

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

Annual Surveillance Report

2007

☼ □ The number of HIV diagnoses has risen in the past 7 years, but not in New South Wales, which has long had the highest rates. The differences in rates between states/territories are likely to be due to divergent trends in sexual risk behaviour in men ☼ having male-to-male sex, ☼ which remains the predominant route of HIV transmission in Australia. There is a need for effective, innovative and evidence-based programs for HIV prevention, particularly among men having male-to-male sex. □



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

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Preface

This report is the eleventh 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.ncheacr.unsw.edu.au>

The Australian AIDS Public Access Dataset and the Australian HIV Public Access Dataset, including information on AIDS and HIV infection, respectively, diagnosed in Australia by 31 December 2006 and reported by 31 March 2007, is available through the website <http://www.ncheacr.unsw.edu.au>

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 and sexually transmissible infections in Australia Annual report of trends in behaviour 2007*, edited by the National Centre in HIV Social Research. Specifically, data reported in Tables 5.1.1 and 7.1.2 of *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2007* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2006, as reported by 31 March 2007. 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 Registry, Sydney, NSW
- Australian Federation of AIDS Organisations, Sydney, NSW
- Australian Government Department of Health and Ageing, Canberra, ACT
- Australian Hepatitis Council, Canberra, ACT
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Red Cross Blood Service, Melbourne, VIC
- Communicable Diseases Network Australia, 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 Health Services, NSW Health Department, North Sydney, NSW
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- 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;
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Australian Gonococcal Surveillance Programme

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- Microbiology Department, Canberra Hospital, Woden, ACT
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- Microbiology Laboratory, Royal Darwin Hospital, Casuarina, NT
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- Infectious Diseases Laboratories, Institute of Medical and Veterinary Science, Adelaide, SA
- Department of Microbiology and Infectious Diseases, Royal Hobart Hospital, Hobart, TAS
- The Microbiological Diagnostic Unit, University of Melbourne, Parkville, VIC
- Department of Microbiology and Infectious Diseases, PathWest Laboratory Medicine, Royal Perth Hospital, Perth, WA

Australian Paediatric Surveillance Unit and its collaborators

- John Hunter Children's Hospital, Sydney Children's Hospital, The Children's Hospital at Westmead; Private practitioners, NSW
- Mater Hospital, Royal Children's Hospital, Private practitioners, QLD
- Women's and Children's Hospital, SA
- Mercy Hospital for Women, Monash Medical Centre, Royal Children's Hospital, Royal Women's Hospital; Private practitioners, VIC
- Princess Margaret Hospital for Children, WA

Collaborative group on sentinel surveillance in sexual health clinics

- Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
- Sydney South West Sexual Health Centre, Camperdown, NSW
- Brisbane Sexual Health Clinic, Brisbane, QLD
- Gold Coast Sexual Health Clinic, Miami, QLD
- Clinic 275, Adelaide, SA
- Melbourne Sexual Health Centre, Melbourne, VIC

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- Justice Health, Matraville, NSW
- Northern Territory Correctional Services, Department of Justice, Darwin, NT
- Department of Corrective Services, Brisbane, QLD
- South Australian Prison Health Services, Adelaide, SA
- Corrective Services Division, Department of Justice, Hobart, TAS
- Department of Human Services, Melbourne, VIC
- Department of Corrective Services, Perth, WA

Australian HIV Observational Database

- Bligh Street Clinic, Tamworth; Blue Mountains Sexual Health Clinic, Katoomba; Holdsworth House General Practice, Darlinghurst; Illawarra Sexual Health, Wollongong; RPAH SEXUAL HEALTH, Camperdown; Macquarie Sexual Health Centre, Dubbo; Nepean Sexual Health and HIV Clinic, Penrith; Holden Street Clinic, Gosford; SHAIDS, Lismore; St Vincent's Hospital, Darlinghurst, Sydney Sexual Health Centre, Sydney, Dr Ellis General Medical Practice, Coffs Harbour; Taylor Square, Darlinghurst; 407 Bourke Street, Surry Hills; NSW
- Clinic 34, Darwin, NT
- AIDS Medical Unit, North Quay; Clinic 87, Sunshine Coast & Cooloola HIV Sexual Health Service, Nambour; Gladstone Road Medical Centre, Highgate Hill; 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

Collaboration of Australian Needle and Syringe Programs

- Drug Referral Information Centre, ACT
- Albury Community Health Centre, Albury; Harm Minimisation Services (SWSAHS), Fairfield; Hunter NSP Services and Royal Newcastle Hospital, Newcastle; Indo-Chinese Outreach Network (ICON) Bankstown, Cabramatta and Liverpool; Kirketon Road Centre and K2, Kings Cross; Medically Supervised Injecting Centre (MSIC), Kings Cross; Northern Rivers Area Health Service; Port Kembla First Step Program; Resource and Education Program for IDUs, Redfern and Canterbury; St George NSP, Kogarah; The Exchange, Manly; Wentworth HIV and Sexual Health Service; Western Sydney AIDS Prevention Service, Auburn, Blacktown, Mt Druitt and Parramatta, NSW
- Northern Territory AIDS Council, Darwin and Palmerston, NT
- Biala Community Alcohol and Drug Services, Brisbane; Cairns Base Hospital NSP; Drug Users Network, Education and Support (DUNES), Gold Coast; Kobi House, Toowoomba; Queensland Intravenous and AIDS Association (QuIVAA), Brisbane; Sunshine Coast Intravenous and AIDS Association (SCIVAA), Sunshine Coast; West Moreton Sexual Health Service, Ipswich, QLD
- Hindmarsh Centre, Hindmarsh; Noarlunga Community Health Service; Northern Metropolitan Community Health Service NSP and Shopfront, Salisbury; Parks Community Health Service, Adelaide; Port Adelaide Community Health Service, Port Adelaide; South Australia Voice for Intravenous Education (SAVIVE) AIDS Council South Australia, Adelaide; South Australian Drug and Alcohol Services Council, Adelaide; Warrinilla Clinic, Adelaide, SA
- NuFIT, Glenorchy; Tasmanian Council on AIDS, Hepatitis & Related Diseases (TasCAHRD), Hobart; Devonport Community Health Centre, Devonport, TAS
- Health Works, Footscray; Melbourne Inner Needle Exchange, Collingwood; South East Alcohol and Drug Service, Dandenong; St Kilda NSP; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Melbourne, VIC
- WA AIDS Council Mobile Exchange, Perth; Western Australia Substance Users Association (WASUA), Northbridge and Bunbury, WA
- Centre for Immunology, St Vincent's Hospital, Sydney, NSW

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

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- Dr Iryna Zablotska, National Centre in HIV Social Research, The University of New South Wales, Sydney, NSW
- Professor John Kaldor (Chair), Professor Basil Donovan, Professor Andrew Grulich, Associate Professor Lisa Maher, Ann McDonald, Melanie Middleton, Dr Libby Topp, Dr Handan Wand, Surveillance Program, National Centre in HIV Epidemiology and Clinical Research



Summary

HIV/AIDS

- By 31 December 2006, 26,267 diagnoses of HIV infection, 10,125 diagnoses of AIDS and 6,723 deaths following AIDS had occurred in Australia.
- The number of new HIV diagnoses in Australia increased by 31% between 2000 and 2006.
- Differences between the States and Territories were observed in recent trends of newly diagnosed HIV infection. New South Wales recorded a stable population rate in 2002 – 2006 at around 6.1 per 100 000 population whereas rates increased in Queensland, South Australia, Victoria and Western Australia, from 3.5, 2.0, 4.5 and 2.4 in 2002 to 4.0, 4.1, 5.6 and 3.5 in 2006, respectively.
- The number of diagnoses of newly acquired HIV infection increased from 245 in 2002 to 304 in 2006.
- HIV continued to be transmitted primarily through sexual contact between men.
- There was a similar rate of HIV diagnosis *per capita* in the Aboriginal and Torres Strait Islander and non-Indigenous populations. Higher proportions of cases were attributed to heterosexual contact and injecting drug use in the Aboriginal and Torres Strait Islander population.
- The *per capita* rate of HIV and AIDS diagnosis in Australia was at least five times higher among people born in countries in sub-Saharan Africa than among Australian born people. In the past five years, sixty percent of cases of HIV infection attributed to heterosexual contact were in people from high HIV prevalence countries or their sexual partners.

Viral hepatitis

- The *per capita* rate of diagnosis of hepatitis C infection in Australia declined by 25% over the past five years to 61.1 per 100 000 population in 2006.
- At the end of 2006, an estimated 202,400 people were living in Australia with chronic hepatitis C infection, including 45,400 with moderate to severe liver disease.
- The reported number of diagnoses of newly acquired hepatitis C infection was relatively stable in 2002 – 2006 at around 450.
- Based on reported cases, hepatitis C transmission continued to occur in Australia predominantly among people with a recent history of injecting drug use. Similarly, reported cases of hepatitis B transmission were also attributed predominantly to injecting drug use.
- The proportion of people seen at needle and syringe programs who reported having injected drugs for three years or less dropped from around 10% in 2002 to 5% in 2006. Within this group, hepatitis C prevalence fell by half between 2002 and 2006 to 18%.
- In 2006, chronic hepatitis C infection and chronic hepatitis B infection were the underlying causes of liver disease in 23.8% and 2.3% of liver transplants, respectively.
- An estimated 2,847 people with chronic hepatitis C infection were prescribed ribavirin and pegylated interferon combination treatment or pegylated interferon only in 2006.

Sexually transmissible infections other than HIV

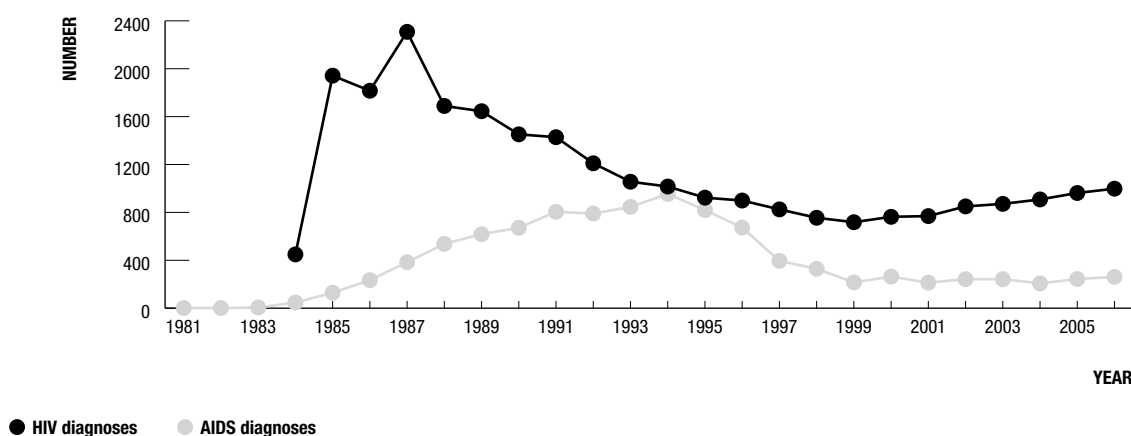
- Chlamydia was the most frequently reported notifiable condition in Australia in 2006 with 47,030 reported diagnoses. The population rate of diagnosis of chlamydia in 2006 was 232 per 100 000 population, a 12% increase over the rate in 2005, continuing the increase seen over the past ten years.
- The population rate of diagnosis of gonorrhoea increased by 29% from 32.8 in 2002 to 42.2 in 2006, and the rate of diagnosis of infectious syphilis increased from 3.1 in 2004 to 4.0 in 2006. These increases largely occurred in homosexual men.
- Substantially higher rates of diagnosis of chlamydia, gonorrhoea and infectious syphilis were recorded among Aboriginal and Torres Strait Islander people compared with non-Indigenous people.

Main Findings

HIV/AIDS

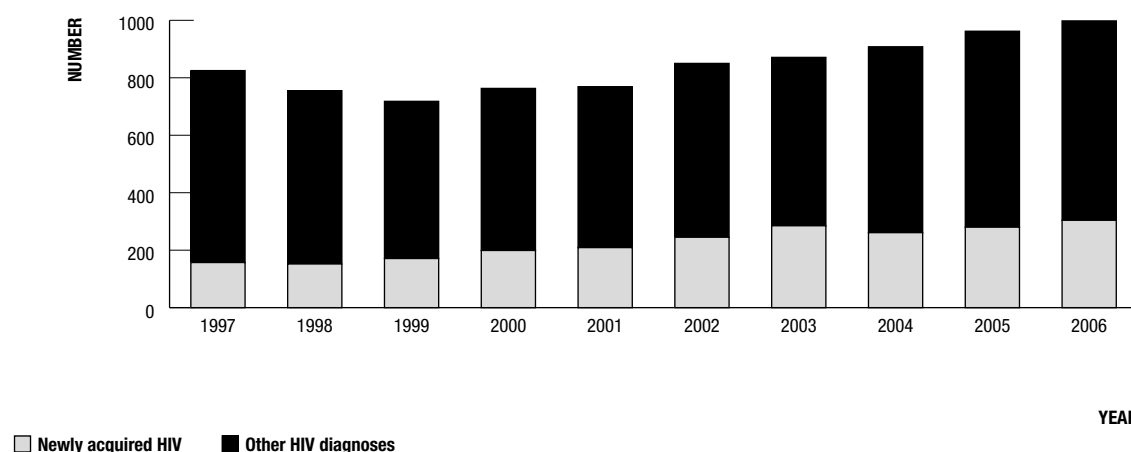
Following a long-term decline, the annual number of new HIV diagnoses in Australia has gradually increased over the past seven years, from 763 cases in 2000 to 998 in 2006 (Figure 1). Among cases of newly diagnosed HIV infection, an increasing number were in people who had acquired HIV infection within the previous year (Figure 2).

Figure 1 Number of diagnoses of HIV infection and AIDS¹ in Australia



¹ AIDS diagnoses adjusted for reporting delays.

Figure 2 Newly diagnosed HIV infection in Australia, including diagnoses of newly acquired HIV infection, by year



Recent trends in the population rate of newly diagnosed HIV infection have differed between the State and Territory health jurisdictions. In New South Wales, the rate per 100 000 population declined from 6.7 in 1997 to 5.2 in 2000 and then increased to 5.9 in 2006. In Victoria, the rate increased steadily, from 2.9 in 1998 – 1999 to 5.6 in 2006. The population rate of newly diagnosed HIV infection also increased in Queensland, South Australia and Western Australia, from 3.5, 2.0 and 2.4 in 2002, to 4.0, 4.1 and 3.5, respectively, in 2006 (Figure 3).

Figure 3 Newly diagnosed HIV infection, 1997 – 2006, by year and State/Territory

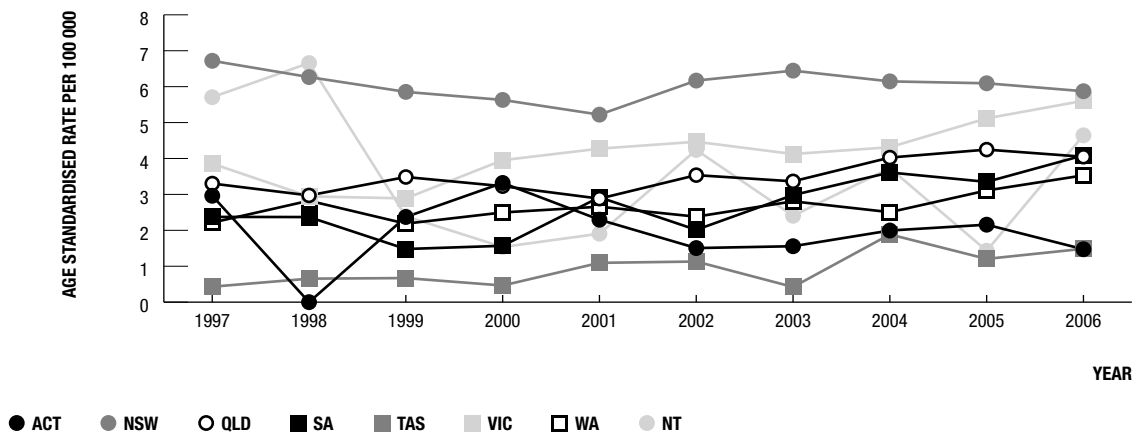
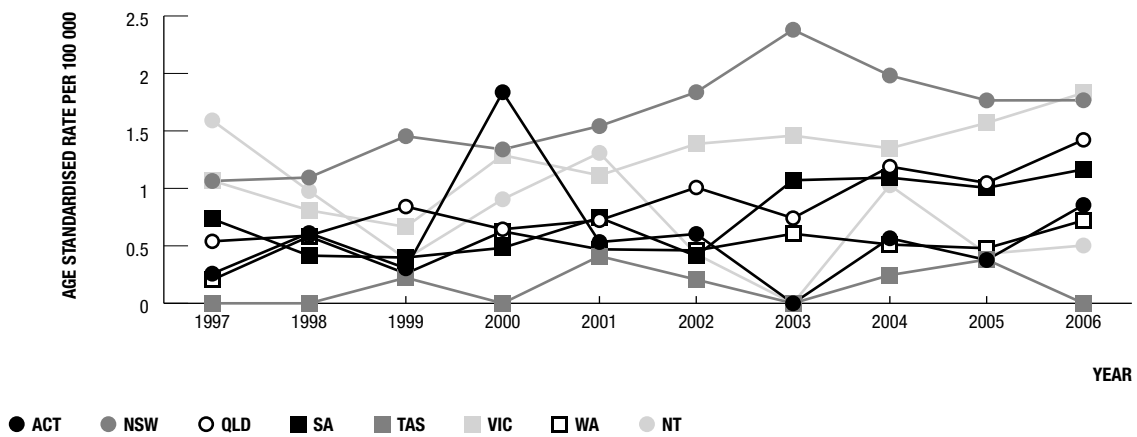


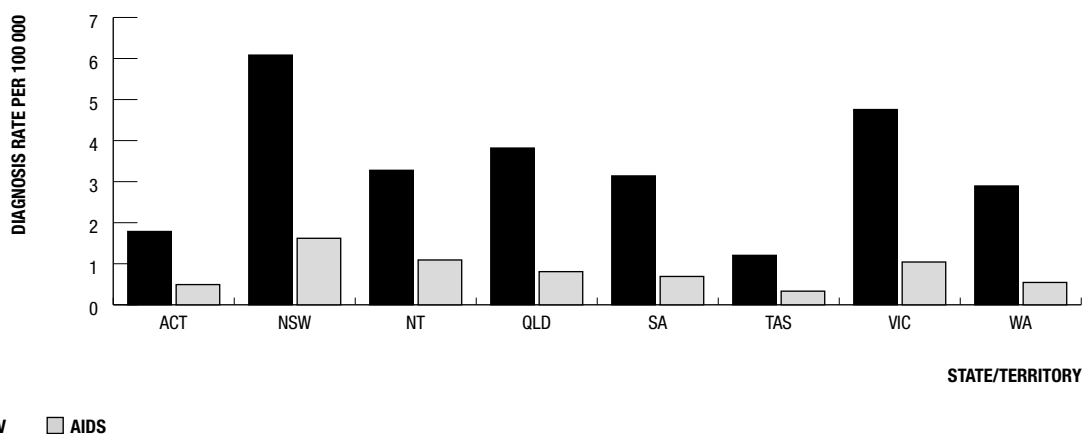
Figure 4 Newly acquired HIV infection, 1997 – 2006, by year and State/Territory



The population rate of diagnosis of newly acquired HIV infection in New South Wales increased from 1.1 per 100 000 in 1997 to 1.5 in 2001, reached a peak of 2.4 in 2003 and declined to 1.8 in 2006. The rate more than doubled in Queensland, from 0.6 in 2000 to 1.4 in 2006, and in South Australia, from 0.5 in 2000 to 1.2 in 2006. In Victoria, it increased by 40% from 1.3 in 2000 to 1.8 in 2006, similar to the rate in New South Wales in 2006. These reported diagnoses of newly acquired HIV infection represent a lower limit to the number of cases of HIV transmission that have actually occurred in Australia over this time (Figure 4).

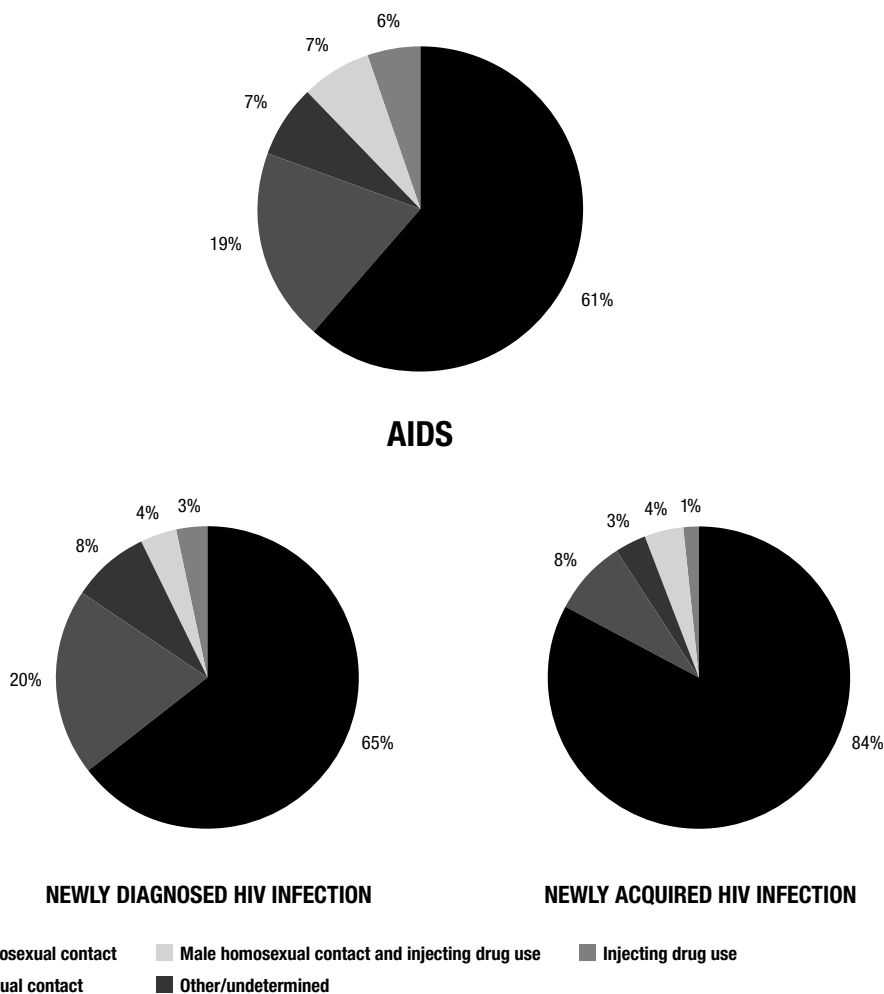
The annual number of AIDS diagnoses in Australia declined from 395 diagnoses in 1997 to 213 diagnoses in 2001 and has remained relatively stable over the past five years at around 240 diagnoses, as a result of the wide availability of effective antiretroviral therapies (Figure 1).

