

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

Annual Surveillance Report

2003



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edited by

Ann McDonald

National Centre in HIV Epidemiology and Clinical Research

in collaboration with

Australian Gonococcal Surveillance Programme

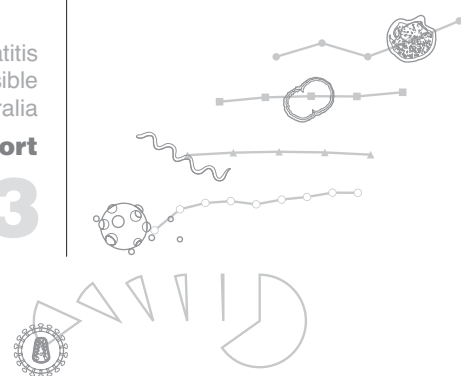
Communicable Diseases Network Australia

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

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Preface

This report is the seventh 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 available at Internet address <http://www.med.unsw.edu.au/nchecr>

The Australian AIDS Public Access Dataset, including information on AIDS cases diagnosed in Australia by 31 December 2002 and reported by 31 March 2003, is available through the website. For the first time, the Australian HIV Public Access Dataset, including information on cases of newly diagnosed HIV infection in Australia, cumulative to 31 December 2002 and reported by 31 March 2003, is also available through the website.

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 risk behaviour 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 2003*, edited by the National Centre in HIV Social Research. Specifically, data reported in Tables 5.1.1, 7.1.2 and 7.1.3 of *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2003* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2002, as reported by 31 March 2003. All data in this report are provisional and subject to future revision.

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.



Acknowledgments

National organisations

- Australasian Society for HIV Medicine, Sydney, NSW
- Australia and New Zealand Liver Transplant Register, Sydney, NSW
- Australian Defence Force, Department of Defence, Canberra, ACT
- Australian Federation of AIDS Organisations, Sydney, NSW
- Australian Hepatitis Council
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Paediatric Surveillance Unit and its contributors; Sydney Children's Hospital, Randwick, NSW
- Communicable Diseases Network Australia, Canberra, ACT
- Commonwealth Department of Health and Ageing, Canberra, ACT
- Multicultural HIV/AIDS and Hepatitis C Service, Camperdown, NSW
- National Aboriginal Community Controlled Health Organisations
- National Association of People Living with HIV/AIDS
- National Centre in HIV Social Research, The University of New South Wales, NSW
- 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 Program, Disease Control, Department of Health and Community Services, 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;
The Macfarlane Burnet Institute for Medical Research and Public Health Limited, Prahran, VIC
- Communicable Diseases Control Unit, Health Department of WA, Perth, WA

Australian Gonococcal Surveillance Programme

Reference Laboratories:

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

Collaborative group on sentinel surveillance in sexual health clinics

- Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
- Livingstone Road Sexual Health Centre, Marrickville, NSW
- 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; Department for Correctional Services (SA), 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, Sydney Sexual Health Centre, Sydney, The Medical and Vein Centre, Coffs Harbour; Taylor Square, Darlinghurst; 407 Bourke Street, Surry Hills, NSW
- Clinic 34, Darwin, NT
- AIDS Medical Unit, North Quay; Blackall Terrace Specialist Group, Nambour; Brunswick Street Medical Centre, New Farm; Gold Coast Sexual Health Clinic, Miami; Sexual Health Program, Cairns Base Hospital, Cairns, QLD
- The Care and Prevention Program, Adelaide University, Adelaide, SA
- The Alfred Hospital, Prahran; Melbourne Sexual Health Centre, Carlton; Monash Medical Centre, Clayton; Prahran Market Clinic, South Yarra; The Centre Clinic, St Kilda; The Carlton Clinic, Carlton, VIC
- Department of Clinical Immunology, Royal Perth Hospital, Perth, WA

Collaboration of Australian Needle and Syringe Programs

- Drug Referral Information Centre, ACT
- Albury Base Hospital and Community Health Centre, Albury; Drug Intervention Services and ICON Street Youth Program, Cabramatta; Kirketon Road Centre and K2, Kings Cross; Northern Rivers Health Service; Port Kembla First Step Program; Resource and Education Program for IDU, Redfern and Canterbury; Royal Newcastle Hospital NSP, Newcastle; St George NSP, Kogarah; Sydney Sexual Health Centre NSP, Sydney; The Exchange, Manly and Ryde; Wentworth HIV and Sexual Health Service; Western Sydney AIDS Prevention Service, Auburn, Blacktown, Mt Druiitt and Parramatta, NSW
- Northern Territory AIDS/Hepatitis C Council, Darwin, NT
- BIALA Community Alcohol and Drug Services and QuilVa, Brisbane; Cairns Base Hospital NSP; DUNE Gold Coast; Ipswich Sexual Health NSP; Kobi House, Toowoomba; Logan Youth NSP; MacKay Sexual Health; SCIVAA, Sunshine Coast, QLD
- Clovelly Park NSP, Clovelly Park; Hindmarsh Centre, Hindmarsh; Lyell McEwin, Adelaide; Noarlunga Community Health Service; Northern Metropolitan Community Health Service NSP and Shopfront; Parks Community Health Service; Port Adelaide Community Health Service NSP; SAVIVE NSP; South Australian Drug and Alcohol Services Council; Warrinilla Clinic, Adelaide, SA
- NuFIT, Glenorchy; Sexual Health NSP, Launceston; Tasmanian AIDS & Related Diseases Council, Hobart; Tasmanian Users Health Support League; The Link, Hobart, TAS
- Melbourne Inner Needle Exchange, Collingwood; South East Alcohol and Drug Service, Dandenong; St Kilda NSP; SHARPS, Frankston; Western Region AIDS and Hepatitis Prevention, VIC
- AIDS Council of Western Australia, Perth; Western Australia Users Association, Perth and Bunbury, WA
- St Vincent's Hospital, Sydney NSW: Alcohol and Drug Service; Centre for Immunology

Risk behaviour and treatment uptake among gay and other homosexually active men

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



Summary

HIV/AIDS

- After adjusting for reporting delay, there were 9,083 AIDS cases and 6,272 deaths following AIDS in Australia, cumulative to 31 December 2002. The number of HIV diagnoses, adjusted for multiple reporting, was 19,674 at the end of 2002. An estimated 13,120 people were living with HIV/AIDS in Australia in 2002.
- The annual number of AIDS diagnoses in Australia peaked at 953 cases in 1994 and dropped to 246 cases in 2002. The decline in AIDS incidence from 1994 was due to a fall in HIV incidence occurring in the mid 1980s and the effectiveness since mid 1996 of combination antiretroviral therapy in delaying progression to AIDS among people whose HIV infection was diagnosed before AIDS diagnosis. The number of AIDS cases reported in people whose HIV infection was diagnosed within the preceding three months has remained stable over the past ten years.
- The annual number of cases of newly diagnosed HIV infection gradually increased from 650 in 1998 to around 800 in 2002. The number of reported diagnoses of newly acquired HIV infection has also increased from 150 cases in 1998 to around 240 cases in 2002, indicating the lower bound of the number of new HIV infections that have actually occurred in Australia over this time. An estimated total of 450 new HIV infections occurred in Australia in 2002.
- Transmission of HIV infection in Australia continued to be mainly through sexual contact between men, which was reported in more than 85% of cases of newly acquired HIV infection diagnosed in 1998 – 2002. HIV prevalence remained below 1% among people attending needle and syringe programs, prison entrants, and among men and women seen at sexual health clinics reporting a history of heterosexual contact and women with a history of sex work.
- In 1993 – 2002, 180 HIV diagnoses and 69 AIDS diagnoses were notified among Indigenous people. The *per capita* rate of HIV and AIDS diagnosis among Indigenous people was similar to that among non-Indigenous people but a higher proportion of HIV diagnoses in Indigenous people were among women (35.6% vs 10.6%). Exposure to HIV was attributed to male homosexual contact for the majority of diagnoses in non-Indigenous people, whereas in Indigenous people, an almost equal proportion of HIV diagnoses was attributed to heterosexual and male homosexual contact. A higher proportion of HIV diagnoses were associated with injecting drug use (20%) in Indigenous people, compared to 4% among non-Indigenous people.
- AIDS incidence and estimated HIV prevalence in Australia at the end of 2002 were 1.3 and 67 per 100,000 population, respectively. AIDS incidence in Australia in 2002 was similar to that recorded in the United Kingdom and was substantially lower than in France (3.3), Spain (7.1) and the United States (15.4 in 2001). Within the Asia-Pacific region, estimated HIV prevalence in Cambodia, Myanmar and Thailand was substantially higher than that in Australia in 2002.
- Survival following AIDS in Australia increased from 17.4 months for cases diagnosed in 1993 to 38.4 months for cases diagnosed in 1999.
- An estimated 52% of all people living with HIV infection in Australia in 2002 were treated with antiretroviral therapy.

Viral hepatitis

- The reported number of diagnoses of hepatitis C infection has declined from a peak of 20,465 in 2000 to 15,953 cases in 2002. The reported number of diagnoses of newly acquired hepatitis C infection has declined from 672 cases in 2001 to 434 cases in 2002.
- Hepatitis C transmission continued to occur in Australia predominantly among people with a recent history of injecting drug use. More than 75% of people diagnosed with newly acquired hepatitis C infection reported a history of injecting drug use.
- Among people seen at needle and syringe programs who reported having commenced injecting drug use within the past three years, hepatitis C prevalence increased from 17% in 1998 to 38% in 2002. In 2002, hepatitis C prevalence was 38% among people aged less than 20 years and was 46% among those aged 20 – 24 years.

- An estimated 225,000 people were living with hepatitis C infection in Australia in 2002, including 133,000 with chronic hepatitis C infection and stage 0/1 liver disease, 29,000 with stage 2/3 liver disease and 6,900 living with hepatitis C related cirrhosis. A further 57,000 had hepatitis C antibodies without chronic infection.
- Around 1,640 people were prescribed ribavirin and interferon combination treatment for hepatitis C infection in 2002.
- The primary cause of liver disease among 151 people who had a liver transplant in 2002 was hepatitis C in 15.7% of cases and hepatitis B in 10.5% of cases.
- The population rate of diagnosis of newly acquired hepatitis B infection increased from 1.4 in 1998 to 2.1 per 100,000 population in 2002. Newly acquired hepatitis B infection was diagnosed most frequently among people aged 20 – 29 years. In 1998 – 2002, Victoria recorded the highest number of diagnoses of newly acquired hepatitis B infection.

Sexually transmissible infections

- Chlamydia was the most frequently reported notifiable condition in Australia in 2002 with 24,045 diagnoses. The population rate of diagnosis of chlamydia increased from 74.7 per 100,000 in 1999 to 128.5 per 100,000 in 2002.
- The population rate of diagnosis of gonorrhoea increased slightly, from 29.0 per 100,000 population in 1998 to 32.9 in 2002. The population rate of diagnosis of syphilis also increased, from 6.8 per 100,000 population in 2001 to 8.2 per 100,000 in 2002. Syphilis reappeared among homosexually active men in Sydney during 2002, with infection being diagnosed in 3 of 376 cohort study participants, giving an incidence of 0.76 per 100 person years.
- The number of diagnoses of donovanosis decreased from 30 in 2001 to 20 in 2002.
- The population rates of diagnosis of chlamydia, gonorrhoea and syphilis were substantially higher in the Northern Territory than elsewhere in Australia. Substantially higher rates of diagnosis of chlamydia, gonorrhoea and syphilis were recorded among Indigenous people compared with non-Indigenous people.



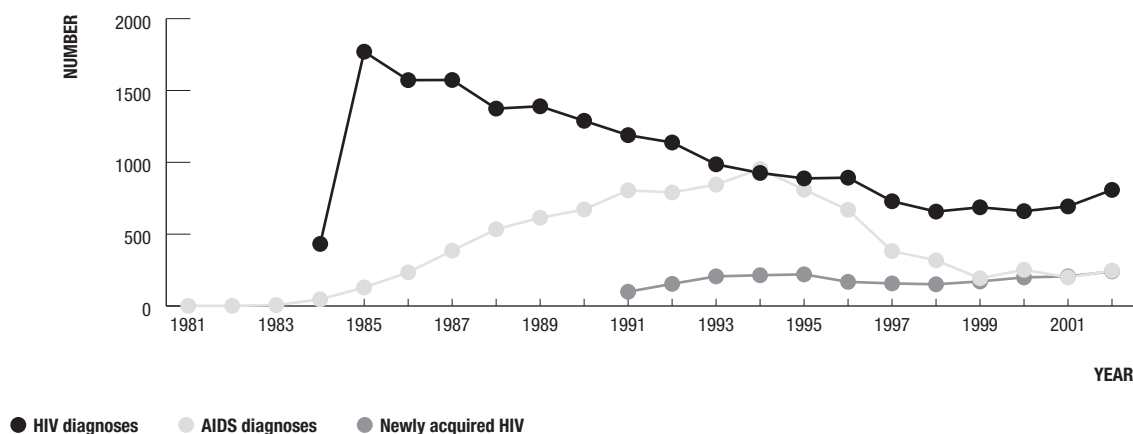
Main Findings

General patterns

HIV/AIDS

The annual number of AIDS diagnoses in Australia, after adjustment for reporting delay, peaked in Australia in 1994 with 953 diagnoses, and is estimated to have declined to around 200 – 250 cases in 1999 – 2002 (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.

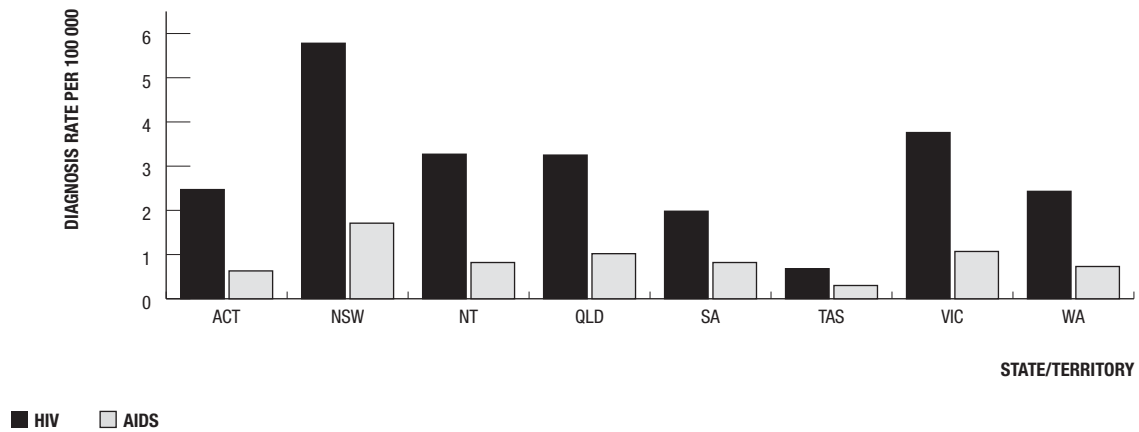
Figure 1 Number of diagnoses of HIV infection¹ and AIDS in Australia



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

At the end of 2002, the cumulative number of HIV infections that had been diagnosed in Australia was estimated to have been 19,674, and an estimated 13,120 people were living with HIV infection. Approximately 52% of all people living with HIV infection were receiving antiretroviral treatment for HIV infection. 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 treatment use declined or began to fail for a substantial proportion of people, then AIDS incidence could increase again.

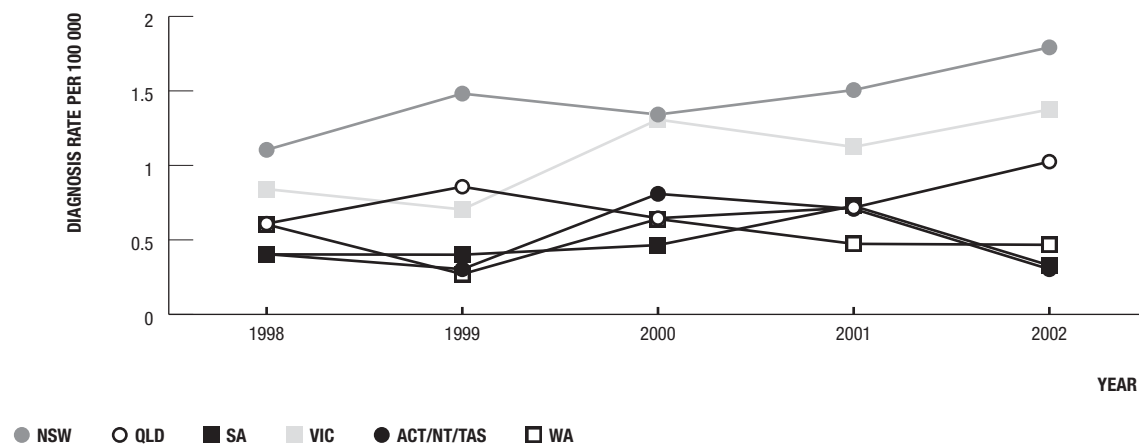
Figure 2 Average annual incidence of diagnoses of HIV infection and AIDS, 1998 – 2002, by State/Territory



Over the past five years, the *per capita* rate of diagnoses of AIDS and HIV infection has been highest in New South Wales at 1.7 and 5.8 diagnoses per 100,000 population, respectively. Victoria recorded the second highest rate of diagnosis of AIDS (1.1) and HIV infection (3.8) in 1998 – 2002. Population rates of HIV diagnosis were similar in the Northern Territory (3.3) and Queensland (3.3), and lower rates were recorded in the Australian Capital Territory (2.5), Western Australia (2.4), South Australia (2.0) and Tasmania (0.7) (Figure 2).

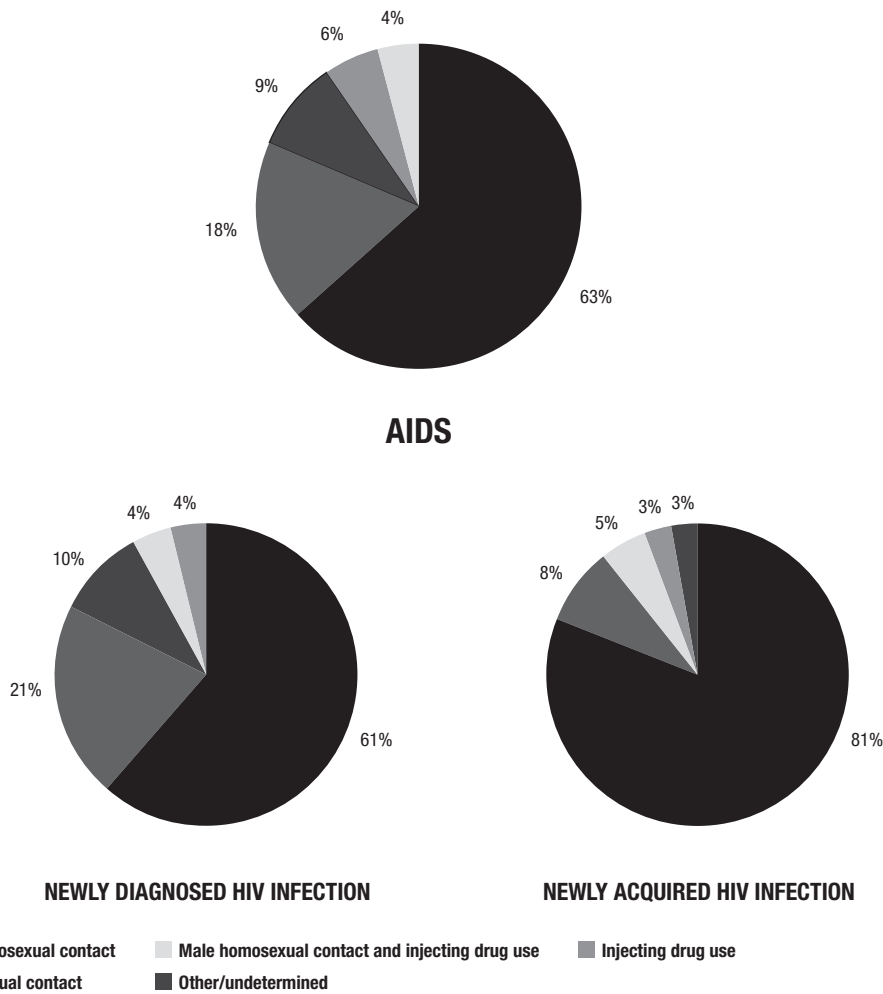
Following a long-term decline, the annual number of new HIV diagnoses in Australia has gradually increased over the past five years, from around 650 cases in 1998 to around 800 in 2002. Among these new diagnoses, an increasing number were in people who had acquired HIV infection within the previous year (Figure 1).

Figure 3 Newly acquired HIV, 1998 – 2002, by year and State/Territory



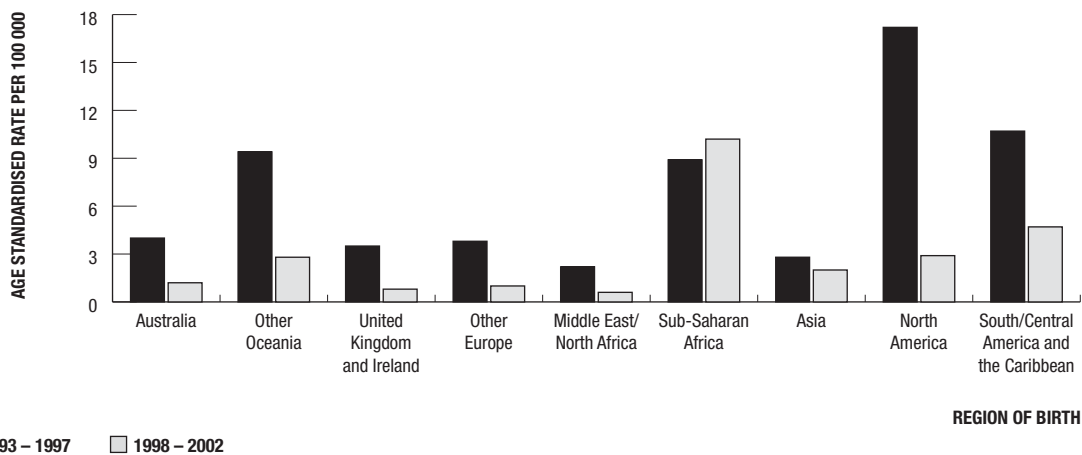
The *per capita* rate of diagnosis of newly acquired HIV infection increased by around 65% in New South Wales (from 1.1 per 100,000 in 1998 to 1.8 in 2002), Queensland (from 0.6 per 100,000 in 1998 to 1.0 in 2002) and in Victoria (from 0.8 per 100,000 population to 1.4 in 2002) and remained unchanged in the Australian Capital Territory, Northern Territory and Tasmania combined (0.4), South Australia (0.4), and Western Australia (0.5). 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).

Figure 4 AIDS, HIV infection and newly acquired HIV infection, 1998 – 2002, 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 1998 – 2002. 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. Relatively small percentages of newly acquired infections were attributed to a history of injecting drug use among women and heterosexual men (3.0%), or heterosexual contact only (8.4%).

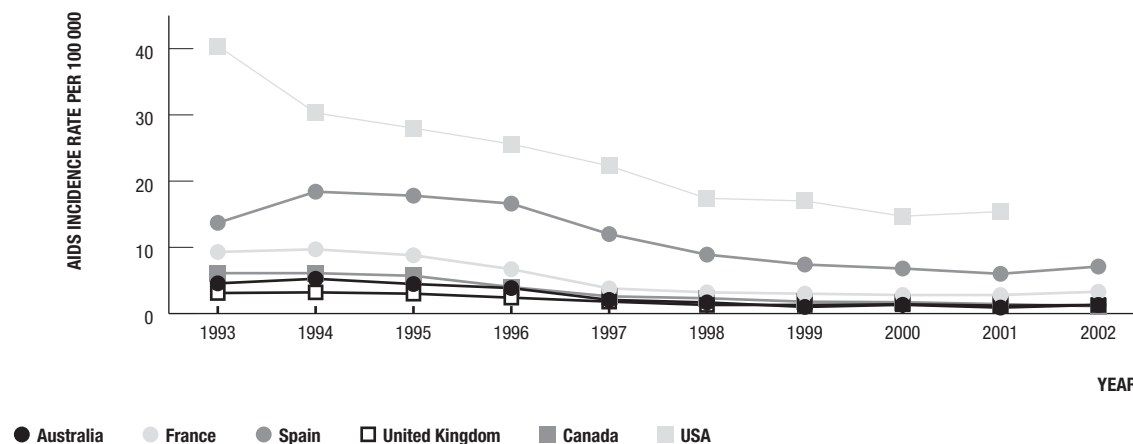
Figure 5 AIDS incidence in Australia, 1993 – 2002, by year and region of birth



People born in Australia accounted for 68% of AIDS diagnoses in Australia in 1998 – 2002. AIDS incidence in 1998 – 2002 was highest among people born in countries in sub-Saharan Africa (Figure 5).

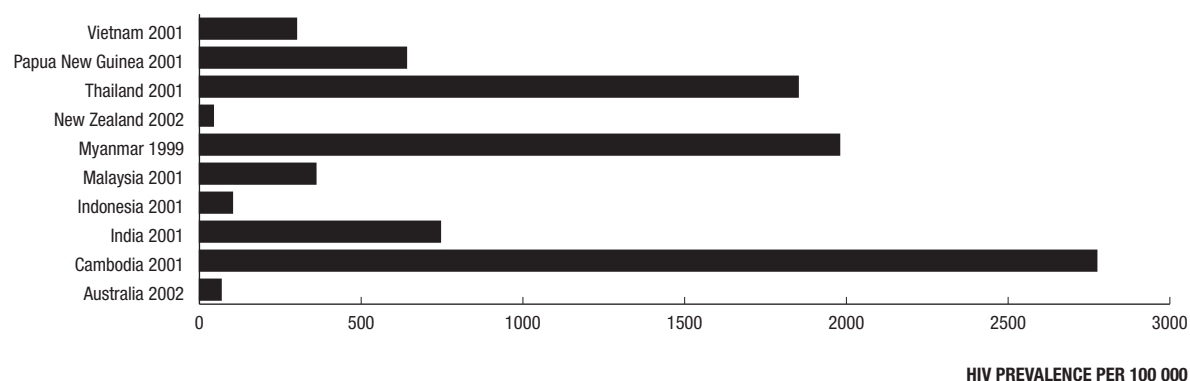
In 2002, AIDS incidence in Australia (1.3 per 100,000 population) was similar to that in the United Kingdom. Substantially higher AIDS rates are reported in a number of other Western countries including France (3.3 per 100,000 population), Spain (7.1 per 100,000 population) and the United States (15.4 per 100,000 population in 2001) (Figure 6).

Figure 6 AIDS incidence in selected industrialised countries¹ 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, Papua New Guinea and Vietnam was also higher than that in Australia in 2002 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 13.4 per 100,000 in 1998 to 2.0 per 100,000 in 2002. A similar decline in the rate of diagnosis of hepatitis A infection occurred in New South Wales and Queensland.

Reported diagnoses of newly acquired hepatitis B infection have gradually increased from 1.4 per 100,000 population in 1998 to 2.1 per 100,000 population in 2002. The population rate of diagnosis of newly acquired hepatitis B infection in 2002 increased in the Northern Territory (9.2 per 100,000 population), and remained relatively high in Victoria (3.7 per 100,000 population) and Tasmania (4.4 per 100,000 population) compared to the rate observed in other health jurisdictions (Figure 8). The rate of diagnosis of newly acquired hepatitis B infection declined in 2002 in the age groups 15 – 19 years (3.1 per 100,000 population) and 20 – 29 years (5.6 per 100,000 population) and remained relatively stable in the 30 – 39 year age group (3.6 per 100,000 population) (Figure 9).

