	52	60	55	52	60	55	363	190	554	19	16	18
Combination	121	70	192	42	73	66	66	71	68	114	66	180	29	39	33
Other	109	36	148	67	64	47	51	64	53	77	26	103	15	15	15
Total¹	1 527	840	2 378	61	67	63	62	69	65	1 402	782	2 191	20	22	23

2000

History of injecting drug use	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
Less than 3 years	218	135	52	52	64	57	58	68	62	195	126	322	12	22	16
3 to 5 years	328	224	554	67	67	67	70	79	74	308	215	525	14	21	17
6 or more years	1 189	546	1 744	67	70	68	68	74	70	1 109	502	1 619	13	20	15
Not reported	51	26	84	51	54	50	57	50	52	36	17	53	9	24	13
<i>Last drug injected</i>															
Heroin/opiates	953	579	1 533	68	70	69	71	78	74	913	550	1 464	14	22	17
Amphetamines	409	163	575	56	58	56	57	60	58	364	142	509	8	13	9
Combination	150	51	202	75	78	76	79	78	79	140	45	186	20	22	20
Other	274	138	424	57	67	60	62	71	65	231	123	360	14	24	16
Total¹	1 786	931	2 734	64	68	66	67	74	69	1 648	860	2 519	13	21	16

1 Totals include people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

Table 5.2.2 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1995 – 2000, percent reporting HIV and HCV tests within the past twelve months, and number reporting sexual intercourse in the last month, and percent reporting condom use at last intercourse by year, sex, age group and sexual identity

1995													
Age group/ Sexual identity	Number of participants			% reporting recent HIV test			Number reporting sexual intercourse			% using condoms at last intercourse			
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T	
Less than 20 years	36	28	65	64	54	60	24	22	47	50	50	51	
20 – 24 years	127	93	226	58	80	68	101	78	183	42	28	36	
25 – 34 years	296	136	435	70	72	70	223	100	324	31	31	31	
35+ years	174	69	246	68	72	70	105	41	148	23	24	24	
Not reported	6	1	7	50	100	57	4	1	5	0	0	0	
<i>Sexual identity</i>													
Heterosexual	538	233	775	66	73	68	384	174	560	30	26	29	
Bisexual	37	64	104	68	73	72	27	51	80	30	49	44	
Homosexual	42	23	69	69	70	70	32	14	49	63	14	51	
Not reported	22	7	31	68	71	71	14	3	18	21	33	22	
Total¹	639	327	979	67	73	69	457	242	707	32	31	32	

1996													
Age group/ Sexual identity	Number of participants			% reporting recent HIV test			Number reporting sexual intercourse			% using condoms at last intercourse			
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T	
Less than 20 years	80	56	137	49	71	58	61	45	107	51	33	44	
20 – 24 years	241	115	358	70	72	71	182	95	278	42	33	39	
25 – 34 years	378	203	589	66	77	69	254	152	410	33	31	32	
35+ years	268	92	362	67	80	70	152	59	211	25	29	26	
Not reported	5	0	7	80	–	71	3	0	4	33	–	25	
<i>Sexual identity</i>													
Heterosexual	803	321	1 133	65	74	68	535	236	776	31	26	30	
Bisexual	69	97	166	70	79	75	48	84	132	58	45	50	
Homosexual	60	32	92	72	88	77	42	18	60	67	33	57	
Not reported	40	16	62	70	63	66	27	13	42	30	31	31	
Total¹	972	466	1 453	66	76	69	652	351	1 010	33	31	34	

1997															
Age group/ Sexual identity	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
Less than 20 years	95	89	184	53	66	60	48	71	59	62	76	138	45	30	37
20 – 24 years	294	145	440	63	74	67	61	74	65	211	129	342	32	26	30
25 – 34 years	429	226	658	73	75	74	73	73	73	310	168	479	34	29	32
35+ years	298	114	414	62	62	63	68	66	68	173	75	248	25	28	26
Not reported	3	0	3	33	–	33	33	–	33	3	0	3	33	–	33
<i>Sexual identity</i>															
Heterosexual	950	387	1 341	65	71	67	66	72	68	659	315	976	30	27	29
Bisexual	70	119	191	67	71	70	68	70	69	49	99	149	53	34	41
Homosexual	51	54	105	71	70	70	74	70	72	23	26	49	61	12	35
Not reported	48	14	62	67	92	73	66	79	65	28	8	36	25	38	28
Total¹	1 119	574	1 699	66	71	67	66	66	72	759	448	1 210	32	28	31