Figure 5 Average annual incidence of newly diagnosed HIV infection and AIDS, 2002 – 2006, by State/Territory



Over the past five years, the *per capita* rate of AIDS diagnosis was highest in New South Wales at 1.6 per 100 000 population. The Northern Territory (1.1) and Victoria (1.0) recorded the second and third highest rate of AIDS diagnosis in Australia in 2002 – 2006. Lower population rates of AIDS diagnosis were recorded in Queensland (0.8), South Australia (0.7), Western Australia (0.5), the Australian Capital Territory (0.5) and Tasmania (0.3) (Figure 5).

Figure 6 AIDS, newly diagnosed HIV infection and newly acquired HIV infection, 2002 – 2006, by HIV exposure category



Transmission of HIV in Australia continues to occur primarily through sexual contact between men (Figure 6). In 2002 – 2006, a history of male homosexual contact was reported in 69% of cases of newly diagnosed HIV infection. Among cases of newly acquired HIV infection, male homosexual contact was reported in 88%, injecting drug use among women and heterosexual men in 1%, heterosexual contact only in 8%, and in 3% of cases, exposure to HIV remained undetermined.

Figure 7 AIDS incidence in Australia, 1997 – 2006, by year and region of birth

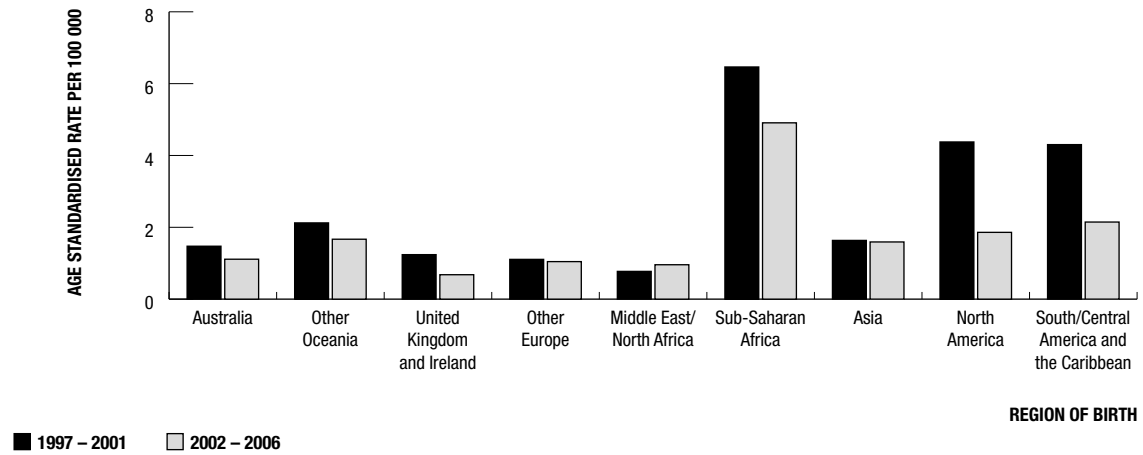
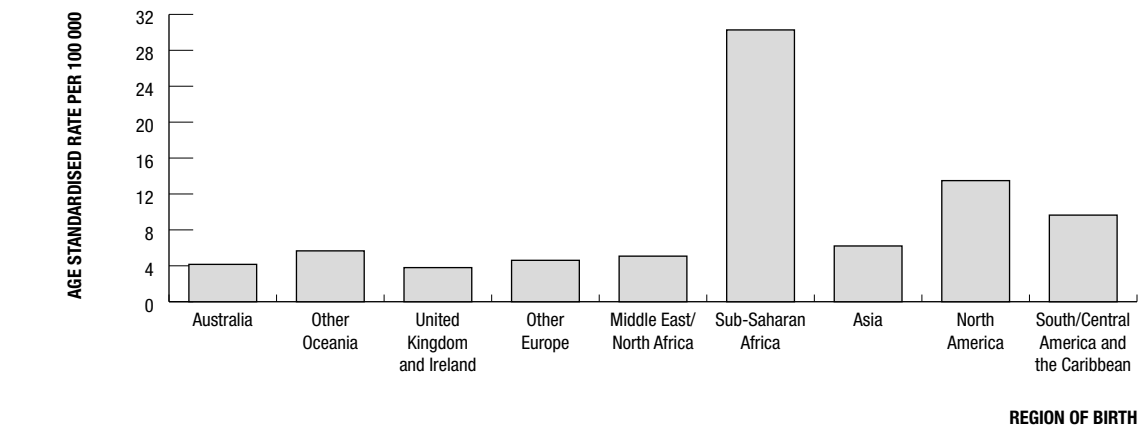
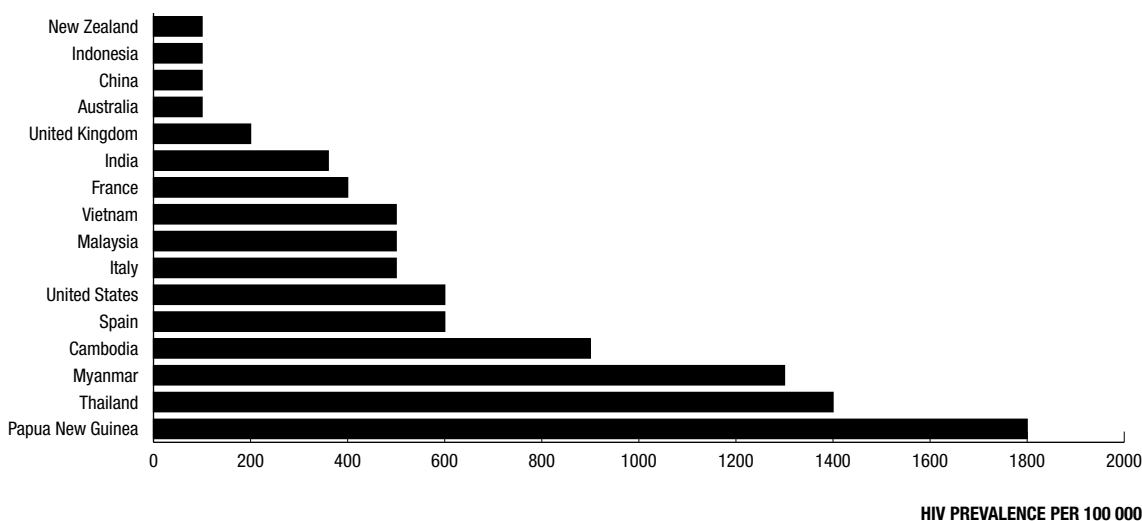


Figure 8 HIV diagnoses in Australia, 2002 – 2006, by year and region of birth



People born in Australia accounted for 67% and 65% of AIDS diagnoses in Australia in 1997 – 2001 and in 2002 – 2006, respectively. The highest AIDS incidence in Australia in both five year intervals was among people born in countries in sub-Saharan Africa (Figure 7). Around 60% of new HIV diagnoses in 2002 – 2006 were in people who were born in Australia. Countries in sub-Saharan Africa were associated with the highest population rate of HIV diagnosis in Australia in 2002 – 2006 (Figure 8). Among cases of HIV infection newly diagnosed in the past three years, 8% of cases reported speaking a language other than English at home.

Figure 9 HIV prevalence in selected countries



In 2006, estimated HIV prevalence among people aged 15 – 49 years was slightly lower in Australia than in the United Kingdom and was a third that in Italy and a quarter of that in the United States. Substantially higher estimates of prevalence were reported in selected countries of South East Asia, such as Cambodia, Myanmar and Thailand and in Papua New Guinea (Figure 9).

Viral hepatitis

The population rate of reported diagnoses of hepatitis A infection in Australia declined over the past five years, from 2.0 per 100 000 population in 2002 to 1.4 in 2006. The decline in the annual number of new diagnoses of hepatitis A infection occurred predominantly among men in the age groups 30 – 39 years and 20 – 29 years.

The population rate of diagnosis of newly acquired hepatitis B infection increased among both males and females in 2000 – 2002 and then declined to less than 2 and around 1 per 100 000 males and females, respectively, in 2006 (Figure 10). Substantial declines in the rate of diagnosis of newly acquired hepatitis B infection occurred in 2002 – 2006 among people aged 15 – 19 years (50%) and 20 – 29 years (41%) (Figure 11). School-based adolescent “catch up” vaccination programs may have played a role in this reduction by increasing vaccine coverage in the 15 – 19 year age group. The rate of diagnosis of newly acquired hepatitis B infection remained relatively stable among those aged 30 years or older.

Figure 10 Newly acquired hepatitis B by year and sex

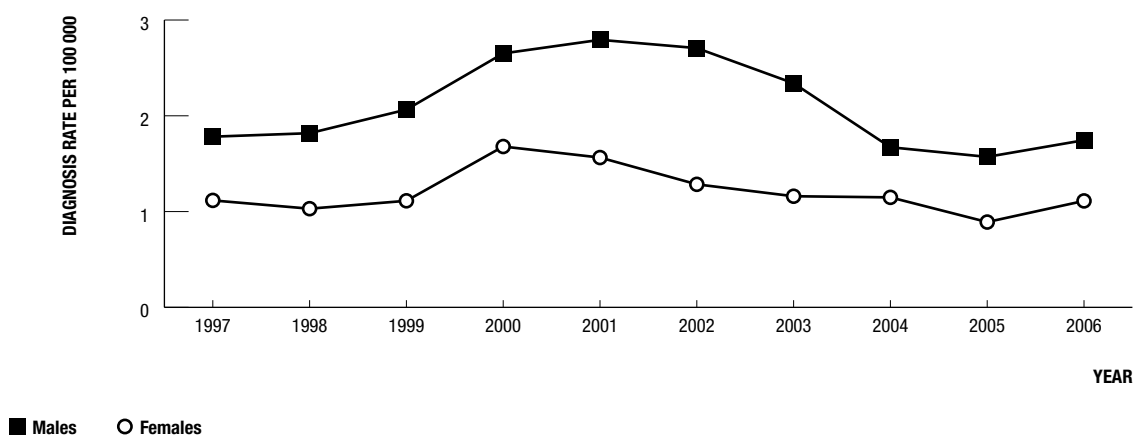
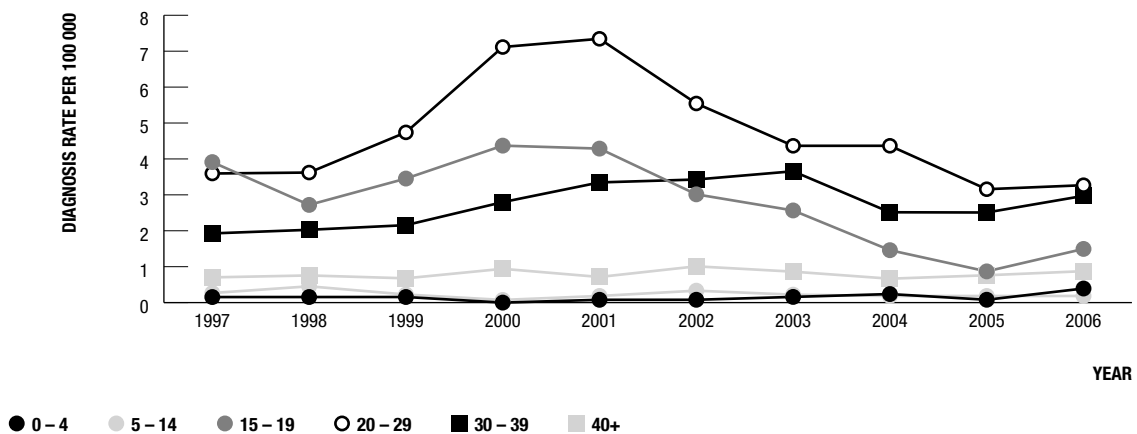
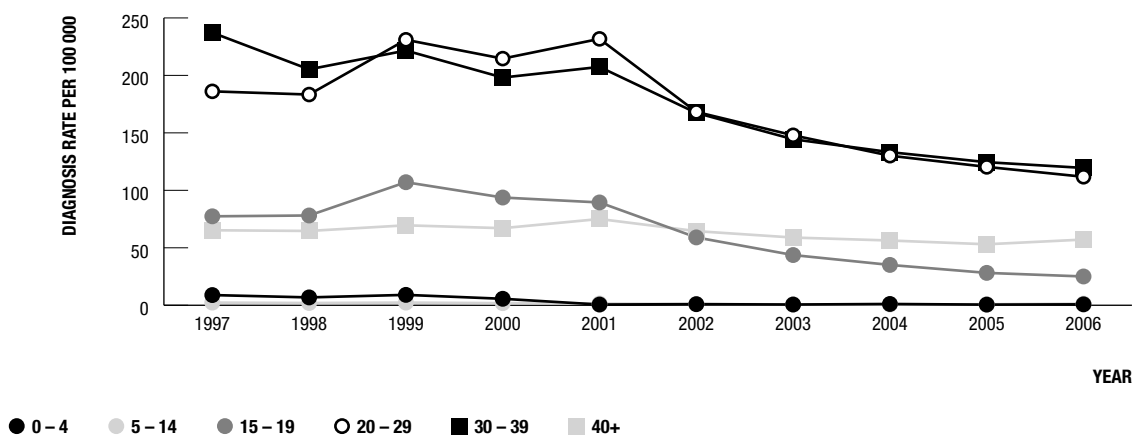


Figure 11 Newly acquired hepatitis B infection by year and age group



Information on the source of exposure to hepatitis B, reported through health authorities in the Australian Capital Territory, South Australia, Tasmania and Victoria, indicated that around half the cases were associated with injecting drug use, and this proportion remained stable in 2002 – 2006. The proportion of diagnoses attributed to heterosexual contact also remained stable at around 21% and the source of exposure to hepatitis B was undetermined in around 22% of cases (Table 2.1.5).

Figure 12 Hepatitis C infection by year and age group



The rate of diagnosis of hepatitis C infection per 100 000 population declined from 81.3 in 2002 to 61.1 in 2006. In 2002 – 2006, the rate of diagnosis of hepatitis C infection declined by 33% in the 20 – 29 year age group and by 29% in the 30 – 39 year age group (Figure 12). In the 15 – 19 year age group, the rate of new hepatitis C diagnoses declined by 58% in 2002 – 2006. Mathematical modelling of the hepatitis C virus epidemic in Australia by the Hepatitis C Virus Projections Working Group (Razali *et al* 2007) suggests that the decrease in the rate of diagnosis was largely attributable to reductions in the prevalence of injecting drug use, but the possible contributions of reductions in risk behaviour related to drug injecting among young people or changes in the rates of testing cannot be excluded.

Around 3% of cases of hepatitis C infection diagnosed in 2002 – 2006 were reported as having been acquired within the previous two years (Figure 13). Victoria reported 46% the national total of diagnoses of newly acquired hepatitis C infection in 2006, identified after follow up of all newly diagnosed cases of hepatitis C infection in the first six months and follow up of all cases aged 30 years or less in the last six months (Victorian Infectious Diseases Bulletin 2006). The increased rate of diagnosis of newly acquired hepatitis C infection in the 20 – 29 year age group, from 6.5 in 2005 to 7.0 in 2006, may be attributable to more complete diagnosis as a result of the follow up activities in Victoria. Reported hepatitis C transmission continued to occur at the highest rate among adults aged less than 30 years (Figure 14), primarily those with a history of injecting drug use (Table 2.1.12).

Figure 13 Newly acquired hepatitis C by year and sex

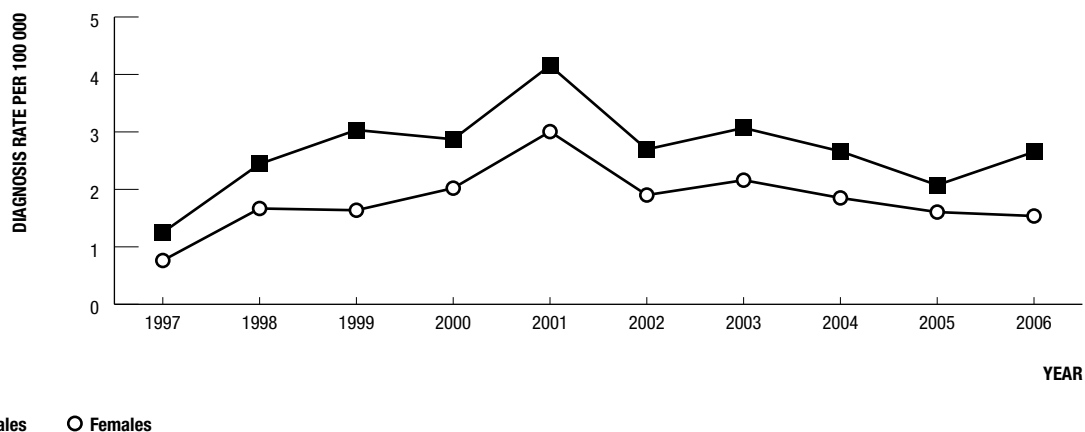
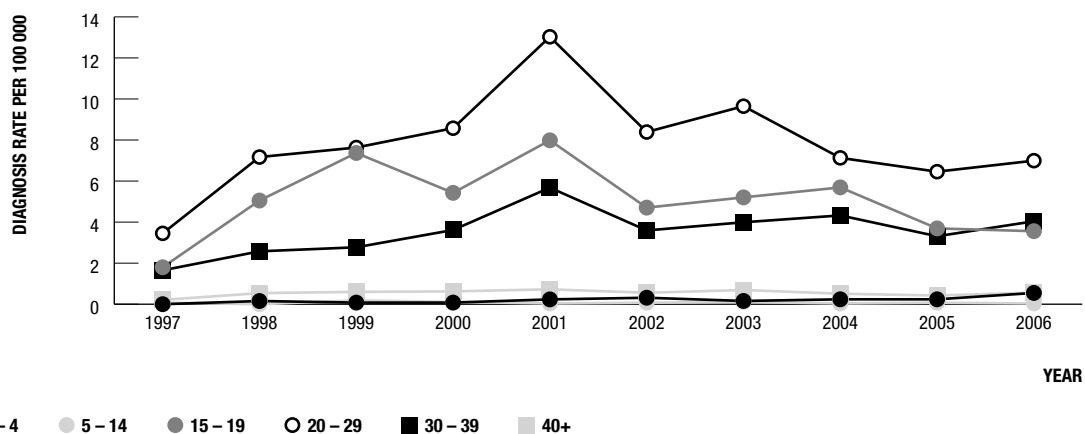


Figure 14 Newly acquired hepatitis C by year and age group



Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence declined from 17.6 per 100 person years in 1997 to 15.5 per 100 person years in 2002 and to 10.8 per 100 person years in 2006 (Table 4.3.1). Among new injecting drug users recruited into a cohort study in New South Wales in 1999 – 2002, hepatitis C incidence was 44.1 per 100 person years (Maher *et al* 2007). An injecting history of less than one year, female gender, having a culturally and linguistically diverse background and injecting cocaine use predicted hepatitis C infection among new injecting drug users.

The vast majority of diagnoses of newly acquired hepatitis B infection and newly acquired hepatitis C infection occurred among Australian born people. The proportion of diagnoses of newly acquired hepatitis B and C infection among overseas born people was lower than their proportion in the Australian population (Table 2.1.6 and Table 2.1.13).

In 2006, an estimated 271,000 people living in Australia had been exposed to hepatitis C virus. Of these, 68,500 people were estimated to have cleared their infection, 157,000 had chronic hepatitis C infection and early liver disease (stage F0/1), 40,000 had chronic hepatitis C infection and moderate liver disease (stage F2/3), and 5,400 were living with hepatitis C related cirrhosis.

Hepatitis C prevalence in 2006 was almost 150 times lower among blood donors (0.009%) than the estimated prevalence of hepatitis C infection in the Australian population as a whole (1.3%) (Figure 39).

Sexually transmissible infections other than HIV

Chlamydia was the most frequently reported infection notified in Australia in 2006, with 47,030 cases. Among males, the population rate of reported diagnoses per 100 000 more than doubled, from 35.2 in 1997 to 84.5 in 2001 and more than doubled again to 185.1 in 2006. Among females, the rate of chlamydia diagnoses per 100 000 doubled from 64.9 in 1997 to 124.4 in 2001, and then more than doubled to 270.0 in 2006 (Figure 15). Increasing rates of diagnosis of chlamydia were reported in all States and Territories. Increases in the rate of diagnosis of chlamydia were highest in the 20 – 29 and 15 – 19 year age groups and these two age groups accounted for almost 80% of the annual number (Figure 16). In 2002 – 2006, the female to male sex ratio in the 15 – 19 year age group was 3.5:1 whereas in the 20 – 29 year age group it was 1.4:1. The higher rate for young women compared to men is likely to partly reflect higher rates of testing among women.