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

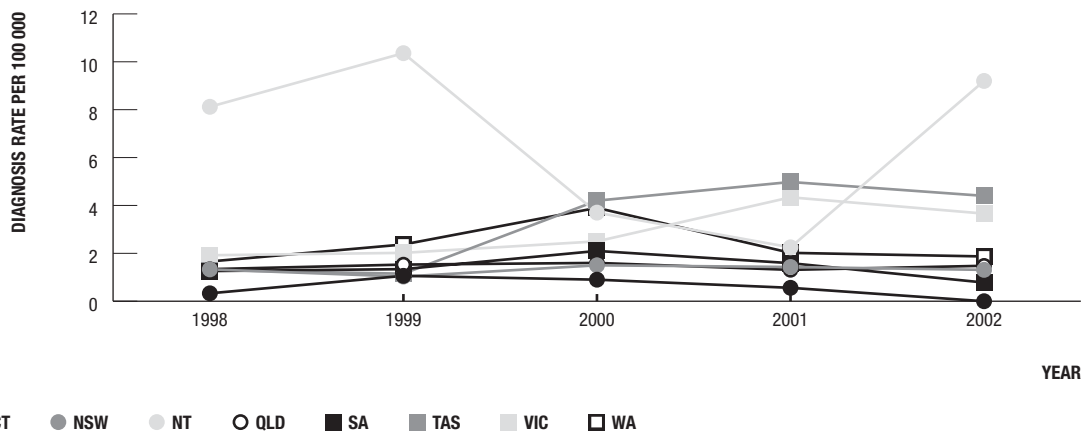
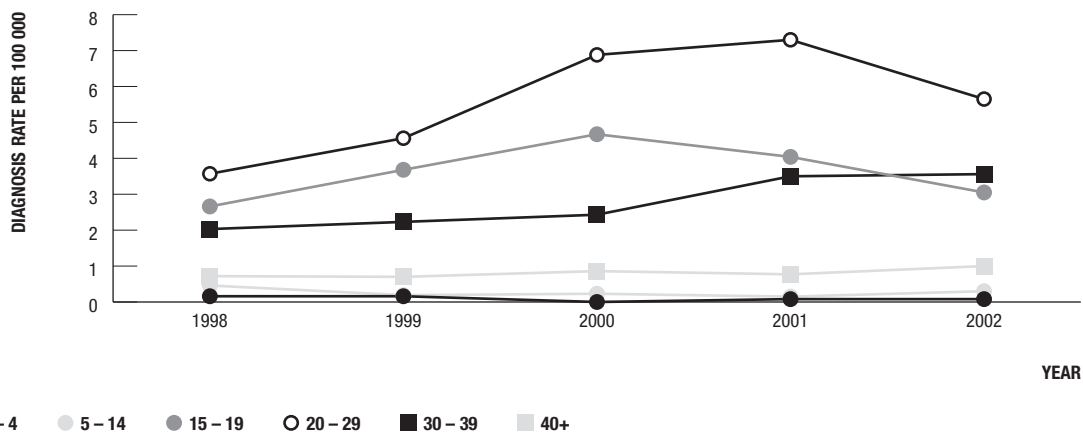
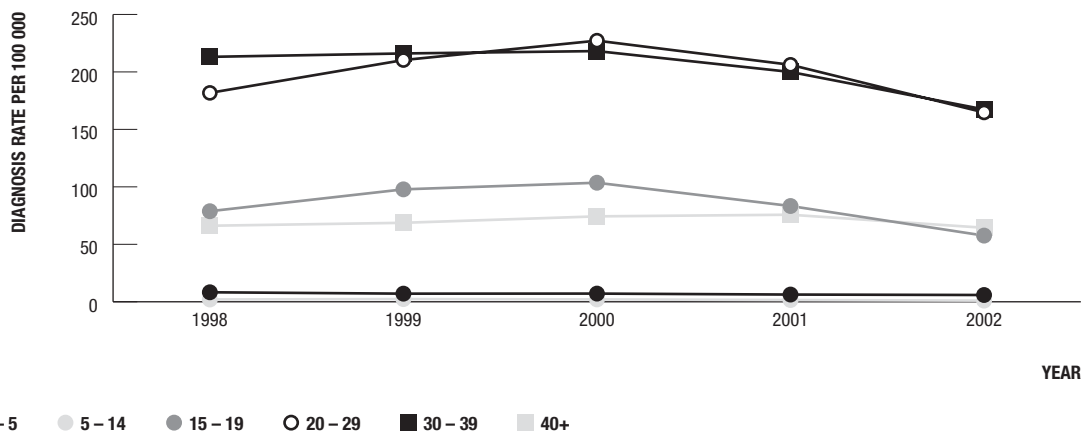


Figure 9 Newly acquired hepatitis B infection by year and age group



The total of 15,953 cases of hepatitis C infection diagnosed in 2002 was the lowest annual number of hepatitis C diagnoses notified in the past five years. In 1998 – 2002, the male to female ratio of hepatitis C notifications remained stable at 1.7:1. However, in the 15 – 19 year age group, a higher number of cases was reported among females than among males. The *per capita* rate of diagnosis of hepatitis C infection was highest in the 20 – 29 and 30 – 39 year age groups (Figure 10). In 2000 – 2002, the population rate of hepatitis C diagnosis declined in every age group.

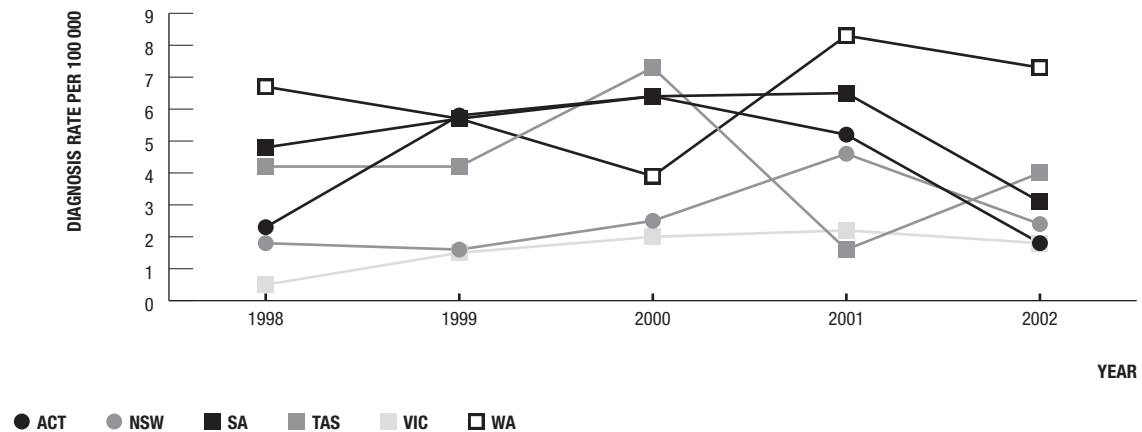
Figure 10 Hepatitis C infection by year and age group



The vast majority of notifications have been of hepatitis C infection of unknown duration. However, around 3.5% and 2.7% of cases of hepatitis C infection diagnosed in 2001 and 2002, respectively, were acquired within the previous two years. The diagnosed cases of newly acquired hepatitis C infection provide a lower limit to the extent of ongoing hepatitis C transmission, estimated to be 16,000 cases in 2001.

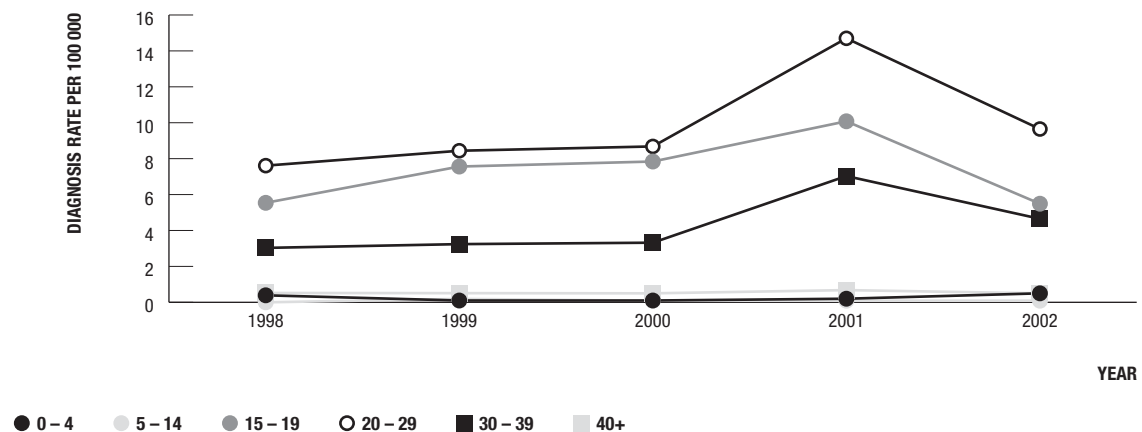
The population rate of diagnosis of newly acquired hepatitis C infection was highest among people aged 20 – 29 years and 15 – 19 years (Figure 12). Hepatitis C transmission continued to occur, primarily among people with a history of injecting drug use. However, information on the source of exposure to hepatitis C was not reported for 24% and 19% of cases of newly acquired hepatitis C infection diagnosed in 2001 and 2002, respectively.

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



¹ Data not available from NT and QLD

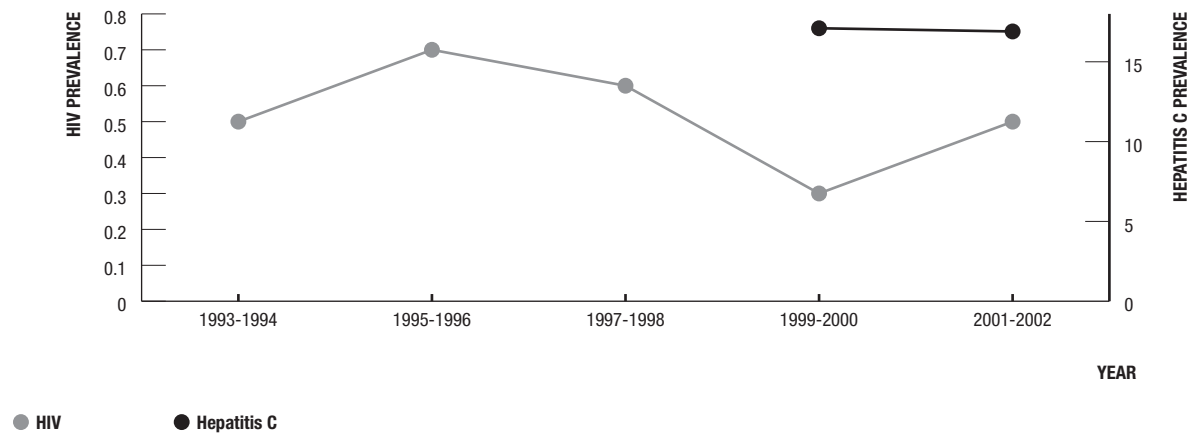
Figure 12 Newly acquired hepatitis C by year and age group



Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence remained high (17.8 per 100 person years), particularly among those aged less than 30 years. The steady increase in hepatitis C prevalence over time among people attending needle and syringe programs who report that they began injecting in the past three years, also indicates continuing high levels of hepatitis C transmission (Table 4.1.2).

Among men and women seen at sexual health clinics in 2001 – 2002 who were tested for hepatitis C antibody, the percentage with newly diagnosed hepatitis C infection was highest among those who reported a history of injecting drug use and lowest among those who reported a history of heterosexual contact, either in Australia or overseas.

Figure 13 HIV and hepatitis C prevalence¹ in blood donors by year



¹ Prevalence per 100 000 donations

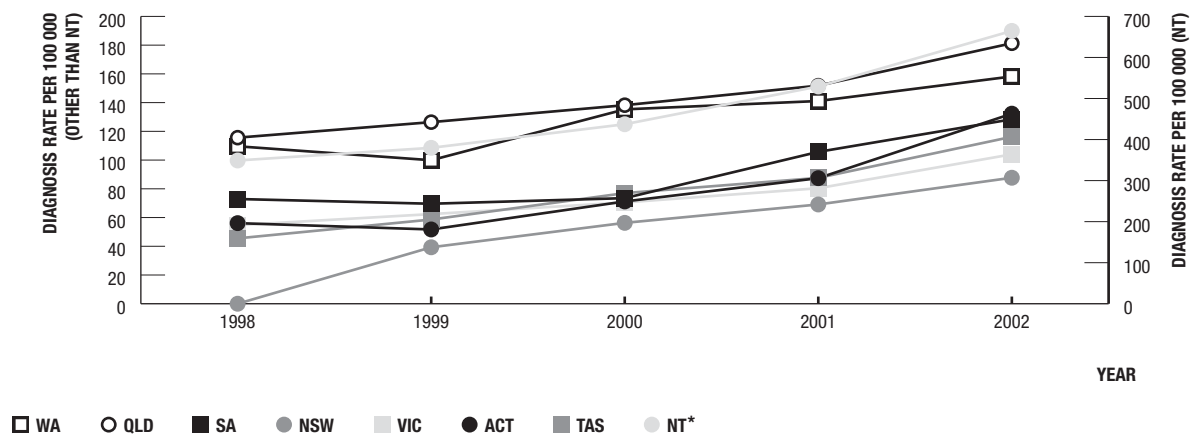
Blood donors are considered to be at low risk for hepatitis C infection. Hepatitis C prevalence in 2002 was substantially lower among blood donors (17.2 per 100,000 donations) than the estimated prevalence of hepatitis C infection in the Australian population as a whole (1,144 per 100,000 population).

In 2002, an estimated 225,000 people living in Australia had been exposed to hepatitis C virus. Of these, an estimated 57,000 people had cleared their infection and were not chronically infected, 133,000 had chronic hepatitis C infection and early liver disease (stage 0/1), 29,000 had chronic hepatitis C infection and moderate liver disease (stage 2/3), and 6,900 were living with hepatitis C related cirrhosis.

Sexually transmissible infections other than HIV

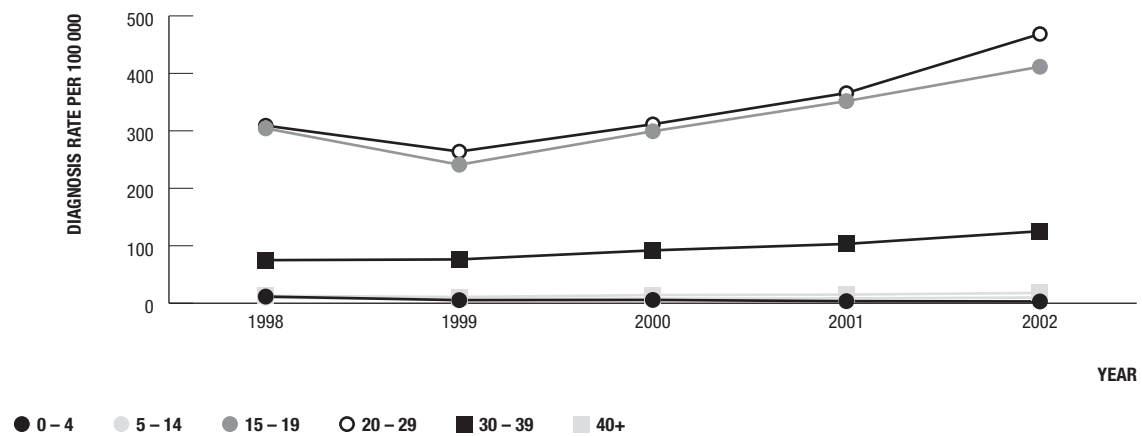
Chlamydia was the most frequently reported sexually transmissible infection notified in Australia in 2002, with 24,045 cases. The population rate of reported diagnoses of chlamydia increased from 74.7 per 100,000 population in 1999 to 128.5 per 100,000 population in 2002 (Figure 14). Increasing rates of diagnosis over time of chlamydia were reported in all State/Territory health jurisdictions in 1999 – 2002. The population rate of chlamydia diagnosis increased most markedly in the 20 – 29 year and the 15 – 19 year age groups (Figure 15).

Figure 14 Chlamydia by year and State/Territory



* NT on right axis

Figure 15 Chlamydia by year and age group



The population rate of diagnosis of gonorrhoea also increased, from 29.0 in 1998 to 32.9 per 100,000 population in 2002 (Figures 16). The rate of diagnosis of gonorrhoea was similar for the age groups 15 – 19 years and 20 – 29 years (Figure 17).

Figure 16 Gonorrhoea by year and State/Territory

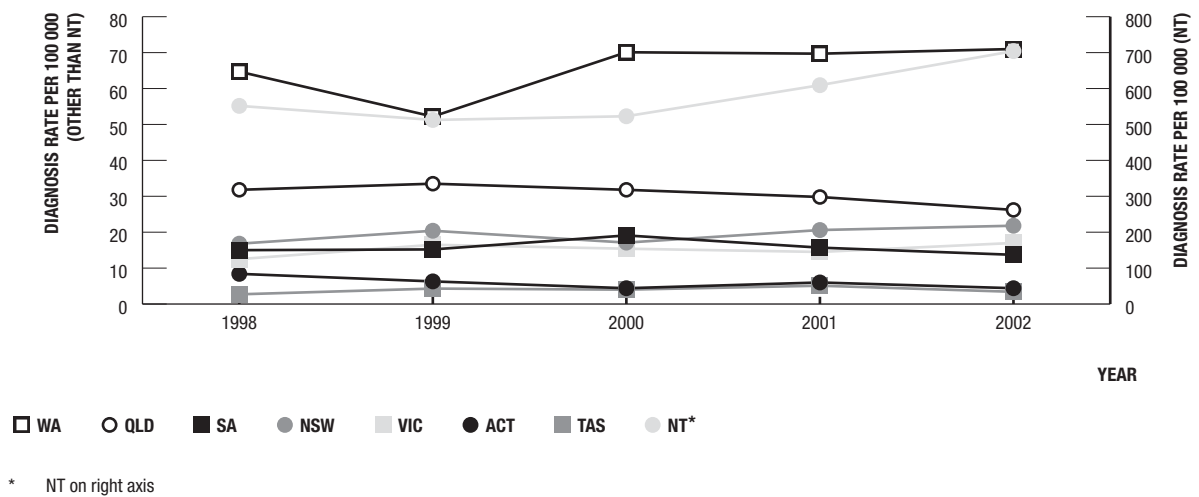
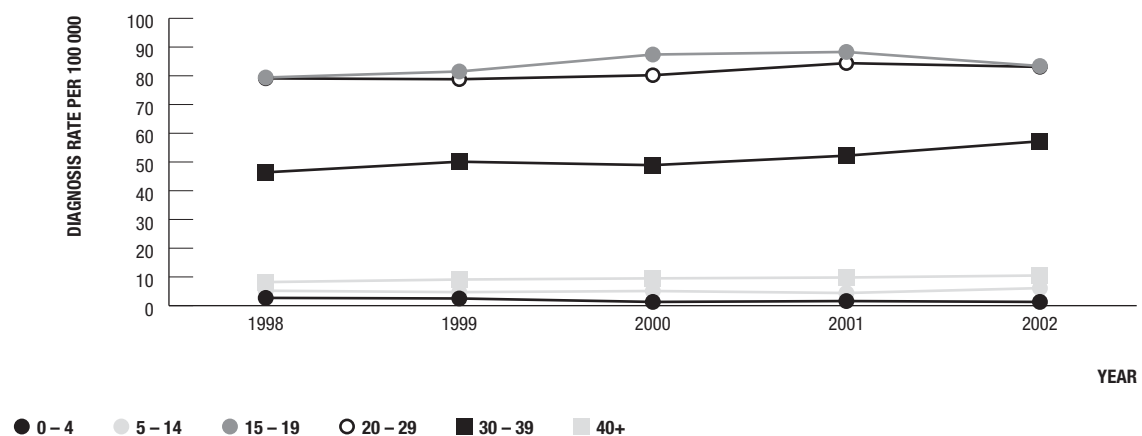
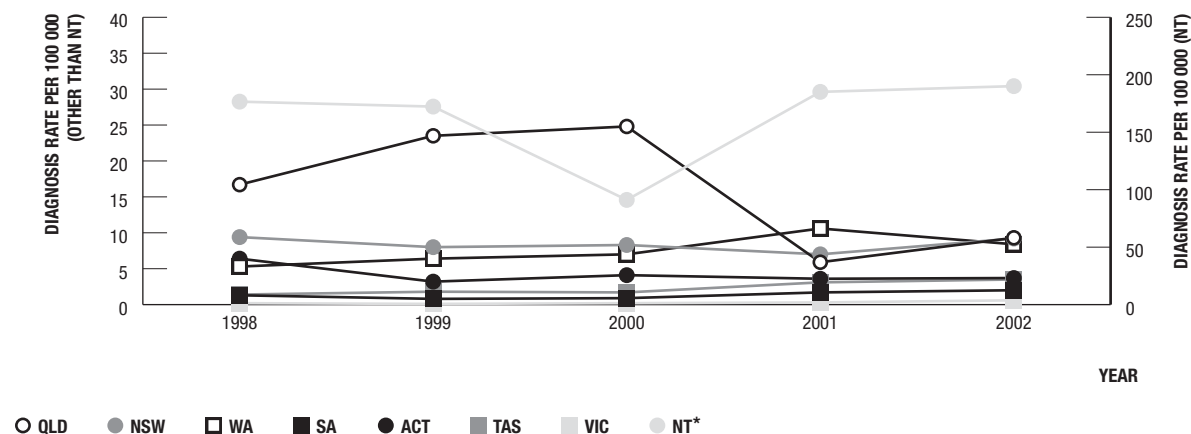


Figure 17 Gonorrhoea by year and age group



Almost all State/Territory health jurisdictions reported an increased number and population rate of diagnosis of syphilis in 2002 compared with 2001 (Figure 18). In Sydney, newly acquired infections were reported among homosexually active men at levels that had not been seen in the recent past. Among 376 men enrolled in the Health in Men (HIM) cohort study in 2001 who were retested for syphilis in 2002, three were newly diagnosed, giving an incidence rate of 0.76 per 100 person years.

Figure 18 Syphilis by year and State/Territory



• NT on right axis

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 chlamydia and gonorrhoea may be partly attributable to increases in testing and the use of diagnostic tests with greater sensitivity in both asymptomatic and symptomatic populations.

The number of diagnoses of donovanosis declined from 31 in 2001 to 20 in 2002, with fewer diagnoses among women aged less than 30 years in 2002 compared to 2001.

HIV and viral hepatitis in sentinel populations

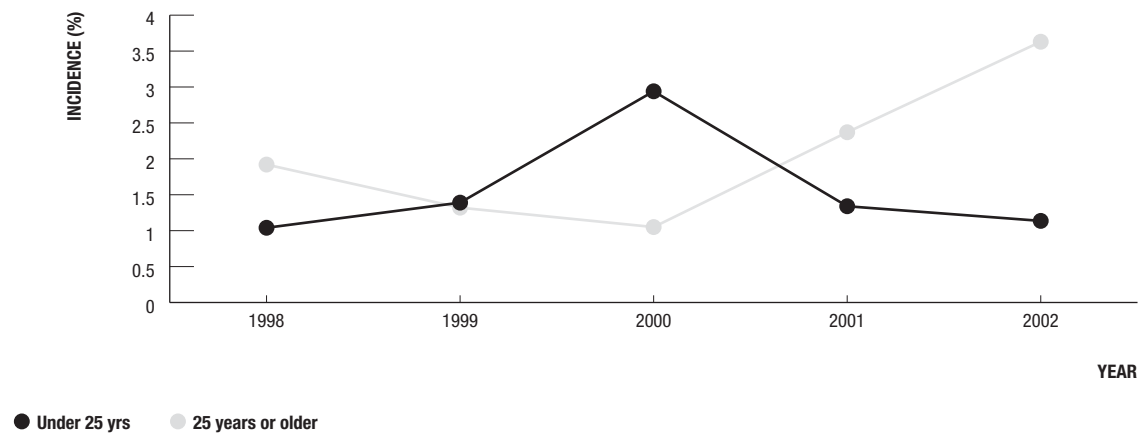
Several population groups at increased risk of HIV infection, compared to the general population in Australia, have been identified in the *National HIV/AIDS Strategy 1999 – 2000 to 2003 – 2004* and the *Australian Hepatitis C Surveillance Strategy* as priority groups for prevention and health promotion initiatives. Gay and other homosexually active men, Indigenous people and people who have injected drugs, were identified as priority groups either because of ongoing HIV or hepatitis C transmission or the potential for increases in viral transmission. The pattern of HIV transmission has also been monitored among people potentially at risk of HIV infection through heterosexual contact including female sex workers. People living with HIV/AIDS, and with hepatitis C infection, 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 1998 – 2002 was 2,523 and there were 838 diagnoses of newly acquired HIV infection. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (86%) than total HIV diagnoses (66%) in 2002. This difference may be due to greater access to and uptake of HIV antibody testing among gay and other homosexually active men.

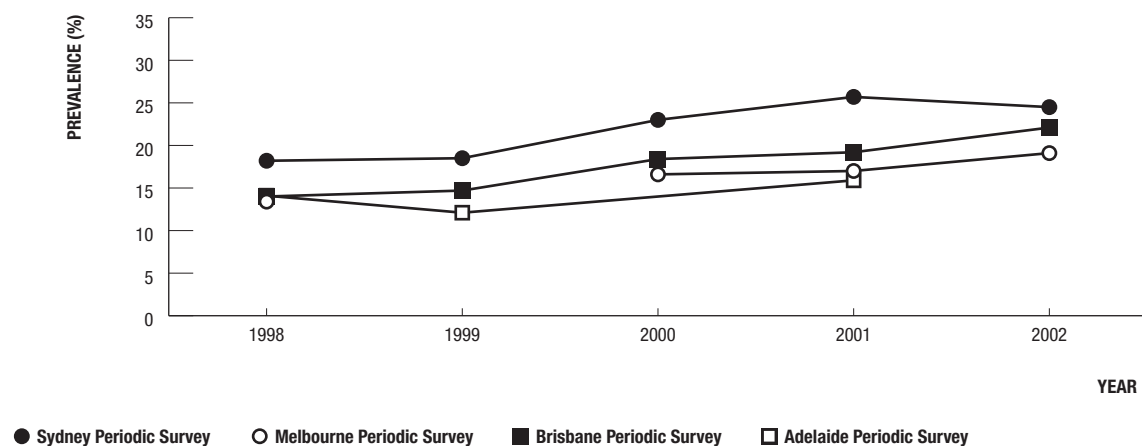
Among gay and other homosexually active men, aged 25 years or older, who were seen at metropolitan sexual health clinics, HIV incidence increased from 1.05 percent in 2000 to 3.6% in 2002 (Figure 19). In the Health in Men (HIM) cohort study among homosexually active men in Sydney, 4 cases of newly acquired HIV infection were diagnosed in 2002 among 392 men who were HIV seronegative at enrolment in 2001, giving an incidence of 0.98 per 100 person years.

Figure 19 HIV incidence among gay and other homosexually active men seen at sexual health clinics



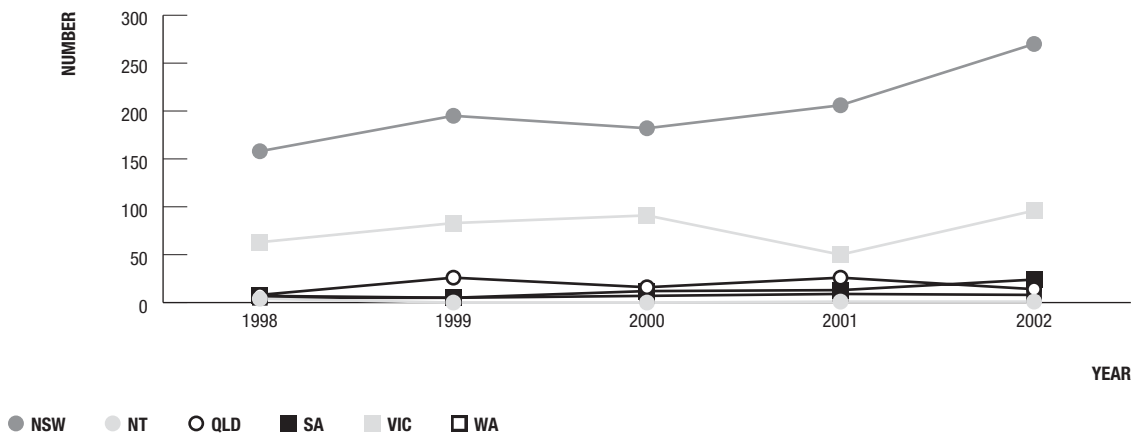
The Sydney Gay Community Periodic Survey, a cross sectional survey of gay and other homosexually active men, indicated that an increasing proportion of respondents reported unprotected anal sex with casual partners. The proportion increased from around 18% for respondents with casual partners in 1998 – 1999 to 25% in 2002 (Figure 20). Similar surveys carried out among gay and other homosexually active men in Brisbane, Melbourne and Adelaide also indicated increases in unsafe sexual behaviour with casual partners.

Figure 20 Prevalence of unprotected anal intercourse with casual partners reported by gay and other homosexually active men



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 over the past year from 206 in 2001 to 270 in 2002 in New South Wales, and from 50 to 96 in Victoria (Figure 21). In the Australian Study of Health and Relationships, 32% and 2.1% of 185 homosexually active men reported unprotected anal intercourse with their regular partners and casual partners, respectively.

Figure 21 Gonococcal rectal isolates among men by State/Territory reported to the Australian Gonococcal Surveillance Programme



Indigenous people

Overall rates of HIV and AIDS diagnoses *per capita* have differed little between Indigenous and non-Indigenous people (Figure 22 and Figure 23). However, in 2002, the age standardised rate of HIV diagnosis increased more sharply in the Indigenous population than in the non-Indigenous population. Furthermore, the rate of decline in AIDS incidence has been slower in the Indigenous population compared with the non-Indigenous population.