1998

Age group/ Sexual identity	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
Less than 20 years	138	117	255	54	70	61	49	71	59	94	87	181	44	20	32
20 – 24 years	386	235	622	64	74	68	63	71	66	290	179	470	41	25	35
25 – 34 years	626	300	933	65	71	67	64	69	66	435	215	656	31	29	30
35+ years	414	201	618	62	61	61	63	64	63	220	106	328	25	21	23
Not reported	2	0	2	0	–	0	0	–	0	1	0	1	0	–	0
<i>Sexual identity</i>															
Heterosexual	1 339	620	1 963	63	68	65	63	69	65	885	424	1 313	31	23	28
Bisexual	88	139	228	69	73	71	68	73	71	62	99	162	48	38	43
Homosexual	69	74	144	65	70	68	65	66	66	53	52	106	53	17	36
Not reported	70	20	95	54	60	56	46	55	62	40	12	55	40	25	38
Total¹	1 566	853	2 430	63	69	65	62	69	65	1 040	587	1 636	34	25	31

1999

Age group/ Sexual identity	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
Less than 20 years	130	114	244	48	67	57	50	75	62	93	92	185	55	41	48
20 – 24 years	324	201	527	59	70	63	61	68	64	249	170	420	38	26	33
25 – 34 years	665	331	1 000	64	68	66	64	68	66	449	243	696	29	31	30
35+ years	408	194	607	63	61	62	63	68	65	205	128	337	33	26	30
<i>Sexual identity</i>															
Heterosexual	1 242	553	1 795	60	63	61	62	66	63	787	419	1 206	32	25	30
Bisexual	104	187	297	66	77	74	61	77	71	74	148	227	38	49	45
Homosexual	70	52	124	74	75	75	61	77	69	50	33	84	60	15	42
Not reported	111	48	162	65	56	61	63	60	62	85	33	121	40	36	36
Total¹	1 527	840	2 378	61	67	63	62	69	65	996	633	1 638	34	30	33

2000

Age group/ Sexual identity	Number of participants			% reporting recent HIV test			% reporting recent HCV test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
Less than 20 years	121	117	238	46	63	55	58	74	66	86	94	180	46	42	44
20 – 24 years	353	252	608	68	76	71	71	78	74	250	196	449	42	33	38
25 – 34 years	744	355	1 105	67	70	68	68	76	70	492	251	746	36	30	34
35+ years	553	205	762	63	58	62	65	65	65	282	125	408	34	32	33
Not reported	15	2	21	60	100	57	73	100	67	10	2	13	40	0	33
<i>Sexual identity</i>															
Heterosexual	1 495	599	2 099	64	65	64	66	72	68	926	426	1 353	35	31	34
Bisexual	85	207	294	75	82	80	72	84	80	59	155	216	49	44	46
Homosexual	92	76	173	66	55	62	64	66	65	63	54	121	62	22	43
Not reported	114	49	168	65	65	64	73	69	70	72	33	106	36	29	33
Total¹	1 786	931	2 734	64	68	66	67	74	69	1 120	668	1 796	37	33	36

1 Totals include people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

6 Treatment for HIV infection

6.1 Uptake of antiretroviral treatment for HIV infection

6.1.1 Antiretroviral treatment among people enrolled in the Australian HIV Observational Database in 2000

	Current antiretroviral treatment ¹					Total
	None	Mono/ Double	3+ (NRTI +/- PI, no NNRTI)	3+ (NRTI + NNRTI, no PI)	3+ (NNRTI + PI, +/- NRTI)	
Total	404 (22%)	242 (13%)	564 (31%)	461 (25%)	148 (8%)	1 819
Sex						
Male	380 (22%)	223 (13%)	539 (31%)	439 (26%)	143 (8%)	1 724
Female	24 (25%)	19 (20%)	25 (26%)	22 (23%)	5 (5%)	95
Age at enrolment (years)						
<30	69 (43%)	22 (14%)	33 (21%)	30 (19%)	6 (4%)	160
30-39	202 (26%)	94 (12%)	228 (30%)	181 (24%)	59 (8%)	764
40-49	97 (17%)	68 (12%)	192 (34%)	160 (28%)	50 (9%)	567
50+	36 (11%)	58 (18%)	111 (34%)	90 (27%)	33 (10%)	328
Exposure category						
Male homosexual contact	321 (22%)	179 (12%)	448 (31%)	380 (26%)	123 (9%)	1 451
Other/not reported	83 (23%)	63 (17%)	116 (31%)	81 (22%)	25 (7%)	368
Viral load (copies/ml)						
<400	92 (11%)	116 (14%)	270 (31%)	302 (35%)	79 (9%)	859
400-10 000	98 (30%)	49 (15%)	103 (32%)	49 (15%)	23 (7%)	322
10 000+	154 (42%)	43 (12%)	83 (23%)	56 (15%)	29 (8%)	365
Not reported	60	34	108	54	17	273
CD4+ count (cells/μl)						
<200	33 (14%)	38 (17%)	86 (38%)	43 (19%)	28 (12%)	228
200-500	149 (21%)	96 (14%)	222 (32%)	168 (24%)	59 (9%)	694
500+	196 (24%)	91 (11%)	232 (29%)	231 (29%)	54 (7%)	804
Not reported	26	17	24	19	7	93
AIDS prior to enrolment						
No	373 (26%)	194 (13%)	413 (28%)	376 (26%)	99 (7%)	1 455
Yes	31 (9%)	48 (13%)	151 (42%)	85 (23%)	49 (13%)	364
Previous treatment						
None	268 (68%)	37 (9%)	36 (9%)	45 (11%)	10 (3%)	396
Mono/Double	17 (9%)	130 (66%)	16 (8%)	26 (13%)	8 (4%)	197
3 + (NRTI +/- PI, not NNRTI)	61 (9%)	43 (7%)	460 (70%)	75 (11%)	20 (3%)	659
3 + (NRTI + NNRTI, not PI)	41 (10%)	26 (7%)	28 (7%)	300 (74%)	8 (2%)	403
3 + (PI + NNRTI, +/- NRTI)	17 (10%)	6 (4%)	24 (15%)	15 (9%)	102 (62%)	164