Figure 15 Chlamydia by year and sex

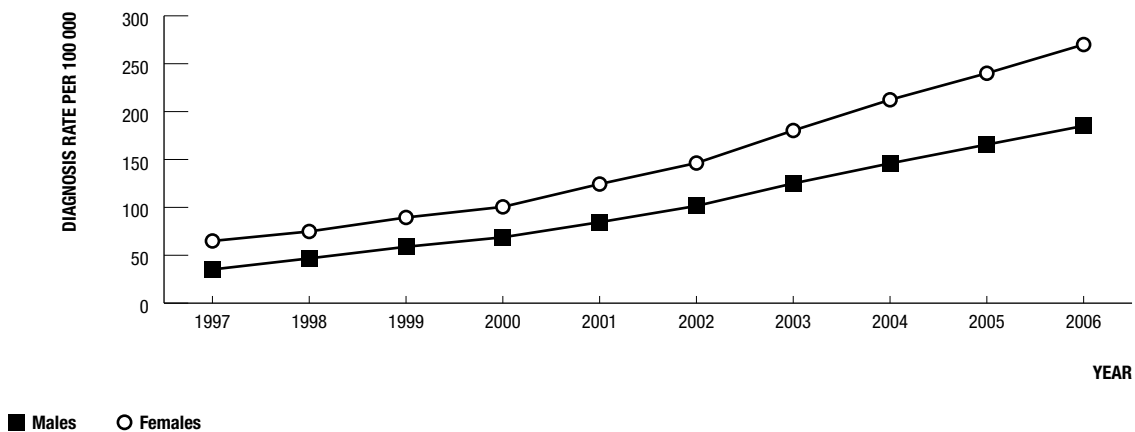
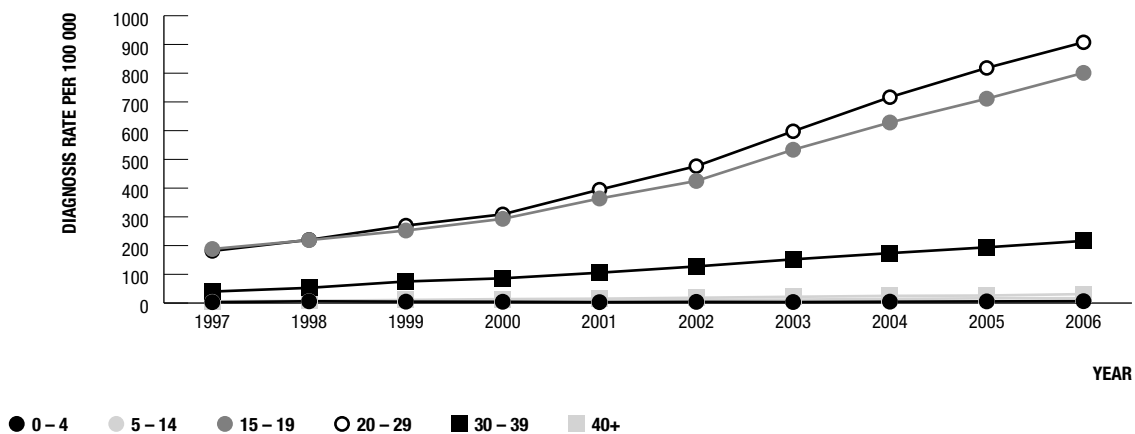


Figure 16 Chlamydia by year and age group



The population rate of diagnosis of gonorrhoea increased in 1997 – 2001 by about 40% among males and by 10% among females whereas in 2002 – 2006, a 27% increase was observed among both males and females (Figure 17). A higher notification rate for men is partly attributable to cases of gonorrhoea in men who have sex with men. The rate of diagnosis was highest in the age groups 15 – 19 years and 20 – 29 years and was substantially lower among people aged 30 years or older (Figure 18).

The population rate of diagnosis of infectious syphilis among males increased from 5.0 per 100 000 population in 2004 – 2005 to 6.2 in 2006 (Figure 19). These increases occurred predominantly in Victoria and Queensland and were almost completely confined to homosexually active men. In contrast, reported diagnoses of infectious syphilis in New South Wales declined from 4.5 in 2004 to 3.1 in 2006.

Figure 17 Gonorrhoea by year and sex

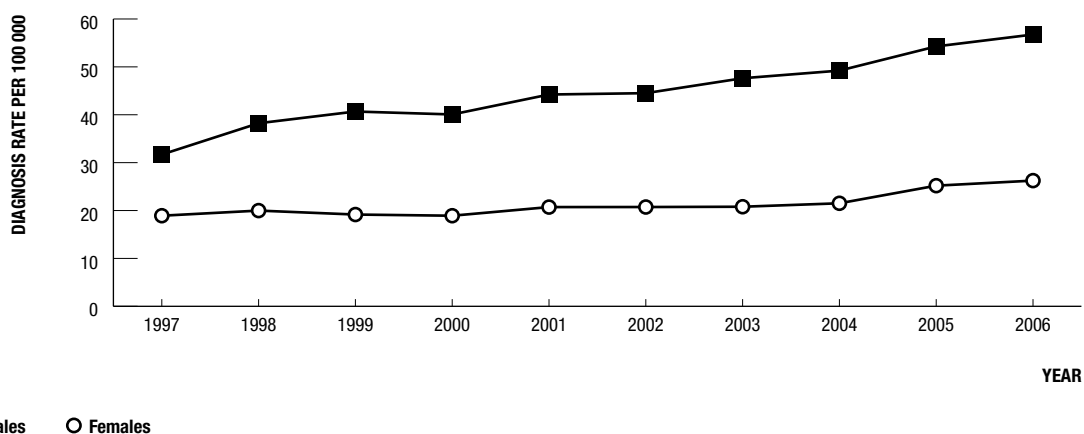


Figure 18 Gonorrhoea by year and age group

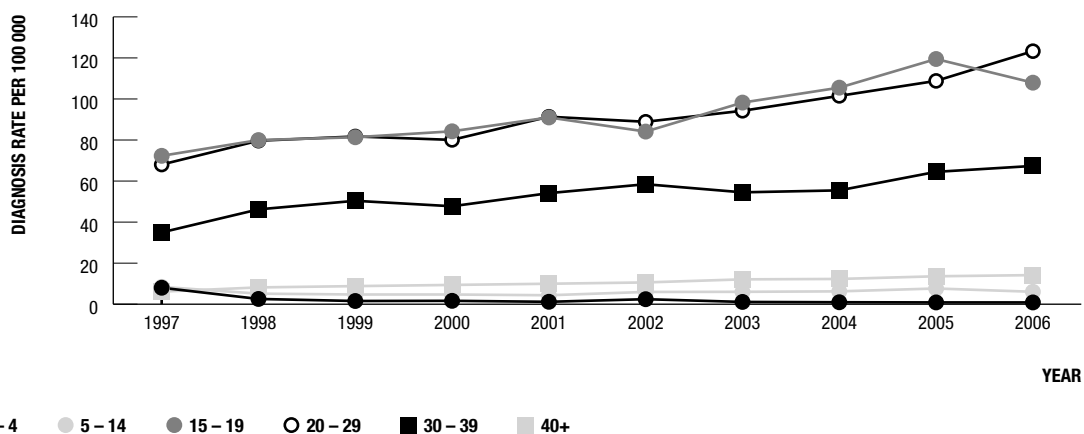
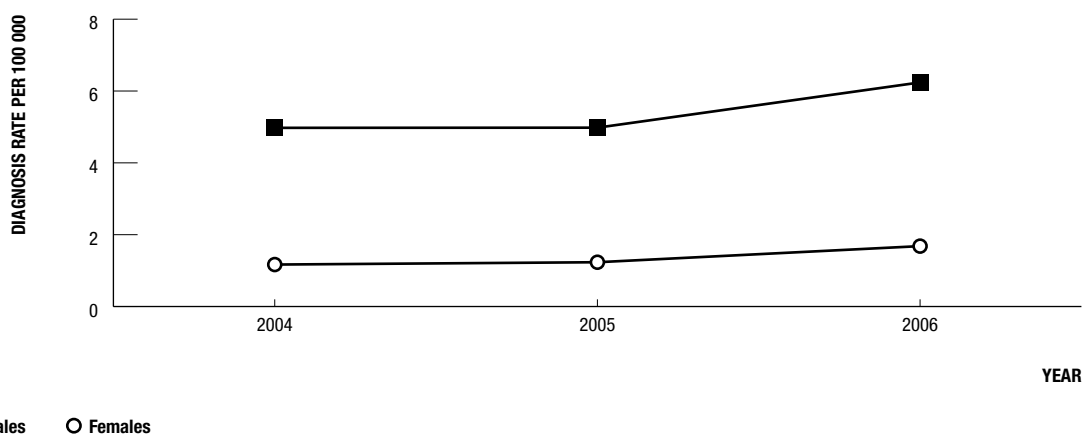


Figure 19 Infectious syphilis by year and sex



The rates of notification of chlamydia, gonorrhoea and infectious syphilis in the Northern Territory continue to be substantially higher than those in other State/Territories. The continuing decline in the number of diagnoses of donovanosis, from 17 in 2002 to 4 in 2006, may be a consequence of improved case ascertainment and treatment.

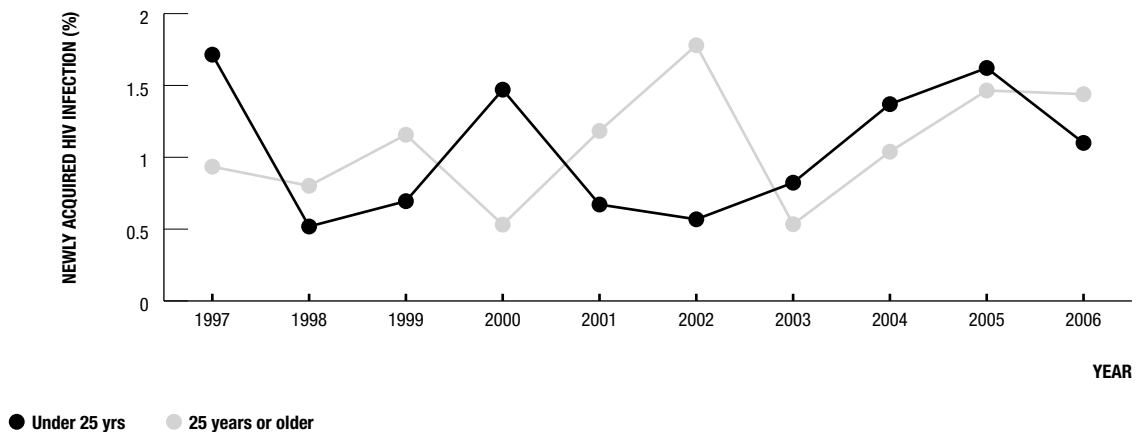
HIV, viral hepatitis and sexually transmissible infections in selected populations

Population groups regarded as priorities for prevention and health promotion activities under the national strategies for HIV/AIDS, hepatitis C, sexually transmissible infections (STI) and the National Aboriginal and Torres Strait Islander Sexual Health and Blood Borne Virus Strategy, include gay and other homosexually active men, Aboriginal and Torres Strait Islander people, prison entrants and people who have injected drugs. These population groups were identified as priority groups because they are recognised as either experiencing ongoing HIV, hepatitis C or STI transmission or having the potential for increases in transmission.

Gay and other homosexually active men

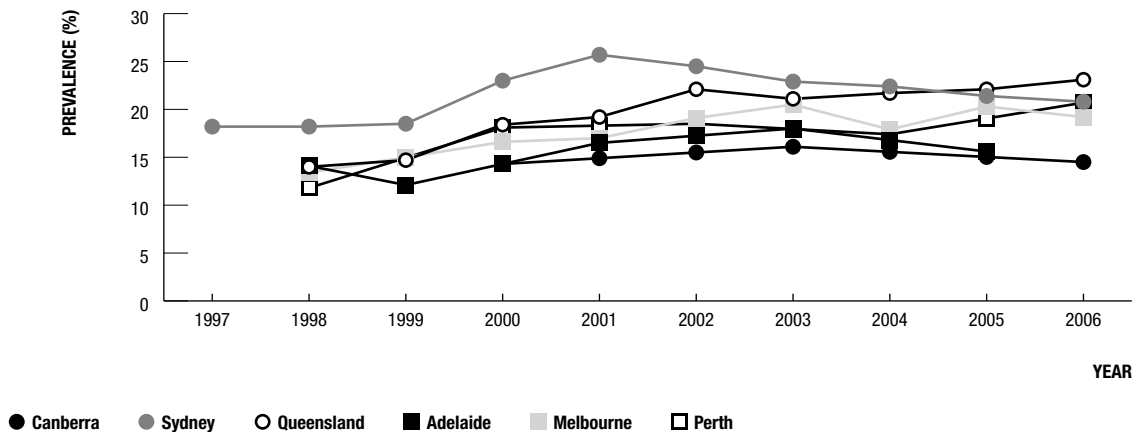
Men with a history of homosexual contact continue to make up the majority of people diagnosed with AIDS and HIV infection in Australia. The overall number of new HIV diagnoses in this category was 2,589 and 3,154, respectively, including 767 and 1,200 diagnoses of newly acquired HIV infection in 1997 – 2001 and 2002 – 2006, respectively. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (85%) than total HIV diagnoses (67%) in 2006. This difference may partly reflect higher levels of HIV antibody testing among gay and other homosexually active men.

Figure 20 Newly acquired HIV infection among gay and other homosexually active men seen at sexual health clinics by year and age group



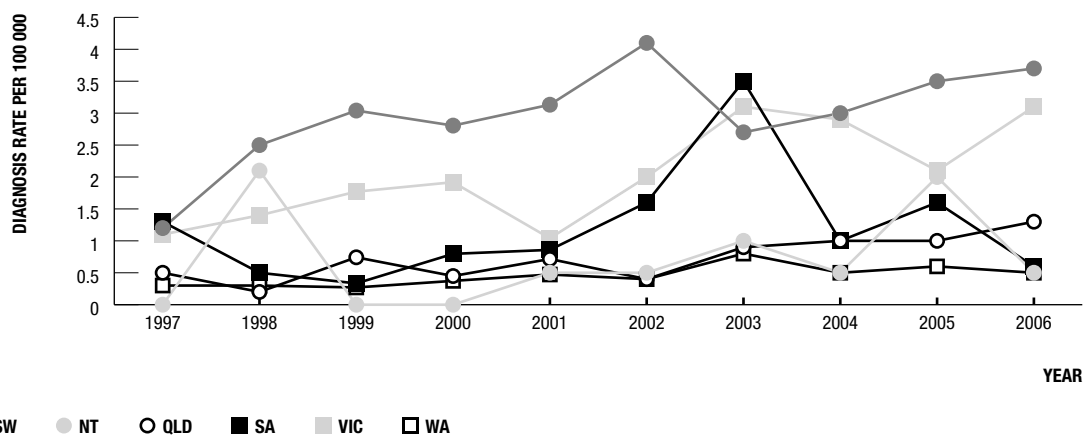
Among gay men seen at metropolitan sexual health clinics, the percentage with newly acquired HIV infection has increased both in those aged less than 25 years, from 0.8% in 2003 to 1.1% in 2006, and in those aged 25 years or older, from 0.5% in 2003 to 1.4% in 2006 (Figure 20). In the Health in Men (HIM) cohort study among homosexually active men in Sydney, 13, 8, 15, 12 and 5 were diagnosed with newly acquired HIV infection in 2002, 2003, 2004, 2005 and 2006, respectively, giving an incidence of 1.81, 0.72, 1.12, 0.88 and 0.39 per 100 person years, respectively (Table 4.1.1).

Figure 21 Prevalence of unprotected anal intercourse with casual partners reported by men in Gay Community Periodic Surveys



The Gay Community Periodic Survey indicated that the proportion of Sydney respondents who reported unprotected anal intercourse with casual partners had increased from 18% in 1997 to 25.7% in 2001 and then declined to 20.8% in 2006 (Figure 21). The same surveys carried out among gay and other homosexually active men in Adelaide, Brisbane and Melbourne indicated that the level of reported unsafe sexual behaviour had plateaued at around 16%, 22% and 20%, respectively, in 2006, whereas in Perth, the level of reported unsafe sexual behaviour had increased from 18.5% in 2002 to 20.7% in 2006.

Figure 22 Gonococcal rectal isolates among men reported to the Australian Gonococcal Surveillance Programme, by State/Territory and year



Surveillance data for gonorrhoea also provide an indication of unsafe sexual behaviour among gay and other homosexually active men in Australia. The rate of rectal gonococcal isolates among men in New South Wales increased from 1.2 per 100 000 population in 1997 to 3.1 in 2001 and to 3.7 in 2006. In Victoria, the rate increased from 1.1 in 1997 to 2.0 in 2002, to 3.1 in 2006 (Figure 22).

Aboriginal and Torres Strait Islander people

The rates of HIV diagnosis *per capita* in the Aboriginal and Torres Strait Islander and non-Indigenous populations differed little, and declined in both populations in 1997 – 2001 (Figure 23). In the most recent five year period, the rate of HIV diagnosis in the non-Indigenous population gradually increased to 5.1 per 100 000 population in 2006, whereas the rate in the Aboriginal and Torres Strait Islander population declined from a peak of 7.5 in 2002 to 4.9 in 2006. The rate of AIDS diagnosis in the Aboriginal and Torres Strait Islander population declined from a peak of 4.2 in 2004 to 1.3 in 2006. The decline in AIDS incidence in the Aboriginal and Torres Strait Islander population may be affected by incomplete AIDS notification in recent years. The rate of AIDS diagnosis in the non-Indigenous population also declined from 1.3 in 2002 to 1.0 in 2006 (Figure 24). The recent trends in the rates of HIV and AIDS diagnoses in the Aboriginal and Torres Strait Islander population are based on small numbers of diagnoses and may reflect localised occurrences rather than national patterns (see Tables 1.3.1 – 1.3.4).

Figure 23 Newly diagnosed HIV infection, 1997 – 2006, by Aboriginal and Torres Strait Islander status and year

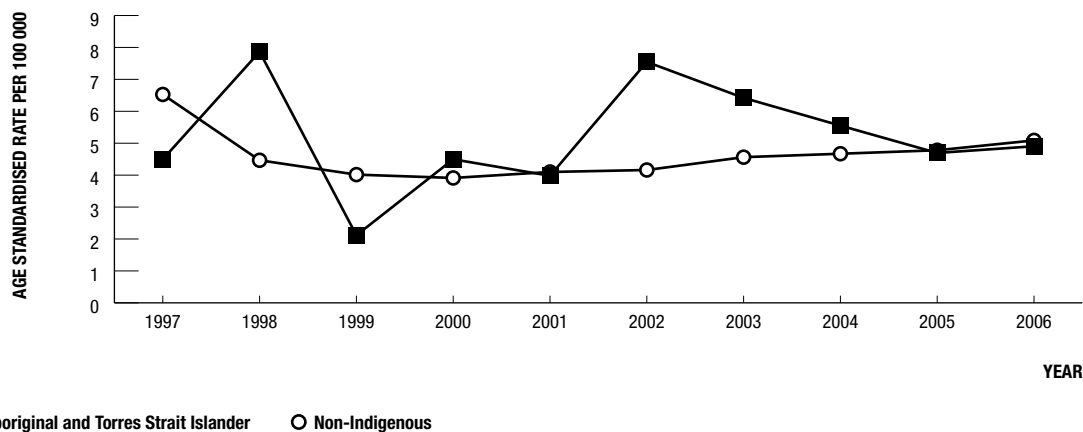
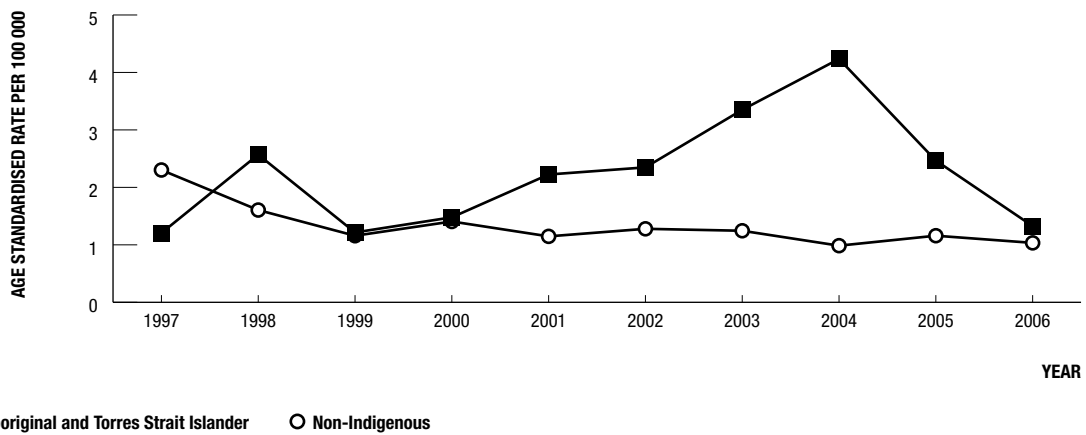
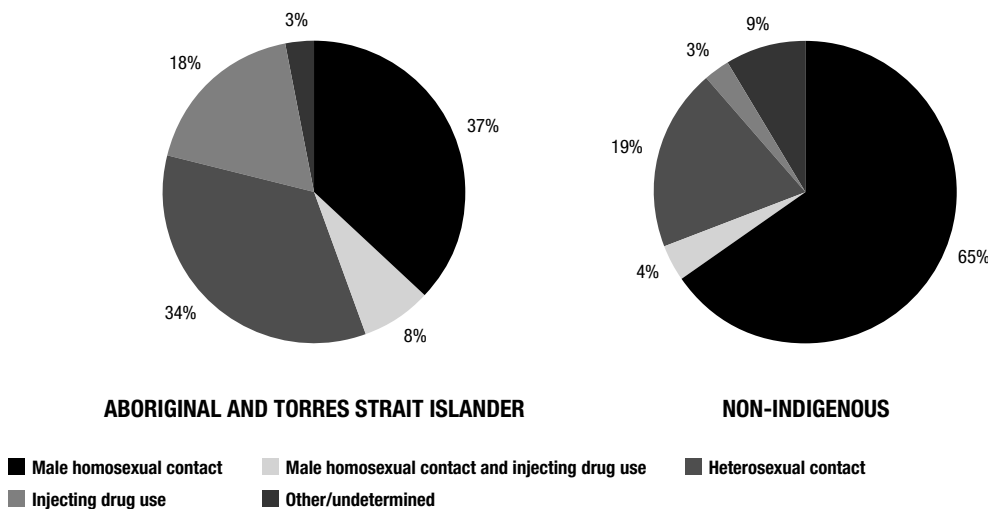