Figure 22 Newly diagnosed HIV infection, 1993 – 2002, by Indigenous status and year

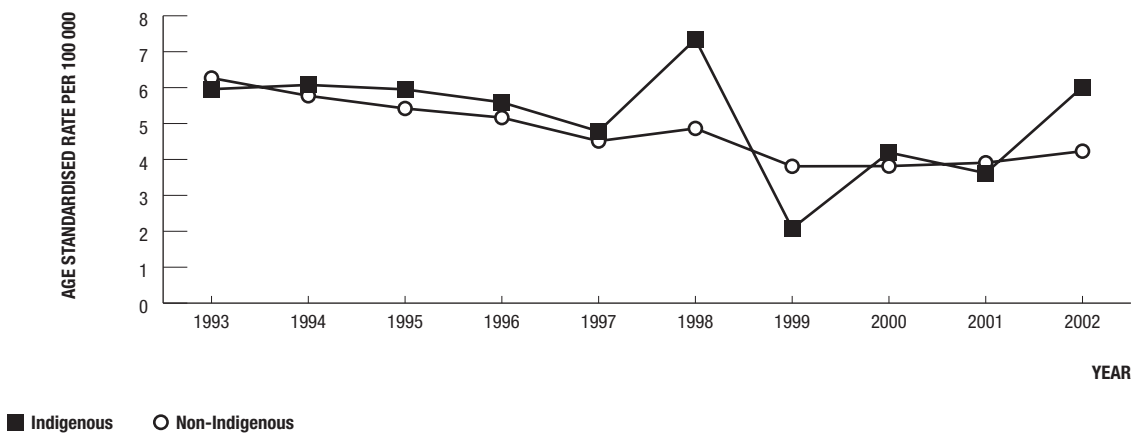
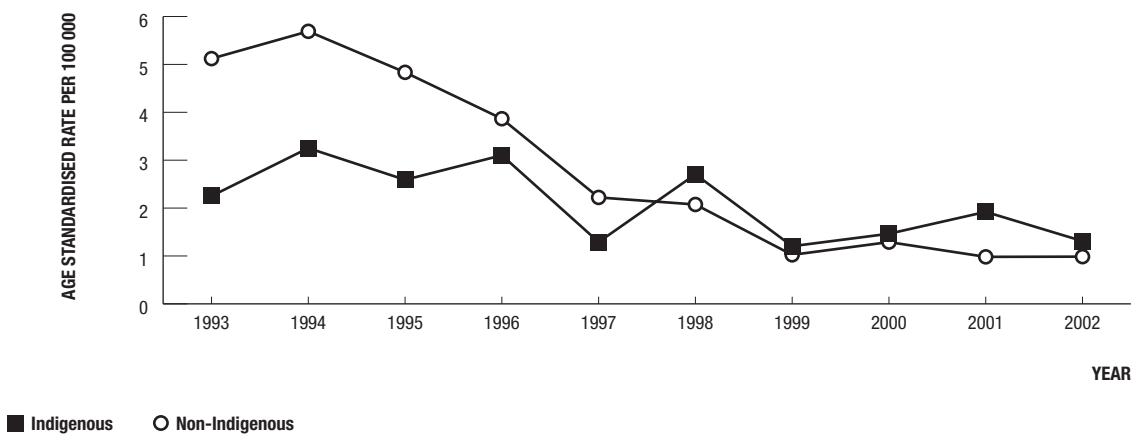
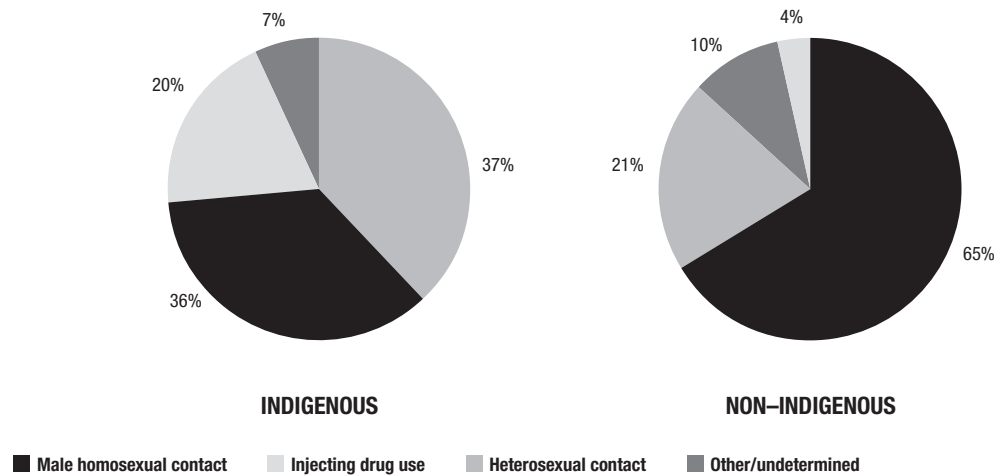


Figure 23 AIDS incidence, 1993 – 2002, by Indigenous status and year



Among new HIV diagnoses in 1998 – 2002, the most frequently reported route of HIV transmission was male homosexual contact in the non-Indigenous population whereas in the Indigenous population, male homosexual contact and heterosexual contact were reported almost equally frequently (Figure 24). Indigenous cases also differed from non-Indigenous cases in that a higher proportion of infections were attributed to injecting drug use, and a higher proportion of infections were among women (35.6% among Indigenous cases vs 10.6% for non-Indigenous cases).

Figure 24 HIV diagnoses, 1998 – 2002, by HIV exposure category and Indigenous status

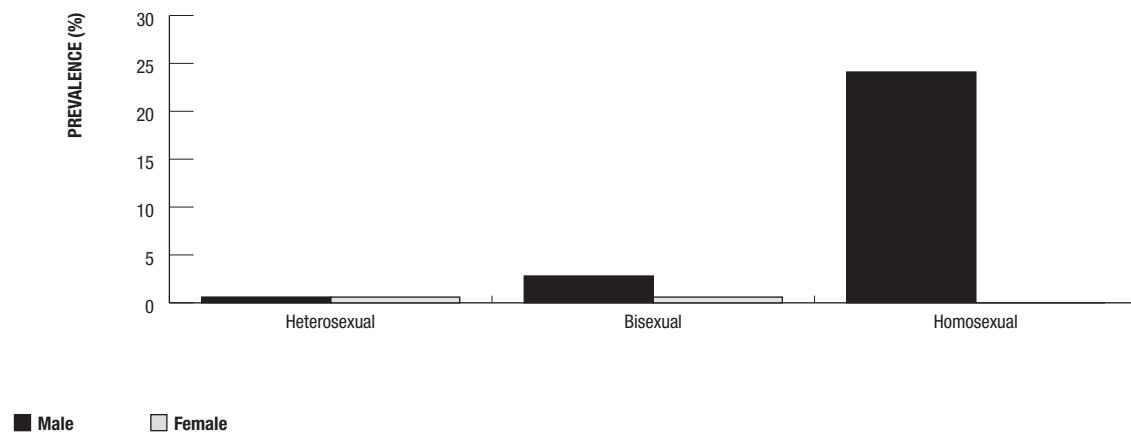


High rates of sexually transmissible infections other than HIV infection were recorded among Indigenous people in the Northern Territory, South Australia and Western Australia. In other States and Territories, interpretation of trends in diagnoses of sexually transmissible infections in Indigenous people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

People who have injected drugs

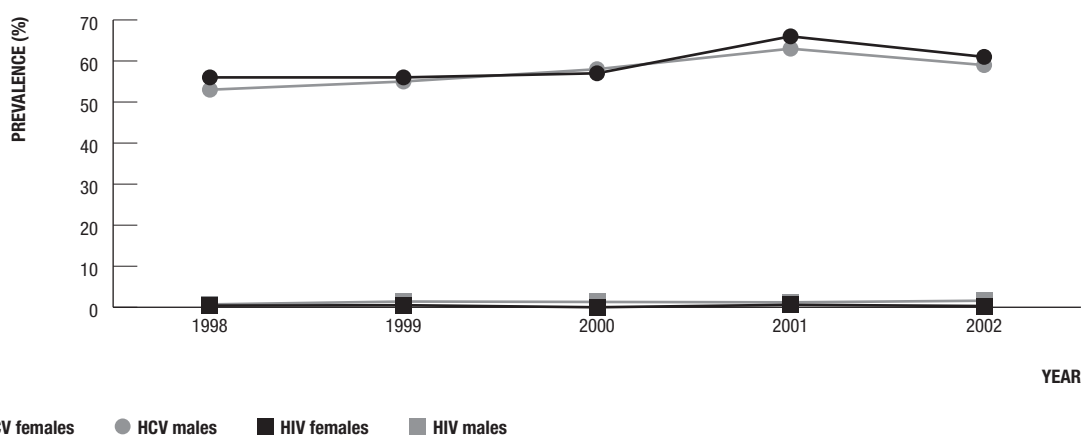
Approximately 7% of HIV diagnoses in Australia have been in people with a history of injecting drug use, of whom about half were men who also reported a history of homosexual contact.

Figure 25 HIV prevalence in people seen at needle and syringe programs, 2002, by sexual orientation



HIV prevalence among people attending needle and syringe programs has remained low (around 1% in 2000 – 2002) except among men who identified themselves as homosexual (Figure 25). HIV prevalence has also remained low (less than 0.5%) in both men and women seen at metropolitan sexual health centres who identified themselves as injecting drug users (Figure 33).

Figure 26 HIV and hepatitis C prevalence¹ in needle and syringe programs by year and sex

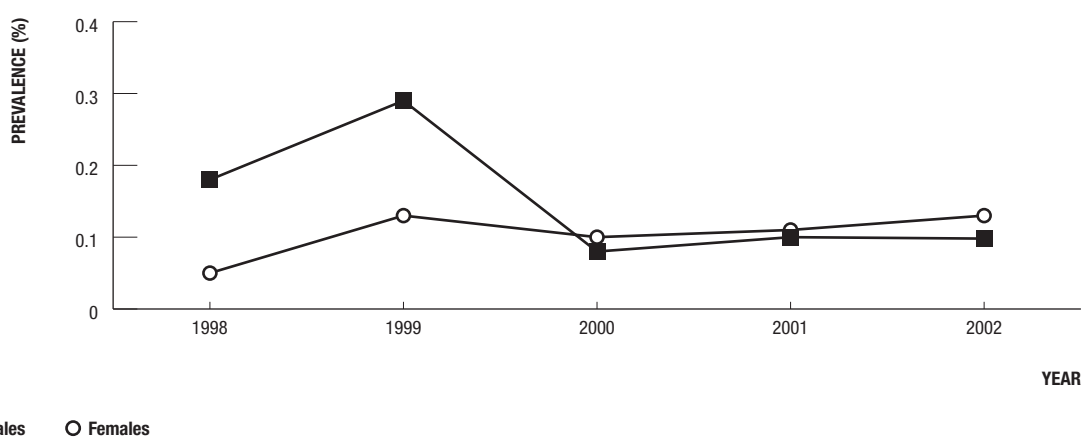


¹ HIV and hepatitis C prevalence adjusted by estimated prevalence of injecting drug use in each State/Territory

In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs continued to be reported at high levels in 2002 (Figure 26). Hepatitis C prevalence among males and females reporting less than three years of drug injection has steadily increased from 17% in 1998 to 38% in 2002.

The percentage of injecting drug users seen at needle and syringe programs who reported re-use of a syringe after someone else in the last month declined among women from 21% in 1998 to 16% in 2002 and remained stable among men at 16%.

Figure 27 HIV prevalence in prison entrants by year and sex



HIV prevalence among people entering Australian prisons in 1998 – 2002 has been steady, at levels of less than 0.5% (Figure 27). Prevalence differed little between male and female entrants but was higher in New South Wales than in other States and Territories.

Heterosexual transmission of HIV infection

In 1998 – 2002, transmission was attributed to heterosexual contact in 21% of new HIV diagnoses. Among 557 cases attributed to heterosexual contact for which detailed information on exposure history was available, 36% were in people 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%). Twenty two percent of cases were attributed to heterosexual contact with a partner from a high prevalence country (Figure 28). The sexual partner's history of exposure to HIV was not specified in 20% of cases attributed to heterosexual contact. Among heterosexually acquired cases, country of birth of the person was reported as Australia in 39%, South East Asia in 22% and sub-Saharan Africa in 23% (Figure 29).

Figure 28 HIV infection attributed to heterosexual contact, 1998 – 2002, by exposure category

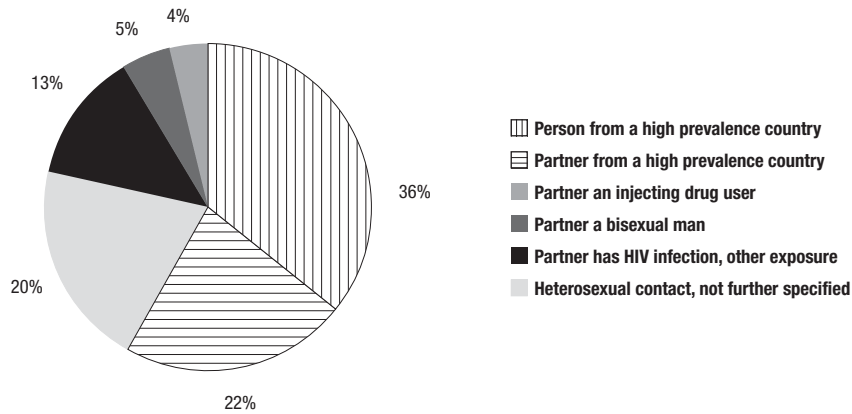
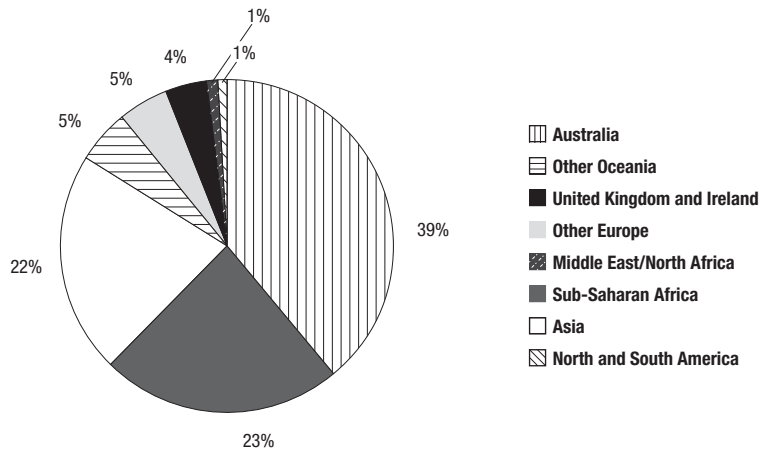
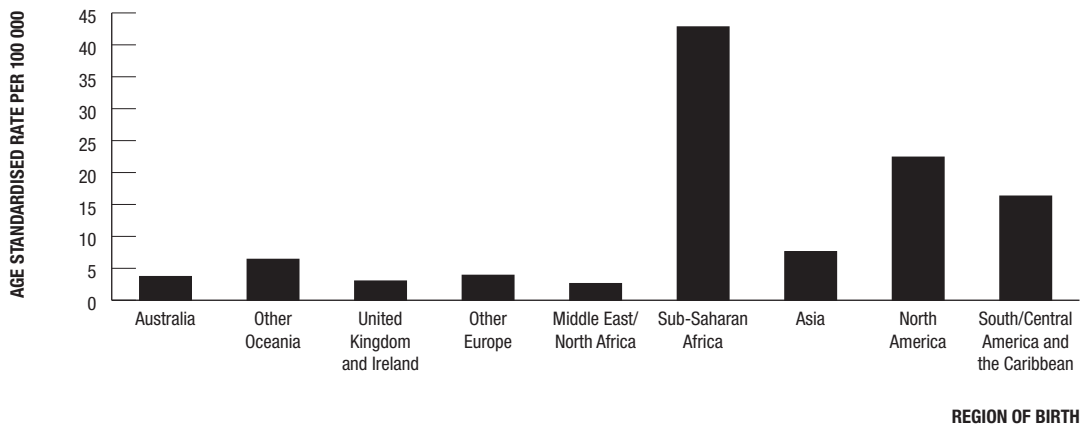


Figure 29 HIV infection attributed to heterosexual contact, 1998 – 2002, by region of birth



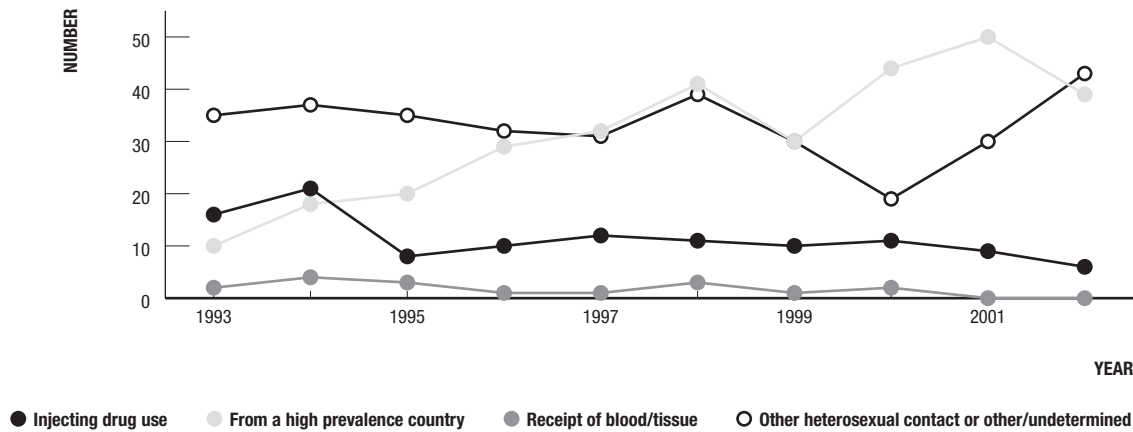
In 2002, the highest rate of HIV diagnosis, among people living in Australia for at least three months prior to diagnosis, was in people born in countries in sub-Saharan Africa (Figure 30).

Figure 30 HIV diagnoses, 2002, by country/region of birth



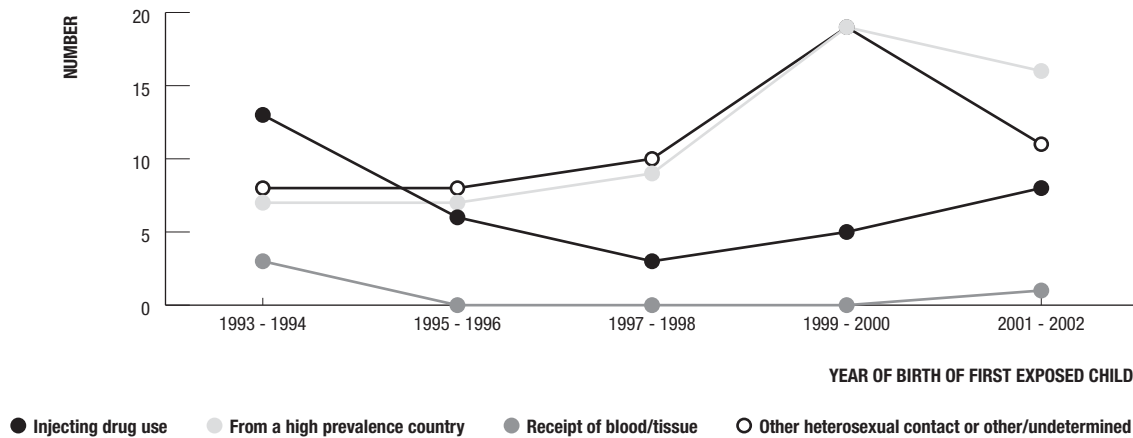
The annual number of HIV diagnoses among women has remained stable over the past 10 years, at around 60 – 90 diagnoses per year (Figure 31). An increasing number of HIV diagnoses among women, and in the subgroup of women who have had perinatally exposed children (Figure 32), was associated with heterosexual contact in a high prevalence country or heterosexual contact with a partner from a high prevalence country.

Figure 31 HIV diagnoses in women by year and exposure category¹



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

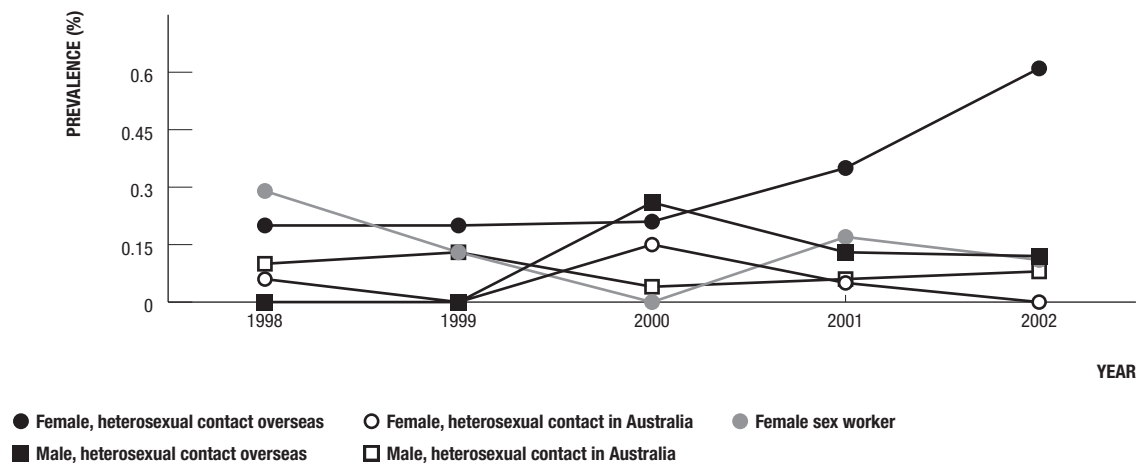
Figure 32 Women with HIV infection who have had children by year and HIV exposure category¹



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

A modest increase in HIV prevalence has recently been documented among women who report a history of heterosexual contact overseas, who were seen through a network of sexual health clinics in Australia.

Figure 33 HIV prevalence among heterosexually active people seen at sexual health clinics by year, sex and HIV exposure category



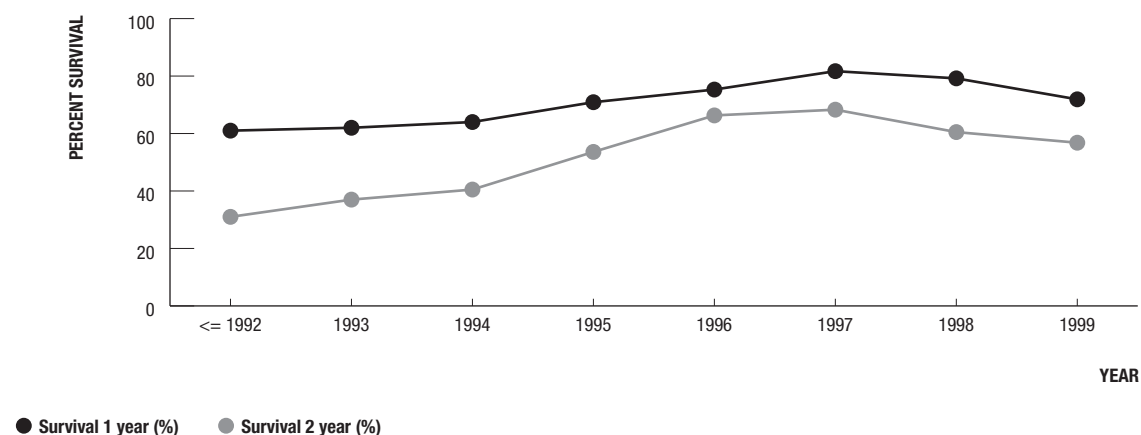
Among men and women attending the sexual health clinics with a history of heterosexual contact only in Australia, HIV prevalence has remained at less than 0.3%, with no evidence of an increase in HIV prevalence over this time. HIV prevalence has also remained low among women self-identifying as sex workers, with or without a reported history of injecting drug use (Figure 33). A recently completed population based survey of heterosexually active men and women in Australia indicated that 76.7% of women and 70.3% of men reported unprotected vaginal intercourse with their regular partner whereas less than 5% of men and women reported unprotected vaginal intercourse with casual partners (Smith *et al* 2003).

Levels of HIV infection in blood donors, who undergo a screening interview to exclude people at higher risk of a number of transmissible agents, provide some information on HIV prevalence in the lower risk segment of the population (Figure 13). 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.

Illness and mortality in people with HIV infection and viral hepatitis

Evidence of the benefits of improved therapy for HIV infection, introduced in mid-1996, has come from the substantial increases in survival following the diagnosis of AIDS (Figure 34). Median survival among people diagnosed with AIDS increased from 17.4 months in 1993 to 38.4 months in 1999.

Figure 34 Survival following AIDS



The impact of improved HIV therapy in delaying disease progression is further demonstrated by the sharp decline in the number of AIDS cases for which HIV diagnosis had taken place at least three months earlier (Figure 35). In comparison, there has been no reduction in the number of cases for which HIV diagnosis occurred within the preceding three months.

Figure 35 AIDS diagnoses, 1993 – 2002, by year and timing of HIV diagnosis

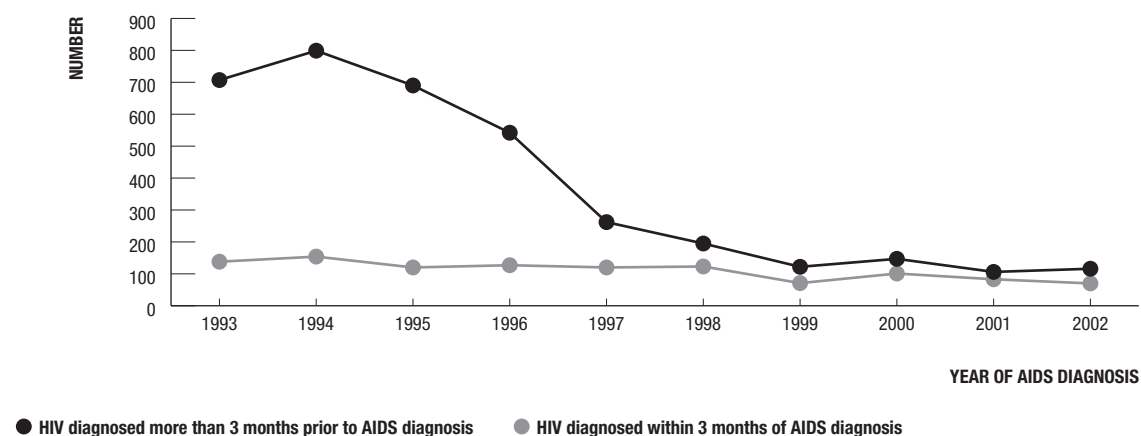
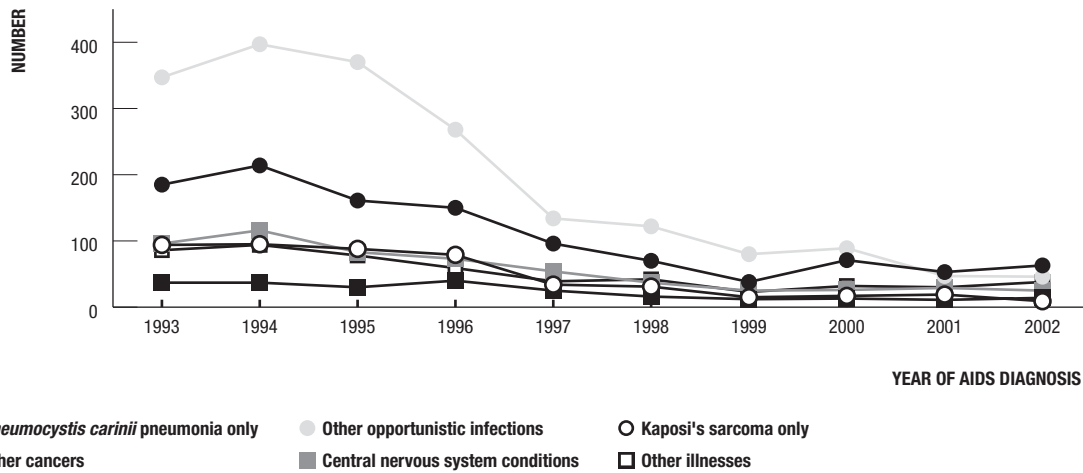


Figure 36 AIDS diagnoses, 1993 – 2002, by AIDS defining illness and year



These trends have led to a doubling since the mid 1990s in the proportion of new AIDS cases in people with late HIV diagnosis, with now 40% of cases having undiagnosed HIV infection until around the time of AIDS diagnosis. *Pneumocystis carinii* pneumonia (PCP) was the most common AIDS defining illness among AIDS cases diagnosed in 2002. In 1998 – 2002, 52% of cases with PCP were cases of late HIV presentation (Figure 36).

Late HIV presentation has disproportionately affected men and women with a history of heterosexual contact and those with an undetermined exposure history (Figure 37). 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 38), suggesting differences in awareness of HIV infection or access to health services.