1 NRTI: Nucleoside reverse transcriptase inhibitor. NNRTI: Non-nucleoside reverse transcriptase inhibitor. PI: protease inhibitor.

Source: Australian HIV Observational Database

6.1.2 Number of gay and other homosexually active men with diagnosed HIV infection participating in the Periodic Surveys, 1997 – 2000, and proportion reporting use of combination antiretroviral therapy for HIV infection, by city and year of survey

	Sydney				Brisbane			Melbourne		Perth		Canberra
	1997	1998	1999	2000	1998	1999	2000	1998	2000	1998	2000	2000
Sample size	265	606	602	504	112	100	77	138	151	45	50	18
Proportion reporting use of combination therapy	74.7	72.4	71.3	75.2	68.8	67.0	66.2	78.3	66.9	62.1	74.0	66.7

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; State AIDS Councils; People living with HIV/AIDS

6.2 Monitoring prescriptions for antiretroviral agents

Table 6.2.1 Number of people prescribed antiretroviral treatment through the Highly Specialised Drugs (S100) Program by year and antiretroviral agent

Antiretroviral agent	Jan–Jun 96	Jul–Dec 96	Jan–Jun 97	Jul–Dec 97	Jan–Jun 98	Jul–Dec 98	Jan–Jun 99	Jul–Dec 99	Jan–Jun 00	Jul–Dec 00
Nucleoside analogue reverse transcriptase inhibitors										
Abacavir	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	956	1 225
Didanosine	606	483	783	1 063	1 318	1 495	1 456	1 473	1 305	1 261
Lamivudine	n/a	3 319	4 478	4 383	4 218	3 969	3 126	3 093	3 332	3 443
Stavudine	n/a	1 793	3 038	3 434	3 681	3 825	3 646	3 619	3 388	3 028
Zalcitabine	1 301	1 019	801	318	237	201	163	137	122	112
Zidovudine	2 529	2 910	2 892	1 970	1 783	1 505	809	632	491	560
Lamivudine & Zidovudine	n/a	n/a	n/a	n/a	n/a	220	958	1 283	1 546	1 735
Non-nucleoside analogue reverse transcriptase inhibitors										
Delavirdine	n/a	n/a	n/a	n/a	n/a	98	88	84	62	58
Efavirenz	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	991	1 050
Nevirapine	n/a	n/a	n/a	1 157	1 716	1 884	2 064	2 177	2 220	2 279
Protease inhibitors										
Indinavir	n/a	618	1 485	1 872	1 756	1 555	1 326	1 251	1 285	1 190
Nelfinavir	n/a	n/a	n/a	n/a	1 012	1 359	1 370	1 336	1 168	1 056
Ritonavir	n/a	213	758	817	764	704	546	696	977	1 026
Saquinavir	n/a	1 949	2 531	2 021	1 489	1 515	1 193	1 166	920	808
Total patients¹	n/a	5 617	6 425	5 743	5 881	6 085	6 229	6 296	6 520	6 507
Total cost (\$'000s)	5 549	19 083	28 522	30 354	31 427	34 885	32 066	35 623	34 793	34 620

¹ Total patients calculated as (Stavudine + Zidovudine + Combivir (Lamivudine & Zidovudine))/the proportion of patient in the Australian HIV Observational Database receiving either Stavudine or Zidovudine combinations for each six month period.