Figure 24 AIDS incidence, 1997 – 2006, by Aboriginal and Torres Strait Islander status and year



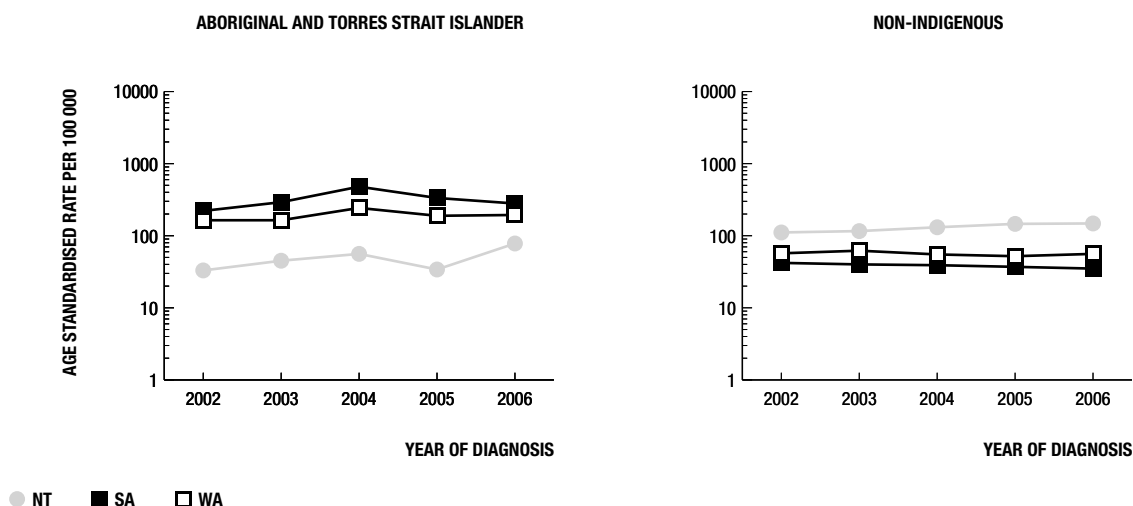
Among new HIV diagnoses in 2002 – 2006, the most frequently reported route of HIV transmission was male homosexual contact in the non-Indigenous population (65%). In the Aboriginal and Torres Strait Islander population, exposure to HIV was attributed to male homosexual contact in 37% of cases and in 34%, heterosexual contact was the reported source of exposure to HIV (Figure 25). Aboriginal and Torres Strait Islander cases also differed from non-Indigenous cases in that a higher proportion of infections were attributed to injecting drug use (18% among Aboriginal and Torres Strait Islander cases vs 3% for non-Indigenous cases), and a higher proportion of infections were among women (30% among Aboriginal and Torres Strait Islander cases vs 11% for non-Indigenous cases).

Figure 25 HIV diagnoses, 2002 – 2006, by Aboriginal and Torres Strait Islander status and HIV exposure category



The population rate of newly diagnosed hepatitis C infection in the Aboriginal and Torres Strait Islander population in the Northern Territory was two or three times lower than that in the non-Indigenous population (Figure 26). In 2002 – 2006, the rate of hepatitis C diagnosis increased in both the Aboriginal and Torres Strait Islander and the non-Indigenous populations in the Northern Territory, contrary to the decreasing trend nationally. In Western Australia, the population rate of newly diagnosed hepatitis C infection in the Aboriginal and Torres Strait Islander population was between two and three times higher than that in the non-Indigenous population. This difference was even more marked in South Australia where the rate of diagnosis was between 5 and 10 times higher in the Aboriginal and Torres Strait Islander population.

Figure 26 Hepatitis C by Aboriginal and Torres Strait Islander status, State/Territory and year



Increasing population rates of diagnosis of chlamydia and gonorrhoea were apparent among the Aboriginal and Torres Strait Islander population in the Northern Territory, South Australia and Western Australia in 2002 – 2006 (Figures 27 and 28). A substantial increase in the population rate of diagnosis of infectious syphilis was recorded in the Aboriginal and Torres Strait Islander population in the Northern Territory but not in the non-Indigenous population (Figure 29). In States and Territories other than the Northern Territory, South Australia, Victoria and Western Australia, interpretation of trends in diagnoses of sexually transmissible infections in Aboriginal and Torres Strait Islander people was limited by incomplete information on Aboriginal and Torres Strait Islander status.

Figure 27 Chlamydia by Aboriginal and Torres Strait Islander status, State/Territory and year

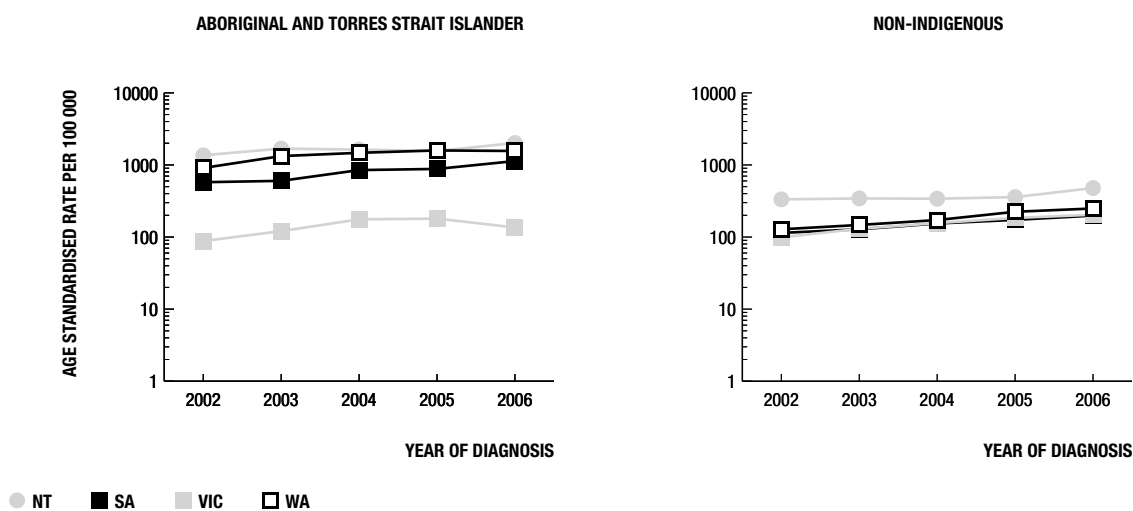


Figure 28 Gonorrhoea by Aboriginal and Torres Strait Islander status, State/Territory and year

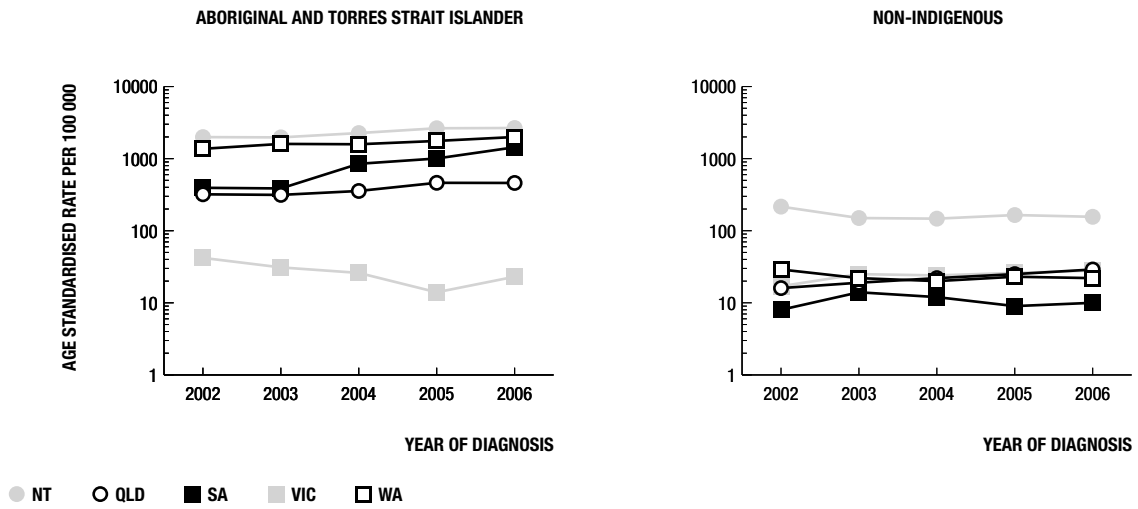
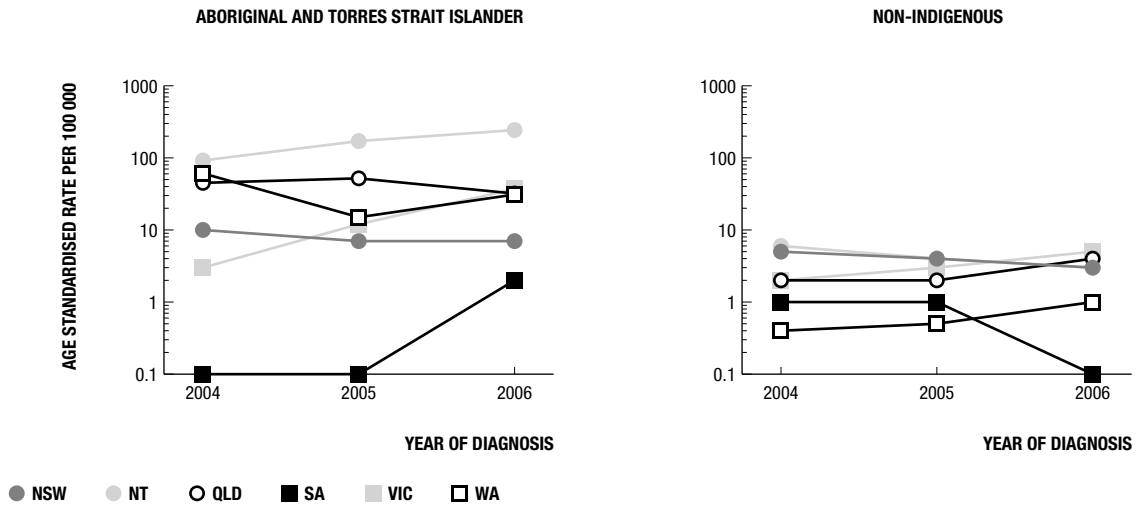


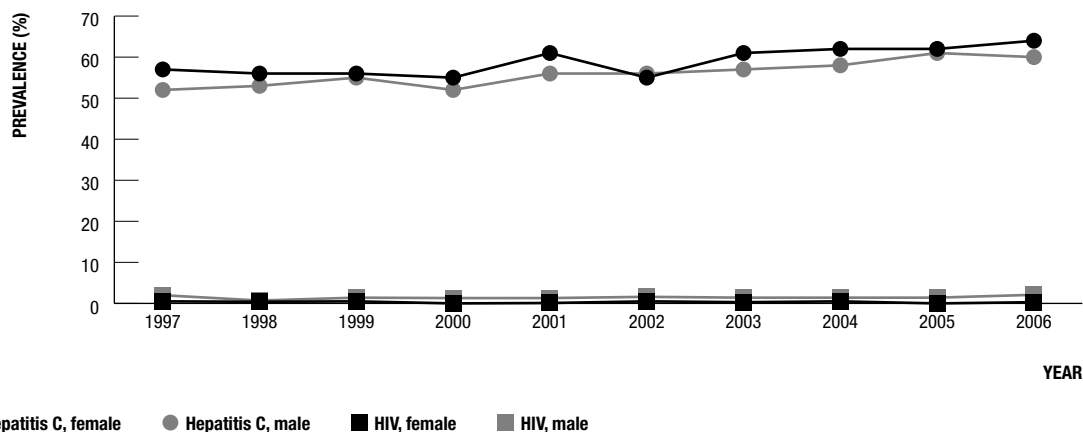
Figure 29 Infectious syphilis by Aboriginal and Torres Strait Islander status, State/Territory and year



People who have injected drugs

In 1997 – 2006, approximately 8% of HIV diagnoses in Australia were in people with a history of injecting drug use, of whom more than half were men who also reported a history of homosexual contact.

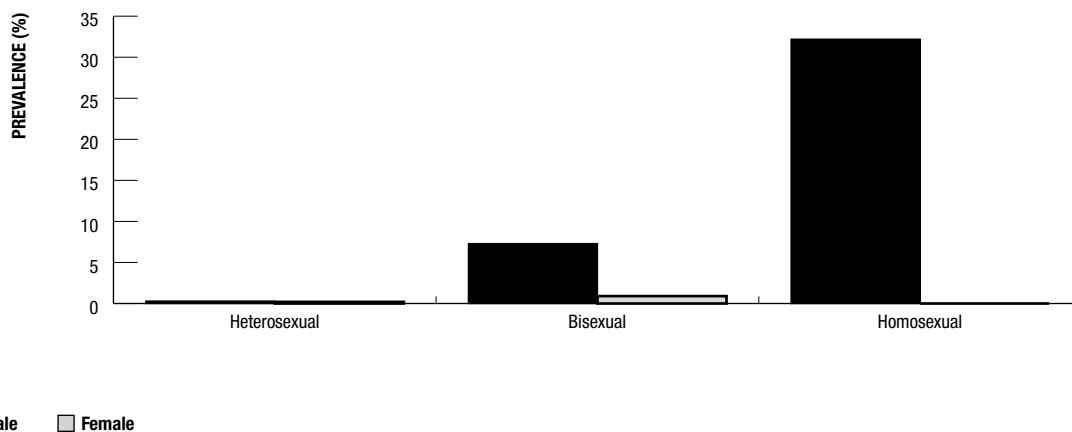
Figure 30 HIV and hepatitis C prevalence¹ in Needle and Syringe Programs by year and sex



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

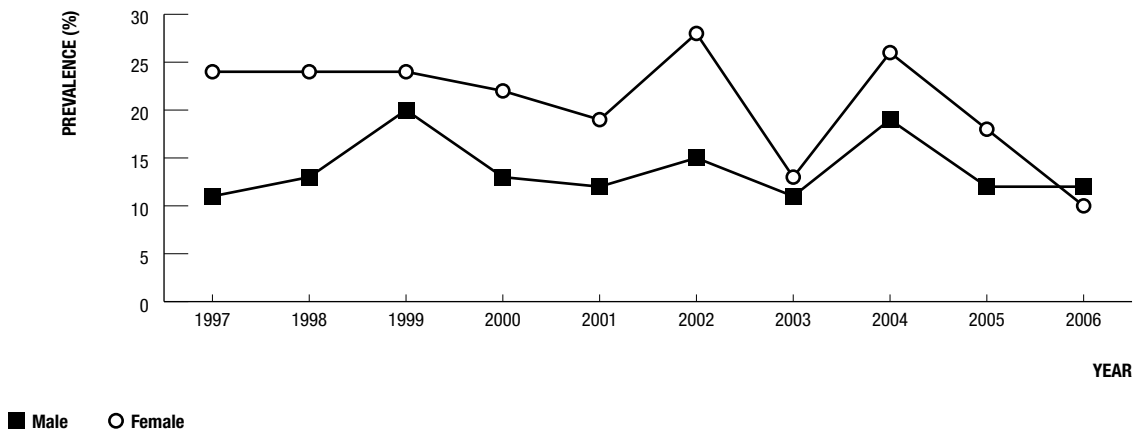
HIV prevalence among people attending needle and syringe programs has remained low (around 1% in 2002 – 2006) (Figure 30) but in the subgroup of men who identified as homosexual, it was 32.2% in 2006 (Figure 31). Of 820 men and 380 women with a history of injecting drug use who were tested for HIV antibody at metropolitan sexual health centres in 2005 – 2006, 6 cases of HIV infection (0.73%) were diagnosed in men and none were diagnosed in women (Figures 37 and 38).

Figure 31 HIV prevalence in people seen at Needle and Syringe Programs, 2006, by sexual identity



In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs remained at high levels in 1997 – 2006 (Figure 30).

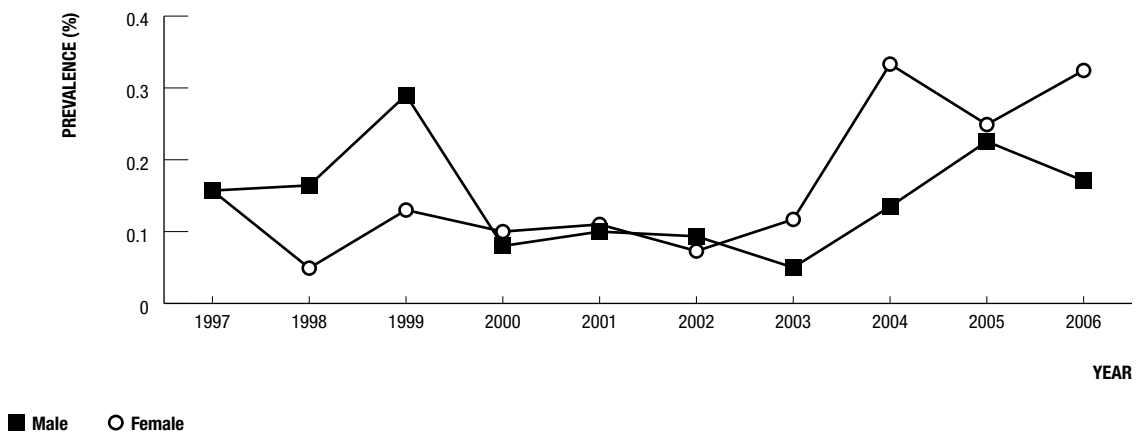
Figure 32 Prevalence of sharing among people¹ seen at Needle and Syringe Programs, by year and sex



¹ With a history of injecting drug use of less than 3 years.

Among people attending needle and syringe programs who report having injected for three years or less, hepatitis C prevalence increased from 13% in 1997 to 38% in 2002 and then declined to 18% in 2006, indicating changing patterns of injecting drug use and hepatitis C transmission in this population. The prevalence of reported sharing of injecting equipment among women with a history of injecting drug use of less than three years declined from 24% in 1997 to 10% in 2006 (Figure 32). The decline in the number of people in the survey who reported having injected drugs for three years or less (from 226 in 2002 to 102 in 2006), as well as in the number of survey respondents aged less than 20 years (from 140 in 2002 to 43 in 2006), suggests that there has been a fall in the prevalence of injecting drug use among young people. Hepatitis C prevalence has also dropped among males and females aged less than 20 years from 38% in 2002 to 17% in 2006 (Table 4.2.2).

Figure 33 HIV prevalence in prison entrants by year and sex



HIV prevalence among people entering Australian prisons in 1997 – 2006 has remained low, at levels of less than 0.5% (Figure 33). Prevalence increased in 2004 – 2006 in both males and females, due primarily to increases in the number of HIV diagnoses in prison entrants in New South Wales and South Australia.

Heterosexual transmission of HIV infection

The number of new HIV diagnoses for which exposure to HIV was attributed to heterosexual contact has increased from 775 in 1997 – 2001 to 914 in 2002 – 2006, accounting for 20% of total HIV diagnoses in both 1997 – 2001 and 2002 – 2006.