Figure 37 AIDS diagnoses, 1998 – 2002, by late HIV presentation and exposure category

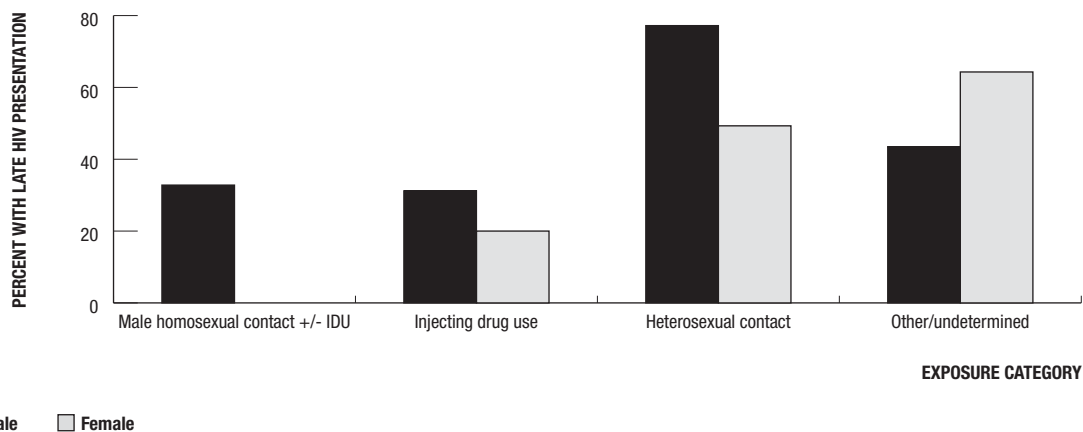
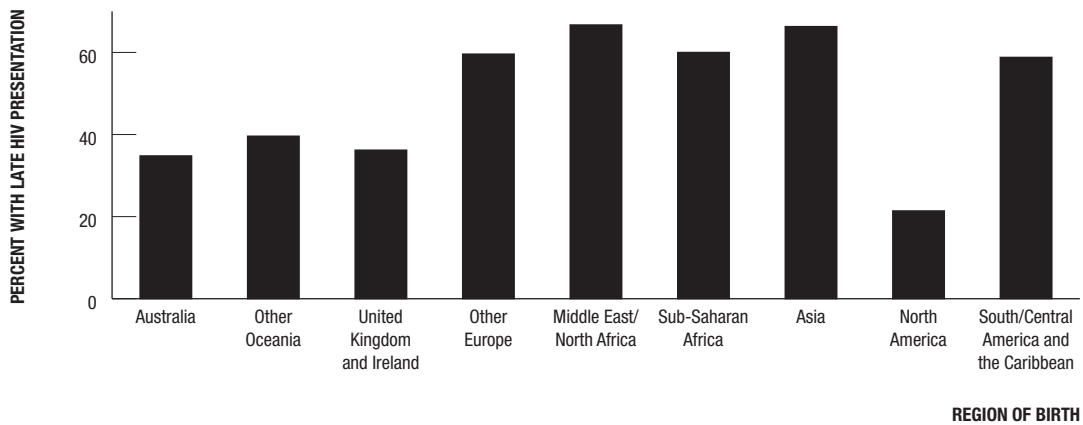


Figure 38 AIDS diagnoses, 1998 – 2002, by late HIV presentation and region of birth



The estimated numbers of people living with AIDS, and the number of people living with a CD4+ cell count of less than 500/ μ l and without AIDS, are projected to gradually increase through the year 2006. The number of people living with a CD4+ cell count of more than 500/ μ l is expected to remain stable.

There is no comprehensive registry of advanced illness related to hepatitis B and C. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 151 people who had a liver transplantation in 2002, 41 (27.2%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 10% of people having liver transplantation (Table 2.3.1). The number of people living with hepatitis C-related cirrhosis was projected to increase from 6,700 in 2002 to 9,500 in 2006.

Patterns of treatment for HIV and hepatitis C infection

The Australian HIV Observational Database indicated that 69% of 1,835 people under follow up in 2002 were receiving triple combination antiretroviral treatment (Figure 39). Viral load was undetectable and median CD4+ cell count was 500 or greater for more than 50% of people reported to the Australian HIV Observational Database from the second half of 2000 (Figure 40).

Figure 39 First treatment among antiretroviral naïve people enrolled on the Australian HIV Observational Database

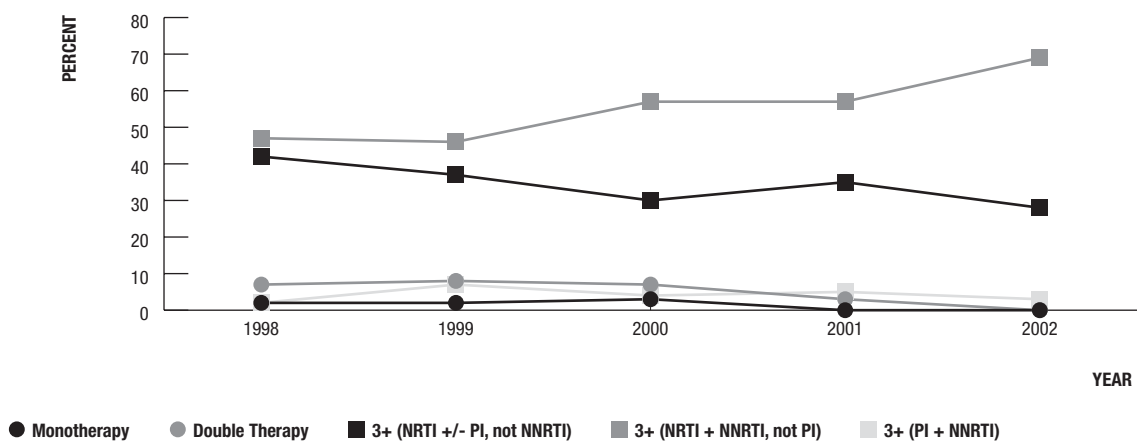
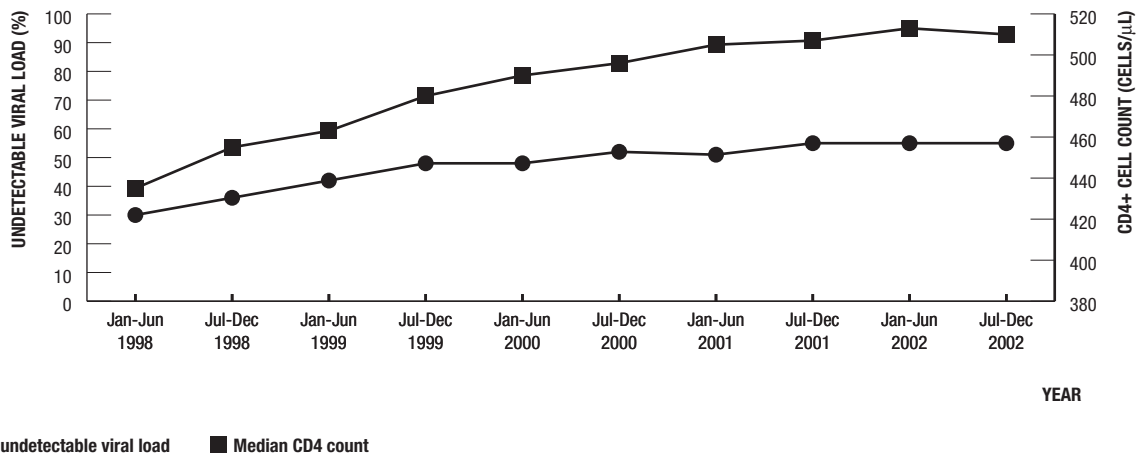
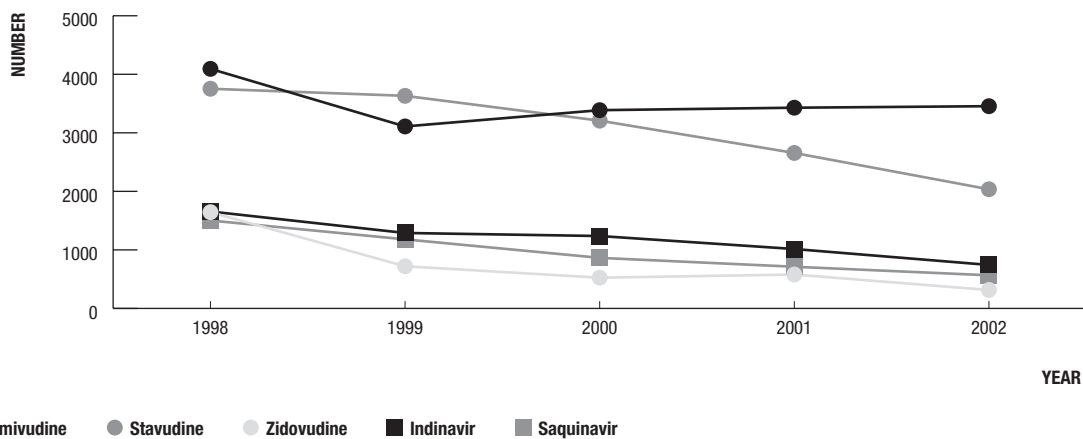


Figure 40 HIV viral load and CD4+ cell count among people enrolled on the Australian HIV Observational Database



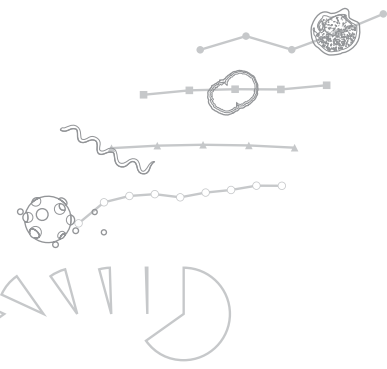
Use of combination antiretroviral therapy by gay and other homosexually active men participating in the Gay Community Periodic Surveys in Sydney and Melbourne had increased slightly from around 66% in 2001 to 68 – 70% in 2002. Around 70% of people enrolled in Positive Health in 2002 – 2003 also reported use of antiretroviral treatment for HIV infection.

Figure 41 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 for HIV infection has gradually increased from 6,059 in 1998 to 6,823 during 2002. Lamivudine and stavudine were the most frequently prescribed nucleoside analogue reverse transcriptase inhibitors prescribed in 1998 – 2002. The most commonly prescribed protease inhibitors in 2002 were tenofovir (862 people) and ritonavir (771 people) (Figure 41).

In 2002, combination treatment with ribavirin and interferon was prescribed for 1,640 people with hepatitis C infection.



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1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

Table 1.1.1 Characteristics of AIDS cases by year¹. 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 ¹
	≤93	94	95	96	97	98	99	00	01	02	
Total cases	5 061	953	810	669	382	318	193	248	189	195	9 018
Males (%)	96.1	94.9	95.3	95.1	91.9	93.1	88.6	90.7	88.9	92.8	95.0
Median age (years)											
M	37	37	37	37	37	39	39	39	40	41	38
F	33	37	31	35	34	32	35	34	34	36	33
Late HIV diagnosis (%)											
M	–	15.6	14.2	19.0	30.5	38.2	38.0	40.0	41.1	40.3	24.0
F	–	28.9	28.6	18.2	41.9	47.6	28.6	47.8	65.0	46.2	36.4
State/Territory (%)											
ACT	1.1	1.5	1.1	1.3	0.0	1.6	0.0	1.2	0.0	1.0	1.1
NSW	59.2	57.8	58.4	54.7	51.8	53.8	57.0	48.0	41.8	38.0	57.0
NT	0.4	0.3	0.4	0.1	0.8	0.9	1.0	0.4	0.5	0.5	0.4
QLD	9.2	10.3	12.5	11.5	15.7	12.0	16.6	16.1	15.3	22.0	10.9
SA	4.1	5.2	3.7	4.8	6.3	6.0	5.2	3.2	5.3	7.7	4.5
TAS	0.6	0.5	0.2	1.1	0.5	0.9	0.0	0.4	0.5	1.0	0.6
VIC	20.7	20.0	20.0	20.8	20.9	20.1	17.6	24.6	25.9	23.1	20.8
WA	4.7	4.3	3.7	5.7	3.9	4.7	2.6	6.0	10.6	6.7	4.7
HIV exposure category (%)²											
Male homosexual contact	85.2	83.4	81.0	80.3	75.4	67.9	65.1	67.5	70.0	71.4	81.8
Male homosexual contact and injecting drug use	4.2	5.0	5.8	5.8	3.9	3.0	5.7	5.6	2.8	5.5	4.5
Injecting drug use ³	2.4	3.1	3.6	3.6	5.0	8.1	5.7	6.5	4.0	3.8	3.2
Heterosexual contact	3.7	5.7	6.4	8.2	14.1	18.6	22.3	18.2	20.9	17.6	6.8
Haemophilia/coagulation disorder	1.7	1.1	1.9	1.1	1.1	0.3	0.6	1.3	0.6	1.1	1.5
Receipt of blood/tissue	2.6	1.0	0.8	0.9	0.3	1.4	0.6	0.4	0.6	0.5	1.8
Mother with/at risk for HIV infection	0.2	0.7	0.5	0.0	0.3	0.7	0.0	0.4	1.1	0.0	0.3
Other/undetermined	2.7	3.3	4.1	5.1	5.2	6.9	9.3	6.9	6.3	6.7	3.7
AIDS defining condition (%)											
<i>Pneumocystis carinii</i> pneumonia (PCP)	31.3	22.5	19.9	22.4	25.1	22.0	19.7	28.6	28.0	32.3	27.7
Kaposi's sarcoma (KS)	13.0	10.0	10.9	11.8	8.9	9.7	7.8	6.9	10.1	4.6	11.6
PCP and other (not KS)	6.2	2.4	4.2	4.3	7.1	6.9	8.8	7.3	9.0	9.2	5.8
Oesophageal candidiasis	7.5	14.2	16.3	14.6	10.2	10.1	12.4	11.7	5.8	11.3	10.0
<i>Mycobacterium avium</i>	4.4	5.0	7.1	6.6	3.7	4.4	3.1	4.4	2.6	0.5	4.7
HIV wasting disease	3.8	7.3	8.3	5.1	6.8	10.4	13.0	6.4	4.2	4.6	5.3
Other conditions	33.8	38.6	33.3	35.1	38.2	36.5	35.2	34.7	40.2	37.4	34.9

1 Not adjusted for reporting delay.

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

3 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
		≤93	94	95	96	97	98	99	00 ¹	01 ¹	02 ¹	
ACT	M	55	13	7	7	0	4	0	2	0	3	91
	F	2	1	2	2	0	1	0	1	0	0	9
NSW	M	2 888	529	457	348	189	160	96	106	76	91	4 940
	F	102	20	15	18	9	10	14	15	7	3	213
NT	M	20	3	3	1	3	3	2	1	1	1	38
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	441	95	96	74	50	36	30	38	29	48	937
	F	22	3	5	3	10	2	2	3	1	4	55
SA	M	196	45	29	31	23	16	8	8	8	16	380
	F	12	5	1	1	1	3	2	0	3	3	31
TAS	M	26	5	2	7	2	2	0	1	1	2	48
	F	2	0	0	0	0	1	0	0	0	1	4
VIC	M	1 012	178	150	133	73	62	30	59	45	53	1 795
	F	32	12	11	6	7	2	3	3	6	4	86
WA	M	224	36	28	35	11	13	5	14	18	14	398
	F	12	4	1	3	4	2	0	1	3	2	32
Total²		5 061	953	810	669	382	318	193	252	199	246	9 083

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 diagnoses										Total
		≤93	94	95	96	97	98	99	00 ¹	01 ¹	02 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact		4 194	769	629	510	273	201	114	159	131	163	7 143
Male homosexual contact and injecting drug use		205	46	45	37	14	9	10	13	5	13	397
Injecting drug use ²	M	73	19	20	18	11	19	6	12	5	9	192
	F	46	10	8	5	7	5	4	3	2	0	90
Heterosexual contact	M	112	27	30	31	30	42	24	26	24	29	375
	F	71	26	20	21	21	13	15	17	15	13	232
Haemophilia/coagulation disorder	M	74	10	15	7	4	1	1	3	1	2	118
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	66	5	3	2	0	2	0	0	0	0	78
	F	48	3	3	4	1	2	1	1	1	1	65
Health care setting	M	1	0	0	0	0	0	0	0	0	0	1
	F	1	1	1	0	0	0	0	0	0	0	3
Other/undetermined	M	114	25	29	31	19	20	16	16	12	13	295
	F	7	1	0	3	1	1	1	1	0	2	17
Total adults/adolescents³		5 030	946	806	669	381	316	193	251	197	246	9 035
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	7	3	1	0	0	2	0	0	0	0	13
	F	6	3	3	0	1	0	0	1	2	0	16
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	11	0	0	0	0	0	0	0	0	0	11
	F	2	1	0	0	0	0	0	0	0	0	3
Total children		31	7	4	0	1	2	0	1	2	0	48
Total³		5 061	953	810	669	382	318	193	252	199	246	9 083

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

2 Excludes male 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
		≤93	94	95	96	97	98	99	00 ¹	01 ¹	02 ¹	
ACT	M	40	13	7	4	1	0	1	3	2	0	71
	F	2	0	0	0	0	0	1	1	0	0	4
NSW	M	1 996	402	338	263	117	67	61	71	39	43	3 397
	F	67	17	20	5	6	1	1	2	3	3	125
NT	M	14	3	3	2	1	1	0	0	1	1	26
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	296	71	70	66	28	24	13	14	13	15	610
	F	14	5	4	4	1	2	1	2	3	1	37
SA	M	118	31	33	25	7	13	4	5	7	9	252
	F	7	4	2	1	0	1	0	1	0	2	18
TAS	M	18	3	2	3	1	2	1	0	0	1	31
	F	1	1	0	0	0	0	0	0	0	0	2
VIC	M	734	156	140	109	60	37	35	27	20	12	1 330
	F	14	7	13	5	6	3	2	1	6	0	57
WA	M	160	30	21	26	12	4	6	6	4	3	272
	F	6	4	1	2	3	1	0	1	2	1	21
Total²		3 496	753	655	515	245	156	127	134	100	91	6 272

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

Exposure category	Sex	Year of death following AIDS										Total
		≤93	94	95	96	97	98	99	00 ¹	01 ¹	02 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact		2 967	592	511	399	183	115	89	92	63	66	5 077
Male homosexual contact and injecting drug use		120	42	32	28	17	9	7	6	10	4	275
Injecting drug use ²	M	39	8	17	15	7	5	7	8	5	3	114
	F	28	5	8	4	5	0	0	1	1	1	53
Heterosexual contact	M	55	26	17	25	6	6	8	8	2	7	160
	F	31	22	26	11	8	5	4	6	9	6	128
Haemophilia/coagulation disorder	M	46	13	9	10	4	0	4	3	1	1	91
	F	1	2	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	57	4	4	2	1	0	0	0	0	0	68
	F	38	5	4	1	1	1	1	0	3	0	54
Health care setting	M	0	0	1	0	0	0	0	0	0	0	1
	F	0	1	1	0	0	0	0	0	0	0	2
Other/undetermined	M	73	22	21	19	9	13	6	9	4	3	179
	F	7	0	0	1	1	1	0	1	0	0	11
Total adults/adolescents³		3 471	748	652	515	244	155	127	134	98	91	6 235
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	3	2	2	0	0	0	0	0	1	0	8
	F	5	2	0	0	1	1	0	0	1	0	10
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	11	0	0	0	0	0	0	0	0	0	11
	F	1	1	1	0	0	0	0	0	0	0	3
Total children		25	5	3	0	1	1	0	0	2	0	37
Total³		3 496	753	655	515	245	156	127	134	100	91	6 272

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, 1993 – 2002, and age standardised annual incidence per 100 000 population¹ by year of AIDS diagnosis and region of birth

Region/ Country of birth	1993 – 1997			1998 – 2002		
	Number	Percent	Age standardised incidence	Number	Percent	Age standardised incidence
Australia	2 667	72.9	4.0	775	67.8	1.2
Overseas born	878	24.0	4.1	335	29.3	1.6
<i>Other Oceania</i>	177	4.8	9.4	53	4.6	2.8
<i>United Kingdom and Ireland</i>	199	5.4	3.5	47	4.1	0.8
<i>Other Europe</i>	206	5.6	3.8	57	5.0	1.0
<i>Middle East/</i>						
<i>North Africa</i>	21	0.6	2.2	6	0.5	0.6
<i>Sub-Saharan Africa</i>	48	1.3	8.9	55	4.8	10.2
<i>Asia</i>	120	3.3	2.8	86	7.5	2.0
<i>North America</i>	64	1.8	17.2	14	1.2	2.8
<i>South/Central America and the Caribbean</i>	43	1.2	10.7	17	1.5	4.7
Total with a reported country of birth	3 545	96.9	4.1	1 110	97.1	1.3
Not reported	114	3.1	33	2.9		
Total	3 659	100.0	4.1	1 143	100.0	1.3

1 Population estimates by country of birth and age group 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 02 ¹	Alive at 1 Jan 02 ²	Left Australia ³	Median survival (months)		% Survival	
					Other ⁴		1 year	2 year
≤92	4 216	3 925	11	46	234	16.0	61.0	31.0
93	845	695	3	4	143	17.4	62.0	37.0
94	953	659	8	4	282	19.6	64.0	40.5
95	810	428	22	0	360	27.6	70.9	53.6
96	669	239	22	0	408	49.2	75.3	66.3
97	382	93	13	0	276	52.8	81.7	68.3
98	318	87	10	0	221	34.8	79.2	60.5
99	193	35	12	1	145	38.4	71.9	56.8
00	248	46	17	0	185	22.8	67.9	41.8
01	189	30	36	0	123	–	–	–
02	195	21	174	0	–	–	–	–
Total	9 018	6 258	328	55	2 377	18.0	64.3	39.0

1 Deaths occurring prior to 1 January 2003.

2 Last medical contact on or after 1 January 2002.

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

4 Last medical contact prior to 1 January 2002.

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	%
	≤93		94 – 96		97 – 99		00 – 02		Cumulative to 31 Dec 02			
	M	F	M	F	M	F	M	F	M	F		
<i>Pneumocystis carinii</i> pneumonia (PCP)	1 539	37	495	30	192	12	171	16	2 397	95	2 498	27.7
Kaposi's sarcoma (KS)	655	4	261	1	80	0	45	0	1 041	5	1 047	11.6
KS and PCP alone	47	0	12	0	2	0	1	0	62	0	62	0.7
KS and other (not PCP)	97	0	32	0	9	0	6	0	144	0	144	1.6
PCP and other (not KS)	296	17	81	4	56	9	45	8	478	38	521	5.8
Oesophageal candidiasis	360	16	353	12	86	9	55	7	854	44	899	10.0
Toxoplasmosis	177	6	64	4	24	1	24	1	289	12	304	3.4
Cryptococcosis	180	5	87	4	34	4	20	0	321	13	336	3.7
Non-Hodgkin's lymphoma	177	10	101	5	50	1	36	1	364	17	381	4.2
<i>Mycobacterium avium</i>	212	13	133	16	33	1	16	1	394	31	426	4.7
Herpes simplex virus	116	11	40	2	15	2	5	1	176	16	193	2.1
HIV encephalopathy	132	3	102	6	46	6	32	2	312	17	329	3.6
Cytomegalovirus	188	2	98	3	18	1	8	2	312	8	322	3.6
HIV wasting disease	170	22	163	6	75	9	32	1	440	38	480	5.3
Cryptosporidiosis	106	3	69	2	10	1	5	0	190	6	196	2.2
<i>Mycobacterium tuberculosis</i>	33	4	9	2	5	0	6	2	53	8	61	0.7
Pulmonary tuberculosis ²	2	0	15	0	21	8	11	3	49	11	60	0.7
Recurrent pneumonia ²	7	1	25	1	17	1	6	1	55	4	60	0.7
Cervical cancer ²	–	2	–	1	–	2	–	1	–	6	6	0.1
Other single diagnoses	53	6	32	4	7	0	13	1	105	11	116	1.3
Other multiple diagnoses	315	22	140	10	38	6	37	8	530	46	577	6.4
Total¹	4 862	184	2 312	113	818	73	574	56	8 566	426	9 018	100.0

1 Includes 26 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										
	≤93	94	95	96	97	98	99	00	01	02	Total ²
Total cases	15 044	1 017	930	918	821	759	724	745	759	823	22 548
Males (%)	93.6	90.8	91.9	91.4	89.4	87.1	89.6	89.3	87.7	88.3	92.3
Median age (years)											
Males	32	32	34	34	34	35	35	35	35	35	33
Females	29	28	30	28	30	30	28	30	29	32	29
State/Territory (%)											
ACT	1.2	1.4	1.9	0.8	1.0	1.0	1.1	1.5	0.9	0.6	1.2
NSW	60.3	49.8	57.9	50.0	53.0	53.5	52.8	48.3	44.8	47.1	57.2
NT	0.5	0.5	0.2	0.5	1.3	1.6	0.7	0.4	0.5	1.0	0.6
QLD	8.9	15.9	11.9	16.7	13.8	13.8	17.3	15.3	13.7	15.8	10.9
SA	3.5	3.7	3.3	5.0	4.1	4.6	3.0	3.1	5.7	3.2	3.6
TAS	0.4	0.2	0.6	0.3	0.0	0.4	0.4	0.0	0.6	0.6	0.4
VIC	20.4	21.2	17.6	20.5	21.9	18.4	19.2	25.2	27.3	26.5	20.9
WA	4.8	7.3	6.5	6.2	4.9	6.6	5.5	6.2	6.5	5.2	5.2
HIV exposure category (%)³											
Male homosexual contact	81.2	74.4	73.7	75.5	72.8	65.5	65.5	68.2	66.3	71.3	77.4
Male homosexual contact and injecting drug use	3.6	6.4	5.2	4.0	4.8	4.7	6.3	3.4	5.3	3.5	4.1
Injecting drug use ⁴	4.7	3.3	4.5	2.8	3.1	3.4	5.5	4.4	5.7	2.2	4.4
Heterosexual contact	6.1	13.7	15.1	16.7	18.2	25.2	21.8	23.6	22.1	22.6	11.0
<i>Partner with/at risk of HIV infection</i>	<i>42.6</i>	<i>59.8</i>	<i>60.8</i>	<i>70.3</i>	<i>67.6</i>	<i>76.7</i>	<i>69.2</i>	<i>82.4</i>	<i>78.1</i>	<i>69.9</i>	<i>61.0</i>
<i>Not further specified</i>	<i>57.4</i>	<i>40.2</i>	<i>39.2</i>	<i>29.7</i>	<i>32.4</i>	<i>23.3</i>	<i>30.8</i>	<i>18.6</i>	<i>21.9</i>	<i>30.1</i>	<i>39.0</i>
Haemophilia/coagulation disorder	2.4	0.0	0.1	0.0	0.0	0.1	0.5	0.0	0.1	0.0	1.6
Receipt of blood/tissue	1.8	0.8	0.4	0.2	0.1	0.6	0.3	0.0	0.0	0.0	1.2
Mother with/at risk of HIV infection	0.2	1.0	0.8	0.8	0.9	0.4	0.1	0.4	0.4	0.3	0.4
Health care setting	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Other/undetermined	20.9	5.1	7.5	9.7	9.1	8.0	9.5	8.3	7.6	10.8	16.7

1 Not adjusted for multiple reporting.

2 Total includes 8 cases 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		Year of HIV diagnosis										Total
		≤93	94	95	96	97	98	99	00	01	02	
ACT	M	153	12	16	6	5	6	5	10	6	5	224
	F	13	2	2	1	3	2	3	1	1	0	28
NSW	M	7 322	460	519	410	338	339	314	312	293	305	10 612
	F	397	35	34	35	27	42	30	29	31	29	689
NT	M	67	5	2	5	7	11	4	1	3	4	109
	F	3	0	0	0	4	1	1	1	0	4	14
QLD	M	1 238	150	103	139	93	88	114	93	85	117	2 220
	F	69	10	10	11	19	13	17	14	17	13	193
SA	M	478	35	29	41	26	28	16	19	34	21	727
	F	37	4	1	4	6	6	3	2	9	5	77
TAS	M	62	1	6	3	2	2	2	5	5	3	91
	F	2	1	0	0	0	1	1	0	0	2	7
VIC	M	2 738	181	146	179	171	122	120	168	182	193	4 200
	F	130	18	10	14	13	9	12	20	23	23	272
WA	M	655	56	46	46	33	28	36	36	36	30	1 002
	F	43	15	14	9	7	20	6	9	11	13	147
Total	M	12 000	839	816	817	649	562	612	581	600	715	18 191
	F	694	85	71	74	79	94	73	76	92	89	1 427
Total		12 733	926	888	893	729	657	687	660	693	808	19 674

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, 1993 – 2002, 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
		93	94	95	96	97	98	99	00	01	02	
Total cases		206	214	220	168	157	151	171	199	206	241	1 933
Males (%)		95.6	92.5	95.5	95.2	94.3	97.4	94.2	94.0	92.2	94.6	94.5
Median age (years)	M	29	29	31	31	32	31	32	32	34	34	32
	F	27	27	35	22	32	19	27	25	34	38	28
State/Territory												
ACT	M	1	1	6	1	0	2	1	6	2	1	21
	F	0	1	0	0	0	0	0	0	0	0	1
NSW	M	136	111	123	83	67	70	93	84	92	115	974
	F	5	7	3	2	2	0	2	3	7	2	33
NT	M	2	1	0	0	2	2	1	1	3	1	13
	F	0	0	0	0	1	0	0	1	0	0	2
QLD	M	5	18	26	19	19	21	27	21	23	35	214
	F	1	2	2	2	0	0	3	2	3	3	18
SA	M	20	4	11	6	9	6	6	6	10	5	83
	F	0	0	0	0	2	0	0	1	1	0	4
TAS	M	0	1	1	0	0	0	1	0	2	1	6
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	29	59	37	41	47	38	30	59	51	66	457
	F	2	5	3	2	3	1	2	3	3	0	24
WA	M	4	3	6	10	4	8	3	10	7	4	59
	F	0	1	1	2	0	3	1	1	2	5	16
HIV exposure category												
Male homosexual/bisexual contact	M	173	168	183	146	130	124	130	159	164	207	1 584
Male homosexual/bisexual contact and injecting drug use	M	6	16	11	5	10	13	14	5	9	8	97
Injecting drug use ³	M	4	4	6	2	2	1	6	7	5	0	37
	F	2	2	1	1	0	2	2	3	2	0	15
Heterosexual contact	M	11	6	7	6	6	6	10	12	7	8	79
	F	6	11	8	7	6	2	6	8	13	9	76
Health care setting ⁴	M	0	1	0	0	0	0	0	0	0	0	1
	F	0	2	0	0	0	0	0	0	0	1	3
Other/undetermined	M	3	3	3	1	0	3	2	4	5	5	29
	F	0	1	0	0	2	0	0	0	1	0	4
Evidence of newly acquired infection												
Testing history only	M	120	105	93	85	69	70	79	76	89	95	881
	F	7	8	5	5	5	3	2	5	9	1	50
Illness only	M	21	36	58	26	37	35	37	62	45	49	406
	F	0	5	2	2	0	0	5	3	1	3	21
Testing history and illness	M	56	57	59	49	42	42	46	49	56	84	540
	F	1	3	2	1	3	1	1	3	6	6	27

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 8 people whose sex was reported as transgender.