Source: Highly Specialised Drugs (S100) Program

Table 6.2.2 Number of people prescribed drugs for HIV/AIDS related conditions through the Highly Specialised Drugs (S100) Program

	Jan–Jun 96	Jul–Dec 96	Jan–Jun 97	Jul–Dec 97	Jan–Jun 98	Jul–Dec 98	Jan–Jun 99	Jul–Dec 99	Jan–Jun 00	Jul–Dec 00
Azithromycin	n/a	n/a	n/a	89	256	287	294	277	264	246
Cidofovir	n/a	n/a	n/a	n/a	n/a	9	7	6	2	6
Clarithromycin	314	318	322	257	192	183	130	177	217	238
Doxorubicin	n/a	n/a	n/a	n/a	n/a	n/a	11	9	16	16
Foscarnet	34	41	32	31	32	22	14	13	10	5
Ganciclovir	145	174	158	163	121	92	78	80	137	154
Rifabutin	571	416	297	140	95	85	66	66	77	53
Total cost (\$'000s)	1 326	2 122	1 744	1 655	1 496	1 204	1 119	1 013	1 173	1 354

Source: Highly Specialised Drugs (S100) Program

7 Global comparisons

Table 7.1 Estimated HIV prevalence and AIDS incidence in selected countries

Country	HIV prevalence		AIDS incidence	
	2000	Rate ¹	2000	Rate ¹
Asia Pacific				
Australia	12 440	68	255	1.4
Cambodia ^{2,3}	220 000	2 013	8 257	172
China ³	500 000	40	–	–
India ³	3 700 000	378	–	–
Indonesia ³	52 000	25	–	–
Japan ³	10 000	8	–	–
Malaysia ³	49 000	225	–	–
Myanmar ³	530 000	1 176	–	–
New Zealand	1 400	37	27	0.7
Papua New Guinea ³	5 400	115	–	–
Philippines ³	28 000	38	–	–
Republic of Korea ³	3 800	8	–	–
Thailand ^{3,4}	755 000	1 241	25 847	42.5
Vietnam ³	100 000	127	–	–
Europe				
France ^{3,4}	130 000	221	1 578	2.6
Germany ^{3,4}	37 000	45	435	0.5
Italy ^{3,4}	95 000	166	2 110	3.7
Spain ^{3,4}	120 000	303	2 864	7.2
United Kingdom	25 000	41	635	1.1
North America				
Canada	48 000	154	644	2.1
United States ^{3,4}	850 000	308	46 400	16.7

1 Rate per 100 000 population.

2 AIDS incidence estimated in people aged 15–49 years.

3 Estimated HIV prevalence in 1999.

4 AIDS incidence not adjusted for reporting delay



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Methodological notes

1 National surveillance for diagnoses of HIV infection, AIDS and perinatal exposure to HIV

1.1 National AIDS Registry

National surveillance for AIDS diagnoses

AIDS is a notifiable condition in all State/Territory health jurisdictions in Australia. AIDS cases are notified by the diagnosing doctor through State/Territory health authorities to the national HIV surveillance centre. Information sought at AIDS notification includes State/Territory of diagnosis, name code (based on the first two letters of the family name and given name), sex, date of birth, country of birth, date of AIDS diagnosis, AIDS defining illness, CD4+ cell count at AIDS diagnosis, date of first HIV diagnosis, and source of exposure to HIV. Late HIV diagnosis in adults/adolescents was defined as HIV infection newly diagnosed within three months of AIDS diagnosis (Kaldor and French 1993). Further information on the AIDS surveillance system in Australia is available in Kaldor *et al* (1993).

Prior to 1993, the US Centers for Disease Control and Prevention AIDS surveillance definition was used in Australia (Centers for Disease Control 1987). From 1993, three additional conditions, recurrent pneumonia, pulmonary tuberculosis and cervical cancer, were included as AIDS defining illnesses in Australia (Australian National Council on AIDS 1994).

Adjusting AIDS incidence for reporting delay

Reporting delay, the interval between the date of AIDS diagnosis and date of entry of the AIDS notification onto the *National AIDS Registry*, was calculated for AIDS cases diagnosed from 1 January 1998 to 31 December 2000 and notified by 31 March 2001. It was assumed that AIDS cases were completely reported within three years of diagnosis. The number of AIDS diagnoses in each quarter from the second quarter of 1998 was adjusted for reporting delay using the methods of Brookmeyer and Liao (1990) and Law and Kaldor (1997).

The reporting delay distribution varied between State/Territory health authorities, and AIDS cases diagnosed in the fourth quarter of a year were reported more quickly than cases diagnosed in other quarters. These factors were considered in the adjustment of the number of AIDS diagnoses. There was no significant difference in reporting delay due to sex or age. Similar methods were used for adjusting the number of deaths following AIDS for reporting delay.

Survival following AIDS

The analysis was based on AIDS cases diagnosed by 31 December 2000 and reported to the *National AIDS Registry* by 31 March 2001. Cases without any follow-up information after AIDS diagnosis were excluded from the analysis. Survival following AIDS was calculated as the interval from the date of AIDS diagnosis to the date of death if the person had died; otherwise to the date of last medical contact or 31 December 2000, whichever came first. Survival rates at 1 and 2 years following AIDS diagnosis, and median survival, were estimated by the Kaplan-Meier method. Further information on survival following AIDS is available in Li *et al* (2000).