Figure 34 Newly diagnosed HIV infection among men who report an exposure other than male homosexual contact, by year and HIV exposure category

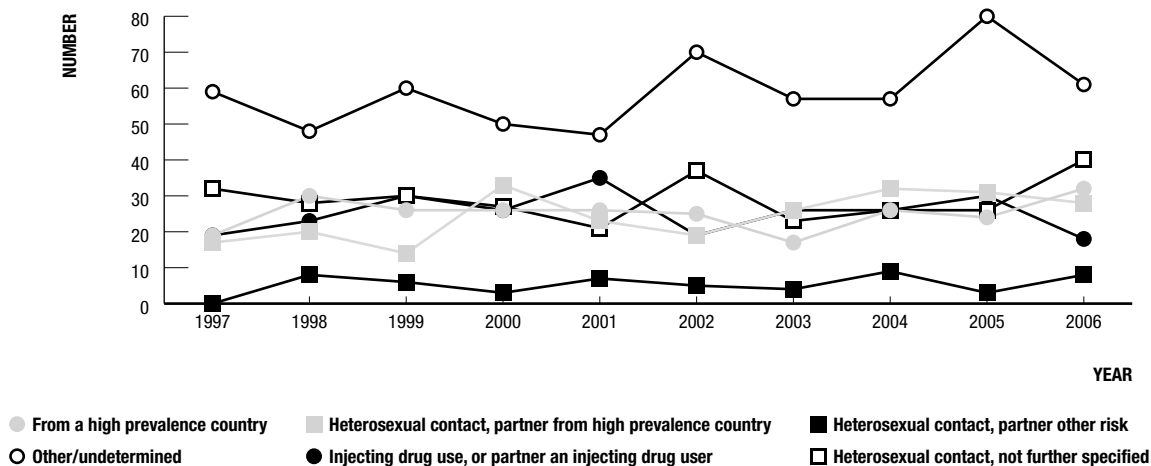
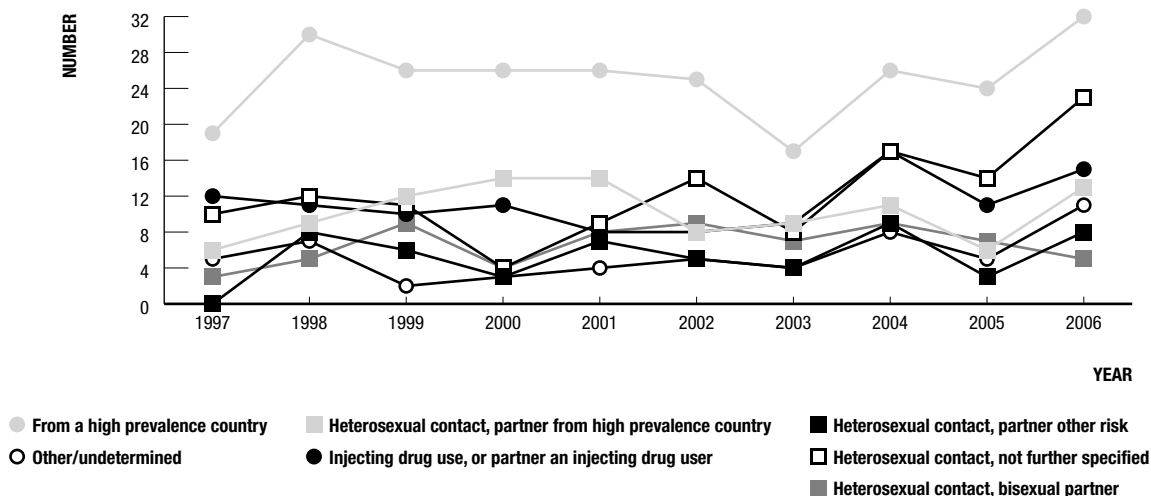


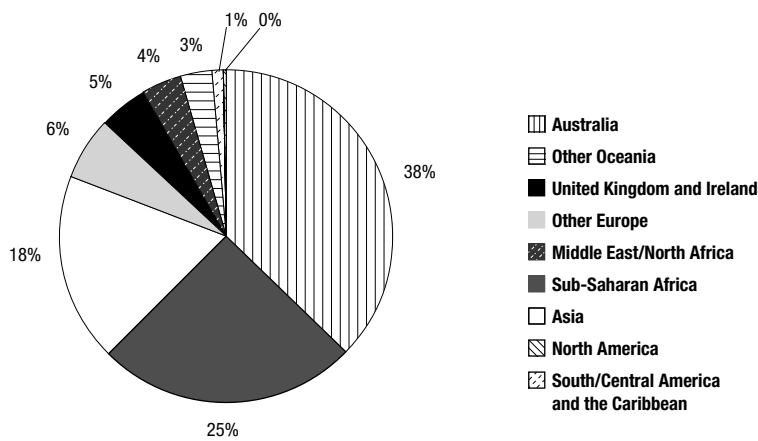
Figure 35 Newly diagnosed HIV infection among women, by year and HIV exposure category



Men and women who came from a country with high HIV prevalence accounted for 36% and 38% of HIV diagnoses attributed to heterosexual contact in 1997 – 2001 and 2002 – 2006, respectively. In both five year intervals, the majority of cases came from high HIV prevalence countries in sub-Saharan Africa (57% and 61%) and South East Asia (36% and 29%). The proportion of cases from high prevalence countries that were among women increased from 54% in 1997 – 2001 to 63% in 2002 – 2006. The increasing numbers of diagnoses among women from high prevalence countries resulted in a 47% increase in cases in this category in New South Wales, a 50% increase in Queensland, a 75% increase in Victoria, a 21% increase in Western Australia and a 45% increase in Australia in 2002 – 2006 over the numbers in the previous five year period.

Excluding cases from a high prevalence country, there was a small annual increase (about 3% per year) in 1997 – 2006 in the number of new HIV diagnoses associated with heterosexual contact in among men but not among women. Men and women with HIV infection who reported a partner from a high prevalence country accounted for 21% and 20% of new HIV diagnoses attributed to heterosexual contact in 1997 – 2001 and 2002 – 2006, respectively. Of new HIV diagnoses in 2002 – 2006 for which the country of birth of the heterosexual partner was reported (67%), 64% and 27% of cases, respectively, came from South East Asia and sub-Saharan Africa. Heterosexual contact, not further specified, was reported for 24% and 20% of cases attributed to heterosexual contact in 1997 – 2001 and 2002 – 2006, respectively. The percentage of men whose exposure was attributed to heterosexual contact, not further specified, increased from 67% in 1997 – 2001 to 75% in 2002 – 2006. The source of exposure to HIV remained undetermined for substantial numbers of men in 1997 – 2006 (Figure 34).

Figure 36 HIV infection attributed to heterosexual contact, 2002 – 2006, by region of birth



Among cases of HIV infection diagnosed in Australia in 2002 – 2006 and attributed to heterosexual contact, country of birth was reported as Australia in 38%, sub-Saharan Africa in 25% and South East Asia in 18% (Figure 36).

Figure 37 HIV prevalence among heterosexually active men seen at sexual health clinics by year and HIV exposure category

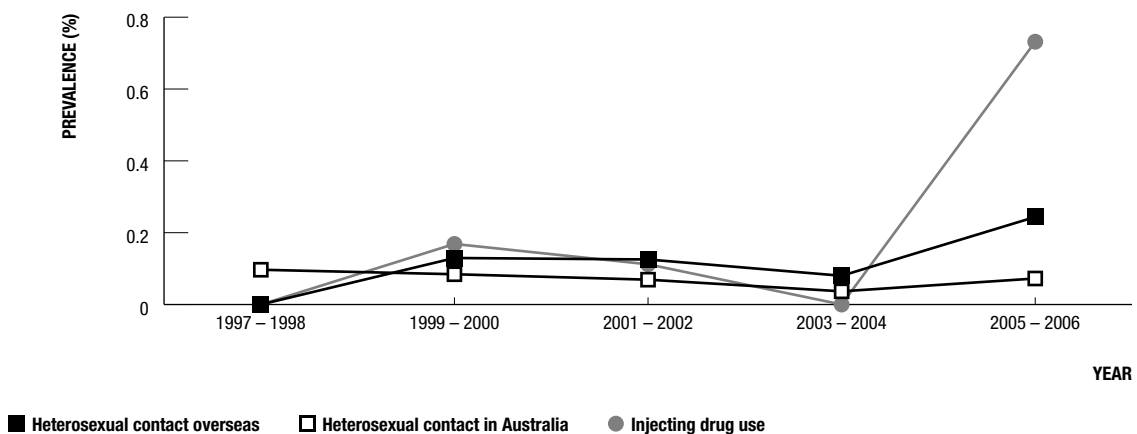
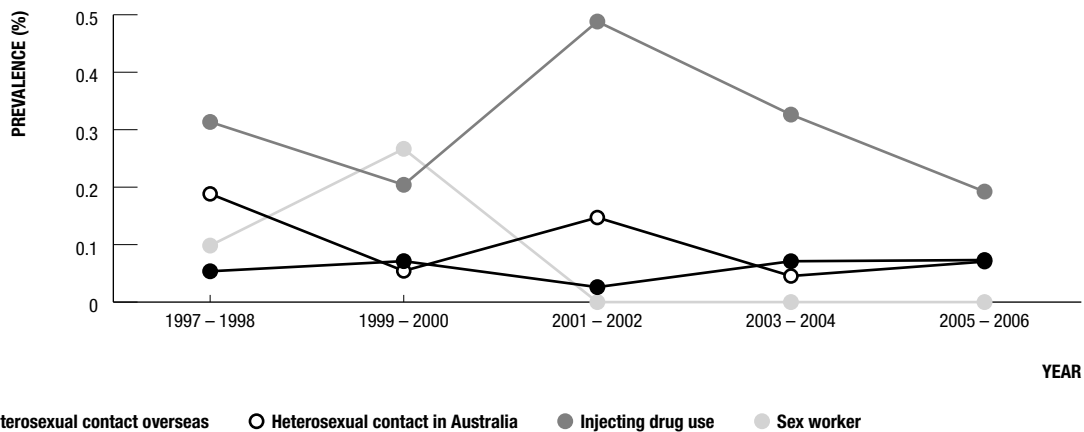
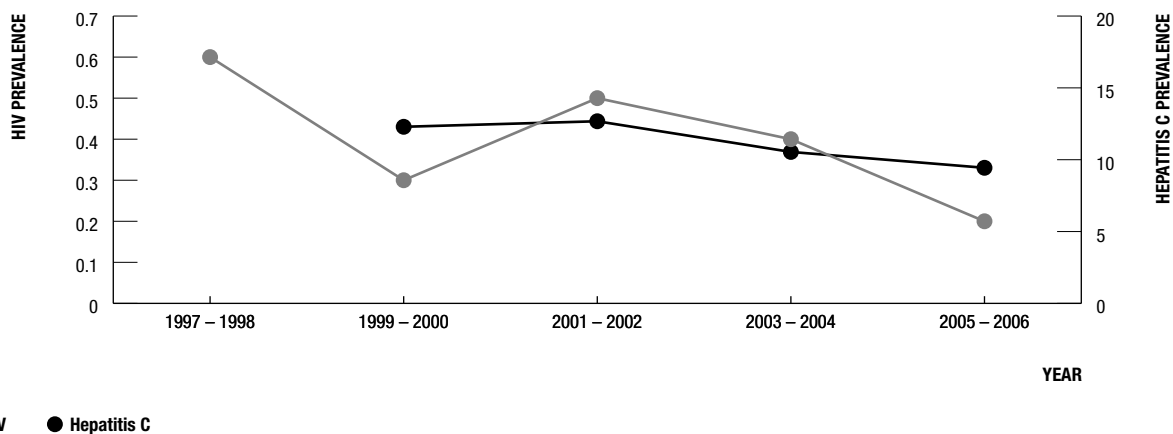


Figure 38 HIV prevalence among heterosexually active women seen at sexual health clinics by year and HIV exposure category



HIV prevalence has remained less than 0.5% among heterosexually active men and women seen through metropolitan sexual health clinics. In 2002 – 2006, HIV prevalence was less than 0.5% among men and women who reported a history of heterosexual contact overseas and among men and women who reported a history of heterosexual contact in Australia only (Figure 37). HIV prevalence has also remained low among women self-identifying as sex workers, with or without a history of injecting drug use (Figure 38).

Figure 39 HIV and hepatitis C prevalence¹ in blood donors by year



¹ Prevalence per 100 000 donations.

Levels of HIV infection in blood donors, who undergo a screening interview to exclude those with recognised risk factors for HIV infection, have been below 1 per 100 000 donations since 1985, with some evidence of a decline during this period, possibly reflecting increasingly effective donor deferral procedures (Figure 39).

Treatment, illness and mortality in people with HIV infection and viral hepatitis

The impact of improved HIV therapy in delaying disease progression is demonstrated by the sharp decline over the past ten years in the number of AIDS cases for which HIV diagnosis had taken place at least three months earlier (Figure 40). For the first time, in 2006 the number of AIDS cases for which HIV infection had been diagnosed at least three months prior to AIDS was less than the number of cases for which HIV diagnosis had occurred within the preceding three months. In comparison, there has been no reduction in the number of AIDS cases for which HIV diagnosis occurred within the preceding three months.

Figure 40 AIDS diagnoses, 1997 – 2006, by year and timing of HIV diagnosis

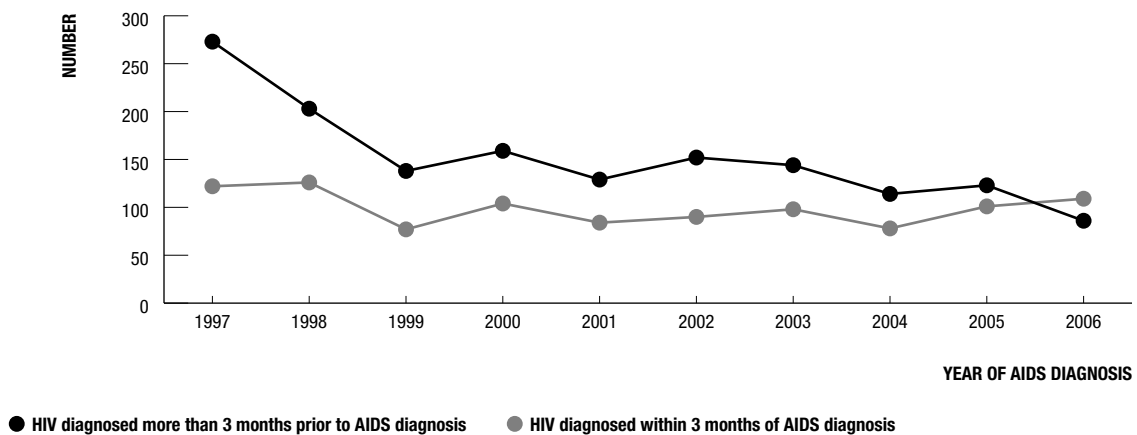
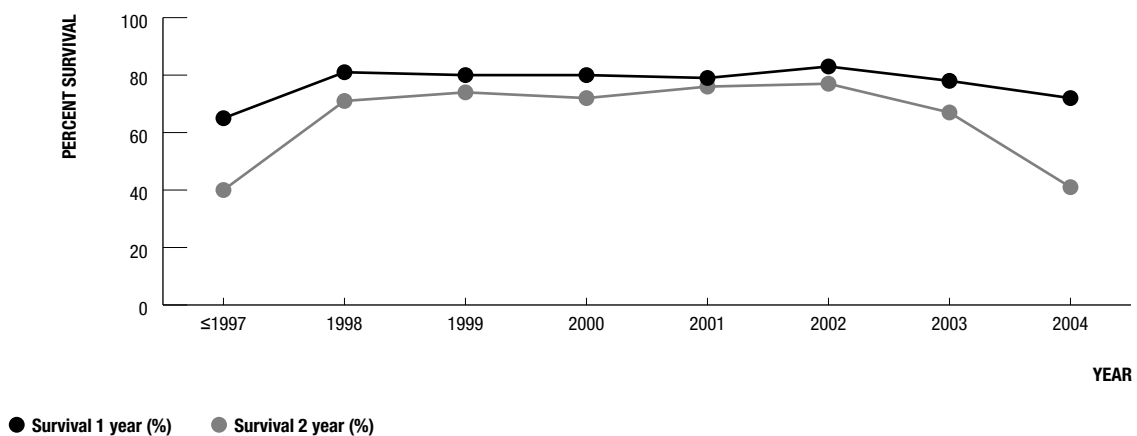
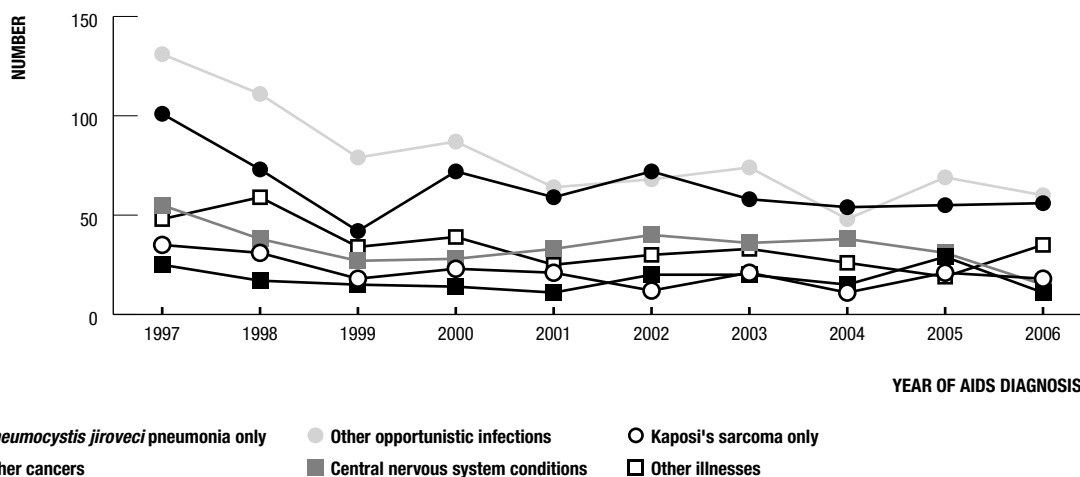


Figure 41 Survival following AIDS by year



Further evidence of the benefits of improved therapy for HIV infection has come from the substantial increases in survival following the diagnosis of AIDS (Figure 41). Median survival among people diagnosed with AIDS increased from 19 months prior to 1997 to 34 months among cases diagnosed with AIDS in 2003.

Figure 42 AIDS diagnoses, 1997 – 2006, by AIDS defining illness and year



The proportion of new AIDS cases in people with late HIV diagnosis has increased from 31% in 1997 to 37% in 2002, with now 56% of cases having undiagnosed HIV infection until around the time of AIDS diagnosis. *Pneumocystis jirovecii* pneumonia (PCP) was the single most common AIDS defining illness among AIDS cases diagnosed in 2002 – 2006, accounting for 27% of diagnoses. Opportunistic infections other than PCP, Kaposi's sarcoma and other cancers, central nervous system conditions and cases with multiple illnesses accounted for 29.1%, 16.3%, 14.6% and 13.1%, respectively (Figure 42). In 2002 – 2006, PCP (31.5% vs 23.4%) and other multiple illnesses (16% vs 10.8%) were more frequently diagnosed, and opportunistic infections other than PCP (29%) were diagnosed as frequently among cases with late HIV diagnosis as among cases with non-late HIV diagnosis. Kaposi's sarcoma and other cancers (20.2% vs 11.1%), and central nervous system conditions (16.5% vs 12.2%) were diagnosed more frequently among cases with non-late HIV diagnosis than among cases with late HIV diagnosis.

Figure 43 AIDS diagnoses, 1997 – 2006, by late HIV diagnosis, year and exposure category

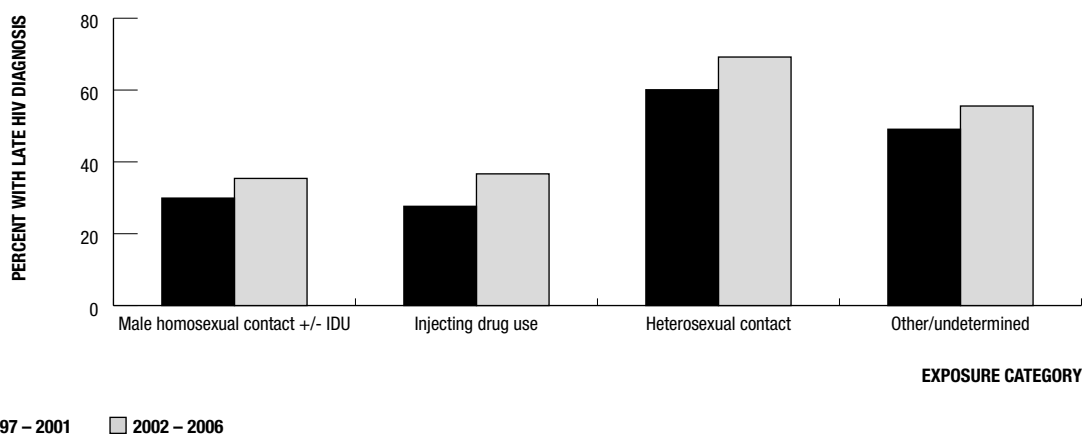
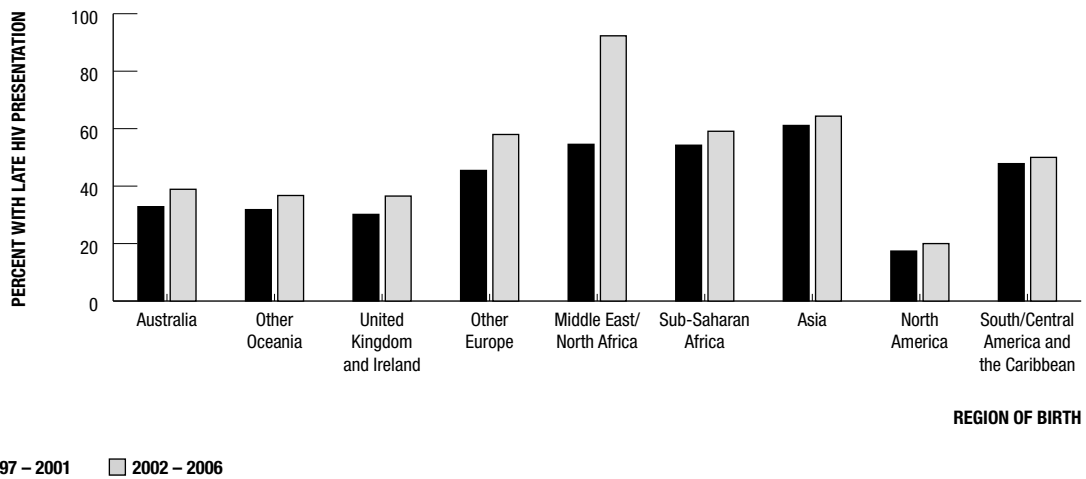


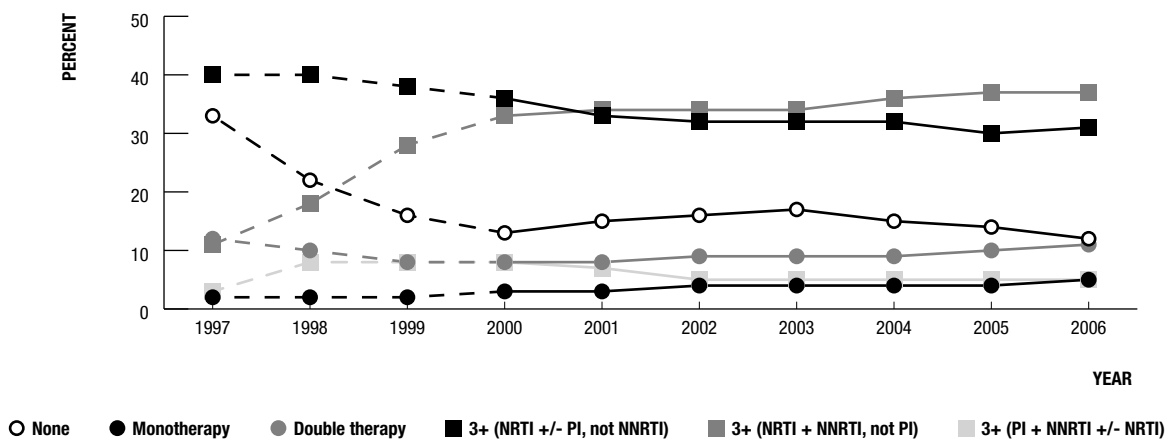
Figure 44 AIDS diagnoses, 1997 – 2006, by late HIV diagnosis, year and region of birth



Late HIV presentation has disproportionately affected men and women with a history of heterosexual contact and those with an undetermined exposure history (Figure 43). Late HIV presentation was also associated with region of birth. Compared to Australian born cases, a substantially higher percentage of cases of late presentation occurred among people born in countries in Asia and sub-Saharan Africa and among people born in European countries other than the United Kingdom and Ireland (Figure 44). Based on small number of cases, the percentage of cases of late HIV presentation among people born in countries in the Middle East or North Africa was notably high (see Table 1.1.6).