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

4 'Health care setting' includes 3 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), 1998 – 2002, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

Characteristic	Sex	Year of HIV diagnosis				
		1998	1999	2000	2001	2002
State/Territory						
ACT	M	90 (6)	465 (4)	525 (10)	450 (4)	780 (3)
	F	195 (2)	850 (3)	920 (1)	190 (1)	– (0)
NSW	M	362 (180)	417 (184)	420 (214)	472 (178)	490 (201)
	F	323 (31)	280 (18)	372 (22)	174 (16)	430 (18)
NT	M	465 (10)	105 (4)	450 (2)	516 (4)	482 (4)
	F	520 (1)	530 (1)	300 (1)	– (0)	571 (4)
QLD	M	410 (83)	420 (95)	420 (90)	440 (78)	390 (104)
	F	310 (13)	410 (17)	355 (14)	430 (16)	580 (12)
SA	M	334 (27)	432 (17)	446 (19)	383 (32)	400 (19)
	F	233 (6)	121 (3)	207 (2)	157 (8)	330 (5)
TAS	M	866 (2)	543 (2)	– (0)	516 (1)	568 (2)
	F	12 (1)	250 (1)	– (0)	– (0)	184 (2)
VIC	M	360 (117)	400 (109)	437 (152)	426 (160)	485 (172)
	F	500 (9)	324 (10)	333 (16)	455 (20)	339 (13)
WA	M	400 (27)	334 (24)	324 (33)	255 (35)	393 (28)
	F	344 (19)	568 (5)	400 (9)	496 (10)	425 (13)
Exposure category						
Male homosexual contact ¹	M	432 (349)	467 (328)	446 (405)	484 (398)	500 (440)
Injecting drug use ²	M	435 (10)	300 (19)	380 (20)	330 (21)	406 (8)
	F	344 (7)	275 (3)	940 (3)	534 (6)	– (0)
Heterosexual contact	M	200 (75)	279 (63)	315 (77)	234 (59)	270 (67)
	F	352 (69)	410 (53)	360 (59)	345 (62)	415 (72)
Other/undetermined	M	127 (18)	286 (29)	104 (18)	93 (14)	225 (18)
	F	73 (6)	343 (2)	52 (3)	830 (3)	757 (2)
Newly acquired HIV infection status						
Diagnoses of newly acquired HIV infection ³	M	528 (129)	511 (127)	560 (164)	578 (149)	577 (195)
	F	610 (4)	680 (7)	660 (9)	442 (14)	625 (10)
Other HIV diagnoses	M	292 (323)	350 (312)	280 (356)	367 (343)	380 (338)
	F	316 (78)	320 (51)	335 (56)	336 (57)	358 (64)
Total⁴		370 (535)	407 (498)	417 (588)	439 (563)	453 (611)

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, 1992 – 2001, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis

	Year of HIV diagnosis										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Newly acquired HIV infection	154	206	214	220	168	157	151	172	199	207	1 848
AIDS											
Interval between HIV and AIDS diagnosis											
Less than 1 year	5	4	5	9	2	4	1	3	2	1	36
1 – 2 years	3	7	8	7	2	2	1	2	0	1	33
2 – 3 years	8	8	7	4	1	2	2	4	1	–	37
3 – 4 years	5	8	1	1	1	1	3	0	–	–	20
4 – 5 years	4	4	1	1	2	1	2	–	–	–	15
5 or more years	11	5	12	9	4	2	–	–	–	–	43
Total	36	36	34	31	12	12	9	9	3	2	184

Source: State/Territory health authorities

Table 1.2.6 Number of specimens tested for HIV antibody in public health laboratories, 1993 – 2002, by State/Territory and year of test

State/Territory	Year of HIV antibody test									
	1993	1994	1995	1996	1997	1998	1999	2000 ¹	2001 ¹	2002 ¹
ACT	10 767	10 300	9 368	7 053	7 044	8 293	6 976	5 762	5 446	5 712
NSW	346 652	344 903	300 944	270 735	286 701	299 434	324 126	311 904	328 295	357 526
NT	10 002	11 283	12 122	13 111	13 424	13 137	15 149	14 835	15 158	15 710
QLD	147 329	137 133	154 992	141 741	156 738	164 388	179 336	183 533	185 028	184 994
SA	82 521	77 628	69 054	76 098	74 640	80 586	76 987	76 275	77 219	77 597
TAS	12 873	14 000	12 628	13 192	11 347	11 883	12 243	13 152	12 714	12 574
VIC	163 497	132 100	108 230	119 360	94 846	113 342	161 600	160 611	177 949	202 682
WA	70 733	76 544	72 317	77 435	73 826	79 308	82 040	89 426	100 225	93 271
Total	844 374	803 891	739 655	718 725	718 566	770 371	858 457	855 498	902 034	950 066

¹ Estimated number of specimens tested for HIV antibody, adjusted for incomplete reporting.

Source: National Serology Reference Laboratory, Australia

1.3 National surveillance for HIV/AIDS in Indigenous people

Table 1.3.1 Characteristics of cases of newly diagnosed HIV infection in Indigenous people¹, 1993 – 2002, by year. Number of cases, median age and percent (number) of total cases by sex, newly acquired infection, State/Territory and HIV exposure category

Characteristic	Year of HIV diagnosis										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Total cases	18	20	21	19	15	27	9	15	13	23	180
Males (%)	77.8	75.0	61.9	78.9	73.3	66.7	66.7	92.9	53.8	52.2	69.3
Median age (years)	29	29	25	29	36	31	28	34	29	36	30
Newly acquired infection (%)	16.7 (3)	5.0 (1)	33.3 (7)	10.5 (2)	26.7 (4)	18.5 (5)	33.3 (3)	26.7 (4)	15.4 (2)	26.1 (6)	20.6(37)
State/Territory											
ACT	–	–	–	–	–	–	–	–	–	–	–
NSW	55.5(10)	35.0 (7)	42.9 (9)	21.1 (4)	26.7 (4)	29.6 (8)	55.6 (5)	40.0 (6)	23.1 (3)	21.7 (5)	33.9(61)
NT	5.6 (1)	15.0 (3)	4.7 (1)	5.2 (1)	33.3 (5)	14.8 (4)	0.0 (0)	6.7 (1)	7.7 (1)	8.7 (2)	10.6(19)
QLD	27.7 (5)	10.0 (2)	14.3 (3)	42.1 (8)	20.0 (3)	7.4 (2)	11.1 (1)	13.3 (2)	23.1 (3)	21.7 (5)	18.9(34)
SA	5.6 (1)	5.0 (1)	4.7 (1)	10.5 (2)	0.0 (0)	3.7 (1)	11.1 (1)	6.7 (1)	7.7 (1)	8.7 (2)	6.1(11)
TAS	5.6 (1)	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)	0.5 (1)
VIC	–	–	–	–	–	–	0.0 (0)	0.0 (0)	15.4 (2)	0.0 (0)	1.1 (2)
WA	0.0 (0)	35.0 (7)	33.3 (7)	21.1 (4)	20.0 (3)	44.4(12)	22.2 (2)	33.3 (5)	23.1 (3)	39.1 (9)	28.9(52)
HIV exposure category (number)											
Male homosexual/bisexual contact	61.1(11)	26.3 (5)	28.6 (6)	58.8(10)	60.0 (9)	29.2 (7)	25.0 (2)	46.7 (7)	38.5 (5)	17.4 (4)	38.2(66)
Male homosexual/bisexual contact and injecting drug use	0.0 (0)	26.3 (5)	19.0 (4)	5.9 (1)	6.7 (1)	12.5 (3)	12.5 (1)	6.6 (1)	0.0 (0)	4.3 (1)	9.8(17)
Injecting drug use ²	5.6 (1)	0.0 (0)	0.0 (0)	11.8 (2)	0.0 (0)	12.5 (3)	25.0 (2)	26.7 (4)	30.8 (4)	17.4 (4)	11.6(20)
Heterosexual contact	33.3 (6)	42.1 (8)	52.4(11)	23.5 (4)	33.3 (5)	41.7(10)	37.5 (3)	20.0 (3)	23.0 (3)	60.9(14)	38.7(67)
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)	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)	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)	4.1 (1)	0.0 (0)	0.0 (0)	7.7 (1)	0.0 (0)	1.7 (3)
Other/undetermined ³	0.0 (0)	5.0 (1)	0.0 (0)	10.5 (2)	0.0 (0)	11.5 (3)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	3.9 (7)

1 Information on Indigenous status was not available from ACT at 31 March 2003. 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 1.3.2 Characteristics of cases of AIDS in Indigenous people¹, 1993 – 2002, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis, State/Territory and HIV exposure category

Characteristic	Year of AIDS diagnosis										Total
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
Total cases	7	11	9	10	4	9	5	5	4	5	69
Males (%)	57.1	81.8	88.9	80.0	75.0	77.8	100.0	100.0	100.0	60.0	81.6
Median age (years)	36	32	31	30	38	34	37	37	43	37	34
Late HIV diagnosis (number)	28.6 (2)	9.1 (1)	11.1 (1)	10.0 (1)	25.0 (1)	44.4 (4)	40.0 (2)	80.0 (4)	25.0 (1)	40.0 (2)	27.5(19)
State/Territory											
ACT	–	–	–	–	–	–	–	–	–	–	–
NSW	28.6 (2)	45.4 (5)	77.8 (7)	20.0 (2)	50.0 (2)	33.3 (3)	60.0 (3)	20.0 (1)	50.0 (2)	20.0 (1)	40.6(28)
NT	14.3 (1)	18.2 (2)	0.0 (0)	10.0 (1)	0.0 (0)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	7.3 (5)
QLD	42.8 (3)	27.3 (3)	22.2 (2)	50.0 (5)	25.0 (1)	11.1 (1)	0.0 (0)	40.0 (2)	25.0 (1)	40.0 (2)	29.0(20)
SA	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	1.4 (1)
TAS	0.0 (0)	0.0 (0)	0.0 (0)	10.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.4 (1)
VIC	–	–	–	–	–	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.4 (1)
WA	14.3 (1)	9.1 (1)	0.0 (0)	10.0 (1)	25.0 (1)	33.3 (3)	20.0 (1)	40.0 (2)	25.0 (1)	40.0 (2)	18.8(13)
HIV exposure category (number)											
Male homosexual/ bisexual contact	42.9 (3)	54.5 (6)	66.7 (6)	30.0 (3)	33.3 (1)	37.5 (3)	20.0 (1)	100.0 (4)	75.0 (3)	40.0 (2)	48.5(32)
Male homosexual/bisexual 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)	0.0 (0)	0.0 (0)	15.2(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)	0.0 (0)	0.0 (0)	4.5 (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)	25.0 (1)	60.0 (3)	30.3(20)
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)	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)	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)	0.0 (0)	0.0 (0)	1.5 (1)
Other/undetermined ³	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (1)	11.1 (1)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	4.3 (3)

1 Information on Indigenous status was not available from ACT at 31 March 2003. 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

1.4 Assessment of self reported HIV exposure history

Table 1.4.1 Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1998 – 2002, 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	1998 – 2000			2001 – 2002			1998 – 2002		
	Number included	Number with returned questionnaire	Number with additional information	Number included	Number with returned questionnaire	Number with additional information	Number included	Number with returned questionnaire	Number with additional information
ACT	11	10	10	5	3	3	16	13	13
NSW	375	170	135	244	20	18	619	190	153
NT	11	11	11	8	8	8	19	19	19
QLD	109	81	79	74	53	53	183	134	132
SA	30	30	27	24	21	21	54	51	48
TAS	2	2	2	3	3	3	5	5	5
VIC	148	146	140	111	107	102	259	253	242
WA	73	64	61	54	49	46	127	113	107
Total	759	514	465	523	264	254	1 282	778	719

¹ Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (41), people whose medical condition limited reporting of an HIV exposure history (5) and people who were reported to have died (13).

Source: State/Territory health authorities

Table 1.4.2 Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1998 – 2002, 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	1998 – 2000			2001 – 2002			1998 – 2002		
	Number included	Number with returned questionnaire	Number with further information	Number included	Number with returned questionnaire	Number with further information	Number included	Number with returned questionnaire	Number with additional information
Injecting drug use	90	69	60	59	32	31	149	101	91
<i>Heterosexual</i>	60	56	52	42	27	26	102	83	78
<i>Not further specified</i>	30	13	8	17	5	5	47	18	13
Heterosexual contact	480	368	358	321	213	209	801	581	567
<i>From a high prevalence country</i>	166	131	129	119	72	72	285	203	201
<i>Partner from a high prevalence country</i>	103	83	81	59	43	41	162	126	122
<i>Other partner with/at risk of HIV infection</i>	97	73	70	59	49	49	156	122	119
<i>Not further specified</i>	114	81	78	84	49	47	198	130	125
Receipt of blood/tissue	8	4	4	1	1	1	9	5	5
Health care setting	0	0	0	1	1	1	1	1	1
Other/undetermined	181	73	43	141	17	12	322	90	55
Total	759	514	465	523	264	254	1 282	778	719

¹ Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (41), people whose medical condition limited reporting of an HIV exposure history (5) and people who were reported to have died (13).

Source: State/Territory health authorities

Table 1.4.3 Number of cases of newly diagnosed HIV infection, 1998 – 2002, by HIV exposure category reported on the questionnaire, year and sex

HIV exposure category documented on the questionnaire	1998		1999		2000		2001		2002		1998 – 2002		Total ¹
	M	F	M	F	M	F	M	F	M	F	M	F	
Injecting drug use	12	4	20	4	14	3	16	6	4	0	66	17	83
Heterosexual	10	3	14	4	13	3	13	6	4	0	54	16	70
Not further specified	2	1	6	0	1	0	3	0	0	0	12	1	13
Heterosexual contact¹	58	62	54	49	69	53	52	60	46	53	279	277	557
Sex with injecting drug user	0	4	1	2	0	6	1	1	3	3	5	16	21
Sex with bisexual male	–	6	–	5	–	2	–	7	–	7	–	27	27
From a high prevalence country	21	25	21	15	22	23	18	26	11	17	93	106	199
Sub-Saharan Africa	16	9	12	8	12	13	13	19	9	11	62	60	122
South East Asia	4	16	8	7	10	9	5	7	2	4	29	43	72
Other/not reported	1	0	1	0	0	1	0	0	0	2	2	3	5
Sex with a person from a high prevalence country	14	7	12	11	27	11	16	10	10	7	79	46	125
Sub-Saharan Africa	2	7	2	10	5	8	5	6	3	5	17	36	53
South East Asia	12	0	10	1	20	2	10	3	6	1	58	7	65
Other/not reported	0	0	0	0	2	1	1	1	1	1	4	3	7
Sex with person with medically acquired HIV	0	0	0	0	0	1	0	0	0	0	0	1	1
Sex with HIV infected person, exposure not specified	3	15	3	7	4	9	2	10	4	13	16	54	71
Not further specified	20	5	17	9	16	1	15	6	18	6	86	27	113
Receipt of blood/tissue	1	2	0	1	0	0	1	0	0	0	2	3	5
Health care setting	0	0	0	0	0	0	0	0	0	1	0	1	1
Other/undetermined	12	1	26	1	17	1	8	0	7	0	70	3	73
Total¹	83	69	100	55	100	57	77	66	57	54	417	301	719

1 Totals include 1 person whose sex was not reported.

Source: State/Territory health authorities

1.5 National surveillance for perinatal exposure to HIV

Table 1.5.1 Number and population rate¹ of perinatal exposure to HIV, 1993 – 2002, by State/Territory and year of birth

State/ Territory	1993 – 1994		1995 – 1996		1997 – 1998		1999 – 2000		2001 – 2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	1	11.3	2	22.7	1	12.2	3	36.1	0	0.0
NSW	21	11.8	12	6.9	9	5.2	22	12.7	23	13.6
NT	0	0.0	1	13.6	0	0.0	1	13.8	0	0.0
QLD	10	10.7	5	5.3	11	11.7	4	4.3	9	9.4
SA	2	5.1	1	2.6	0	0.0	0	0.0	3	8.7
TAS	0	0.0	1	7.7	1	8.3	0	0.0	0	0.0
VIC	4	3.1	1	0.8	2	1.6	10	8.5	4	3.4
WA	3	6.0	6	12.0	7	14.1	10	20.0	13	27.1
Total	41	7.9	29	5.7	31	6.2	50	10.0	52	10.5

1 Average annual rate of perinatal HIV exposure per 100 000 livebirths. Number of livebirths by State/Territory and year from *Births, Australia* (Australian Bureau of Statistics).

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

Table 1.5.2 Number of women with perinatally HIV exposed children, 1982 – 2002, 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					
	Before the birth (years)				At or after the birth	Total
	< 1	1 – 2	> 2	Total		
1982 – 1992	15	6	6	27	52	79
1993 – 1994	8	0	8	16	15	31
1995 – 1996	8	0	3	11	10	21
1997 – 1998	5	2	8	15	7	22
1999 – 2000	16	4	14	34	9	43
2001 – 2002 ¹	15	2	16	33	2	36
Total¹	67	14	55	136	95	232

1 Includes 1 woman whose date of HIV diagnosis was not reported.

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

Table 1.5.3 Number of women with perinatally HIV exposed children, 1982 – 2002, and number of perinatally exposed children, by year of birth of the first exposed child and the woman's HIV exposure category

Year of the first Exposed child's birth/ HIV exposure category	1993 – 1997		1998 – 2002		1982 – 2002	
	Number of women	Total number of exposed children	Number of women	Total number of exposed children	Number of women	Total number of exposed children
Injecting drug use	8	10	5	6	31	43
Heterosexual contact	53	69	80	96	171	215
<i>Sex with IDU</i>	13	17	9	12	30	38
<i>Sex with bisexual male</i>	5	8	4	6	17	23
<i>From high prevalence country</i>	13	16	23	27	46	55
<i>Sex with person from a high prevalence country</i>	7	10	15	16	24	29
<i>Sex with person with medically acquired HIV</i>	2	2	0	0	5	6
<i>Sex with person with HIV infection, other exposure</i>	6	8	10	13	19	28
<i>Not further specified</i>	7	8	19	22	30	36
Receipt of blood/tissue	1	1	1	1	22	26
Other/undetermined	2	2	3	3	8	11
Total	64	82	89	106	232	295

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

Table 1.5.4 Number of perinatally exposed children, 1982 – 2002, 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					
	Before the birth		At or after the birth		Total	
	Number exposed	Number with HIV	Number exposed	Number with HIV	Number exposed	Number with HIV
1982 – 1992	33	7	59	27	92	34
1993 – 1994	23	5	18	7	41	12
1995 – 1996	17	7	12	7	29	14
1997 – 1998	22	0	9	4	31	4
1999 – 2000	41	0	9	6	50	6
2001 – 2002 ¹	49	0	2	1	52	1
Total¹	185	19	109	52	295	71

¹ Includes 1 child whose mother's date of HIV diagnosis was not reported.

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

1.6 Global comparisons

Table 1.6.1 Estimated HIV prevalence and AIDS incidence in selected countries

Country	HIV prevalence		AIDS incidence	
	2002	Rate ¹	2002	Rate ¹
Asia Pacific				
Australia	13 120	67	246	1.3
Cambodia ^{2,3}	169 000	2 774	14 000	232
China ^{2,3}	1 000 000	140	27 000	5
India ^{2,3}	3 900 000	745	12 239	2.4
Indonesia ^{2,5}	120 000	102	411	<1
Japan ²	10 000	20	–	–
Malaysia ²	42 000	360	4 000	31
Myanmar ^{5,7}	510 000	1 979	3 817	9
New Zealand	1 600	43	17	0.5
Papua New Guinea ²	16 000	640	–	–
Philippines ²	10 000	26	–	–
Republic of Korea ²	3 800	17	–	–
Thailand ²	671 000	1 851	156 309	284
Vietnam ^{2,3}	130 000	300	6 500	15
Europe				
France	–	–	2 004	3.3
Germany	–	–	801	1.0
Italy	–	–	1 788	3.1
Spain	–	–	2 847	7.1
United Kingdom ⁶	41 200	117	791	1.3
North America				
Canada	39 966	125	351	1.1
United States ⁴	506 154	180	43 158	15.4

1 Rate per 100 000 population.

2 HIV prevalence estimate for 2001, among people aged 15–49 years.

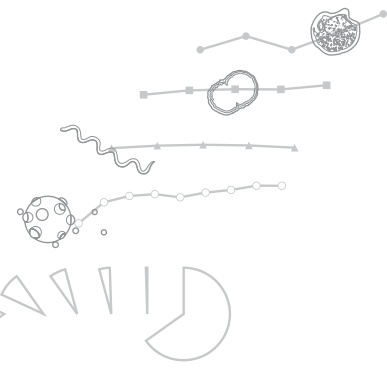
3 AIDS incidence for 2000.

4 For the 12 months January 2001 to December 2001.

5 AIDS incidence, January to September 2000, with estimated annual rate.

6 HIV prevalence estimate for 2001, among people aged 15–59 years.

7 HIV prevalence estimate for 1999.



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2 National surveillance for viral hepatitis

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

Table 2.1.1 Number and rate¹ of diagnosis of hepatitis A infection, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	53	15.5	8	2.4	5	1.6	14	4.2	4	1.2
NSW	927	14.9	407	6.5	199	3.1	195	3.0	146	2.3
NT	45	20.2	89	38.9	45	20.8	37	15.9	47	21.5
QLD	1 050	30.0	360	10.3	133	3.7	115	3.2	68	1.9
SA	97	6.8	121	8.5	54	3.7	20	1.4	15	1.0
TAS	8	1.7	5	1.1	3	0.6	3	0.7	4	0.8
VIC	171	3.7	269	5.7	193	4.1	97	2.0	74	1.6
WA	146	7.8	295	15.8	181	9.7	37	1.9	30	1.6
Total	2 497	13.4	1 554	8.3	813	4.3	518	2.7	388	2.0

¹ Age standardised rate per 100 000 population. Population estimates by State/Territory and year 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, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T ¹
0 – 4	88	60	148	58	57	115	33	21	54	23	10	33	12	12	24
5 – 14	209	220	429	148	156	304	70	64	134	44	22	66	22	19	41
15 – 19	111	93	205	72	71	143	26	27	53	19	3	22	19	7	26
20 – 29	488	271	759	283	191	476	155	76	231	99	37	137	61	32	94
30 – 39	316	142	459	150	111	262	99	59	158	95	27	122	57	30	88
40 – 49	183	83	266	73	50	124	53	34	87	51	21	72	32	20	52
50 – 59	86	48	134	29	24	53	21	23	44	28	9	37	20	9	29
60 +	44	43	87	36	37	73	29	22	51	16	13	29	12	22	34
Not reported	7	3	10	2	1	4	1	0	1	0	0	0	0	0	0
Total	1 532	963	2 497	851	698	1 554	487	326	813	375	142	518	235	151	388

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 diagnosis of newly acquired hepatitis B infection, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	1	0.3	3	1.1	3	0.9	2	0.6	0	0.0
NSW	55	0.9	65	1.0	96	1.5	91	1.4	84	1.3
NT	18	8.1	20	10.4	6	3.7	3	2.3	22	9.2
QLD	47	1.3	54	1.5	56	1.6	47	1.3	54	1.5
SA	18	1.3	19	1.3	30	2.1	23	1.6	11	0.8
TAS	6	1.3	5	1.2	18	4.2	21	5.0	19	4.4
VIC	91	1.9	95	2.0	121	2.5	208	4.3	175	3.7
WA	31	1.7	45	2.4	75	3.9	39	2.0	35	1.9
Total	267	1.4	306	1.6	405	2.1	434	2.3	400	2.1

¹ Age standardised rate per 100 000 population. Population estimates by State/Territory and year 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, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T	M	F	T	M	F	T
0–4	1	1	2	0	2	2	0	0	0	0	1	1	1	0	1
5–14	6	6	12	2	3	5	4	2	6	3	1	4	3	5	8
15–19	18	17	35	23	26	49	24	39	63	24	31	55	18	24	42
20–29	62	39	101	90	38	129	118	77	195	133	74	207	92	62	154
30–39	40	18	59	43	22	65	53	18	71	70	33	103	81	25	106
40–49	20	8	28	24	8	32	23	9	32	26	11	37	38	13	51
50–59	11	3	14	8	7	15	18	6	24	13	5	18	15	5	20
60+	9	5	14	7	2	9	9	5	14	7	2	9	14	1	15
Not reported	2	0	2	0	0	0	0	0	0	0	0	0	1	2	3
Total	169	97	267	197	108	306	249	156	405	276	158	434	263	137	400

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number and rate¹ of diagnosis of hepatitis C infection, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	298	90.0	298	91.4	241	73.2	225	67.6	225	67.3
NSW	6 852	108.8	7 058	111.6	7 789	122.3	7 965	123.5	6 566	101.5
NT	232	110.5	187	85.8	191	90.3	202	93.8	193	91.8
QLD	2 784	80.7	3 069	88.1	3 343	95.0	3 057	85.8	2 699	75.1
SA	863	59.5	940	64.9	988	68.7	913	63.6	614	42.2
TAS	291	64.9	329	74.7	362	81.5	388	89.9	396	92.9
VIC	5 228	110.9	6 233	131.5	5 815	121.4	5 156	106.2	4 086	84.0
WA	1 235	65.8	1 115	59.1	1 736	91.1	1 450	75.1	1 174	61.3
Total	17 783	94.6	19 229	101.9	20 465	107.5	19 356	100.6	15 953	82.8

1 Age standardised rate per 100 000 population. Population estimates by State/Territory and year 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, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	58	47	106	43	41	90	47	39	90	49	26	79	36	35	75
5 – 14	30	21	53	35	25	62	28	26	55	20	20	41	11	17	28
15 – 19	490	527	1 035	649	632	1 302	696	694	1 397	526	601	1 135	347	440	792
20 – 29	3 095	1 968	5 139	3 773	2 074	5 948	4 128	2 277	6 444	3 458	2 350	5 847	2 658	1 806	4 490
30 – 39	3 882	2 251	6 190	4 007	2 198	6 293	4 080	2 247	6 367	3 711	2 138	5 878	3 144	1 807	4 977
40 – 49	2 529	1 138	3 705	2 752	1 261	4 051	3 102	1 321	4 449	3 175	1 447	4 644	2 713	1 322	4 048
50 – 59	399	236	644	435	250	694	559	274	839	632	281	917	618	289	911
60 +	423	355	788	359	346	714	384	362	755	396	343	746	300	272	583
Not reported	68	28	123	39	18	75	32	24	69	45	19	69	26	11	49
Total	10 974	6 571	17 783	12 092	6 845	19 229	13 056	7 264	20 465	12 012	7 225	19 356	9 853	5 999	15 953

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, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis ¹				
	1998	1999	2000	2001	2002
ACT	8	20	22	18	6
NSW	110	101	156	294	149
NT	–	–	–	–	–
QLD	–	–	–	–	–
SA	67	80	89	90	42
TAS	18	18	31	7	15
VIC	21	71	93	105	87
WA	126	108	75	158	135
Total	350	398	466	672	434

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number of diagnoses of newly acquired hepatitis C infection, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹
0 – 4	3	1	4	1	0	1	1	0	1	1	1	2	3	2	5
5 – 14	0	0	0	1	3	4	0	2	2	1	1	2	0	2	2
15 – 19	26	32	58	39	40	80	38	54	92	48	61	109	24	36	60
20 – 29	97	74	172	134	57	191	122	104	226	201	133	334	120	89	210
30 – 39	47	23	71	54	21	76	56	36	92	96	70	166	75	36	111
40 – 49	19	14	33	21	12	33	36	9	45	31	15	46	24	11	35
50 – 59	5	5	10	5	2	7	4	1	5	6	1	7	6	4	10
60+	1	0	1	2	4	6	1	2	3	5	1	6	1	0	1
Not reported	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	199	149	350	257	139	398	258	208	466	389	283	672	253	180	434

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number of diagnoses of newly acquired hepatitis C infection¹, 1998 – 2002, by year and exposure category

Exposure category	1998	1999	2000	2001	2002	Total
Injecting drug use	207	254	188	398	268	1 315
Sexual transmission	7	4	2	3	3	19
Tattoos	2	5	5	7	3	22
Body piercing/acupuncture	3	3	0	1	1	8
Surgery/dental treatment	2	1	0	5	4	12
Needlestick injury	0	0	2	5	4	11
Household contact	1	0	0	1	1	3
Other	1	2	1	7	5	16
Undetermined	40	35	16	133	68	292
Total	263	304	214	560	357	1 698

¹ Diagnoses reported through State/Territory health jurisdictions other than NSW, NT and QLD in 1998 – 2000, and diagnoses reported through State/Territory health jurisdictions other than NT, QLD and WA in 2001 – 2002.