1.2 National HIV Database

National surveillance for newly diagnosed HIV infection

Newly diagnosed HIV infection, as well as AIDS, is a notifiable condition in all State/Territory health jurisdictions in Australia. Cases of diagnosed HIV infection were notified through State/Territory health authorities to the national HIV surveillance centre on the first occasion of diagnosis in Australia. Information sought at notification of HIV infection included State/Territory of diagnosis, name code (based on the first two letters of the family name and the first two letters of the given name), sex, date of birth, Indigenous status, date of HIV diagnosis, CD4+ cell count at diagnosis, source of exposure to HIV and evidence of newly acquired HIV infection.

Newly acquired HIV infection was defined as newly diagnosed HIV infection with evidence of a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis. Cases of newly acquired HIV infection which had progressed to AIDS were identified by matching HIV diagnoses, notified to the *National HIV Database*, to AIDS diagnoses, notified to the *National AIDS Registry*. HIV and AIDS diagnoses were matched by name code, sex and date of birth.

The surveillance systems for newly diagnosed HIV infection and newly acquired HIV infection are described in McDonald *et al* (1994a) and McDonald *et al* (1994b). The National Serology Reference Laboratory, Australia (Dax and Vandenberg 1993), carried out monitoring of HIV antibody testing.

Adjusting the number of HIV diagnoses for multiple reports

The number of diagnoses of HIV infection reported to the *National HIV Database* was adjusted for multiple reporting, based on the reported dates of birth of each case. By assuming that all dates of birth were equally likely, and that all diagnoses of HIV infection were reported with the correct date of birth, it was possible to estimate the number of distinct HIV diagnoses. Further details of the methods used are described in Law *et al* (1996).

The total number of distinct HIV diagnoses was estimated for each State/Territory and year of diagnosis. Because adult/adolescent women and people whose sex was reported as transgender are a relatively small proportion of all HIV diagnoses, and also because diagnoses in women are thought to be almost completely accurate, their numbers of HIV diagnoses were simply enumerated, assuming that there was no multiple reporting (McDonald and Cui 1997). The number of men diagnosed with HIV infection adjusted for multiple reporting was then estimated for each State/Territory by subtracting the appropriate number of women and transgender from the corresponding State/Territory total.

1.3 Estimates of the number of people living with HIV infection

Estimates of the number of people living with HIV infection by disease stage (a CD4+ cell count of more than 500/ μ l, a CD4+ cell count of less than 500/ μ l and AIDS free, or living with AIDS) between 2000 and 2004 were based on the estimated pattern of past HIV incidence given by back-projection analyses (see *Annual Surveillance Report 2000* for details of methods). HIV incidence was assumed to continue at a constant rate of 450 new infections per year from 2001 onwards. The rate of progression to a CD4+ cell count of fewer than 500/ μ l was modelled using a Weibull-with-levelling distribution (Rosenberg *et al* 1992) corresponding to a median time from HIV infection to a CD4+ cell count of 500/ μ l of 4 years, with 95% below 500/ μ l by 10 years. The number of AIDS diagnoses and deaths in 2000 were based on reported numbers of cases adjusted for reporting delays. From 2001 onwards, AIDS incidence and deaths were assumed to continue at the same rate as 2000.

1.4 National monitoring of diagnoses of HIV/AIDS in Indigenous people

Information on Indigenous status was routinely sought at diagnosis of HIV infection and AIDS in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia. Information on Indigenous status was sought for cases of HIV infection and AIDS newly diagnosed in New South Wales from January 1992 and from June 1998 in Victoria. Information on Indigenous status was not available for cases of HIV/AIDS diagnosed in the Australian Capital Territory by the end of March 2001. Nationally, information on Indigenous status at HIV/AIDS diagnosis was sought prospectively from May 1995. For HIV/AIDS diagnoses prior to 1995, Indigenous status was obtained retrospectively through State/Territory health authorities. In 1992 – 2000, 93% of HIV notifications from State/Territory health authorities other than the Australian Capital Territory and Victoria prior to June 1998 included information on Indigenous status.

1.5 Assessment of patient report of exposure to HIV

The basis for HIV exposure category classification was documented in cases of newly diagnosed HIV infection in adults/adolescents, for which the person reported a source of exposure to HIV other than male homosexual/bisexual contact. The medical practitioner involved in the person's HIV diagnosis was asked to complete a questionnaire which sought specific information on the person's reported history of receipt of blood, injecting drug use and heterosexual contact, both in Australia and overseas. The medical practitioner was also asked to indicate whether he/she was generally satisfied with the person's reported HIV exposure history. Further information is available in McDonald *et al* (1994c), McDonald (1995) and Raman *et al* (1996).