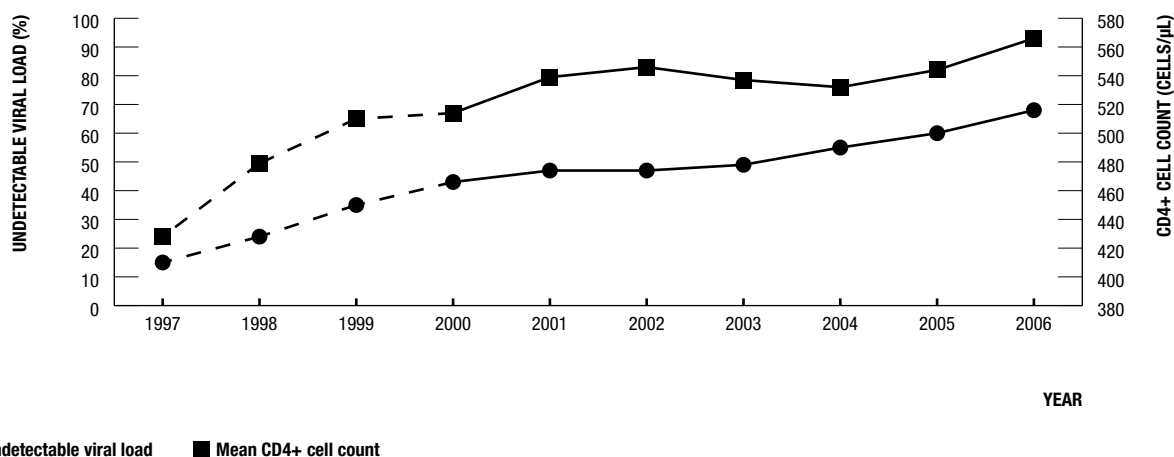
There is no comprehensive registry of advanced illness related to hepatitis B and C in Australia. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 130 people who had a liver transplant in 2006, 31 (23.8%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 3 (2.3%) people having liver transplants (Table 2.3.1).

Figure 45 Treatment uptake among people enrolled on the Australian HIV Observational Database¹ by year



¹ Dashed lines indicate the years of retrospective data collection.

Figure 46 HIV viral load and CD4+ cell count among people enrolled on the Australian HIV Observational Database¹



¹ Dashed lines indicate the years of retrospective data collection.

The Australian HIV Observational Database indicated that 72% of 1,802 people under follow up in 2006 were receiving triple combination antiretroviral treatment for HIV infection (Figure 45). Viral load was undetectable for more than 50% of people being followed through the Australian HIV Observational Database from 2004 and CD4+ cell count was higher than 480 cells/µl from 2000 (Figure 46). Of people enrolled in the Australian HIV Observational Database in 2006, 10.5% had been diagnosed with both HIV and hepatitis C antibody.

Use of combination antiretroviral therapy by gay and other homosexually active men participating in the Gay Community Periodic Surveys in Sydney remained stable at around 66% in 2003 – 2006 and was 60% or less in Melbourne in 2004 – 2006. In Brisbane, the proportion of gay and other homosexually active men reporting use of combination antiretroviral therapy has steadily increased to 65% in 2006. The proportion of people enrolled in Positive Health in Sydney who reported use of combination antiretroviral therapy increased from 69% in 2002 – 2003 to around 75% in 2006.

Figure 47 People prescribed reverse transcriptase inhibitors through the Highly Specialised Drugs Program

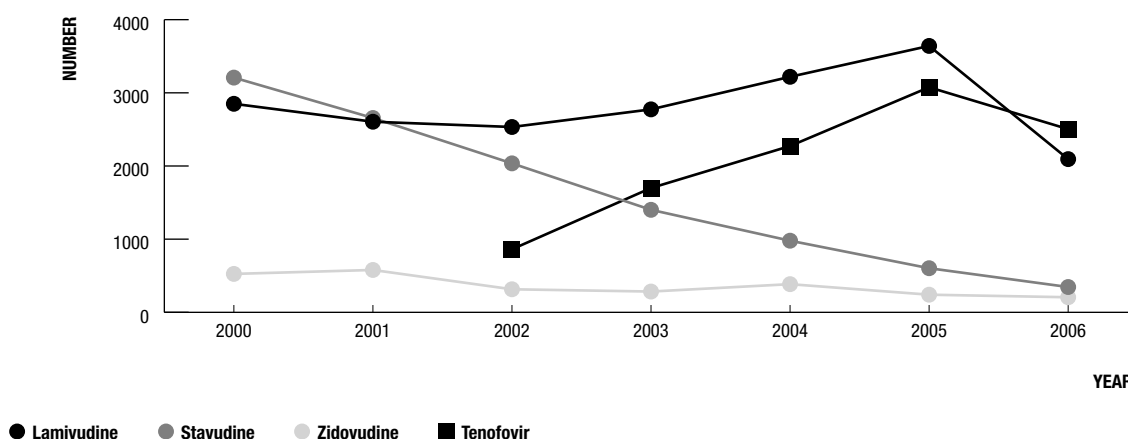
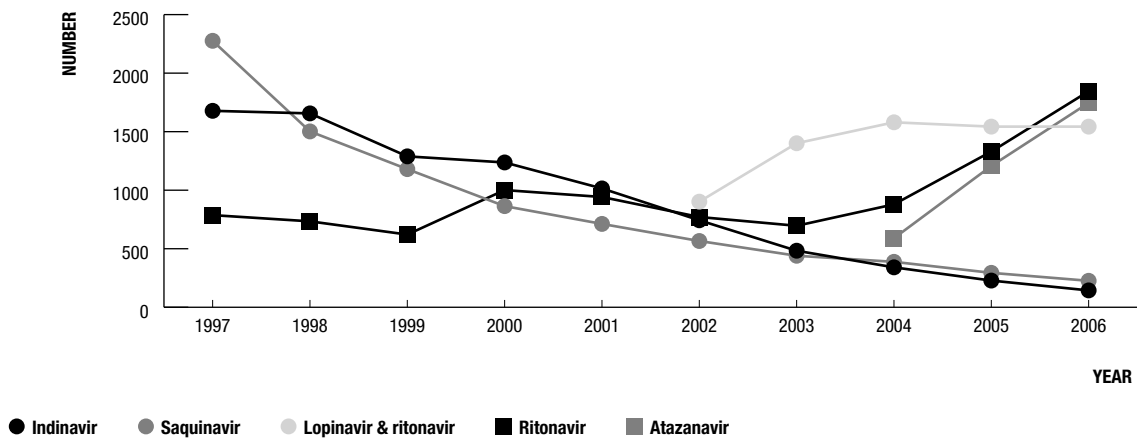
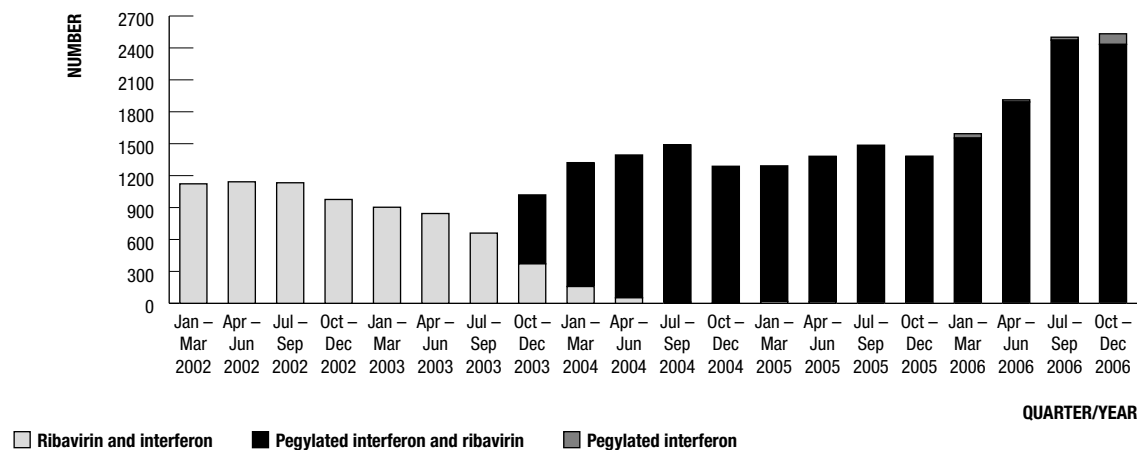


Figure 48 People prescribed protease inhibitors through the Highly Specialised Drugs Program



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 increased from 6,440 in 2002 to 9,463 during 2006. Tenofovir and lamivudine were the most frequently prescribed reverse transcriptase inhibitors in 2006 (Figure 47). The most commonly prescribed protease inhibitors in 2006 were ritonavir (1,845 people), and atazanavir (1,746 people) (Figure 48).

Figure 49 People prescribed drugs for treatment of hepatitis C infection through the Highly Specialised Drugs Program



A substantial shift in treatment for hepatitis C infection has occurred, away from interferon and ribavirin treatment prior to 2004, to pegylated interferon and ribavirin combination treatment in 2004 (Figure 49). Pegylated interferon only became available for treatment of hepatitis C infection in 2006. An estimated 2,847 people were receiving treatment for hepatitis C infection in 2006. The increase in the number of people dispensed drugs for treatment of hepatitis C infection between the first and the second quarters of 2006 was attributable to a removal in April 2006 of the requirement for biopsy proven liver damage prior to treatment.

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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	
		≤ 97 ²	98	99	00	01	02	03	04	05		06
Total cases		7 910	329	215	263	213	242	242	192	224	195	10 025
Males (%)		95.5	92.7	89.3	90.9	88.7	91.3	93.0	87.5	87.9	88.7	94.4
Median age (years)	M	37	39	39	40	40	41	42	43	42	43	38
	F	33	35	34	32	36	33	35	44	39	35	34
Late HIV diagnosis (%)²	M	30.1	37.7	37.0	38.9	36.5	36.2	40.4	38.1	44.2	54.9	38.5
	F	40.6	47.8	27.3	45.8	60.9	47.4	43.8	63.6	51.9	63.2	48.9
State/Territory (%)												
ACT		1.1	1.5	0.0	1.1	0.0	0.8	1.7	0.5	0.4	0.0	1.0
NSW		58.3	53.7	58.1	49.0	46.5	45.5	59.1	50.5	48.2	44.6	56.7
NT		0.4	0.9	0.9	0.0	0.5	0.4	1.7	1.6	0.4	1.0	0.5
QLD		10.1	11.6	15.8	16.0	14.1	21.1	9.9	15.1	16.1	8.7	11.0
SA		4.3	5.8	4.7	3.0	4.2	6.2	2.1	5.7	4.0	6.7	4.4
TAS		0.6	0.9	0.0	0.4	0.5	0.8	0.0	0.5	0.9	1.5	0.6
VIC		20.7	20.7	18.1	24.7	24.9	19.8	19.8	21.4	26.3	32.3	21.1
WA		4.5	4.9	2.3	5.7	9.4	5.4	5.8	4.7	3.6	5.1	4.7
HIV exposure category (%)³												
Male homosexual contact		83.6	68.4	65.8	68.4	68.6	71.9	66.1	61.5	61.7	59.8	80.0
Male homosexual contact and injecting drug use		4.7	3.5	6.1	6.5	4.4	6.9	7.6	9.5	9.1	6.0	5.1
Injecting drug use ⁴		2.8	7.4	5.6	6.1	4.4	3.9	6.7	6.7	7.2	4.9	3.5
Heterosexual contact		5.1	18.4	21.4	17.0	19.6	16.0	18.8	20.7	20.6	28.3	8.1
Haemophilia/coagulation disorder		1.5	0.3	0.5	1.2	1.0	0.9	0.4	0.6	0.0	0.0	1.3
Receipt of blood/tissue		1.9	1.3	0.5	0.4	0.5	0.4	0.4	1.1	1.0	1.1	1.7
Mother with/at risk for HIV infection		0.3	0.6	0.0	0.4	1.5	0.0	0.0	0.0	0.5	0.0	0.3
Other/undetermined		3.0	6.1	9.7	6.5	4.4	4.8	8.0	7.3	7.2	6.0	3.7
AIDS defining condition (%)												
<i>Pneumocystis jirovecii</i> pneumonia (PCP)		28.0	22.2	19.5	27.4	27.7	29.8	24.0	28.1	24.6	28.7	27.5
Kaposi's sarcoma (KS)		12.1	9.4	8.4	8.7	9.9	5.0	8.7	5.7	9.4	9.2	11.3
PCP and other (not KS)		5.4	6.7	7.9	6.8	8.0	7.4	7.9	6.8	9.4	5.6	5.8
Oesophageal candidiasis		10.0	10.6	13.5	11.8	7.0	12.0	8.7	6.3	9.8	10.8	10.0
<i>Mycobacterium avium</i>		4.9	4.0	2.8	3.0	2.3	1.7	2.5	1.6	1.3	2.1	4.4
HIV wasting disease		4.9	10.0	13.0	6.1	3.8	5.0	7.0	3.1	2.2	4.6	5.2
Other conditions		34.6	37.1	34.9	36.1	41.3	39.2	41.3	48.4	43.3	39.0	35.7

1 Not adjusted for reporting delay.

2 Percentage with late HIV diagnosis for 1997 only. Total percentage with late HIV presentation for 1997 – 2006 only.

3 The 'Other/undetermined' category was excluded from 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 1.1.2 Number of AIDS diagnoses adjusted for reporting delay by State/Territory, sex and year

State/Territory	Sex	Year of AIDS diagnosis										Total
		≤ 97	98	99	00	01	02	03	04 ¹	05 ¹	06 ¹	
ACT	M	80	4	0	2	0	2	3	0	1	0	92
	F	6	1	0	1	0	0	1	1	0	0	10
NSW	M	4 434	166	110	113	90	102	138	98	101	117	5 469
	F	165	10	15	16	9	6	4	8	13	5	251
NT	M	30	3	2	0	1	1	3	1	0	2	43
	F	0	0	0	0	0	0	1	2	1	0	4
QLD	M	757	36	32	39	29	47	20	24	34	24	1 042
	F	43	2	2	3	1	4	4	5	4	3	71
SA	M	323	16	8	8	6	13	5	10	11	16	416
	F	20	3	2	0	3	2	0	1	0	1	32
TAS	M	42	2	0	1	1	1	0	1	2	3	53
	F	2	1	0	0	0	1	0	0	0	0	4
VIC	M	1 558	65	35	62	45	45	44	37	60	71	2 022
	F	69	3	3	3	7	3	4	5	8	6	111
WA	M	333	13	5	14	17	10	12	12	7	6	429
	F	24	3	0	1	3	3	2	0	1	4	41
Total²		7 910	329	215	263	213	242	242	207	243	261	10 125

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

2 Includes 35 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
		≤ 97	98	99	00	01	02	03	04 ¹	05 ¹	06 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact	M	6 407	211	128	169	140	165	148	124	135	153	7 780
Male homosexual contact and injecting drug use	M	353	11	12	16	9	15	16	17	21	24	494
Injecting drug use ²	M	142	17	7	11	5	8	12	10	17	9	238
	F	75	6	4	4	3	1	2	2	3	0	100
Heterosexual contact	M	231	43	26	25	24	22	31	19	28	38	487
	F	160	14	16	17	16	15	12	18	21	15	304
Haemophilia/coagulation disorder	M	110	1	1	3	2	2	1	1	0	0	121
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	76	2	0	0	0	0	1	2	1	1	83
	F	59	2	1	1	1	1	0	0	1	0	66
Health care setting	M	1	0	0	0	0	0	0	0	0	0	1
	F	3	0	0	0	0	0	0	0	0	0	3
Other/undetermined	M	210	18	18	15	8	9	16	10	15	15	334
	F	12	1	1	1	1	2	1	2	0	3	24
Total adult/adolescents³		7 866	327	215	262	210	242	241	207	242	261	10 073
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	11	2	0	0	1	0	0	0	1	0	15
	F	14	0	0	1	2	0	0	0	0	0	17
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 blood/tissue	M	11	0	0	0	0	0	0	0	0	0	11
	F	3	0	0	0	0	0	0	0	0	0	3
Other/undetermined	M	0	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	1	0	0	0	1
Total children		44	2	0	1	3	0	1	0	1	0	52
Total³		7 910	329	215	263	213	242	242	207	243	261	10 125

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

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

3 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

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

State/Territory	Sex	Year of death following AIDS										Total ²
		≤ 97	98	99	00	01	02	03	04 ¹	05 ¹	06 ¹	
ACT	M	63	0	1	3	2	0	1	0	2	1	73
	F	2	0	1	1	0	1	1	0	1	0	7
NSW	M	3 113	70	67	79	60	49	44	52	33	34	3 601
	F	113	1	1	4	3	5	2	2	4	1	136
NT	M	23	1	0	0	1	1	0	0	0	1	27
	F	0	0	0	0	0	0	0	1	0	0	1
QLD	M	530	25	14	16	17	16	11	15	15	13	672
	F	28	2	1	2	3	1	2	2	0	1	42
SA	M	214	14	5	5	8	10	5	12	2	5	280
	F	14	1	0	1	0	2	2	0	0	0	20
TAS	M	27	2	1	0	1	1	0	0	0	1	33
	F	2	0	0	0	0	0	0	0	0	0	2
VIC	M	1 207	38	39	29	21	14	17	14	16	25	1 420
	F	45	3	2	1	6	0	1	1	0	2	61
WA	M	249	5	8	7	5	3	4	7	5	6	299
	F	16	2	0	1	2	1	1	1	0	2	26
Total²		5 665	164	141	149	130	104	91	107	78	94	6 723

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

2 Includes 23 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 ³
		≤ 97	98	99	00	01	02	03	04 ¹	05 ¹	06 ¹	
Adults/adolescents (13 years and older at death following AIDS)												
Male homosexual contact	M	4 658	120	97	104	85	73	55	74	46	55	5 367
Male homosexual contact and injecting drug use	M	239	9	9	7	11	6	9	8	7	4	309
Injecting drug use ²	M	88	6	7	7	7	3	6	6	5	1	136
	F	49	0	0	2	1	4	3	0	3	0	62
Heterosexual contact	M	128	8	11	10	5	7	7	6	8	11	201
	F	97	6	4	7	9	5	5	6	1	4	144
Haemophilia/coagulation disorder	M	84	0	4	3	3	1	0	0	2	1	98
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	69	0	0	0	0	0	0	2	0	2	73
	F	50	1	1	0	3	1	0	1	1	1	59
Health care setting	M	1	0	0	0	0	0	0	0	0	0	1
	F	2	0	0	0	0	0	0	0	0	0	2
Other/undetermined	M	138	12	7	8	3	4	5	4	4	12	197
	F	9	1	0	1	0	0	1	0	0	1	13
Total adult/adolescents³		5 634	163	141	149	128	104	91	107	77	94	6 688
Children (less than 13 years at death following AIDS)												
Mother with/at risk for HIV infection	M	7	0	0	0	1	0	0	0	1	0	9
	F	8	1	0	0	1	0	0	0	0	0	10
Haemophilia/coagulation disorder	M	3	0	0	0	0	0	0	0	0	0	3
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt blood/tissue	M	11	0	0	0	0	0	0	0	0	0	11
	F	2	0	0	0	0	0	0	0	0	0	2
Total children		31	1	0	0	2	0	0	0	1	0	35
Total³		5 665	164	141	149	130	104	91	107	78	94	6 723

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 23 people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.6 Number (percent) of AIDS diagnoses in Australia, 1997 – 2006, and age standardised annual incidence per 100 000 population¹ by year of AIDS diagnosis and region of birth

Region/ Country of birth	1997 – 2001			2002 – 2006		
	Number	Percent	Age standardised incidence	Number	Percent	Age standardised incidence
Australia	947	66.9	1.5	707	64.6	1.1
Overseas born	419	29.6	1.8	350	32.0	1.4
<i>Other Oceania</i>	66	4.7	2.1	49	4.5	1.7
<i>United Kingdom and Ireland</i>	63	4.5	1.2	52	4.7	0.7
<i>Other Europe</i>	66	4.7	1.1	69	6.3	1.0
<i>Middle East/North Africa</i>	11	0.8	0.8	13	1.2	1.0
<i>Sub-Saharan Africa</i>	59	4.2	6.5	44	4.0	4.9
<i>Asia</i>	108	7.6	1.6	101	9.2	1.6
<i>North America</i>	23	1.6	4.4	10	0.9	1.9
<i>South/Central America and the Caribbean</i>	23	1.6	4.3	12	1.1	2.1
Total with a reported country of birth	1 366	96.5	1.5	1 057	96.5	1.2
Not reported	49	3.5	38	3.5		
Total	1 415	100.0		1 095	100.0	

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 06 ¹	Alive at 1 Jan 06 ²	Left Australia ³	Other ⁴	Median (months)	% Survival	
							1 year	2 year
≤ 97	7 910	6 203	152	55	1 500	19	65	40
98	329	116	29	0	184	74	81	71
99	215	53	23	0	139	72	80	74
00	263	75	18	2	168	63	80	72
01	213	45	25	0	143	61	79	76
02	242	54	32	0	156	48	83	77
03	242	44	38	0	160	34	78	67
04	192	38	54	0	100	24	72	41
05	224	35	189	0	0	–	–	–
06	195	20	175	0	0	–	–	–
Total	10 025	6 683	735	57	2 550	20.4	67	44

¹ Deaths occurring prior to 1 January 2007.