Source: State/Territory health authorities

2.2 National surveillance for viral hepatitis in Indigenous people

Table 2.2.1 Number (percent) of diagnoses of hepatitis A infection, 2002, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	1 (25.0)	3 (75.0)	4
NSW	2 (1.4)	117 (80.1)	27 (18.5)	146
NT	19 (40.4)	27 (57.4)	1 (2.1)	47
QLD	2 (2.9)	42 (61.8)	24 (35.3)	68
SA	3 (20.0)	11 (73.3)	1 (6.7)	15
TAS	0 (0.0)	0 (0.0)	4 (100.0)	4
VIC	0 (0.0)	46 (62.2)	28 (37.8)	74
WA	7 (23.3)	18 (60.0)	5 (16.7)	30
Total	33 (8.5)	262 (67.5)	93 (24.0)	388

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2002, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	0 (0.0)	0 (0.0)	0
NSW	1 (1.2)	65 (77.4)	18 (21.4)	84
NT	11 (50.0)	8 (36.4)	3 (13.6)	22
QLD	2 (3.7)	8 (14.8)	44 (81.5)	54
SA	2 (18.2)	9 (81.8)	0 (0.0)	11
TAS	0 (0.0)	4 (21.1)	15 (78.9)	19
VIC	1 (0.6)	168 (96.0)	6 (3.4)	175
WA	1 (2.9)	18 (51.4)	16 (45.7)	35
Total	18 (4.5)	280 (70.0)	102 (25.5)	400

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2002, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	1 (0.4)	4 (1.8)	220 (97.8)	225
NSW	275 (4.2)	2 616 (39.8)	3 675 (56.0)	6 566
NT	16 (8.3)	129 (66.8)	48 (24.9)	193
QLD	94 (3.5)	222 (8.2)	2 383 (88.3)	2 699
SA	47 (7.7)	548 (89.2)	19 (3.1)	614
TAS	9 (2.2)	102 (25.8)	285 (72.0)	396
VIC	32 (0.8)	1 051 (25.7)	3 003 (73.5)	4 086
WA	88 (7.5)	454 (38.7)	632 (53.8)	1 174
Total	562 (3.5)	5 126 (32.1)	10 265 (64.4)	15 953

Source: National Notifiable Diseases Surveillance System

2.3 Long term outcomes among people with chronic viral hepatitis

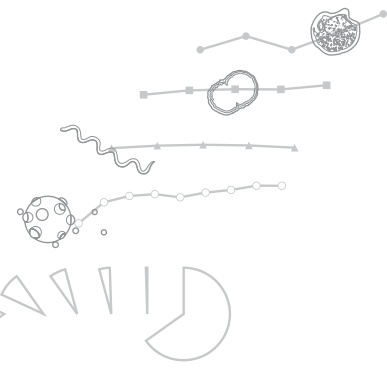
Table 2.3.1 Number (percent) of liver transplants, 1985 – 2002, by year and primary cause of liver disease

Year	hepatitis B	hepatitis C	hepatitis B and C	hepatocellular carcinoma	other ¹	Total
1985 – 1992	32 (9.0)	15 (4.2)	2 (0.6)	10 (2.8)	296 (83.4)	355
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 (16.3)	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	21 (14.4)	32 (21.9)	–	6 (4.1)	87 (59.6)	146
2001	16 (12.8)	22 (17.6)	2 (1.6)	8 (6.4)	77 (61.6)	125
2002 ²	15 (9.9)	41 (27.2)	1 (0.7)	8 (5.3)	86 (57.0)	151
Total	163 (10.5)	244 (15.7)	9 (0.6)	51 (3.3)	1 088 (70.0)	1 555

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

2 Data available to 30 June 2003.

Source: Australia and New Zealand Liver Transplant Register



Tables

3 National surveillance for sexually transmissible infections

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

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3 National surveillance for 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 diagnosis of chlamydia, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	194	56.1	177	51.7	245	71.2	301	87.4	460	132.3
NSW ²	–	–	2 461	39.3	3 557	56.3	4 389	69.1	5 527	87.7
NT	791	349.0	863	379.8	1 000	437.3	1 200	529.3	1 451	664.7
QLD	4 076	115.6	4 476	126.4	4 931	138.2	5 449	151.8	6 449	181.3
SA	1 024	72.9	973	69.6	1 023	73.5	1 457	105.7	1 741	128.4
TAS	202	45.5	254	58.6	332	77.0	375	87.6	478	116.2
VIC	2 570	54.7	2 939	62.4	3 338	70.5	3 853	80.4	4 972	104.0
WA	2 071	109.6	1 903	99.9	2 597	135.3	2 736	141.1	2 967	158.2
Total	10 928	87.1	14 046	74.7	17 023	89.9	19 760	103.8	24 045	128.5

1 Age standardised rate per 100 000 population. Population estimates by State/Territory and year 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, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	54	44	98	27	41	68	31	41	72	20	25	45	17	21	39
5 – 14	35	132	167	28	167	195	18	189	208	25	198	223	39	227	267
15 – 19	594	2 076	2 673	703	2 500	3 208	914	3 116	4 036	1 030	3 753	4 790	1 209	4 445	5 660
20 – 29	2 293	3 538	5 843	2 938	4 517	7 465	3 587	5 236	8 834	4 259	6 100	10 372	5 198	7 566	12 771
30 – 39	753	687	1 441	1 238	981	2 220	1 536	1 148	2 686	1 686	1 346	3 033	2 153	1 568	3 726
40 – 49	261	165	426	387	227	615	541	313	857	562	321	884	708	392	1 104
50 – 59	134	50	185	137	50	187	155	64	219	205	70	275	267	76	345
60 +	24	13	37	40	19	59	59	18	78	50	44	94	70	25	95
Not reported	32	24	58	11	16	29	15	16	33	22	18	44	20	18	38
Total	4 180	6 729	10 928	5 509	8 518	14 046	6 856	10 141	17 023	7 859	11 875	19 760	9 681	14 338	24 045

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, 1998 – 2002, by State/Territory¹ and year

State/Territory	Year of diagnosis				
	1998	1999	2000	2001	2002
NT	18	6	7	13	9
QLD	4	3	6	8	9
WA	8	7	3	10	2
Total	30	16	16	31	20

¹ State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 – 14	0	4	4	0	0	0	0	1	1	0	1	1	0	0	0
15 – 19	0	4	4	1	2	3	0	0	0	0	3	3	4	1	5
20 – 29	1	9	10	0	5	5	3	4	7	4	7	11	2	3	5
30 – 39	2	2	4	0	1	1	1	4	5	2	5	7	2	5	7
40 – 49	0	2	2	1	3	4	3	0	3	2	3	5	0	2	2
50 +	1	5	6	0	3	3	0	0	0	2	2	4	1	0	1
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	26	30	2	14	16	7	9	16	10	21	31	9	11	20

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate¹ of diagnosis of gonorrhoea, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	28	8.4	20	6.3	14	4.4	20	6.0	15	4.4
NSW	1 052	16.8	1 286	20.4	1 082	17.1	1 318	20.6	1 400	21.8
NT	1 223	551.7	1 144	512.5	1 194	522.8	1 369	609.3	1 530	704.2
QLD	1 120	31.8	1 185	33.5	1 136	31.8	1 070	29.8	935	26.2
SA	213	15.0	215	15.2	270	19.1	218	15.7	192	13.7
TAS	12	2.7	19	4.3	17	4.0	21	5.1	14	3.4
VIC	603	12.5	785	16.5	742	15.4	692	14.5	820	17.0
WA	1 218	64.7	990	52.2	1 343	70.1	1 347	69.7	1 341	71.0
Total	5 469	29.0	5 644	29.9	5 798	30.5	6 055	32.6	6 247	32.9

¹ Age standardised rate per 100 000 population. Population estimates by State/Territory and year from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 3.1.6 Number of diagnoses of gonorrhoea, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	12	23	35	12	19	32	7	9	16	7	13	20	3	12	16
5 – 14	39	97	136	31	93	124	20	114	134	25	92	117	32	130	162
15 – 19	483	541	1 027	505	564	1 070	512	651	1 163	511	677	1 191	487	646	1 136
20 – 29	1 438	788	2 233	1 509	713	2 227	1 529	737	2 268	1 605	786	2 393	1 591	760	2 357
30 – 39	1 040	307	1 348	1 170	277	1 456	1 149	275	1 424	1 228	294	1 524	1 328	354	1 682
40 – 49	368	85	454	435	69	506	439	80	519	508	79	588	530	85	616
50 – 59	101	21	123	139	17	158	158	29	188	148	18	166	172	32	204
60 +	39	7	46	41	3	44	42	8	50	36	7	43	49	5	54
Not reported	48	14	67	21	6	27	24	12	36	9	3	13	7	12	20
Total	3 568	1 883	5 469	3 863	1 761	5 644	3 880	1 915	5 798	4 077	1 969	6 055	4 199	2 036	6 247

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 diagnosis of syphilis, 1998 – 2002, by State/Territory and year

State/Territory	Year of diagnosis									
	1998		1999		2000		2001		2002	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	18	6.4	10	3.2	13	4.1	11	3.6	12	3.7
NSW	601	9.4	519	8.0	543	8.3	467	7.0	624	9.2
NT	344	176.6	340	172.3	183	91.1	392	185.1	401	190.1
QLD	579	16.7	827	23.5	884	24.8	211	5.9	341	9.3
SA	18	1.3	12	0.8	13	0.9	24	1.7	28	2.0
TAS	7	1.4	9	1.8	9	1.7	15	3.1	16	3.5
VIC	12	0.2	6	0.1	8	0.2	16	0.3	27	0.6
WA	99	5.3	120	6.4	134	7.0	206	10.6	161	8.4
Total	1 678	8.9	1 843	9.6	1 787	9.2	1 342	6.8	1 610	8.2

1 Age standardised rate per 100 000 population. Population estimates by State/Territory and year from *Australian Demographic Statistics* (Australian Bureau of Statistics).

Source: National Notifiable Diseases Surveillance System

Table 3.1.8 Number of diagnoses of syphilis, 1998 – 2002, by age group, year and sex

Age group (years)	Year of diagnosis														
	1998			1999			2000			2001			2002		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	4	2	8	4	6	10	3	0	3	0	1	1	2	2	4
5 – 14	4	21	25	6	13	19	6	11	17	5	10	15	8	18	26
15 – 19	98	107	206	74	105	180	53	70	123	85	103	188	69	117	186
20 – 29	194	262	462	232	306	538	162	279	441	181	165	346	194	206	402
30 – 39	184	193	378	220	198	423	205	203	408	167	127	294	231	141	375
40 – 49	149	75	227	180	93	273	174	110	285	104	54	161	170	56	228
50 – 59	115	31	147	110	48	159	168	51	219	99	39	138	141	36	177
60 +	151	63	216	135	92	228	198	88	286	126	58	185	137	72	210
Not reported	5	3	9	6	5	13	1	3	5	6	7	14	1	1	2
Total	904	757	1 678	967	866	1 843	970	815	1 787	773	564	1 342	953	649	1 610

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

Source: National Notifiable Diseases Surveillance System

3.2 National surveillance for sexually transmissible infections in Indigenous people

Table 3.2.1 Number and rate¹ of diagnosis of chlamydia, 1998 – 2002, by State/Territory², Indigenous status³ and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1998	Number	480	311	138	886	622	1 449	1 240	2 646
	Rate	734	193	506	64	889	80	761	78
1999	Number	532	331	127	846	507	1 396	1 166	2 573
	Rate	800	208	461	62	723	76	709	76
2000	Number	663	337	169	854	665	1 932	1 497	3 123
	Rate	995	211	611	63	923	105	899	92
2001	Number	761	439	136	1 321	711	2 025	1 608	3 785
	Rate	1 104	280	465	98	948	108	929	112
2002	Number	894	557	157	1 584	627	2 340	1 678	4 481
	Rate	1 280	381	533	120	824	130	957	137

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

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, 2002, by State/Territory and Indigenous status¹

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	446 (97.0)	460
NSW	–	–	2 874 (52.0)	5 527
NT	894 (61.6)	393 (27.1)	164 (11.3)	1 451
QLD	–	–	4 672 (72.4)	6 449
SA	157 (9.0)	1 574 (90.4)	10 (0.6)	1 741
TAS	–	–	344 (72.0)	478
VIC	29 (0.6)	3 169 (63.7)	1 774 (35.7)	4 972
WA	627 (21.1)	895 (30.2)	1 445 (48.7)	2 967
Total	1 707	6 031	11 729 (48.8)	24 045

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.3 Number and rate¹ of diagnosis of gonorrhoea, 1998 – 2002, by State/Territory², Indigenous status and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1998	Number	902	321	134	79	869	349	1 905	749
	Rate	1 478	200	520	6	1 307	19	1 240	22
1999	Number	918	226	133	82	702	288	1 753	596
	Rate	1 444	143	498	6	1 023	16	1 103	17
2000	Number	1 004	190	174	96	830	513	2 008	799
	Rate	1 478	119	644	7	1 194	28	1 216	23
2001	Number	1 093	276	117	101	1 046	301	2 256	678
	Rate	1 647	172	415	7	1 469	16	1 363	20
2002	Number	1 188	342	87	105	841	500	2 116	947
	Rate	1 757	231	334	8	1 176	27	1 266	28

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

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, 2002, by State/Territory and Indigenous status¹

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	15 (100.0)	15
NSW	–	–	1 338 (95.6)	1 400
NT	1 188 (77.7)	210 (13.7)	132 (8.6)	1 530
QLD	–	–	492 (52.6)	935
SA	87 (45.3)	105 (54.7)	0 (0.0)	192
TAS	–	–	11 (78.6)	14
VIC	10 (1.2)	613 (74.8)	197 (24.0)	820
WA	841 (62.7)	270 (20.1)	230 (17.2)	1 341
Total	2 126	1 198	2 415 (38.7)	6 247

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Number and rate¹ of diagnosis of syphilis, 1998 – 2002, by State/Territory², Indigenous status and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1998	Number	319	25	18	0	46	53	383	78
	Rate	649	14	63	0	81	3	308	2
1999	Number	308	32	10	2	47	73	365	107
	Rate	649	21	32	0.1	85	4	304	3
2000	Number	152	31	13	0	73	61	238	92
	Rate	303	21	47	0	134	3	187	3
2001	Number	338	54	24	0	121	85	483	139
	Rate	605	37	82	0	266	5	372	4
2002	Number	339	62	26	2	103	58	468	122
	Rate	575	41	98	0.1	177	3	324	4

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Indigenous status from *Population Distribution, Indigenous Australians* (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

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, 2002, by State/Territory and Indigenous status¹

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	10 (83.3)	12
NSW	57 (9.1)	344 (55.1)	223 (35.7)	624
NT	339 (84.5)	26 (6.5)	36 (9.0)	401
QLD	166 (48.7)	107 (31.4)	68 (19.9)	341
SA	26 (92.9)	2 (7.1)	0 (0.0)	28
TAS	–	–	14 (87.5)	16
VIC	0 (0.0)	26 (96.3)	1 (3.7)	27
WA	103 (64.0)	29 (18.0)	29 (18.0)	161
Total	691	534	381 (23.7)	1 610

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

3.3 Gonococcal isolates

Table 3.3.1 Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2002 by State/Territory, sex and site and antibiotic sensitivity

Sex and Site	State/Territory						Total ³
	NSW ¹	NT ²	QLD	SA	VIC	WA	
Males							
Urethra	1 061	344	416	62	477	245	2 605
Rectal	270	1	14	24	96	8	413
Pharynx	145	1	11	17	50	2	226
Other/not specified	39	6	17	12	11	6	91
Total	1 515	352	458	115	634	261	3 335
Females							
Cervix	84	191	121	17	48	82	543
Other/not specified	15	10	9	0	12	4	50
Total	99	201	130	17	60	86	593
Antibiotic sensitivity (%)							
PPNG	5.8	3.0	6.9	7.1	10.5	13.2	7.1
RR	17.0	2.2	4.6	3.1	11.0	8.5	10.8
LS	61.9	94.0	85.3	78.9	74.0	77.3	73.8
FS	15.3	0.8	3.2	11.0	4.5	0.9	8.2
Total³	1 625	565	588	132	694	347	3 951

1 Total includes 11 cases whose sex and site of isolation was not reported.

2 Total includes 12 cases whose sex and site of isolation was not reported.

3 Total includes 23 cases whose sex and site of isolation was not reported.

PPNG penicillinase producing *N. gonorrhoeae*, RR relatively resistant, LS less sensitive, FS fully sensitive

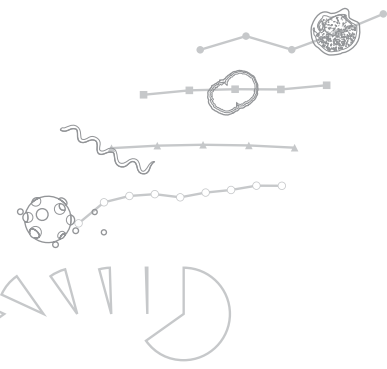
Source: Australian Gonococcal Surveillance Programme

Table 3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1998 – 2002, by sex, site and year

Sex and Site	Year of diagnosis				
	1998	1999	2000	2001	2002 ¹
Males					
Urethra	1 023	1 133	892	1 040	1 061
Rectal	158	195	182	206	270
Pharynx	63	80	91	126	145
Other/not specified	6	6	22	34	39
Total	1 250	1 414	1 187	1 406	1 515
Females					
Cervix	121	103	57	87	84
Rectal	3	4	2	1	3
Pharynx	12	4	5	4	7
Other/not specified	0	3	4	7	5
Total	136	114	68	99	99
Total	1 386	1 528	1 255	1 505	1 625

1 Total includes 11 cases whose sex and site of isolation was not reported.

Source: Australian Gonococcal Surveillance Programme



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4 Surveillance for HIV and viral hepatitis in sentinel populations

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

Table 4.1.1 Number of participating needle and syringe programs (NSP), 1998 – 2002, 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

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		–	–	–	0.7	0.4	0.6	53	56	54

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	0.5	1.1	55	56	56

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)	250 (58)	720 (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)	870 (55)	2 524 (50)	21 (1.3)	0 (0.0)	22 (0.9)	859 (52)	481 (55)	1 348 (53)
Prevalence²		–	–	–	1.3	0.0	0.8	58	57	57

2001

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	33 (42)	8(34)	41 (40)	0 (0.0)	0 (0.0)	0 (0.0)	20 (61)	5 (63)	25 (61)
NSW	14	406 (39)	241 (51)	656 (40)	6 (1.5)	0 (0.0)	6 (0.9)	284 (70)	180 (75)	470 (72)
NT	2	60 (59)	18 (60)	79 (57)	0 (0.0)	0 (0.0)	0 (0.0)	36 (60)	8 (44)	45 (57)
QLD ³	6	550 (46)	240 (59)	798 (50)	8 (1.5)	0 (0.0)	8 (1.0)	237 (43)	118 (49)	359 (45)
SA	7	173 (55)	99 (69)	274 (60)	3 (1.7)	1 (1.0)	4 (1.5)	88 (51)	51 (52)	141 (51)
TAS	1	21 (29)	6 (27)	27 (27)	1 (4.8)	0 (0.0)	1 (3.7)	8 (38)	2 (33)	10 (37)
VIC	4	214 (35)	117 (46)	333 (39)	2 (0.9)	0 (0.0)	2 (0.6)	146 (68)	85 (73)	231 (69)
WA	3	83 (55)	49 (64)	134 (57)	0 (0.0)	0 (0.0)	0 (0.0)	48 (58)	23 (47)	73 (54)
Total	38	1 540 (44)	778 (52)	2 342 (46)	20 (1.3)	1 (0.1)	21 (0.9)	867 (56)	472 (61)	1 354 (58)
Prevalence²		-	-	-	1.2	0.6	0.8	63	66	64

2002

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	40 (27)	21 (36)	61 (29)	0 (0.0)	0 (0.0)	0 (0.0)	30 (75)	18 (86)	48 (79)
NSW	18	470 (39)	261 (45)	739 (37)	13 (2.8)	1 (0.4)	15 (2.0)	333 (71)	181 (69)	521 (71)
NT	1	35 (49)	11 (31)	47 (42)	0 (0.0)	0 (0.0)	0 (0.0)	24 (69)	5 (45)	29 (62)
QLD	9	478 (48)	198 (50)	682 (48)	10 (2.1)	2 (1.0)	13 (1.9)	230 (48)	93 (47)	328 (48)
SA	6	192 (45)	115 (55)	309 (49)	1 (0.5)	1 (0.9)	2 (0.7)	90 (47)	43 (37)	133 (43)
TAS	4	96 (57)	50 (69)	148 (58)	0 (0.0)	0 (0.0)	0 (0.0)	47 (49)	18 (36)	66 (45)
VIC	4	151 (18)	91 (40)	244 (23)	1 (0.7)	0 (0.0)	1 (0.4)	84 (56)	57 (63)	143 (59)
WA	3	87 (100)	36 (100)	123 (99)	0 (0.0)	0 (0.0)	0 (0.0)	34 (39)	19 (53)	53 (43)
Total	46	1 549 (39)	783 (49)	2 353 (42)	25 (1.6)	4 (0.5)	31 (1.3)	872 (56)	434 (55)	1 321 (56)
Prevalence²		-	-	-	1.6	0.3	1.2	59	61	60

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

2 Prevalence adjusted using the estimated prevalence of injecting drug use in each State/Territory.

3 Additional sites surveyed in Queensland in 2001 were not included to facilitate comparison with previous years.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.1.2 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1998 – 2002, and percent with HIV or hepatitis C antibody by year, age group, history of injecting drug use, type of drug last injected among those reporting less than three years of drug injection, and sex

1998										
	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody			
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹	
<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	
<i>History of injecting drug use</i>										
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	
<i>Last drug injected among those reporting less than 3 years of drug injection</i>										
Amphetamines	96	59	156	2.1	1.7	1.9	4	7	5	
Heroin/opiates	128	104	233	0.0	0.0	0.0	22	26	24	
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										
	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody			
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹	
<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	
<i>History of injecting drug use</i>										
Less than 3 years	238	154	392	0.8	0.7	0.8	16	27	20	
3 to 5 years	297	178	476	0.7	2.3	1.3	29	33	30	
6 to 10 years	360	211	575	1.4	0.0	0.9	43	48	45	
10 or more years	591	280	873	2.7	1.1	2.2	78	80	78	
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	
<i>Last drug injected among those reporting less than 3 years of drug injection</i>										
Amphetamines	110	57	167	1.8	1.8	1.8	4	9	5	
Heroin/opiates	89	88	177	0.0	0.0	0.0	31	38	34	
Combination	15	5	20	0.0	0.0	0.0	33	40	35	
Other/Not reported	24	4	28	0.0	0.0	0.0	0	50	7	
Total	238	154	392	0.9	0.7	0.8	16	27	20	

2000

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Age group</i>									
Less than 20 years	111	111	222	0.0	0.0	0.0	24	44	34
20 to 24 years	330	235	569	0.3	0.0	0.2	34	46	39
25 to 29 years	390	190	581	1.5	0.0	1.0	43	48	45
30 to 34 years	298	143	445	2.0	0.0	1.4	56	72	61
35+ years	509	191	705	1.6	0.0	1.3	75	68	73
Not reported	1	0	2	0.0	–	0.0	0	–	0
<i>History of injecting drug use</i>									
Less than 3 years	208	128	336	1.9	0.0	1.2	25	28	26
3 to 5 years	303	214	519	1.3	0.0	0.8	33	48	39
6 to 10 years	400	235	639	0.5	0.0	0.3	47	54	50
10 or more years	691	276	971	1.6	0.0	1.2	73	74	73
Not reported	37	17	59	0.0	0.0	0.0	40	61	47
Total	1 639	870	2 524	1.3	0.0	0.9	52	55	53
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	68	39	107	1.5	0.0	1.0	12	8	10
Heroin/opiates	101	73	174	3.0	0.0	1.7	35	34	34
Combination	20	11	31	0.0	0.0	0.0	40	64	48
Other/Not reported	19	5	24	0.0	0.0	0.0	10	20	13
Total	208	128	336	1.9	0.0	1.2	25	28	26

2001

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Age group</i>									
Less than 20 years	92	74	168	0.0	0.0	0.0	40	39	39
20 to 24 years	289	191	484	0.0	0.0	0.0	36	51	41
25 to 29 years	362	160	525	0.6	0.0	0.4	45	54	48
30 to 34 years	266	147	415	2.6	0.0	1.7	58	67	61
35+ years	529	205	746	2.1	0.5	1.6	77	78	77
Not reported	2	1	4	0.0	0.0	0.0	50	100	75
<i>History of injecting drug use</i>									
Less than 3 years	169	110	282	1.8	0.0	1.1	23	35	28
3 to 5 years	258	151	412	1.6	0.0	1.0	38	51	42
6 to 10 years	383	223	607	1.0	0.0	0.7	49	63	54
10 or more years	683	277	972	1.2	0.0	0.9	77	76	77
Not reported	47	17	69	2.1	0.0	1.5	43	35	42
Total	1 540	778	2 342	1.3	0.1	0.9	56	61	58
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	86	59	146	3.5	0.0	2.1	14	27	19
Heroin/opiates	40	37	78	0.0	0.0	0.0	43	41	41
Combination	10	4	14	0.0	0.0	0.0	30	50	36
Other/Not reported	33	10	44	0.0	0.0	0.0	21	60	30
Total	169	110	282	1.8	0.0	1.1	23	35	28

2002

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Age group</i>									
Less than 20 years	72	67	140	0.0	0.0	0.0	32	45	38
20 to 24 years	271	179	452	0.0	0.6	0.2	45	47	46
25 to 29 years	369	176	547	1.9	0.6	1.5	47	48	48
30 to 34 years	298	145	447	2.7	0.0	2.0	59	57	59
35+ years	535	215	762	1.9	0.9	1.7	70	70	70
Not reported	4	1	5	0.0	0.0	0.0	50	0	40
<i>History of injecting drug use</i>									
Less than 3 years	149	74	226	1.3	0.0	0.9	38	38	38
3 to 5 years	220	151	375	0.9	1.3	1.1	46	43	45
6 to 10 years	389	218	610	0.8	0.0	0.7	47	55	50
10 or more years	750	315	1 073	2.3	0.6	1.9	69	67	69
Not reported	41	25	69	2.4	0.0	1.5	41	44	43
Total	1 549	783	2 353	1.6	0.5	1.3	56	55	56
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	65	36	101	1.5	0.0	1.0	37	33	36
Heroin/opiates	46	29	76	0.0	0.0	0.0	39	45	41
Combination	11	5	17	9.1	0.0	5.9	45	20	41
Other /Not reported	27	4	32	0.0	0.0	0.0	33	50	34
Total	149	74	226	1.3	0.0	0.9	38	38	38

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

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Table 4.1.3 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1998 – 2002, and percent with HIV or hepatitis C antibody by year, sexual orientation, sex work last month, region of birth (2000 – 2002), and sex

1998

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 339	620	1 963	1.0	0.8	0.9	48	56	51
Bisexual	88	139	228	3.4	1.4	2.2	42	45	43
Homosexual	69	74	144	17.4	0.0	8.3	31	45	39
Not reported	70	20	95	1.4	0.0	1.1	47	60	49
<i>Sex work last month</i>									
No	1 486	731	2 223	0.9	0.3	0.7	46	51	48
Yes	43	105	151	4.7	1.9	2.7	58	70	66
Not reported	37	17	56	0.0	0.0	0.0	57	53	57
Total	1 566	853	2 430	1.0	0.5	0.8	47	53	49

1999

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
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>Sex work last month</i>									
No	1 435	664	2 104	1.5	0.9	1.3	49	50	50
Yes	55	152	211	3.6	1.3	1.9	44	59	55
Not reported	37	24	63	5.4	0.0	3.2	59	54	57
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50

2000

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 374	557	1 934	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>Sex work last month</i>									
No	1 519	676	2 199	1.3	0.0	0.9	53	52	53
Yes	69	174	249	1.5	0.0	0.4	59	67	65
Not reported	51	20	76	2.0	0.0	1.3	35	55	42
<i>Country/region of birth</i>									
Australia	1 143	633	1 787	1.3	0.0	0.9	52	56	53
Overseas born	241	123	365	1.2	0.0	0.8	57	61	58
<i>Other Oceania</i>	59	36	95	0.0	0.0	0.0	59	44	54
<i>Asia</i>	53	27	80	1.9	0.0	1.3	58	70	63
<i>United Kingdom and Ireland</i>	73	32	105	2.7	0.0	1.9	55	65	58
<i>Other</i>	56	28	85	0.0	0.0	0.0	55	68	59
Not reported	255	114	372	1.2	0.0	0.8	51	46	49
Total	1 639	870	2 524	1.3	0.0	0.9	52	55	53

2001

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 268	529	1 808	0.4	0.2	0.3	57	60	58
Bisexual	69	154	227	2.9	0.0	0.9	58	62	62
Homosexual	80	47	129	16.3	0.0	10.1	49	66	56
Not reported	123	48	178	0.0	0.0	0.0	50	58	52
<i>Sex work last month</i>									
No	1 419	608	2 039	1.3	0.2	0.9	56	58	57
Yes	61	141	212	3.3	0.0	0.9	61	75	70
Not reported	60	29	91	0.0	0.0	0.0	50	55	53
<i>Country/region of birth</i>									
Australia	1 152	577	1 742	1.3	0.2	0.9	54	59	56
Overseas born	245	119	365	0.0	0.0	0.0	67	64	66
<i>Other Oceania</i>	65	27	93	0.0	0.0	0.0	55	56	56
<i>Asia</i>	64	22	86	0.0	0.0	0.0	80	82	80
<i>United Kingdom and Ireland</i>	54	42	96	0.0	0.0	0.0	63	57	60
<i>Other</i>	62	28	90	0.0	0.0	0.0	68	68	68
Not reported	143	82	235	3.5	0.0	2.1	61	65	63
Total	1 540	778	2 342	1.3	0.1	0.9	56	61	58