1.6 National surveillance for perinatal exposure to HIV

Cases of perinatal exposure to HIV were reported to the national HIV surveillance centre by paediatricians, through the Australian Paediatric Surveillance Unit and through assessment of perinatal exposure in children born to women with HIV infection. Diagnoses of HIV infection in women and their exposed children were notified through national HIV/AIDS surveillance procedures. Further details are given in McDonald *et al* (1997) and McDonald *et al* (2001).

2 National monitoring of diagnoses of viral hepatitis

2.1 Notification of viral hepatitis to the National Notifiable Diseases Surveillance System

Diagnoses of hepatitis A, newly acquired hepatitis B and prevalent cases of hepatitis C infection were notifiable conditions in all State/Territory health jurisdictions in Australia. Cases of hepatitis C infection classified as newly acquired infection, on the basis of hepatitis C antibody testing history and clinical presentation, were recorded in all health jurisdictions other than the Northern Territory and Queensland. Cases were notified by the diagnosing laboratory, medical practitioner, hospital or a combination of these sources, through State/Territory health authorities, to the National Notifiable Diseases Surveillance System. Population rates of diagnosis of viral hepatitis were calculated for each State/Territory using population estimates for 1996, provided by the Australian Bureau of Statistics (1997).

2.2 National monitoring of diagnoses of viral hepatitis in Indigenous people

Information was sought on Indigenous status for diagnoses of hepatitis A, newly acquired hepatitis B and hepatitis C notified to the National Notifiable Diseases Surveillance System. The number of diagnoses in 2000 was tabulated by State/Territory and Indigenous status.

2.3 Incidence of hepatitis C infection among people who have injected drugs

Incidence of hepatitis C infection was monitored among people with a history of injecting drug use attending the Kirketon Road Centre, a primary care clinic in central Sydney. Incidence of hepatitis C infection was calculated among people who were retested following a negative test for hepatitis C antibody when first assessed at the Centre. Repeat hepatitis C antibody testing was carried out, based on the assessment of risk behaviour for hepatitis C infection. The timing of hepatitis C seroconversion was estimated as the mid-point between the last negative test and the first positive test. Indeterminate hepatitis C antibody tests were considered to be negative in the analysis.

2.4 Long term outcomes among people with chronic viral hepatitis

A network of liver transplant centres in Australia and New Zealand has collected information on the characteristics of people undergoing liver transplantation. People undergoing liver transplantation have been routinely tested for hepatitis B infection and for hepatitis C infection since antibody testing became available in 1990. Information was sought on the primary and secondary causes of liver disease including the results of tests for hepatitis B virus and hepatitis C virus. The information was forwarded to the Liver Transplant Registry located at Royal Prince Alfred Hospital in Sydney.

3 National monitoring of diagnoses of sexually transmissible infections

3.1 Notification of specific sexually transmissible infections to the National Notifiable Diseases Surveillance System

Diagnoses of specific sexually transmissible infections were notified by State/Territory health authorities to the National Notifiable Disease Surveillance System, maintained by the Commonwealth Department of Health and Aged Care. Chlamydia was notifiable in all health jurisdictions except New South Wales prior to 1998; Chlamydia was made notifiable in New South Wales in 1998. Gonorrhoea and syphilis were notifiable conditions in all health jurisdictions. In most health jurisdictions, diagnoses of sexually transmissible infections were notified by the diagnosing laboratory, the medical practitioner, hospital or a combination of these sources (see Table below). In Western Australia, a parent or guardian, household co-occupant, local government or employer can also notify a diagnosis.

Table Source of notification of specific sexually transmissible infections to the National Notifiable Diseases Surveillance System by State/Territory

Diagnosis	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Gonorrhoea	Doctor	Laboratory	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Other ¹
Syphilis	Doctor	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Other ¹
Chlamydia	Doctor Laboratory Hospital	Not notifiable	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor Other ¹
Donovanosis	Not notifiable	Not notifiable	Doctor Laboratory	Doctor Laboratory Hospital	Not notifiable	Laboratory	Doctor Laboratory	Doctor ¹ Laboratory

¹ Parent or guardian, occupier of household, local government, or employer.

3.2 National monitoring of diagnoses of specific sexually transmissible infections in Indigenous people

Information on Indigenous status in diagnosed cases of chlamydia, gonorrhoea and syphilis was sought through doctor notification in the Australian Capital Territory, the Northern Territory, South Australia, Victoria and Western Australia. New South Wales and Tasmania were the only health authorities that sought information on Indigenous status through laboratory notification. In Queensland, information on Indigenous status was not sought at notification of sexually transmissible infections other than HIV, by 31 March 2001.