² Last medical contact on or after 1 January 2006.

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

⁴ Last medical contact prior to 1 January 2006.

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	%
	≤ 97		98 – 00		01 – 03		04 – 06		Cumulative to 31 Dec 06			
	M	F	M	F	M	F	M	F	M	F		
<i>Pneumocystis jirovecii</i> pneumonia (PCP)	2 135	74	176	11	174	13	147	17	2 632	115	2 756	27.5
Kaposi's sarcoma (KS)	952	5	72	0	54	0	50	0	1 128	5	1 134	11.3
KS and PCP alone	60	0	1	0	1	0	4	0	66	0	66	0.7
KS and other (not PCP)	131	0	8	0	10	0	6	0	155	0	155	1.5
PCP and other (not KS)	399	27	50	6	48	6	39	6	536	45	586	5.8
Oesophageal candidiasis	754	35	85	10	59	6	50	5	948	56	1 006	10.0
Toxoplasmosis	251	10	21	1	21	1	12	3	305	15	324	3.2
Cryptococcosis	287	11	28	2	19	2	20	3	354	18	374	3.7
Non-Hodgkin's lymphoma	300	15	42	1	48	1	54	0	444	17	461	4.6
<i>Mycobacterium avium</i>	358	29	25	2	14	1	9	1	406	33	440	4.4
Herpes simplex virus	169	14	9	3	5	0	6	0	189	17	207	2.1
HIV encephalopathy	257	13	36	3	47	3	33	4	373	23	397	4.0
Cytomegalovirus	297	5	13	2	9	1	11	2	330	10	343	3.4
HIV wasting disease	361	28	67	10	34	3	18	2	480	43	525	5.2
Cryptosporidiosis	181	5	8	1	13	0	6	0	208	6	214	2.1
<i>Mycobacterium tuberculosis</i>	40	6	6	2	9	1	5	2	60	11	71	0.7
Pulmonary tuberculosis ²	26	1	19	8	15	6	17	7	77	22	100	1.0
Recurrent pneumonia ²	39	3	17	0	5	4	6	1	67	8	77	0.8
Cervical cancer ²	–	4	–	1	–	0	–	1	–	6	6	0.1
Other single diagnoses	92	10	9	0	17	1	9	4	127	15	142	1.4
Other multiple diagnoses	468	34	44	6	33	9	36	10	581	59	641	6.4
Total¹	7 557	329	736	69	635	58	538	68	9 466	524	10 025	100.0

1 Includes 35 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 Registry

Table 1.2.1 Characteristics of cases of newly diagnosed HIV infection by year¹. Number of cases, median age, language spoken at home² and percent of total cases by sex, State/Territory and HIV exposure category

Characteristic	Year of HIV diagnosis										
	≤ 97	98	99	00	01	02	03	04	05	06	Total ¹
Total cases	18 673	755	718	763	769	850	871	908	962	998	26 267
Males (%)	93.1	87.0	89.6	88.8	87.4	88.8	89.8	86.2	90.3	85.4	91.6
Median age (years)											
Males	32	35	35	35	35	35	37	37	37	38	33
Females	29	30	28	30	29	32	31	31	32	31	30
Language spoken at home²											
English	–	–	–	–	–	–	–	288	347	516	1 151
Other language	–	–	–	–	–	–	–	19	20	57	96
Not reported	–	–	–	–	–	–	–	601	595	425	1 621
State/Territory (%)											
ACT	1.2	1.1	1.1	1.4	1.0	0.6	0.6	0.8	0.7	0.5	1.1
NSW	59.1	53.1	52.6	48.8	45.1	47.9	49.2	45.2	42.4	39.6	55.5
NT	0.5	1.6	0.7	0.4	0.5	0.9	0.6	0.9	0.3	0.9	0.6
QLD	9.7	13.8	17.2	15.1	13.5	15.3	14.6	17.3	17.5	16.3	11.4
SA	3.6	4.6	3.2	3.0	5.6	3.5	5.2	6.0	5.3	6.1	3.9
TAS	0.4	0.4	0.4	0.0	0.7	0.6	0.0	0.6	0.5	0.6	0.4
VIC	20.4	18.4	19.1	25.0	26.9	25.8	23.5	23.8	26.7	28.6	21.6
WA	5.1	7.0	5.7	6.2	6.6	5.4	6.3	5.5	6.6	7.3	5.4
HIV exposure category (%)³											
Male homosexual/bisexual contact	79.8	65.7	65.8	68.3	66.4	70.8	73.3	67.9	72.1	68.0	76.4
Male homosexual/bisexual contact and injecting drug use	4.2	5.1	6.4	4.0	5.2	4.3	4.5	3.9	4.5	3.9	4.4
Injecting drug use ⁴	4.2	3.4	5.3	4.3	5.6	2.6	3.6	4.3	3.4	2.8	4.1
Heterosexual contact	7.9	24.6	21.5	23.0	22.3	21.9	18.4	23.5	19.3	24.5	12.4
<i>Partner with/at risk of HIV infection</i>	<i>53.5</i>	<i>76.9</i>	<i>70.9</i>	<i>80.9</i>	<i>81.2</i>	<i>69.8</i>	<i>79.1</i>	<i>78.2</i>	<i>76.3</i>	<i>71.9</i>	<i>66.1</i>
<i>Not further specified</i>	<i>46.5</i>	<i>23.1</i>	<i>29.1</i>	<i>19.1</i>	<i>18.7</i>	<i>30.2</i>	<i>20.9</i>	<i>21.8</i>	<i>23.7</i>	<i>28.1</i>	<i>33.9</i>
Haemophilia/coagulation disorder	1.8	0.1	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.3
Receipt of blood/tissue	1.5	0.6	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	1.0
Mother with/at risk of HIV infection	0.4	0.4	0.2	0.4	0.4	0.3	0.2	0.1	0.6	0.7	0.4
Health care setting	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1
Other/undetermined	17.6	7.0	8.9	7.5	6.8	9.3	7.3	7.3	8.8	8.2	14.8

1 Not adjusted for multiple reporting.

2 Language spoken at home was sought for cases of HIV infection newly diagnosed from 1 January 2004.

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
		≤ 97	98	99	00	01	02	03	04	05	06	
ACT	M	190	6	5	10	7	3	4	5	7	3	240
	F	21	2	3	1	1	0	1	1	0	2	32
NSW	M	9 055	347	338	316	306	363	361	337	363	325	12 111
	F	527	42	30	34	32	30	32	61	31	56	875
NT	M	85	11	4	2	3	4	3	5	2	4	123
	F	7	1	1	1	0	4	1	3	0	5	23
QLD	M	1 662	88	102	94	85	114	108	132	149	134	2 668
	F	118	13	17	14	18	13	17	22	12	24	268
SA	M	604	29	19	20	32	23	39	44	48	51	909
	F	51	6	3	2	9	6	3	7	4	9	100
TAS	M	70	0	2	0	5	3	0	4	5	6	95
	F	3	1	1	1	0	2	0	2	0	0	10
VIC	M	3 406	119	120	165	179	192	183	188	220	251	5 023
	F	185	8	12	20	23	22	17	23	30	27	367
WA	M	839	30	36	36	37	31	38	35	46	52	1 180
	F	87	21	6	9	12	13	13	7	15	20	203
Total	M	15 322	550	610	572	593	731	728	724	835	817	21 482
	F	999	94	73	82	95	90	84	126	92	143	1 878
Total		16 370	645	685	658	690	825	813	851	928	963	23 428

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 Number of new diagnoses of HIV infection¹ by age group, sex and year, cumulative to 31 December 2006

Age group (years)	Sex	Year of HIV diagnosis										Total ²
		≤ 97	98	99	00	01	02	03	04	05	06	
0 – 1	M	41	2	0	1	0	0	0	0	0	1	45
	F	18	0	1	1	2	0	0	1	1	3	27
2 – 12	M	84	1	3	1	0	1	0	0	2	2	94
	F	19	0	1	0	1	1	2	0	2	1	27
13 – 19	M	398	8	6	7	13	1	5	8	9	9	464
	F	63	8	7	3	4	5	4	6	3	7	110
20 – 29	M	6 128	169	159	162	158	180	163	161	181	166	7 627
	F	417	34	28	37	41	26	28	51	25	52	739
30 – 39	M	6 380	242	263	280	276	321	317	309	320	293	9 001
	F	255	37	23	29	29	41	29	30	41	45	559
40 – 49	M	2 968	147	130	133	145	156	164	189	216	242	4 490
	F	100	12	9	7	13	10	11	22	15	24	223
50 – 59	M	951	63	58	67	59	69	99	84	99	101	1 650
	F	47	0	2	0	3	3	5	12	4	9	85
60+	M	304	25	23	20	17	27	34	29	41	38	558
	F	50	3	2	4	1	4	5	4	1	2	76
Not reported	M	128	0	1	6	4	0	0	0	1	0	140
	F	30	0	0	1	1	0	0	0	0	0	32
Total	M	17 382	657	643	677	672	755	782	780	869	852	24 069
	F	999	94	73	82	95	90	84	126	92	143	1 878
Total²		18 673	755	718	763	769	850	871	908	962	998	26 267

1 Not adjusted for multiple reporting.

2 Totals include 68 people whose sex was reported as transgender and 252 people whose sex was not reported.

Source: State/Territory health authorities

Table 1.2.4 Number (percent) of new HIV diagnoses in Australia, 2002 – 2006, and age standardised rate per 100 000 population¹ by year of HIV diagnosis and region of birth

Region/ Country of birth	2002			2003			2004			2005			2006		
	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate
Australia	489	57.5	3.7	533	61.2	4.0	555	61.1	4.2	580	60.3	4.4	572	57.3	4.4
Overseas born	267	31.4	6.1	267	30.7	6.1	277	30.5	6.2	278	28.9	6.4	335	33.6	8.0
<i>Other Oceania</i>	25	2.9	4.1	35	4.0	5.8	29	3.2	4.8	36	3.7	6.3	45	4.5	7.3
<i>United Kingdom and Ireland</i>	36	4.2	3.8	45	5.2	4.3	39	4.3	3.2	49	5.1	4.4	38	3.8	3.4
<i>Other Europe</i>	45	5.3	5.0	42	4.8	4.6	35	3.9	4.4	39	4.1	4.6	41	4.1	4.5
<i>Middle East/North Africa</i>	5	0.6	2.0	7	0.8	2.8	15	1.7	6.6	11	1.1	5.7	18	1.8	8.2
<i>Sub-Saharan Africa</i>	48	5.6	27.0	45	5.2	27.6	59	6.5	33.3	46	4.8	27.2	61	6.1	36.2
<i>Asia</i>	73	8.6	5.5	74	8.5	5.6	69	7.6	5.4	73	7.6	5.4	116	11.6	9.1
<i>North America</i>	19	2.2	17.6	11	1.3	10.2	17	1.9	15.6	15	1.6	14.1	10	1.0	10.0
<i>South/Central America and the Caribbean</i>	16	1.9	14.9	8	0.9	7.5	14	1.5	12.6	9	0.9	8.0	6	0.6	5.3
Total with a reported country of birth	756	88.9	4.2	800	91.8	4.5	832	91.6	4.6	858	89.2	4.8	907	90.9	5.1
Not reported	94	11.1		71	8.2		76	8.4		104	10.8		91	9.1	
Total	850	100.0		871	100.0		908	100.0		962	100.0		998	100.0	

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

Source: State/Territory health authorities

Table 1.2.5 Characteristics of diagnoses of newly acquired HIV infection¹, 1997 – 2006, 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
		97	98	99	00	01	02	03	04	05	06	
Total cases		157	152	171	199	209	245	285	261	280	304	2 263
Males (%)		93.6	97.4	94.2	93.9	92.3	95.1	96.1	94.3	96.8	94.0	94.8
Median age (years)	M	32	31	32	32	34	34	33	35	35	37	34
	F	31	19	27	25	34	38	34	24	27	37	29
State/Territory												
ACT	M	1	2	1	6	2	2	0	2	1	2	19
	F	0	0	0	0	0	0	0	0	0	1	1
NSW	M	65	71	92	84	95	118	153	112	128	110	1 028
	F	3	0	2	3	7	2	4	5	3	7	36
NT	M	2	2	1	1	3	1	0	2	1	1	14
	F	1	0	0	1	0	0	0	0	0	0	2
QLD	M	19	21	27	21	23	34	25	43	40	56	309
	F	0	0	3	2	3	3	3	3	1	1	19
SA	M	9	6	6	6	10	6	15	15	15	17	105
	F	2	0	0	1	1	0	1	1	0	0	6
TAS	M	0	0	1	0	2	1	0	1	2	0	7
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	47	38	30	59	51	67	69	62	75	86	584
	F	3	1	3	3	3	0	3	4	4	7	31
WA	M	4	8	3	10	7	4	12	9	9	13	79
	F	0	3	1	1	2	5	0	1	1	2	16
HIV exposure category												
Male homosexual/bisexual contact	M	129	125	130	160	165	211	243	208	232	244	1 847
Male homosexual/bisexual contact and injecting drug use	M	10	13	15	7	10	9	12	11	15	13	115
Injecting drug use ³	M	2	1	5	6	5	0	5	2	2	2	30
	F	1	2	2	3	2	0	2	4	1	2	19
Heterosexual contact	M	6	6	9	12	8	8	12	16	9	17	103
	F	6	2	6	8	13	9	9	10	8	15	86
Health care setting ⁴	M	0	0	0	0	0	0	0	1	0	0	1
	F	0	0	0	0	0	1	0	0	0	0	1
Other/undetermined	M	0	3	2	2	5	5	2	7	13	9	48
	F	2	0	0	0	1	0	0	0	0	1	4
Evidence of newly acquired infection												
Testing history only	M	68	71	80	77	91	98	138	105	127	149	1 004
	F	6	3	2	5	9	1	5	10	5	7	53
Illness only	M	37	35	35	61	46	51	44	46	49	44	448
	F	0	0	6	3	1	3	0	3	2	8	26
Testing history and illness	M	42	42	46	49	56	84	92	95	95	92	693
	F	3	1	1	3	6	6	6	1	2	3	32

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 primary HIV infection within one year of HIV diagnosis.

2 Totals include 7 people whose sex was reported as transgender.

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

4 'Health care setting' includes 1 case of occupationally acquired HIV infection.

Source: State/Territory health authorities

Table 1.2.6 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 2002 – 2006, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

Characteristic	Sex	Year of HIV diagnosis				
		2002	2003	2004	2005	2006
State/Territory						
ACT	M	780 (3)	40 (3)	560 (5)	403 (6)	525 (2)
	F	– (0)	4 (1)	470 (1)	– (0)	320 (1)
NSW	M	481 (212)	410 (243)	470 (225)	463 (242)	440 (236)
	F	420 (19)	405 (22)	459 (36)	243 (20)	389 (38)
NT	M	482 (4)	555 (4)	266 (5)	509 (3)	241 (4)
	F	571 (4)	40 (1)	342 (3)	– (0)	65 (5)
QLD	M	390 (108)	520 (101)	450 (128)	455 (146)	406 (128)
	F	580 (12)	495 (16)	220 (20)	460 (11)	380 (23)
SA	M	435 (22)	473 (38)	454 (41)	393 (43)	363 (50)
	F	370 (6)	325 (3)	619 (7)	421 (3)	494 (8)
TAS	M	568 (2)	270 (2)	506 (4)	430 (6)	234 (5)
	F	184 (2)	– (0)	612 (1)	– (0)	– (0)
VIC	M	485 (174)	418 (163)	436 (177)	510 (206)	397 (227)
	F	301 (19)	220 (13)	290 (21)	392 (24)	490 (23)
WA	M	390 (31)	420 (37)	411 (42)	325 (45)	396 (44)
	F	425 (13)	324 (10)	494 (6)	560 (15)	456 (18)
Exposure category						
Male homosexual contact ¹	M	484 (460)	480 (499)	468 (499)	490 (568)	443 (561)
Injecting drug use ²	M	406 (10)	200 (14)	370 (21)	256 (22)	255 (14)
	F	– (0)	605 (4)	680 (9)	1 050 (4)	730 (5)
Heterosexual contact	M	273 (68)	189 (54)	318 (79)	330 (69)	230 (90)
	F	410 (73)	323 (58)	390 (83)	371 (64)	380 (104)
Other/undetermined	M	265 (18)	174 (24)	485 (28)	360 (38)	210 (31)
	F	757 (2)	334 (2)	190 (3)	390 (5)	280 (7)
Newly acquired HIV infection status						
Diagnoses of newly acquired HIV infection ³	M	577 (199)	539 (214)	566 (220)	574 (234)	527 (250)
	F	625 (10)	491 (7)	866 (14)	799 (7)	651 (14)
Other HIV diagnoses	M	374 (357)	375 (377)	400 (407)	380 (463)	311 (446)
	F	340 (65)	320 (59)	336 (81)	354 (66)	366 (102)
Total⁴		442 (635)	436 (659)	446 (723)	450 (771)	405 (814)

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 primary HIV infection within one year of HIV diagnosis.

4 Totals include 9 people whose sex was reported as transgender and 1 person whose sex was not reported.

Source: State/Territory health authorities

Table 1.2.7 Number of cases of newly acquired HIV infection, 1996 – 2005, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis

	Year of HIV diagnosis										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Newly acquired HIV infection	169	157	152	171	199	209	245	285	261	280	2 128
AIDS											
Interval between HIV and AIDS diagnosis											
Less than 1 year	2	4	2	3	2	2	1	4	2	6	28
1 – 2 years	2	2	1	2	0	2	0	3	0	1	13
2 – 3 years	1	2	2	6	1	5	2	1	–	–	20
3 – 4 years	1	1	3	5	2	2	0	2	–	–	16
4 – 5 years	3	1	2	2	2	1	–	–	–	–	11
5 or more years	11	7	10	3	1	–	–	–	–	–	32
Total	20	17	20	21	8	12	3	10	2	7	120

Source: State/Territory health authorities

Table 1.2.8 Number of specimens tested for HIV antibody in public health laboratories, 1997 – 2006, by State/Territory and year of test

State/Territory	Year of HIV antibody test									
	1997	1998	1999	2000	2001	2002 ¹	2003 ¹	2004 ¹	2005 ¹	2006 ¹
ACT	7 044	8 293	6 976	5 762	5 446	5 712	7 978	14 388	15 551	16 565
NSW	286 701	299 434	324 126	311 904	328 295	357 526	358 063	347 064	356 046	322 569
NT	13 424	13 137	15 149	14 835	15 158	15 710	16 407	15 323	15 217	7 247
QLD	156 738	164 388	179 336	183 533	185 028	184 994	188 403	206 322	222 558	238 509
SA	74 640	80 586	76 987	76 275	77 219	75 360	79 409	83 970	88 158	88 552
TAS	11 347	11 883	12 243	13 152	12 714	12 574	12 967	12 754	13 041	12 573
VIC	94 846	113 342	161 600	160 611	177 949	202 682	204 561	152 284	165 461	183 508
WA	73 826	79 308	82 040	89 426	100 225	93 271	100 483	102 694	114 203	101 277
Total	718 566	770 371	858 457	855 498	902 034	947 829	968 271	934 799	990 235	970 800

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 Aboriginal and Torres Strait Islander people

Table 1.3.1 Characteristics of cases of newly diagnosed HIV infection in Aboriginal and Torres Strait Islander people¹, 1997 – 2006, by year. Number of cases, median age and percent² of total cases by sex, newly acquired infection, State/Territory and HIV exposure category

Characteristic	Year of HIV diagnosis										Total
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Total cases	15	28	9	16	14	27	23	21	18	19	190
Males (%)	73.3	67.9	66.7	87.5	57.1	55.6	73.9	71.4	83.3	68.4	70.0
Median age (years)	36	32	28	30	30	36	34	30	34	31	33
Newly acquired infection	26.7 (4)	21.4 (6)	33.3 (3)	18.7 (3)	14.3 (2)	22.2 (6)	17.4 (4)	28.6 (6)	22.2 (4)	31.6 (6)	23.2(44)
State/Territory											
ACT	–	–	–	–	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)
NSW	26.7 (4)	28.6 (8)	55.6 (5)	37.5 (6)	28.6 (4)	30.8 (8)	17.4 (4)	19.0 (4)	11.1 (2)	42.1 (8)	27.9(53)
NT	33.3 (5)	14.3 (4)	0.0 (0)	6.2 (1)	7.1 (1)	7.7 (2)	4.3 (1)	4.8 (1)	0.0 (0)	0.0 (0)	7.9(15)
QLD	20.0 (3)	7.1 (2)	11.1 (1)	18.7 (3)	21.4 (3)	15.4 (5)	26.1 (6)	23.8 (5)	38.9 (7)	15.8 (3)	20.0(38)
SA	0.0 (0)	3.6 (1)	11.1 (1)	6.2 (1)	7.1 (1)	7.7 (2)	8.7 (2)	9.5 (2)	0.0 (0)	0.0 (0)	5.3(10)
TAS	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)
VIC	–	3.6 (1)	0.0 (0)	0.0 (0)	14.3 (2)	3.8 (1)	21.7 (5)	19.0 (4)	16.7 (3)	10.5 (2)	9.5(18)
WA	20.0 (3)	42.8(12)	22.2 (2)	31.3 (5)	21.4 (3)	34.6 (9)	21.7 (5)	23.8 (5)	33.3 (6)	31.6 (6)	29.5(56)
HIV exposure category											
Male homosexual/ bisexual contact	60.0 (9)	32.0 (8)	25.0 (2)	50.0 (8)	42.9 (6)	20.0 (7)	31.8 (7)	50.0(10)	33.3 (6)	50.0 (9)	39.3(72)
Male homosexual/bisexual contact & injecting drug use	6.7 (1)	12.0 (3)	12.5 (1)	6.2 (1)	0.0 (0)	4.0 (1)	13.6 (3)	0.0 (0)	22.2 (4)	0.0 (0)	7.7(14)
Injecting drug use ³	0.0 (0)	12.0 (3)	25.0 (2)	25.0 (4)	28.6 (4)	16.0 (4)	13.6 (3)	20.0 (4)	16.7 (3)	27.8 (5)	17.5(32)
Heterosexual contact	33.3 (5)	40.0(10)	37.5 (3)	18.7 (3)	21.4 (3)	60.0(15)	40.9 (9)	30.0 (6)	27.8 (5)	22.2 (4)	34.4(63)
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)	4.0 (1)	0.0 (0)	0.0 (0)	7.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.1 (2)
Other/undetermined ⁴	0.0 (0)	10.7 (3)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	4.3 (1)	4.8 (1)	0.0 (0)	5.3 (1)	3.7 (7)

1 Information on Aboriginal and Torres Strait Islander status was available in ACT from 1 January 2005. Information on Aboriginal and Torres Strait Islander status was available in VIC from 1 June 1998.