2002

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 267	524	1 797	0.6	0.6	0.6	58	56	57
Bisexual	71	171	248	2.8	0.6	1.6	54	56	56
Homosexual	58	32	92	24.1	0.0	16.3	38	53	45
Not reported	153	56	216	1.3	0.0	0.9	52	54	51
<i>Sex work last month</i>									
No	1 442	633	2 090	1.7	0.6	1.4	57	54	56
Yes	59	131	194	1.7	0.0	1.0	51	64	60
Not reported	48	19	69	0.0	0.0	0.0	54	53	54
<i>Country/region of birth</i>									
Australia	1 223	635	1 874	2.0	0.6	1.6	55	55	55
Overseas born	273	117	395	0.0	0.0	0.0	64	57	62
<i>Other Oceania</i>	40	30	70	0.0	0.0	0.0	55	57	56
<i>Asia</i>	94	15	110	0.0	0.0	0.0	73	73	74
<i>United Kingdom and Ireland</i>	75	38	115	0.0	0.0	0.0	61	61	61
<i>Other</i>	64	34	100	0.0	0.0	0.0	58	47	55
Not reported	53	31	84	1.9	0.0	1.2	58	58	58
Total	1 549	783	2 353	1.6	0.5	1.3	56	55	56

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

4.2 Incidence of hepatitis C infection among injecting drug users

Table 4.2.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1998 – 2002

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
1998			
less than 20 years	7.2	2	27.6
20 – 29 years	69.8	19	27.2
30+ years	27.5	4	14.6
Total	104.5	25	23.9
1999			
less than 20 years	6.3	2	31.8
20 – 29 years	55.2	7	12.7
30+ years	27.5	3	10.9
Total	89.0	12	13.5
2000			
less than 20 years	4.1	1	24.2
20 – 29 years	39.4	8	20.3
30+ years	23.8	3	12.6
Total	67.3	12	17.8
2001			
less than 20 years	1.8	2	108.7
20 – 29 years	26.6	7	26.3
30+ years	17.7	2	11.3
Total	46.1	11	23.8
2002			
less than 20 years	1.0	0	0.0
20 – 29 years	8.2	1	12.2
30+ years	5.2	0	0.0
Total	14.4	1	6.9

Source: Kirketon Road Centre

4.3 National monitoring of HIV infection among entrants into Australian prisons

Table 4.3.1 Number of receptions into Australian prisons, 1998 – 2002, proportion tested for HIV antibody at reception and number (percent) 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	
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)
2001									
Number of receptions	–	11 767	2 063	8 880	3 563	1 272	–	6 577	34 122
Number (%) male	–	10 443 (89)	1 917 (93)	8 099 (91)	3 190 (90)	1 144 (90)	–	5 770 (88)	30 563 (90)
Tested for HIV antibody (%)	–	35.6	100.0	100.0	24.0	48.6	–	46.2	57.6
% males tested	–	35.6	100.0	100.0	25.1	49.6	–	46.8	58.2
Number (%) with HIV	–	9 (0.2)	1 (0.05)	3 (0.03)	5 (0.6)	0 (0.0)	–	2 (0.07)	20 (0.1)
Number (%) male	–	7 (0.2)	1 (0.05)	3 (0.04)	5 (0.6)	0 (0.0)	–	2 (0.07)	18 (0.1)
2002									
Number of receptions	108	11 433	1 751	11 108	2 643	1 520	–	6 207	34 770
Number (%) male	99 (92)	10 115 (88)	1 655 (95)	9 701 (87)	2 579 (98)	1 343 (88)	–	5 328 (86)	30 820 (87)
Tested for HIV antibody (%)	25.9	35.6	100.0	100.0	24.8	30.6	–	40.9	59.3
% males tested	28.3	36.2	100.0	100.0	23.4	32.2	–	42.4	59.5
Number (%) with HIV	0 (0.0)	4 (0.1)	2 (0.1)	7 (0.06)	3 (0.5)	1 (0.2)	–	4 (0.2)	21 (0.1)
Number (%) male	0 (0.0)	3 (0.08)	2 (0.1)	6 (0.06)	2 (0.3)	1 (0.2)	–	4 (0.2)	18 (0.1)

1 The corrections centre in the ACT is a remand centre only. HIV antibody testing is carried out on prisoner request. Data only available for the last six months of 1999 and 2000, and the last two months of 2002.

2 Data available from VIC on males only in the interval 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 for 2000, 2001 and 2002.

Source: State/Territory Departments of Corrections

4.4 HIV and hepatitis C seroprevalence among people seen at sexual health clinics

Table 4.4.1 Number of people seen at selected metropolitan sexual health clinics in Australia, 1998 – 2002, 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

Males	Sexual Health Clinic	Sexual Health Clinic							Total
		Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC		
1998	Seen	4 433	–	2 579	1 084	3 604	6 138	17 838	
	Tested	2 152	–	1 057	665	2 823	3 747	10 444	
	Newly diagnosed (%)	15 (0.7)	–	3 (0.3)	1 (0.1)	5 (0.2)	16 (0.4)	40 (0.4)	
	Previously negative (%)	8 (0.7)	–	2 (0.3)	0 (0.0)	5 (0.3)	5 (0.3)	20 (0.2)	
1999	Seen	3 465	761	2 662	1 076	3 211	5 620	16 795	
	Tested	1 682	399	1 156	489	2 435	3 453	9 614	
	Newly diagnosed (%)	19 (1.1)	2 (0.5)	4 (0.3)	6 (1.2)	4 (0.2)	16 (0.5)	51 (0.5)	
	Previously negative (%)	8 (0.8)	0 (0.0)	4 (0.6)	1 (0.8)	3 (0.2)	3 (0.2)	19 (0.4)	
2000	Seen	3 601	942	2 835	1 033	2 907	5 178	16 496	
	Tested	1 791	506	1 071	470	2 321	3 405	9 564	
	Newly diagnosed (%)	14 (0.8)	0 (0.0)	2 (0.2)	6 (1.3)	6 (0.3)	6 (0.2)	34 (0.4)	
	Previously negative (%)	6 (0.6)	0 (0.0)	1 (0.3)	1 (0.8)	6 (0.4)	3 (0.2)	17 (0.4)	
2001	Seen	4 181	993	2 881	1 148	3 061	5 434	17 698	
	Tested	2 165	535	1 201	516	2 362	2 149	8 928	
	Newly diagnosed (%)	20 (0.9)	1 (0.2)	1 (0.1)	3 (0.6)	4 (0.2)	21 (1.0)	50 (0.6)	
	Previously negative (%)	12 (0.9)	1 (0.9)	1 (0.2)	2 (1.6)	4 (0.3)	0 (0.0)	20 (0.5)	
2002	Seen	4 417	1 265	2 907	1 164	3 459	–	13 212	
	Tested	2 485	755	1 179	540	2 734	–	7 693	
	Newly diagnosed (%)	26 (1.1)	0 (0.0)	7 (0.6)	2 (0.4)	5 (0.2)	–	40 (0.5)	
	Previously negative (%)	16 (1.1)	0 (0.0)	7 (1.4)	0 (0.0)	4 (0.2)	–	27 (0.7)	

Sexual Health Clinic

Females		Sexual Health Clinic							Total
		Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW ¹	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC ¹		
1998	Seen	2 915	–	1 632	1 363	2 475	4 732	13 117	
	Tested	1 364	–	563	905	1 832	3 230	7 894	
	Newly diagnosed (%)	5 (0.4)	–	1 (0.2)	0 (0.0)	1 (0.1)	1 (0.03)	8 (0.1)	
	Previously negative (%)	2 (0.3)	–	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.03)	
1999	Seen	2 196	869	1 773	1 302	2 289	4 542	12 971	
	Tested	1 011	402	632	636	1 645	2 968	7 294	
	Newly diagnosed (%)	1 (0.1)	1 (0.2)	0 (0.0)	1 (0.2)	0 (0.0)	2 (0.1)	5 (0.1)	
	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	2 350	1 085	1 737	1 359	2 051	4 123	12 705	
	Tested	1 079	529	623	661	1 530	2 937	7 359	
	Newly diagnosed (%)	2 (0.2)	2 (0.4)	0 (0.0)	1 (0.2)	0 (0.0)	5 (0.2)	10 (0.1)	
	Previously negative (%)	1 (0.2)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.1)	
2001	Seen	2 973	980	2 242	1 517	2 267	4 513	14 492	
	Tested	1 509	440	878	693	1 577	1 661	6 758	
	Newly diagnosed (%)	3 (0.2)	0 (0.0)	0 (0.0)	2 (0.3)	0 (0.0)	3 (0.2)	8 (0.1)	
	Previously negative (%)	2 (0.3)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	3 (0.1)	
2002	Seen	2 989	1 317	2 406	1 598	2 585	–	10 895	
	Tested	1 467	595	918	789	1 800	–	5 569	
	Newly diagnosed (%)	3 (0.2)	1 (0.2)	0 (0.0)	0 (0.0)	1 (0.1)	–	5 (0.1)	
	Previously negative (%)	2 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	–	3 (0.1)	

1 Livingstone Road Sexual Health Centre joined the network in 1999. Data not available from the Melbourne Sexual Health Centre, VIC, in 2002.

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.4.2 Number of people seen at selected metropolitan sexual health clinics in Australia, 1998 – 2002, 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

Males	HIV exposure category	HIV exposure category							Total
		Male homosexual contact'	Male homosexual contact', age < 25 years	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males		
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 (0.1)	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	3 489	595	778	1 104	9 512	1 613	16 496	
	Tested	2 218	447	544	768	5 340	694	9 564	
	Newly diagnosed (%)	29 (1.3)	3 (0.7)	1 (0.2)	2 (0.2)	2 (0.04)	0 (0.0)	34 (0.4)	
	Previously negative (%)	15 (1.1)	3 (1.5)	0 (0.0)	1 (0.3)	1 (0.04)	0 (0.0)	17 (0.4)	
2001	Seen	4 275	699	762	1 193	9 752	1 716	17 698	
	Tested	2 448	509	481	745	4 780	474	8 928	
	Newly diagnosed (%)	37 (1.5)	8 (1.6)	1 (0.2)	1 (0.1)	3 (0.1)	8 (1.7)	50 (0.6)	
	Previously negative (%)	20 (0.5)	5 (3.3)	0 (0.0)	0 (0.3)	0 (0.0)	0 (0.0)	20 (0.5)	
2002	Seen	3 661	714	625	1 251	7 055	620	13 212	
	Tested	2 386	562	412	849	3 895	151	7 693	
	Newly diagnosed (%)	35 (1.5)	7 (1.2)	0 (0.0)	1 (0.1)	3 (0.1)	1 (0.7)	40 (0.5)	
	Previously negative (%)	25 (0.7)	3 (1.1)	0 (0.0)	1 (0.3)	1 (0.1)	0 (0.0)	27 (0.7)	

HIV exposure category

Females	Sex worker ²	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females	Total
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 (0.2)	3 (0.1)	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 (0.5)	1 (0.2)	0 (0.0)	1 (0.2)	5 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2000						
Seen	1 277	514	809	8 592	1 513	12 705
Tested	1 071	342	487	4 803	656	7 359
Newly diagnosed (%)	0 (0.0)	0 (0.0)	1 (0.2)	7 (0.1)	2 (0.3)	10 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	2 (0.1)
2001						
Seen	1 497	594	988	9 671	1 742	14 492
Tested	1 147	359	574	4 139	539	6 758
Newly diagnosed (%)	2 (0.2)	0 (0.0)	2 (0.3)	2 (0.1)	2 (0.4)	8 (0.1)
Previously negative (%)	1 (0.1)	0 (0.0)	1 (0.4)	1 (0.1)	0 (0.0)	3 (0.1)
2002						
Seen	1 145	434	1 021	7 580	715	10 895
Tested	892	261	655	3 533	228	5 569
Newly diagnosed (%)	1 (0.1)	0 (0.0)	4 (0.6)	0 (0.0)	0 (0.0)	5 (0.1)
Previously negative (%)	1 (0.2)	0 (0.0)	2 (0.8)	0 (0.0)	0 (0.0)	3 (0.1)

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

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

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.4.3 Number of people seen at selected metropolitan sexual health clinics in Australia, 1998 – 2002, 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

Males		Age group (years)							Total
		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported	
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	538	6 535	5 569	2 327	1 051	474	2	16 496
	Tested	332	4 116	2 995	1 273	585	263	0	9 564
	Newly diagnosed (%)	0 (0.0)	13 (0.3)	16 (0.5)	3 (0.2)	2 (0.3)	0 (0.0)	–	34 (0.4)
	Previously negative (%)	0 (0.0)	8 (0.5)	5 (0.3)	3 (0.4)	1 (0.3)	0 (0.0)	–	17 (0.4)
2001	Seen	606	6 918	5 749	2 677	1 223	525	–	17 698
	Tested	330	3 899	2 772	1 192	523	212	–	8 928
	Newly diagnosed (%)	2 (0.6)	18 (0.5)	17 (0.6)	11 (0.9)	1 (0.2)	1 (0.5)	–	50 (0.6)
	Previously negative (%)	1 (1.2)	8 (0.5)	8 (0.6)	1 (0.2)	1 (0.4)	1 (0.9)	–	20 (0.5)
2002	Seen	547	5 365	4 074	1 963	892	371	0	13 212
	Tested	357	3 450	2 280	990	449	167	0	7 693
	Newly diagnosed (%)	0 (0.0)	17 (0.5)	12 (0.5)	9 (0.9)	1 (0.2)	1 (0.6)	–	40 (0.5)
	Previously negative (%)	0 (0.0)	12 (0.8)	9 (0.6)	5 (0.9)	1 (0.4)	0 (0.0)	–	27 (0.7)

Age group (years)

Females	Age group (years)							Total
	13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported	
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 (0.1)
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	1 156	6 049	3 731	1 007	340	420	2	12 705
Tested	701	4 117	1 665	655	182	39	0	7 359
Newly diagnosed (%)	0 (0.0)	4 (0.1)	5 (0.3)	1 (0.2)	0 (0.0)	0 (0.0)	–	10 (0.1)
Previously negative (%)	0 (0.0)	1 (0.05)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	2 (0.1)
2001								
Seen	1 571	7 715	3 376	1 289	427	112	2	14 492
Tested	682	3 638	1 591	640	175	31	1	6 758
Newly diagnosed (%)	1 (0.1)	2 (0.1)	5 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (0.1)
Previously negative (%)	1 (0.6)	1 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.1)
2002								
Seen	1 463	5 693	2 469	894	299	77	0	10 895
Tested	636	3 020	1 284	470	135	24	0	5 569
Newly diagnosed (%)	0 (0.0)	4 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	5 (0.1)
Previously negative (%)	0 (0.0)	2 (0.2)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	3 (0.1)

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.4.4 Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2002, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and clinic

Males	Sexual Health Clinic								Total
	Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC ¹			
2001	Seen 4 184	993	2 881	1 148	3 061	5 434		17 701	
	Tested 243	199	494	183	2 412	367		3 898	
	Newly diagnosed (%) 12 (4.9)	11 (5.5)	12 (2.4)	23 (12.6)	21 (0.9)	20 (5.4)		99 (2.5)	
2002	Seen 4 330	1 265	2 907	1 164	3 459	–		13 125	
	Tested 251	280	537	205	2 742	–		4 015	
	Newly diagnosed (%) 1 (0.4)	45 (16.1)	24 (4.5)	18 (8.8)	63 (2.3)	–		151 (3.8)	
Females									
2001	Seen 2 972	980	2 242	1 517	2 268	4 513		14 492	
	Tested 132	243	388	296	1 594	326		2 979	
	Newly diagnosed (%) 4 (3.0)	35 (14.4)	8 (2.1)	22 (7.4)	5 (0.3)	29 (8.9)		103 (3.5)	
2002	Seen 2 924	1 317	2 406	1 598	2 585	–		10 830	
	Tested 115	343	405	337	1 785	–		2 985	
	Newly diagnosed (%) 0 (0.0)	87 (25.4)	18 (4.4)	20 (5.9)	49 (2.7)	–		174 (5.8)	

¹ Data not available from the Melbourne Sexual Health Centre, VIC, in 2002.

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.4.5 Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2002, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and exposure category

Males	Exposure category							Total
	Male homosexual contact	Male homosexual contact and injecting drug use	Male homosexual contact and injecting drug use	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males	
2001	Seen	3 960	318	762	1 193	9 752	1 716	17 701
	Tested	840	139	416	277	2 029	197	3 898
	Newly diagnosed (%)	13 (1.5)	10 (7.2)	37 (8.9)	3 (1.1)	31 (1.5)	5 (2.5)	99 (2.5)
2002	Seen	3 330	318	623	1 251	7 008	595	13 125
	Tested	882	166	360	363	2 139	105	4 015
	Newly diagnosed (%)	18 (2.0)	14 (8.4)	67 (18.6)	5 (1.4)	28 (1.3)	19 (18.1)	151 (3.8)

Females	Exposure category							Total
	Sex worker ¹	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females	Total		
2001	Seen	1 497	594	989	9 671	1 741	14 492	
	Tested	445	276	222	1 783	253	2 979	
	Newly diagnosed (%)	27 (6.1)	22 (8.0)	0 (0.0)	38 (2.1)	16 (6.3)	103 (3.5)	
2002	Seen	1 150	430	1 023	7 520	707	10 830	
	Tested	423	218	287	1 881	176	2 985	
	Newly diagnosed (%)	34 (8.0)	63 (28.9)	3 (1.0)	68 (3.6)	6 (3.4)	174 (5.8)	

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

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.4.6 Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2002, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and age group

	Age group							Total ¹
	13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+		
2001	Seen	606	6 919	5 751	2 677	1 223	525	17 701
	Tested	190	1 690	1 155	550	233	80	3 898
	Newly diagnosed (%)	4 (2.1)	36 (2.1)	31 (2.7)	22 (4.0)	6 (2.6)	0 (0.0)	99 (2.5)
2002	Seen	548	5 342	4 030	1 948	889	368	13 125
	Tested	205	1 757	1 178	555	234	86	4 015
	Newly diagnosed (%)	1 (0.5)	36 (2.0)	64 (5.4)	34 (6.1)	12 (5.1)	4 (4.6)	151 (3.8)
Females								
2001	Seen ¹	1 571	7 716	3 376	1 288	427	112	14 492
	Tested	422	1 494	673	303	78	9	2 979
	Newly diagnosed (%)	4 (0.9)	49 (3.3)	32 (4.8)	17 (5.6)	0 (0.0)	1 (11.1)	103 (3.5)
2002	Seen	1 466	5 670	2 435	885	297	77	10 830
	Tested	430	1 572	618	266	79	20	2 985
	Newly diagnosed (%)	18 (4.2)	43 (2.7)	78 (12.6)	33 (12.4)	2 (2.5)	0 (0.0)	174 (5.8)

¹ Total includes 2 women whose age was not reported.

Source: Collaborative group on sentinel surveillance in sexual health clinics

4.5 HIV, hepatitis B surface antigen and hepatitis C antibody in blood donors

4.5.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody¹, 1985 – 2002, by State/Territory and years of donation

State/Territory	1985 ² – 1992			1993 – 1994			1995 – 1996			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT	135 075	1	0.7	30 865	0	0.0	20 613	0	0.0	195 633	1	0.5
NSW	2 287 573	30	1.3	574 285	2	0.3	540 077	4	0.7	5 164 642	40	0.8
NT	69 246	0	0.0	16 996	0	0.0	19 149	0	0.0	153 591	1	0.7
QLD	1 300 621	15	1.2	361 984	3	0.8	306 661	5	1.6	3 122 219	31	1.0
SA	756 111	2	0.3	192 143	1	0.5	166 305	1	0.6	1 641 783	6	0.4
TAS	195 389	0	0.0	49 242	0	0.0	49 987	0	0.0	408 695	1	0.2
VIC	2 044 353	10	0.5	486 451	4	0.8	424 381	1	0.2	4 406 731	17	0.4
WA	586 988	6	1.0	153 307	0	0.0	167 736	1	0.6	1 486 492	13	0.9
Total	7 375 356	64	0.9	1 865 273	10	0.5	1 694 909	12	0.7	16 579 786	110	0.7

State/Territory	1997 – 1998			1999 – 2000			2001 – 2002			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ³	9 080	0	0.0	—	—	—	—	—	—	195 633	1	0.5
NSW ⁴	565 689	1	0.2	577 431	0	0.0	619 587	3	0.5	5 164 642	40	0.8
NT	14 805	1	6.8	18 429	0	0.0	14 966	0	0.0	153 591	1	0.7
QLD	372 520	3	0.8	385 192	2	0.5	395 241	3	0.8	3 122 219	31	1.0
SA	168 787	2	1.2	176 357	0	0.0	182 080	0	0.0	1 641 783	6	0.4
TAS	51 345	1	1.9	13 013	0	0.0	49 719	0	0.0	408 695	1	0.2
VIC	449 148	1	0.2	499 954	1	0.2	502 444	0	0.0	4 406 731	17	0.4
WA	178 088	1	0.6	200 097	2	1.0	200 276	3	1.5	1 486 492	13	0.9
Total	1 809 462	10	0.6	1 870 473	5	0.3	1 964 313	9	0.5	16 579 786	110	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 1998.

4 Includes one donor diagnosed in 2002 for whom information was not available at 31 March 2003.

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

4.5.2 Number of blood donors in Australia with HIV antibody, 1985 – 2002, 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 – 1992		1993 – 1994		1995 – 1996		1997 – 1998		1999 – 2000		2001 – 2002		All years		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Male homosexual contact	16 ¹	–	1	–	0	–	2 ¹	–	1	–	0	–	20	–	20
Injecting drug use	1	0	0	0	1	0	1	0	0	0	1	0	4	0	4
Heterosexual contact	15	13	2	1	3	2	1	3	0	2	2	4	23	25	48
Person from a high prevalence country	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Receipt of blood/tissue	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Other	0	2	0	1	0	0	0	1	0	1	0	0	0	0	5
Undetermined	13	2	5	0	6	0	1	0	0	1	1	0	26	3	29
Total	46	18	8	2	10	2	5	5	1	4	4	4	74	35	109
New HIV infection²	20	8	1	2	3	2	1	1	0	2	3	1	28	16	44

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

4.5.3 Number of donations tested for hepatitis B surface antigen at blood services, 1998 – 2002, number of donations positive for hepatitis B surface antigen and prevalence of hepatitis B surface antigen¹, 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	22.2	—	—	—	—	—	—
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

State/Territory	2001			2002		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ²	—	—	—	—	—	—
NSW	303 278	48	15.8	316 309	50	15.8
NT	7 119	3	42.1	7 847	2	25.5
QLD	190 120	21	11.0	205 121	22	10.7
SA	88 190	5	5.7	93 890	5	5.3
TAS ³	25 849	2	7.7	23 870	0	0.0
VIC	247 923	35	14.1	254 521	33	13.0
WA	96 771	9	9.3	103 505	14	13.5
Total	959 250	123	12.8	1 005 063	126	12.5

1 Prevalence per 100 000 donations.

2 Hepatitis B surface antigen tests of blood donors in the ACT carried out in NSW from 1 July 1998.

3 Hepatitis B surface antigen tests of blood donors in TAS counted with VIC from 1 July 1999 to 31 December 2000.

Source: Australian Red Cross Blood Service

4.5.4 Number of donations tested for hepatitis C antibody at blood services, 1998 – 2002, 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	268 393	63	23.5	271 662	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	919 139	239	26.0	915 835	168	18.3	955 984	152	15.9

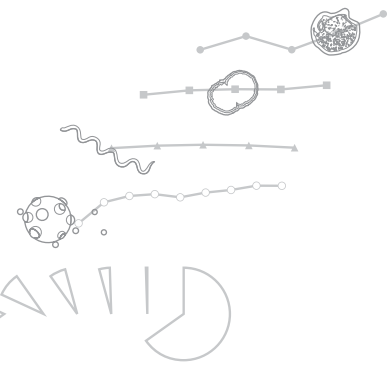
State/Territory	2001			2002		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ²	—	—	—	—	—	—
NSW	303 278	36	11.9	316 309	53	16.8
NT	7 119	1	14.0	7 847	1	12.7
QLD	190 120	49	25.8	205 121	48	23.4
SA	88 190	9	10.2	93 890	12	12.8
TAS ³	25 849	6	23.2	23 870	4	16.8
VIC	247 923	45	18.2	254 521	35	13.8
WA	96 771	13	13.4	103 505	20	19.3
Total	959 250	159	16.6	1 005 063	173	17.2

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 tests of blood donors in TAS counted with VIC from 1 July 1999 to 31 December 2000.

Source: Australian Red Cross Blood Service



Tables

5 Risk behaviour

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

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5

Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 1998 – 2002, prevalence of anal intercourse by partner type, city and year of survey, and prevalence of injecting drug use and HIV antibody testing by city and year of survey

	Sydney			Brisbane			Melbourne			Adelaide							
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2001				
Sample size	3 037	3 343	2 916	2 862	2 884	1 341	1 225	1 285	1 570	1 787	1 891	1 578	1 830	1 887	552	463	565
Anal intercourse with regular partners																	
Men with regular partners	61.3	66.6	64.0	64.2	63.0	61.6	62.2	62.5	61.7	59.3	64.3	63.8	65.5	63.6	65.4	63.5	65.7
Unprotected anal intercourse	30.4	34.0	35.0	35.8	36.9	30.6	29.9	34.2	33.4	33.1	29.1	33.2	37.5	34.9	34.4	33.0	34.7
Anal intercourse with casual partners																	
Men with casual partners	75.3	70.3	72.8	73.3	71.5	71.7	73.6	70.8	71.6	69.8	72.0	71.2	66.1	67.6	60.5	61.8	66.4
Unprotected anal intercourse	18.2	18.5	23.0	25.7	24.5	14.0	14.7	18.4	19.2	22.1	13.4	16.6	17.0	19.1	14.1	12.1	15.9
Injecting drug use¹	–	7.6	7.2	7.0	5.4	8.7	9.1	8.6	9.6	10.1	–	5.0	4.0	4.8	8.7	7.5	4.1
HIV antibody testing²	48.8	47.8	47.0	44.4	50.3	51.5	50.0	50.2	51.0	50.5	46.6	41.5	40.3	39.4	46.7	43.3	45.5

¹ Injecting drug use in the previous 6 months.