Population rates of diagnosis of specific sexually transmissible infections were calculated by year and State/Territory of diagnosis using population estimates for 1996, provided by the Australian Bureau of Statistics (*Population Distribution, Indigenous Australians*, 1996).

3.3 Gonococcal isolates

The Australian Gonococcal Surveillance Programme (AGSP) is a collaborative project involving gonococcal reference laboratories in each State/Territory and is coordinated by the NSW Gonococcal Reference Laboratory at the Prince of Wales Hospital, Sydney. The primary objective of the programme is to monitor the antibiotic susceptibility of isolates of *Neisseria gonorrhoeae*, to assist in the effective treatment of gonorrhoea. Information on sex and site of isolation of gonococcal strains was also collected (AGSP 2001).

4 Surveillance for HIV, hepatitis B and hepatitis C in sentinel populations

4.1 Sentinel HIV surveillance in sexual health clinics

A network of selected metropolitan sexual health clinics provided tabulations, at the end of each quarter and annually, of the number of people seen, the number tested for HIV antibody and the number newly diagnosed with HIV infection, broken down by sex, age group, HIV exposure category and HIV antibody testing history. Potential exposure to HIV was categorised according to the person's reported sexual behaviour in the 12 months prior to being seen at the clinic and any history of injecting drug use. HIV antibody testing history was subdivided into two categories: any history of HIV antibody testing prior to being seen at the clinic and HIV antibody testing in the 12 months prior to being seen. Estimates of HIV incidence among gay and other homosexually active men were based on the number of men seen at the clinic during the year who reported a history of male homosexual contact and who had a negative HIV antibody test within 12 months of their last HIV antibody test. Further information is available in NCHECR (1996).

4.2 National monitoring of HIV infection among entrants into Australian prisons

From 1991, State/Territory Departments of Corrections have forwarded to the national HIV surveillance centre tabulations of the number of people received into prisons in the jurisdiction in each calendar quarter, the number tested for HIV antibody at reception and the number newly diagnosed with HIV infection, broken down by sex. Further information is available in McDonald *et al* (1999).

4.3 HIV and hepatitis C seroprevalence among people who have injected drugs

All clients attending needle and syringe program (NSP) sites during one week in March 1995 (20 fixed sites and one mobile site), June 1996 (19 fixed sites and one mobile site), October 1997 (21 fixed sites and one mobile site), 1998 (30 fixed sites and two mobile sites), 1999 (32 fixed sites and 2 mobile sites) and 2000 (35 sites) were asked to complete a brief, self-administered questionnaire and to provide a finger prick blood spot sample for HIV and hepatitis C antibody testing. NSP sites were selected on the basis of large numbers of clients and representation from all State/Territory health jurisdictions. Prevalence estimates for HIV and hepatitis C antibody were adjusted for differences in survey sample size between State/Territory jurisdictions, using census counts of people aged 15 to 49 years in each State/Territory (Australian Bureau of Statistics, 1997). Further information is available in MacDonald *et al* (1997 and 2000).

4.4 National monitoring of HIV, hepatitis B and hepatitis C antibody among blood donors

All blood donations in Australia have been screened for HIV-1 antibodies since May 1985, for HIV-2 antibodies since April 1992 and for hepatitis C antibody from 1990. Prior to donation, all donors are required to sign a declaration that they do not have a history of any specified factors associated with a higher risk of HIV infection and other blood-borne infections. In all State/Territory health jurisdictions, detailed information is routinely sought on donors found to have antibody to HIV-1, HIV-2 or hepatitis C, and reports are routinely forwarded to the NCHECR. Further details of the national data collection on HIV infection in blood donors are given in NCHECR (1996), and Kaldor *et al* (1991).

4.5 National monitoring of HIV and hepatitis C antibody among entrants into the Australian Defence Force

The Australian Defence Force policy for the detection and prevention of HIV infection is detailed in Defence Instruction 16-6 (Australian Defence Force 1989). Since April 1988, the policy required compulsory testing for HIV antibody of all entrants into the Defence Force once application requirements had been fulfilled. All potential entrants to the Defence Force are advised that they will be tested for HIV and hepatitis C antibody after entry, are warned of the consequences of providing an inaccurate history and are given the option of withdrawing their application should they not wish to proceed. Further details of the Defence Force policy are given by Flynn (1993).

5 Monitoring behaviour

5.1 Monitoring sexual, injecting and HIV antibody testing behaviour among gay and other homosexually active men

Information on sexual behaviour reported by gay and other homosexually active men was obtained through the Sydney Men and Sexual Health (SMASH) study and through Periodic Surveys in Adelaide, Brisbane, Melbourne, Sydney and Perth. The SMASH behavioural data were based on each individual's first interview in each year, so that two 6 month periods in each year represent information from different men. As there was some loss to follow up, and continuing recruitment, respondents in each year were not all the same men.