² HIV antibody testing in the previous 6 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; State-based People living with HIV/AIDS organisations

5.2 Sexual behaviour in the Australian population

Table 5.2.1 Percentage of heterosexually active men and women who reported unprotected vaginal intercourse in the six months prior to interview, May 2001 – June 2002, by State/Territory and partner type

State/Territory	Partner type			
	Regular (%)		Casual (%)	
	Men	Women	Men	Women
ACT	74.6	70.6	3.4	2.8
NSW	68.0	74.9	4.4	1.9
NT	66.3	74.5	4.8	5.4
QLD	68.6	82.0	4.1	4.3
SA	75.9	82.6	3.4	1.2
TAS	71.0	72.6	2.5	3.0
VIC	72.5	73.3	3.2	2.3
WA	70.7	78.9	4.3	2.9
Total	70.3	76.7	3.9	2.6

Source: Australian Study of Health and Relationships

5.3

Sexual and injecting behaviour among people who have injected drugs

Table 5.3.1 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1998 – 2002, percent reporting HIV and hepatitis C 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 past month by year, sex, history of injecting drug use and last drug injected

1998

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
<i>History of drug injection</i>															
Less than 3 years	273	182	457	52	63	56	60	65	56	257	173	432	13	24	17
3 to 5 years	298	178	476	59	72	64	62	71	65	285	170	455	18	31	23
6 to 10 years	361	186	549	67	70	68	65	71	67	339	177	517	19	18	18
11 or more years	598	296	899	67	71	69	67	68	68	569	277	851	15	14	14
Not reported	36	11	49	58	55	55	50	82	55	28	7	35	18	14	17
<i>Last drug injected</i>															
Amphetamine	354	155	510	52	62	55	47	55	49	315	137	453	9	12	10
Heroin/opiates	978	581	1 562	66	71	68	68	73	70	946	559	1 508	16	21	18
Combination	155	88	247	68	67	68	68	64	67	152	83	239	29	29	29
Other/not reported	79	29	111	65	76	67	54	76	59	65	25	90	17	24	19
Total	1 566	853	2 430	63	69	65	62	69	65	1 478	804	2 290	16	21	18

1999

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
<i>History of drug injection</i>															
Less than 3 years	238	154	392	52	66	57	52	66	57	218	145	363	20	24	21
3 to 5 years	297	178	476	59	68	62	59	68	62	271	170	442	17	26	21
6 to 10 years	360	211	575	65	66	66	65	66	66	333	195	532	25	22	24
11 or more years	591	280	873	65	66	65	65	66	65	551	261	814	19	20	20
Not reported	41	17	62	49	71	53	49	71	53	29	11	40	24	36	28
<i>Last drug injected</i>															
Amphetamine	401	212	614	52	60	55	52	60	55	363	190	554	19	16	18
Heroin/opiates	900	524	1 430	67	69	68	67	73	69	852	502	1 360	20	23	21
Combination	122	70	193	61	74	66	66	71	68	115	66	181	30	41	34
Other/not reported	104	34	141	46	56	48	52	62	54	72	24	96	18	25	20
Total	1 527	840	2 378	61	67	63	62	69	65	1 402	782	2 191	21	23	21

2000

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>History of drug injection</i>															
Less than 3 years	208	128	336	52	65	57	58	68	62	187	119	306	12	23	16
3 to 5 years	303	214	519	68	67	67	71	80	75	284	205	491	14	21	17
6 to 10 years	400	235	639	67	73	69	68	75	71	375	219	598	16	28	21
11 or more years	691	276	971	66	68	67	68	73	69	645	255	903	14	15	14
Not reported	37	17	59	51	53	49	57	47	51	28	13	41	11	23	15
<i>Last drug injected</i>															
Amphetamine	373	162	538	55	58	56	57	58	57	332	141	476	7	13	9
Heroin/opiates	1 005	608	1 616	67	69	68	70	77	73	964	581	1 548	16	22	18
Combination	182	73	256	73	75	74	77	78	78	170	68	239	23	29	25
Other/not reported	79	27	114	53	89	64	56	81	61	53	21	76	8	14	11
Total	1 639	870	2 524	64	68	66	67	74	69	1 519	811	2 339	14	21	17

2001

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>History of drug injection</i>															
Less than 3 years	169	110	282	41	61	49	46	68	55	146	98	246	12	19	15
3 to 5 years	258	151	412	55	65	59	59	71	64	236	135	374	8	20	12
6 to 10 years	383	223	607	63	70	66	66	62	68	347	199	547	20	14	18
11 or more years	683	277	972	64	62	63	68	67	68	625	251	887	16	11	14
Not reported	47	17	69	57	53	58	49	47	49	25	8	34	8	13	9
<i>Last drug injected</i>															
Amphetamine	591	263	865	54	60	56	57	63	59	536	239	785	13	10	12
Heroin/opiates	636	350	991	61	67	63	66	73	69	580	319	903	15	15	15
Combination	166	78	244	74	74	74	75	78	76	148	70	218	24	24	24
Other/not reported	47	87	242	56	61	59	63	62	63	115	63	182	14	22	16
Total	1 540	778	2 342	59	64	61	63	69	65	1 379	691	2 088	15	15	15

2002

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>History of drug injection</i>															
Less than 3 years	149	74	226	52	65	57	45	62	51	128	65	196	15	28	19
3 to 5 years	220	151	375	61	77	68	60	75	66	196	137	336	16	18	17
6 to 10 years	389	218	610	66	77	70	70	75	72	354	200	556	21	16	19
11 or more years	750	315	1 073	62	67	64	66	65	66	697	287	991	15	13	14
Not reported	41	25	69	59	68	59	59	68	59	30	16	46	27	25	26
<i>Last drug injected</i>															
Amphetamine	742	381	1 130	61	70	64	63	68	64	449	232	685	15	16	15
Heroin/opiates	551	300	855	62	72	66	65	73	68	738	387	1 130	16	16	16
Combination	168	63	235	70	81	73	74	71	74	157	57	217	27	26	27
Other/not reported	88	39	133	51	67	56	52	62	54	61	29	93	10	7	9
Total	1 549	783	2 353	62	71	65	64	70	66	1 405	705	2 125	17	16	16

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 5.3.2 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1998 – 2002, percent reporting HIV and hepatitis C 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, age group, sexual identity and sex

1998

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T'	M	F	T	M	F	T	M	F	T'	M	F	T
<i>Age group</i>															
Less than 20 years	138	117	255	54	70	61	49	71	59	94	87	181	48	26	38
20 to 24 years	386	235	622	64	74	68	63	71	66	290	179	470	44	30	39
25 to 34 years	626	300	933	65	71	67	64	69	66	435	215	656	36	31	34
35 or more years	414	201	618	62	61	61	63	64	63	220	106	328	30	27	29
Not reported	2	0	2	0	–	0	0	–	0	1	0	1	50	–	50
<i>Sexual identity</i>															
Heterosexual	1 339	620	1 963	63	68	65	63	69	65	885	424	1 313	35	27	32
Bisexual	88	139	228	69	73	71	68	73	71	62	99	162	55	45	49
Homosexual	69	74	144	65	70	68	65	66	66	53	52	106	58	18	38
Not reported	70	20	95	54	60	56	46	55	47	40	12	55	40	30	38
Total	1 566	853	2 430	63	69	65	62	69	65	1 040	587	1 636	37	29	34

1999

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T'	M	F	T	M	F	T	M	F	T'	M	F	T
<i>Age group</i>															
Less than 20 years	130	114	244	48	67	57	50	75	62	90	90	180	55	45	50
20 to 24 years	324	201	527	59	70	63	61	68	64	245	166	412	42	27	36
25 to 34 years	665	331	1 000	64	68	66	64	68	66	443	237	684	33	32	33
35 or more years	406	193	601	63	61	62	63	68	65	201	126	328	36	27	33
Not reported	2	1	6	0	100	17	0	100	33	2	0	3	50	0	17
<i>Sexual identity</i>															
Heterosexual	1 243	553	1 796	60	63	61	62	66	63	778	410	1 188	35	28	33
Bisexual	104	187	297	66	77	74	61	77	71	74	145	224	41	44	43
Homosexual	70	52	124	74	75	75	61	77	69	49	33	83	63	19	44
Not reported	110	48	161	65	56	61	63	60	61	80	31	112	44	29	39
Total	1 527	840	2 378	61	67	63	62	69	65	981	619	1 607	37	31	35

2000

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C 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
<i>Age group</i>															
Less than 20 years	111	111	222	44	65	55	56	77	66	78	88	166	47	41	44
20 to 24 years	330	235	569	68	76	72	71	77	74	235	183	421	43	34	39
25 to 34 years	688	333	1 026	67	70	68	68	76	70	452	237	691	35	30	34
35 or more years	509	191	705	63	58	62	66	64	65	259	114	375	34	33	34
Not reported	1	0	2	0	–	0	0	–	0	1	0	1	0	–	0
<i>Sexual identity</i>															
Heterosexual	1 374	557	1 934	64	66	64	66	72	68	851	392	1 243	35	31	34
Bisexual	77	196	275	75	82	80	71	84	81	53	148	203	49	45	46
Homosexual	84	71	160	65	54	61	63	65	64	58	50	112	61	20	42
Not reported	104	46	155	63	67	63	73	72	71	63	32	96	38	28	34
Total	1 639	870	2 524	64	68	66	67	74	69	1 025	622	1 654	37	33	36

2001

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C 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
<i>Age group</i>															
Less than 20 years	92	74	168	46	77	60	53	74	63	65	58	125	57	28	45
20 to 24 years	289	191	484	57	68	62	60	73	66	208	151	362	41	30	37
25 to 34 years	628	307	940	64	64	64	65	68	66	435	243	683	33	25	30
35 or more years	529	205	746	57	57	58	64	64	64	305	132	447	30	23	28
Not reported	2	1	4	100	100	75	50	100	50	1	1	2	50	0	25
<i>Sexual identity</i>															
Heterosexual	1 268	529	1 808	58	63	60	62	69	64	828	399	1 237	33	23	30
Bisexual	69	154	227	70	70	70	68	71	70	49	120	172	38	42	41
Homosexual	80	47	129	68	60	65	66	72	69	58	30	90	54	13	38
Not reported	123	48	178	58	65	61	69	58	66	79	36	120	37	29	35
Total	1 540	778	2 342	59	64	61	63	69	65	1 014	585	1 619	35	26	32

2002

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C 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
<i>Age group</i>															
Less than 20 years	72	67	140	63	76	69	56	73	64	53	61	115	54	33	44
20 to 24 years	271	179	452	65	78	70	65	75	69	205	143	349	42	35	39
25 to 34 years	667	321	994	64	72	67	68	71	69	470	245	719	34	29	32
35 or more years	535	215	762	59	64	60	60	62	61	318	131	455	29	27	29
Not reported	4	1	5	25	100	40	0	100	20	2	1	3	50	100	60
<i>Sexual identity</i>															
Heterosexual	1 267	524	1 797	62	69	64	63	67	64	844	392	1 239	33	28	32
Bisexual	71	171	248	69	77	75	69	75	73	52	131	188	37	36	38
Homosexual	58	32	92	76	75	75	79	66	74	43	24	69	55	34	48
Not reported	153	56	216	58	75	62	66	79	69	109	34	145	39	25	35
Total	1 549	783	2 353	62	71	65	64	70	66	1 048	581	1 641	35	30	33

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



Tables

6 Estimates of the number of people living with HIV and hepatitis C infection

6.1 Estimates of the number of people living with HIV infection

Table 6.1.1 Estimated number of people living with HIV infection by HIV disease stage, 2002 – 2006 101

6.2 Estimates of the number of people living with hepatitis C infection

Table 6.2.1 Estimated number of people living with hepatitis C infection in 2002 by stage of liver disease 101

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6 Estimates of the number of people living with HIV and hepatitis C infection

6.1 Estimates of the number of people living with HIV infection

Table 6.1.1 Estimated number of people living with HIV¹ by HIV disease stage, 2002 – 2006

Year	Estimated number of people			
	Living with HIV ²	CD4>500 cells/ μ l	CD4<500 cells/ μ l without AIDS	Living with AIDS ³
2002	13 120	2 040	8 280	2 800
2003	13 480	2 030	8 495	2 955
2004	13 840	2 020	8 710	3 110
2005	14 200	2 020	8 915	3 265
2006	14 560	2 020	9 120	3 420

1 The estimated number of people living with HIV is imprecise, due to limitations of current methods for estimating HIV incidence from 1995.

2 Estimated numbers based on back-projection analyses, including people with diagnosed and undiagnosed HIV infection, and assuming 450 new infections per year since 2002.

3 In 2002, 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 2002.

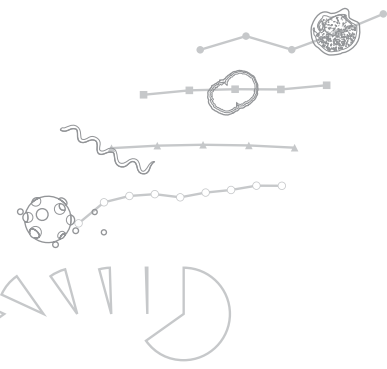
Source: State/Territory health authorities

6.2 Estimates of the number of people living with hepatitis C infection

Table 6.2.1 Estimated number of people living with hepatitis C infection in 2002 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2002	225 000	(166 000 – 270 000)
<i>Exposed to hepatitis C virus but not chronically infected</i>	57 000	(42 000 – 68 000)
<i>Chronic hepatitis C infection with stage 0/1 liver disease</i>	133 000	(98 000 – 160 000)
<i>Chronic hepatitis C infection with stage 2/3 liver disease</i>	29 000	(21 000 – 34 000)
<i>Living with hepatitis C-related cirrhosis</i>	6 900	(5 300 – 8 300)
During 2002		
Hepatitis C-related liver failure	189	(140 – 230)
Hepatitis C-related hepatocellular carcinoma	55	(41 – 66)

Source: Hepatitis C Virus Projections Working Group 2002



Tables

7 Uptake of treatment for HIV and hepatitis C infection

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7 Uptake of treatment for HIV and hepatitis C infection

7.1 Uptake of antiretroviral treatment for HIV infection

Table 7.1.1 Antiretroviral treatment among people enrolled in the Australian HIV Observational Database in 2002

	Current antiretroviral treatment ¹					Total
	None	Mono/Double	3+ (NRTI +/- PI, no NNRTI)	3+ (NRTI + NNRTI, no PI)	3+ (NNRTI + PI, +/- NRTI)	
Total	401 (22%)	173 (9%)	559 (31%)	593 (32%)	109 (6%)	1 835
Sex						
Male	376 (22%)	162 (9%)	530 (31%)	556 (32%)	109 (6%)	1 733
Female	25 (25%)	11 (11%)	28 (28%)	36 (36%)	0 (0%)	100
Age at enrolment (years)						
<30	49 (37%)	11 (8%)	31 (23%)	40 (30%)	3 (2%)	134
30 – 39	176 (24%)	61 (8%)	213 (29%)	240 (33%)	38 (5%)	728
40 – 49	125 (20%)	61 (10%)	193 (32%)	188 (31%)	43 (7%)	610
50+	51 (14%)	40 (11)	122 (34%)	125 (34%)	25 (7%)	363
Exposure category						
Male homosexual contact	279 (20%)	137 (10%)	415 (31%)	434 (32%)	95 (7%)	1 360
Other/not reported	122 (26%)	36 (8%)	144 (30%)	159 (33%)	14 (3%)	475
Viral load (copies/ml)						
<400	114 (11%)	91 (9%)	305 (31%)	431 (43%)	58 (6%)	999
400 – 10 000	105 (31%)	43 (13%)	109 (32%)	61 (18%)	24 (7%)	342
10 000+	154 (40%)	32 (8%)	110 (28%)	71 (18%)	20 (5%)	387
Not reported	28	7	35	30	7	107
CD4+ count (cells/μl)						
<200	27 (12%)	25 (11%)	96 (42%)	58 (25%)	23 (10%)	229
200 – 500	130 (18%)	65 (9)	251 (36%)	217 (31%)	42 (6%)	705
500+	217 (27%)	78 (10%)	181 (22%)	295 (36%)	38 (5%)	809
Not reported	27	5	31	23	6	92
AIDS prior to enrolment						
No	365 (25%)	135 (9%)	408 (28%)	484 (33%)	73 (5%)	1 465
Yes	36 (10%)	38 (10%)	151 (41%)	109 (29%)	36 (10%)	370
Previous treatment						
None	293 (76%)	8 (2%)	41 (11%)	42 (11%)	3 (1%)	387
Mono/Double	14 (8%)	123 (68%)	29 (16%)	12 (7%)	4 (2%)	182
3 + (NRTI +/- PI, not NNRTI)	47 (9%)	24 (4%)	419 (78%)	39 (7%)	12 (2%)	541
3 + (NRTI + NNRTI, not PI)	36 (6%)	14 (2%)	46 (8%)	494 (83%)	4 (1%)	594
3 + (PI + NNRTI, +/- NRTI)	11 (8%)	4 (3%)	24 (18%)	6 (5%)	86 (66%)	131

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

Source: Australian HIV Observational Database

Table 7.1.2 Number of gay and other homosexually active men with diagnosed HIV infection participating in the Periodic Surveys, 1998 – 2002, and percent reporting use of combination antiretroviral therapy for HIV infection, by city and year of survey

	Sydney					Brisbane					Melbourne				Adelaide		
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	2000	2001	2002	1998	2000	2001
Sample size	606	602	504	453	420	112	99	77	88	121	155	138	151	150	34	34	33
Proportion reporting use of antiretroviral therapy	72.4	71.3	75.2	65.5	68.1	68.8	67.7	66.2	59.1	48.8	82.6	78.3	66.9	70.0	64.7	73.5	57.6

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

Table 7.1.3 Number of people enrolled in Positive Health and percent reporting use of antiretroviral therapy by year and city

	Sydney			Melbourne		
	1998 – 1999	2000 – 2001	2002 – 2003	1998 – 1999	2000 – 2001	2002 – 2003
Sample size	362	292	292	56	105	83
Proportion reporting use of any antiretroviral therapy	80.7	72.6	69.2	87.5	73.3	69.9
Treatment combinations						
Mono/Double	8.6	6.2	8.9	7.2	6.7	10.8
3+ (NRTI +/- PI, no NNRTI)	35.9	28.4	27.1	44.6	28.6	37.3
3+ (NRTI + NNRTI, no PI)	24.0	29.1	23.3	23.2	25.7	18.1
3+ (NNRTI + PI, no NRTI)	0.3	1.0	1.7	–	1.9	1.2
3+ (NNRTI + NRTI + PI)	11.9	6.8	7.9	12.5	8.6	2.4

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; Australian Federation of AIDS Organisations; National Association of People living with HIV/AIDS

7.2 Monitoring prescriptions for HIV treatments

Table 7.2.1 Number of people prescribed antiretroviral treatment through the Highly Specialised Drugs (S100) Program by year and antiretroviral agent

Antiretroviral agent	1998	1999	2000	2001	2002
Nucleoside analogue reverse transcriptase inhibitors					
Abacavir	n/a	709	1 090	1 421	1 355
Didanosine	1 407	1 464	1 283	1 219	1 319
Lamivudine ¹	4 093	3 109	3 387	3 429	3 455
Stavudine	3 753	3 632	3 208	2 656	2 036
Zalcitabine	219	150	117	108	64
Zidovudine	1 644	720	525	579	315
Lamivudine & Zidovudine	220	1 120	1 640	1 910	1 849
Abacavir, Lamivudine & Zidovudine	n/a	n/a	n/a	177	756
Non-nucleoside analogue reverse transcriptase inhibitors					
Delavirdine	91	86	59	70	49
Efavirenz	n/a	710	1 020	1 119	1 208
Nevirapine	1 800	2 120	2 250	2 389	2 334
Protease inhibitors					
Amprenavir	n/a	n/a	n/a	n/a	145
Indinavir	1 656	1 289	1 237	1 015	743
Nelfinavir	1 243	1 353	1 112	864	621
Ritonavir	734	621	1 001	942	771
Saquinavir	1 502	1 180	864	712	566
Tenofovir	n/a	n/a	n/a	n/a	862
Total patients²	6 059	6 114	6 233	6 771	6 823
Total cost³ (\$'000s)	66 360	67 623	69 321	67 085	89 449

1 Includes patients treated with Lamivudine for hepatitis B infection.

2 Total patients calculated as (Stavudine + Zidovudine + Combivir (Lamivudine & Zidovudine)+Trizivir (Abacavir, Lamivudine & Zidovudine))/the proportion of patients in the Australian HIV Observational Database receiving either Stavudine or Zidovudine combinations in each year.

3 Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

Source: Highly Specialised Drugs (S100) Program

Table 7.2.2 Number of people prescribed drugs for HIV/AIDS related conditions through the Highly Specialised Drugs (S100) Program, by year

Treatment	1998	1999	2000	2001	2002
Azithromycin	271	285	255	200	188
Cidofovir	9	6	4	2	2
Clarithromycin	187	153	227	246	268
Doxorubicin	n/a	10	16	13	11
Foscarnet	27	13	7	8	8
Ganciclovir	106	79	145	188	260
Rifabutin	90	64	65	64	41
Valaciclovir	n/a	n/a	145	142	194
Total cost¹ (\$'000s)	2 700	2 125	2 528	3 615	4 735

1 Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

Source: Highly Specialised Drugs (S100) Program

7.3 Monitoring prescriptions for hepatitis C treatments

Table 7.3.1 Number of people prescribed drugs for hepatitis C infection through the Highly Specialised Drugs (S100) Program, by quarter¹

Treatment	2001				2002			
	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sep	Oct – Dec
Ribavirin and Interferon	207	1 024	1 314	1 165	1 123	1 142	1 133	976
Total cost² (\$'000s)	718	3 059	5 481	4 290	4 213	4 515	4 488	3 912

1 An estimated 1,391 and 1,640 people were receiving treatment throughout 2001 and 2002, respectively. Calculations were based on the assumption that 50% of people were receiving treatment for 6 months and the remaining 50% were receiving treatment for 12 months.

2 Public hospital expenditure only.

Source: Highly Specialised Drugs (S100) Program



Methodological notes

1 National surveillance for HIV/AIDS

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 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). AIDS defining illnesses were grouped, in Figure 36, as *Pneumocystis carinii* pneumonia (PCP) only, other opportunistic infections (OI) only, Kaposi's sarcoma (KS) only, other cancers only, central nervous system (CNS) conditions (HIV encephalopathy, toxoplasmosis and cryptococcosis) and other multiple illnesses.

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 2000 to 31 December 2002 and notified by 31 March 2003. 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 2000 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 2002 and reported to the *National AIDS Registry* by 31 March 2003. Cases without any follow-up information after AIDS diagnosis were excluded from the analysis. Crude 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 2002, whichever came first. Survival rates at 1 and 2 years following AIDS diagnosis, and median survival, were estimated by the Kaplan-Meier method. No adjustment was made for the background mortality rate, due to the relatively young median age at AIDS. 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 National surveillance for 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 2003. 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 1993 – 2002, 94.5% 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. Further information is available in Guthrie *et al* (2000).

1.4 Assessment of self-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).

1.5 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).

1.6 Global comparisons

The data in Table 1.6.1 were obtained from the following sources:

- AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago Medical School, Dunedin, New Zealand. *AIDS – New Zealand* 2003; 51
- Beyrer C, Razak MH, Labrique A and Brookmeyer R. Assessing the magnitude of the HIV/AIDS epidemic in Burma. *JAIDS* 2003; 32: 311- 317
- Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report* 2001; 13(2)
- European Centre of the Epidemiological Monitoring of AIDS. *HIV/AIDS Surveillance in Europe: Surveillance Report, end-year report 2002*. Saint-Maurice, Institut de Veille Sanitaire, 2003. No 68.
- Health Canada. *HIV and AIDS in Canada. Surveillance report to December 31, 2002*. Division of HIV/AIDS Epidemiology and Surveillance, Centre for Infectious Disease Prevention and Control, Health Canada, 2003
- Joint United Nations Programme on HIV/AIDS. <http://www.unaids.org>
- Unlinked Anonymous Surveys Steering Group. Prevalence of HIV and hepatitis infections in the United Kingdom 2001. London: Department of Health 2002.
- WHO Western Pacific Region. Report of the Regional Director, 1 July 2001 – 30 June 2002
- WHO Western Pacific Region. Report of the Regional Director, 1 July 2000 – 30 June 2001
- WHO South-East Asia Region. Report of the Regional Director, 1 July 2000 – 30 June 2001

2 National surveillance for 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 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. The number of diagnosed cases by State/Territory, age group and sex was counted based on the date of diagnosis reported to the National Notifiable Diseases Surveillance System. Population rates of diagnoses of viral hepatitis were calculated for each State/Territory using yearly population estimates, provided by the Australian Bureau of Statistics.

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. Exposure to hepatitis C was categorised into a hierarchy of risks for infection. For example, if injecting drug use as well as a history of surgery, blood transfusion or tattoos was reported, exposure was categorised as injecting drug use. Exposure to hepatitis C was categorised as household transmission if a case reported sharing items such as a toothbrush or razor with a person with documented hepatitis C infection, in the absence of other exposures to hepatitis C.

2.2 National surveillance for viral hepatitis in Indigenous people

Information was sought on Indigenous status for diagnoses of hepatitis A, newly acquired hepatitis B and hepatitis C (both newly acquired and prevalent cases) notified to the National Notifiable Diseases Surveillance System. Population rates of diagnoses of viral hepatitis were calculated by year and State/Territory of diagnosis (in those jurisdictions for which Indigenous status was reported in more than 50% of diagnoses in each year 1998 – 2002) using population estimates, provided by the Australian Bureau of Statistics (*Population Distribution, Indigenous Australians, 1996*).

2.3 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.

3 National surveillance for 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 Ageing. 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).

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 Hospital	Laboratory	Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor	Doctor Laboratory	Doctor Laboratory
Syphilis	Doctor Laboratory Hospital	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory
Chlamydia	Doctor Laboratory Hospital	Laboratory	Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor
Donovanosis	Doctor Laboratory Hospital	Laboratory	Doctor Laboratory	Doctor Laboratory Hospital	Not notifiable	Laboratory	Doctor Laboratory	Doctor Laboratory

3.2 National surveillance for 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 2003.

Population rates of diagnosis of specific sexually transmissible infections were calculated by year and State/Territory of diagnosis using population estimates, 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 2003).

4 Surveillance for HIV and viral hepatitis in sentinel populations

4.1 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 (21 sites), June 1996 (20 sites), October 1997 (22 sites), 1998 (32), 1999 (34), 2000 (35 sites), 2001 (38 sites) and 2002 (46 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 the estimated prevalence of injecting drug use in each State/Territory jurisdiction (ANCAHRD 2002). Further information is available in MacDonald *et al* (1997 and 2000).

4.2 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 Kirkeaton 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.

4.3 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).

4.4 HIV and hepatitis C seroprevalence among people seen at sexual health clinics

A network of selected public metropolitan sexual health clinics provided annual tabulations 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 had a negative HIV antibody test within 12 months of their most recent HIV antibody test. Further information is available in McDonald *et al* (2001).

The network of clinics also provided tabulations summarising the number of people seen at the clinic in 2002, the number tested for hepatitis C antibody and the number newly diagnosed with hepatitis C antibody, broken down by sex, age group and exposure category.

4.5 HIV, hepatitis B surface antigen 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, hepatitis B surface antigen 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).

4.6 HIV incidence in the Health in Men (HIM) study

The Health in Men (HIM) study is a cohort study of HIV negative homosexually active men in Sydney. The study commenced in 2001 and recruited men through a variety of community-based settings. The men are tested annually for HIV antibody as part of the study, and more than 95% have also consented to syphilis testing. In 2001, 450 men were recruited and 392 had completed their one-year follow up assessment by the end of 2002.

5 Risk behaviour

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

The Sydney Gay Community Periodic Survey commenced in 1996, with the objective of providing information on sexual behaviour in a broad cross section of Sydney gay men. In February of each year from 1996, 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 and the Canberra Gay Community Periodic Survey commenced in 2000. The Brisbane (including small numbers of men recruited in Cairns and on the Sunshine and Gold Coasts) and Melbourne surveys were carried out annually (June and January/February, respectively); the Adelaide and Perth surveys were carried out every two years (in October/November) and the Canberra survey is conducted every three years (in November). The surveys used similar recruitment strategies 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.

5.2 Sexual behaviour in the Australian population

The Australian study of health and relationships was carried out from May 2001 to June 2002 and provided population-based prevalence estimates of the sexual health of Australian adults. The study provided estimates of the frequency and extent of sexually transmissible infections and HIV risk behaviours, the social, demographic and behavioural characteristics associated with those sexual behaviours, and attitudes and current levels of knowledge of sexually transmissible infections and HIV/AIDS. A computer-assisted telephone interview was developed and applied to a stratified random sample of the Australian population. Interviews were completed with 10,173 men and 9,134 women aged 16 – 59 years resident in all State and Territories in Australia. The overall response rate was 73.1% (69.4% among men and 77.6% among women). After accounting for the survey design and weighting to the 2001 Census, the sample appeared to be broadly representative of the Australian population. The design and methods of the Australian study of health and relationships, coupled with the high response rate, suggest that the results of the study were robust and broadly representative of the Australian population. Further information on the study methods and results are available in Smith *et al* 2003 and Grulich *et al* 2003.

5.3 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, 35 in 2000, 38 in 2001 and 46 sites in 2002. Further information is available in MacDonald *et al* (1997 and 2000).

6 Estimates of the number of people living with HIV and hepatitis C infection

6.1 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 2002 and 2006 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 2002 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 2002 were based on reported numbers of cases adjusted for reporting delays. From 2003 onwards, AIDS incidence and deaths were assumed to continue at the same rate as 2002.

6.2 Estimates of the number of people living with hepatitis C infection

Estimates of the number of people living with hepatitis C virus were derived by the Hepatitis C Virus Projections Working Group, a collaborative group formed under the auspices of ANCAHRD's Hepatitis C Sub-Committee. Estimates were derived from mathematical models in the following way. First, the number of people who had injecting drugs in Australia over the last three decades was estimated. Based on this pattern of injecting drug use, and estimates of hepatitis C incidence among injecting drug users derived from cohort studies, hepatitis C incidence as a result of injecting drug use was estimated. These estimates of hepatitis C incidence due to injecting drug use were then adjusted in accordance with epidemiological data to allow for hepatitis C infections through other transmission routes, including receipt of blood or blood products. Estimates of the number of people experiencing long-term sequelae of hepatitis C infection were then obtained from the estimated pattern of hepatitis C incidence using rates of progression derived from cohort studies. Estimates of the numbers of people living with hepatitis C in 2002 were adjusted to allow for mortality related to hepatitis C infection, injecting drug use and unrelated to hepatitis C infection or injecting. Further details are given in the Working Group's Report (ANCAHRD, 2002).

7 Uptake of treatment for HIV and hepatitis C infection

7.1 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 2003, 27 participating clinical sites had enrolled a total of 2,218 people into the AHOD.

A detailed summary of treatments data from the AHOD is published in the *Australian HIV Observational Database Biannual Report* (NCHECR 2001). Further information is available in Australian HIV Observational Database (2001, 2002).

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 and Sydney. Reported use of antiretroviral treatment was also monitored among people with HIV infection participating in Positive Health.

7.2 Monitoring prescriptions for HIV treatments

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 Ageing.

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 93% in July – December 1997 to 70% in July – December 2002. 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.

7.3 Monitoring prescriptions for hepatitis C treatments

The number of prescriptions for ribavirin and interferon was monitored 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 Ageing. The estimated number of people treated with combination ribavirin & interferon for hepatitis C infection increased from 1 391 in 2001 to approximately 1,640 in 2002. These estimates were based on the assumption that 50% of patients were receiving treatment for 6 months, and the remaining 50% were receiving treatment for 12 months.



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