The Sydney Gay Community Periodic Survey commenced in 1996 and provides information on sexual behaviour in a broader cross section of Sydney gay men than was available through the SMASH study. In February 1996, 1997, 1998, 1999 and 2000, gay and other homosexually active men were recruited at the Sydney Gay and Lesbian Mardi Gras fair day or at one of several gay community venues or medical clinics during the subsequent week. In August/September of each year, the sample was available only for the venues. Results from the two surveys in each year have been combined. The questionnaire was self-completed and takes approximately 5 minutes to answer. Information was sought on participant demographics, sexual practices with men and women, injecting drug use, HIV tests and results, and antiretroviral use for respondents with HIV infection.

The Adelaide, Brisbane, Melbourne and Perth Gay Community Periodic Surveys commenced in 1998 using similar recruitment strategies to the Sydney surveys and a compatible survey instrument. Gay and other homosexually active men were recruited at the local equivalent of Sydney's Mardi Gras Fair Day (the Pride Fair in Brisbane and Picnic in the Park in Adelaide) or at one of a small number of community venues or medical clinics during the subsequent week. The sites were selected to be comparable with the range of sites used in the Sydney surveys. The surveys were also carried out in Adelaide and Brisbane in 1999, and in Brisbane, Melbourne and Perth, and in Canberra for the first time, in 2000.

5.2 Monitoring sexual, injecting and blood borne virus testing behaviour among people who have injected drugs

Information on sexual behaviour, history of injecting drug use and HIV and hepatitis C testing history was obtained by client completion of a questionnaire administered at 21 needle and syringe programs in 1995, 20 in 1996, 24 in 1997, 32 in 1998, 34 in 1999 and 35 sites in 2000. Further information is available in MacDonald *et al* (1997 and 2000).

6 Treatment for HIV infection

6.1 Uptake of antiretroviral treatment for HIV infection

The Australian HIV Observational Database (AHOD) is a collaborative study, recording observational data on the natural history of HIV infection and its treatment. The primary objective of the AHOD is to monitor the pattern of antiretroviral and prophylactic treatment use by demographic factors and markers of HIV infection stage. Other objectives are to monitor how often people with HIV infection change antiretroviral treatments and the reasons for treatment change.

Information is collected from hospitals, general practitioner sites and sexual health centres throughout Australia. Participating sites contribute data biannually from established computerised patient management systems. Core variables from these patient management systems are transferred electronically to the National Centre in HIV Epidemiology and Clinical Research (NCHECR), where the data are collated and analysed. By March 2001, 24 participating clinical sites enrolled a total of 1,819 people into the AHOD.

A detailed summary of treatments data from the AHOD is published in the *Australian HIV Observational Database Biannual Report* (NCHECR 2000; Australian HIV Observational Database 2000).

Self-reported use of antiretroviral therapy for the treatment of HIV infection was monitored, from 1997, among gay and other homosexually active men with HIV infection participating in the Periodic Surveys in Adelaide, Brisbane, Melbourne, Perth and Canberra.

6.2 Monitoring prescriptions for antiretroviral agents

All antiretroviral treatments for HIV infection, and some treatments for HIV/AIDS opportunistic infections, are funded through the Highly Specialised Drugs (HSDs) Program, a joint Commonwealth Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Commonwealth Department of Health and Aged Care.

The reported number of people prescribed each treatment was for people treated in community and day services only. Hospital in-patients, and people treated in pharmaceutical company-sponsored clinical trials or expanded access schemes, were excluded. The Commonwealth Government covers the cost of antiretroviral treatment for people seen in community or day services. State/Territory health authorities meet the cost of in-patient supply and costs associated with the management of these drugs.

Data on the HSDs Program were initially provided by financial year until the 1995/1996 financial year, thereafter quarterly reporting became a requirement. Quarterly reporting, from 1996/1997, ensured that the reported number reflected the number of people being prescribed each antiretroviral treatment rather than the number of treatment prescriptions.

Data on drugs for HIV/AIDS related conditions restricted to the HSDs program primarily include drugs for the treatment of the HIV/AIDS. There were, however, two exceptions. Rifabutin has both treatment and prophylactic uses, while azithromycin was prescribed for prophylactic use only.

Based on results from the Australian HIV Observational Database, the proportion of people who were taking zidovudine or stavudine as part of their antiretroviral treatment in any six month period ranged from 92% in July – December 1996 to 82% in July – December 2000. Therefore, the total number of people receiving antiretroviral treatment through the HSDs program was estimated as the number receiving either stavudine or zidovudine divided by the proportion of AHOD patients receiving zidovudine and stavudine.

7 HIV prevalence and AIDS incidence in selected countries

The data in Table 7.1 were obtained from the following sources:

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