2 Number of cases in brackets.

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

4 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

Table 1.3.2 Rate¹ of diagnosis of HIV infection, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and area of residence

Year of diagnosis	Aboriginal and Torres Strait Islander status	Area of residence					Total
		Major cities	Inner regional	Outer regional	Remote	Very remote	
2002	Aboriginal and Torres Strait Islander	14.4	4.8	3.2	0.0	2.8	6.6
	Non-Indigenous	5.7	1.6	1.3	1.3	0.0	4.5
2003	Aboriginal and Torres Strait Islander	10.4	4.8	5.3	2.9	0.0	5.6
	Non-Indigenous	5.9	1.5	1.2	1.0	2.3	4.6
2004	Aboriginal and Torres Strait Islander	10.4	1.2	5.3	5.7	0.0	5.1
	Non-Indigenous	6.0	1.6	2.3	2.0	2.3	4.8
2005	Aboriginal and Torres Strait Islander	6.4	4.8	2.1	2.9	1.4	4.4
	Non-Indigenous	6.6	1.6	1.7	1.0	0.0	5.1
2006	Aboriginal and Torres Strait Islander	9.6	2.4	1.1	5.7	1.4	4.6
	Non-Indigenous	6.6	1.7	2.3	3.0	3.1	5.3

1 Rate per 100 000 population. Population estimates from *2001 Census of Population and Housing* (Australian Bureau of Statistics).

2 Includes diagnoses in people whose Aboriginal and Torres Strait islander status was not reported.

Source: State/Territory health authorities

Table 1.3.3 Characteristics of cases of AIDS in Aboriginal and Torres Strait Islander people¹, 1997 – 2006, by year. Number of AIDS diagnoses, median age and percent² of total cases by sex, late HIV diagnosis, State/Territory and HIV exposure category

Characteristic	Year of AIDS diagnosis										Total
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Total cases	4	9	5	5	5	8	12	12	9	4	73
Males (%)	75.0	77.8	100.0	100.0	100.0	62.5	75.0	91.7	88.9	50.0	82.2
Median age (years)	38	34	37	37	40	37	36	44	36	43	38
Late HIV diagnosis	25.0 (1)	44.4 (4)	40.0 (2)	80.0 (4)	20.0 (1)	37.5 (3)	33.3 (4)	33.3 (4)	55.5 (5)	25.0 (1)	39.7(29)
State/Territory											
ACT	–	–	–	–	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)
NSW	50.0 (2)	33.3 (3)	60.0 (3)	20.0 (1)	60.0 (3)	50.0 (4)	33.3 (4)	33.3 (4)	33.3 (3)	50.0 (2)	39.7(29)
NT	0.0 (0)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	8.3 (1)	8.3 (1)	0.0 (0)	0.0 (0)	4.1 (3)
QLD	25.0 (1)	11.1 (1)	0.0 (0)	40.0 (2)	20.0 (1)	25.0 (2)	25.0 (3)	33.3 (4)	22.2 (2)	0.0 (0)	21.9(16)
SA	0.0 (0)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	8.3 (1)	8.3 (1)	0.0 (0)	0.0 (0)	4.1 (3)
TAS	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)
VIC	–	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	8.3 (1)	33.3 (3)	0.0 (0)	6.8 (5)
WA	25.0 (1)	33.3 (3)	20.0 (1)	40.0 (2)	20.0 (1)	25.0 (2)	25.0 (3)	8.3 (1)	11.1 (1)	50.0 (2)	23.3(17)
HIV exposure category											
Male homosexual/ bisexual contact	33.3 (1)	37.5 (3)	20.0 (1)	100.0 (4)	80.0 (4)	62.5 (5)	45.5 (5)	63.6 (7)	44.4 (4)	0.0 (0)	50.7(34)
Male homosexual/bisexual contact & injecting drug use	0.0 (0)	0.0 (0)	40.0 (2)	0.0 (0)	0.0 (0)	0.0 (0)	9.1 (1)	9.1 (1)	11.1 (1)	25.0 (1)	12.3 (6)
Injecting drug use ³	0.0 (0)	25.0 (2)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	18.2 (2)	9.1 (1)	22.2 (2)	0.0 (0)	9.6 (8)
Heterosexual contact	66.7 (2)	37.5 (3)	20.0 (1)	0.0 (0)	20.0 (1)	37.5 (3)	27.2 (3)	18.2 (3)	11.1 (1)	75.0 (3)	26.0(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)	11.1 (1)	0.0 (0)	1.4 (1)
Mother with/at risk for HIV infection	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)
Other/undetermined ⁴	25.0 (1)	11.1 (1)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	8.3 (1)	0.0 (0)	0.0 (0)	0.0 (0)	5.4 (4)

1 Information on Aboriginal and Torres Strait Islander status was available in the ACT from 1 January 2005. Information on Aboriginal and Torres Strait Islander status was available in VIC from 1 June 1998.

2 Number of cases in brackets.

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

4 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

Table 1.3.4 Rate¹ of diagnosis of AIDS, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and area of residence

Year of diagnosis	Aboriginal and Torres Strait Islander status	Area of residence					Total
		Major cities	Inner regional	Outer regional	Remote	Very remote	
2002	Aboriginal and Torres Strait Islander	4.0	0.0	1.1	5.7	0.0	2.0
	Non-Indigenous ²	1.5	0.7	0.6	0.0	0.0	1.2
2003	Aboriginal and Torres Strait Islander	6.4	0.0	3.2	2.9	0.0	2.9
	Non-Indigenous ²	1.5	0.6	0.6	0.3	0.0	1.2
2004	Aboriginal and Torres Strait Islander	4.8	1.2	3.2	5.7	0.0	2.9
	Non-Indigenous ²	1.2	0.6	0.4	0.0	0.8	1.0
2005	Aboriginal and Torres Strait Islander	4.0	2.4	1.1	2.9	0.0	2.2
	Non-Indigenous ²	1.4	0.7	0.5	0.3	0.0	1.2
2006	Aboriginal and Torres Strait Islander	1.6	0.0	1.1	5.7	0.0	1.2
	Non-Indigenous ²	1.2	0.3	0.8	0.7	0.0	1.0

1 Rate per 100 000 population. Population estimates from *2001 Census of Population and Housing* (Australian Bureau of Statistics).

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

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, 2002 – 2006, number for which the exposure assessment questionnaire was returned and number with additional information on the returned questionnaire¹ by State/Territory² and year

State/Territory	2002 – 2003			2004 – 2006			2002 – 2006		
	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	3	2	2	6	0	0	9	2	2
NT	8	8	8	15	6	6	23	14	14
QLD	70	41	41	–	–	–	70	41	41
SA	18	15	14	66	34	33	84	49	47
TAS	2	2	2	6	1	1	8	3	3
VIC	103	101	95	183	159	155	286	260	250
WA	55	50	49	107	98	95	162	148	144
Total	259	219	211	383	298	290	642	517	501

¹ Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (3), people whose medical condition limited reporting of an HIV exposure history (3) and people who were reported to have died (10).

² For State/Territory health authorities other than New South Wales in 2002 – 2006 and Queensland in 2004 – 2006.

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, 2002 – 2006, 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	2002 – 2003			2004 – 2006			2002 – 2006		
	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	27	22	20	48	39	36	75	61	56
Heterosexual	21	20	20	45	37	34	66	57	54
Not further specified	6	2	0	3	2	2	9	4	2
Heterosexual contact	197	178	178	290	237	233	487	415	411
From a high prevalence country	63	53	53	105	86	86	168	139	139
Partner from a high prevalence country	44	39	39	67	56	55	111	95	94
Other partner with/at risk of HIV infection	48	47	47	50	43	43	98	90	90
Not further specified	42	39	39	68	52	49	110	91	88
Receipt of blood/tissue	0	0	0	3	3	3	3	3	3
Health care setting	1	1	1	1	1	1	2	2	2
Other/undetermined	34	18	12	41	18	17	75	36	29
Total	259	219	211	383	298	290	642	517	501

1 Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (3), people whose medical condition limited reporting of an HIV exposure history (3) and people who were reported to have died (10).

Source: State/Territory health authorities

Table 1.4.3 Number of cases of newly diagnosed HIV infection, 2002 – 2006, by HIV exposure category reported on the questionnaire, year and sex

HIV exposure category documented on the questionnaire	2002		2003		2004		2005		2006		2002 – 2006		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Injecting drug use													
Heterosexual	5	0	9	4	14	3	9	2	3	3	40	12	52
Not further specified	5	0	8	4	13	3	5	2	3	3	34	12	46
	0	0	1	0	1	0	4	0	0	0	6	0	6
Heterosexual contact	49	56	34	38	36	36	37	39	34	34	190	203	393
Sex with injecting drug user	3	3	1	1	0	2	1	3	0	1	5	10	15
Sex with bisexual male	–	8	–	5	–	3	–	3	–	5	–	24	24
From a high prevalence country	11	18	9	14	13	18	13	20	10	13	56	83	139
Sub-Saharan Africa	9	13	7	10	8	9	9	14	2	6	35	52	87
South East Asia	2	5	2	4	2	7	3	4	5	7	14	27	41
Other/not reported	0	0	0	0	3	2	1	2	3	0	7	4	11
Sex with a person from a high prevalence country	12	8	13	7	16	3	15	2	8	4	64	24	88
Sub-Saharan Africa	2	3	1	3	1	1	4	1	3	1	11	9	20
South East Asia	8	1	10	2	11	1	11	1	3	1	43	6	49
Other/not reported	2	4	2	2	4	1	0	0	2	2	10	9	19
Sex with person with medically acquired HIV	0	0	0	0	0	0	0	0	0	0	0	0	0
Sex with HIV infected person, exposure not specified	4	13	1	8	3	3	1	8	2	3	11	35	46
Not further specified	19	6	10	3	4	7	7	3	14	8	54	27	81
Receipt of blood/tissue	0	0	0	0	1	0	0	2	0	0	1	2	3
Health care setting	0	1	0	0	1	0	0	1	0	0	1	2	3
Other/undetermined	8	0	6	1	11	0	10	1	9	4	44	6	50
Total	62	57	49	43	63	39	56	45	46	41	276	225	501

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, 1997 – 2006, by State/Territory and year of birth

State/ Territory	1997 – 1998		1999 – 2000		2001 – 2002		2003 – 2004		2005 – 2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	1	12.2	3	36.1	0	0.0	1	12.0	0	0.0
NSW	9	5.2	23	13.3	23	13.4	23	13.4	17	9.8
NT	0	0.0	1	13.8	0	0.0	0	0.0	0	0.0
QLD	12	12.8	4	4.3	9	9.4	13	13.2	6	5.8
SA	0	0.0	0	0.0	3	8.6	0	0.0	2	5.6
TAS	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0
VIC	2	1.6	11	9.3	5	8.5	9	7.3	7	5.5
WA	7	14.1	10	20.0	14	18.3	5	10.1	1	1.9
Total	32	6.4	52	10.4	54	11.1	51	10.1	33	6.4

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, 1997 – 2006, by time of the woman's HIV diagnosis relative to the first exposed child's birth

First exposed child's year of birth	Interval of the woman's HIV diagnosis					Total
	Before the birth (years)				At or after the birth	
	< 1	1 – 2	> 2	Total		
1997 – 1998	5	2	8	15	8	23
1999 – 2000	17	4	16	37	9	46
2001 – 2002 ¹	15	2	19	36	2	39
2003 – 2004	16	2	19	37	2	39
2005 – 2006	11	4	6	21	2	23
Total¹	64	14	68	146	23	170

1 Includes 1 woman whose first exposed child was born in 2001 – 2002 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, 1997 – 2006, 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	1997 – 2001		2002 – 2006		1997 – 2006	
	Number of women	Number of exposed children	Number of women	Number of exposed children	Number of women	Number of exposed children
Injecting drug use	4	7	5	7	9	14
Heterosexual contact	85	105	71	97	156	202
<i>Sex with injecting drug user</i>	12	16	8	14	20	30
<i>Sex with bisexual male</i>	5	8	2	4	7	12
<i>From high prevalence country</i>	24	29	29	37	53	66
<i>Sex with person from a high prevalence country</i>	15	17	13	18	28	35
<i>Sex with person with medically acquired HIV</i>	0	0	1	1	1	1
<i>Sex with person with HIV infection, other exposure</i>	12	16	3	7	15	23
<i>Not further specified</i>	17	19	15	16	32	35
Receipt of blood/tissue	0	0	1	1	1	1
Other/undetermined	2	2	2	3	4	5
Total	91	114	79	108	170	222

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

Table 1.5.4 Number of perinatally exposed children, 1997 – 2006, 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 or at the birth		After the birth		Total	
	Number exposed	Number with HIV	Number exposed	Number with HIV	Number exposed ¹	Number with HIV
1997 – 1998	22	0	10	5	32	5
1999 – 2000	43	0	9	7	52	7
2001 – 2002 ¹	51	1	2	1	54	2
2003 – 2004	49	2	2	2	51	4
2005 – 2006	31	1	2	2	33	3
Total	196	4	25	17	222	21

1 Includes 1 woman whose exposed child was born in 2001 – 2002 whose date of HIV diagnosis was not reported.

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

Table 1.5.5 Number of perinatally exposed children, born in 1997 – 2006 to women whose HIV infection was diagnosed antenatally, and number with diagnosed HIV infection by year of the child's birth and proportion of mothers reporting use of interventions to reduce the risk of mother-to-child transmission

Child's year of birth/ Reported use of interventions	Proportion of mothers reporting use of interventions	Number of children with HIV infection
1997 – 1998	22	0
<i>No reported use of interventions</i>	4.5	0
<i>Use of 1 intervention</i>	0.0	0
<i>Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding</i>	54.5	0
<i>Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding</i>	40.9	0
1999 – 2000	43	0
<i>No reported use of interventions</i>	2.3	0
<i>Use of 1 intervention</i>	18.6	0
<i>Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding</i>	34.9	0
<i>Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding</i>	44.2	0
2001 – 2002	51	1
<i>No reported use of interventions</i>	2.0	0
<i>Use of 1 intervention</i>	17.6	1
<i>Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding</i>	43.1	0
<i>Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding</i>	37.3	0
2003 – 2004	49	2
<i>No reported use of interventions</i>	2.0	1
<i>Use of 1 intervention</i>	8.2	0
<i>Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding only</i>	30.6	0
<i>Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding</i>	59.2	1
2005 – 2006	31	1
<i>No reported use of interventions</i>	3.2	0
<i>Use of 1 intervention</i>	6.4	0
<i>Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding</i>	35.5	0
<i>Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding</i>	54.8	1
Total	196	4

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	
	2006	Rate ¹	2006	Rate ¹
Asia Pacific				
Australia	15 670	76	261	1.3
Cambodia	64 683	900	–	–
China ²	650 000	49	–	–
India	2 084 137	360	–	–
Indonesia ²	170 000	76	–	–
Japan ²	17 000	13	–	–
Malaysia ²	69 000	272	–	–
Myanmar ²	360 000	713	–	–
New Zealand ²	1 400	34	29	0.7
Papua New Guinea ²	60 000	1 019	–	–
Philippines ²	12 000	14	–	–
Republic of Korea ²	13 000	27	–	–
Thailand ²	580 000	903	–	–
Vietnam ²	260 000	309	–	–
Europe				
France	130 000	215	1 020	1.6
Germany	49 000	59	367	0.4
Italy	150 000	258	1 126	1.9
Spain	140 000	325	1 519	3.5
United Kingdom	68 000	114	857	1.4
North America				
Canada ³	58 000	177	318	1.0
United States ³	1 200 000	402	41 993	13.9

1 Rate per 100 000 population.

2 Estimated HIV prevalence in 2005 in people aged 15 – 49 years.

3 Estimated HIV prevalence and AIDS incidence in 2005.

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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 diagnoses of hepatitis A infection, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis									
	2002		2003		2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	4	1.1	5	1.5	1	0.3	3	0.9	1	0.3
NSW	149	2.3	124	1.9	137	2.1	83	1.2	95	1.4
NT	47	20.6	43	19.1	14	5.9	65	28.8	30	12.6
QLD	67	1.8	48	1.3	27	0.7	50	1.1	31	0.7
SA	16	1.1	13	0.8	11	0.7	10	0.7	8	0.5
TAS	4	0.8	14	2.9	1	0.2	2	0.4	4	0.9
VIC	68	1.4	89	1.8	71	1.5	59	1.2	44	0.9
WA	37	1.9	95	4.9	57	2.9	54	2.7	67	3.3
Total	392	2.0	431	2.2	319	1.6	326	1.6	280	1.4

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, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
0 – 4	11	12	23	26	11	37	19	6	25	20	9	29	14	9	23
5 – 14	22	19	41	49	31	80	42	32	74	34	30	64	34	33	67
15 – 19	19	6	25	15	19	34	11	7	18	14	18	32	11	7	18
20 – 29	62	31	93	48	31	79	30	24	54	28	37	65	26	20	46
30 – 39	58	31	89	40	25	65	31	26	57	23	12	36	19	23	42
40 – 49	33	19	52	42	26	68	25	10	35	23	18	41	19	16	35
50 – 59	23	10	33	19	17	36	11	9	20	15	11	26	17	7	24
60 +	11	24	35	17	15	32	17	19	36	11	15	26	13	11	24
Not reported	0	0	1	0	0	0	0	0	0	6	1	7	1	0	1
Total	239	152	392	256	175	431	186	133	319	174	151	326	154	126	280

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate¹ of diagnoses of newly acquired hepatitis B infection, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis									
	2002		2003		2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	0	0.0	0	0.0	5	1.4	3	0.9	7	2.0
NSW	88	1.3	74	1.1	53	0.8	56	0.8	54	0.8
NT	12	5.3	15	6.9	8	3.6	5	2.3	11	5.1
QLD	53	1.4	41	1.1	53	1.4	62	1.6	50	1.2
SA	11	0.8	10	0.7	8	0.6	8	0.5	7	0.5
TAS	19	4.2	10	2.2	17	3.9	3	0.7	9	2.0
VIC	173	3.6	152	3.1	110	2.2	79	1.6	107	2.1
WA	35	1.8	45	2.3	29	1.5	35	1.7	50	2.5
Total	391	2.0	347	1.8	283	1.4	251	1.2	295	1.5

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, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T	M	F	T	M	F	T	M	F	T ¹	M	F	T ¹
0 – 4	1	0	1	2	0	2	2	1	3	1	0	1	4	1	5
5 – 14	4	5	9	4	2	6	4	1	5	3	1	5	2	3	5
15 – 19	17	24	41	14	21	35	8	12	20	3	9	12	8	13	21
20 – 29	93	57	150	73	46	119	58	62	120	48	40	88	60	33	93
30 – 39	81	21	102	81	28	109	53	22	75	56	19	75	52	36	89
40 – 49	38	12	50	25	8	33	22	11	33	30	11	41	33	19	52
50 – 59	15	6	21	20	7	27	12	5	17	10	8	18	15	6	21
60 +	15	1	16	12	4	16	8	2	10	8	3	11	5	4	9
Not reported	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	264	127	391	231	116	347	167	116	283	159	91	251	179	115	295

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number of diagnoses of newly acquired hepatitis B infection¹, 2002 – 2006, by exposure category, year and sex

Exposure category	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Injecting drug use	72	28	100	66	24	90	49	27	76	30	14	44	43	25	68
Sexual contact	29	30	59	31	17	48	18	14	32	17	17	34	10	9	19
<i>Male homosexual contact</i>	6	–	6	8	–	8	1	–	1	7	–	7	3	–	3
<i>Heterosexual contact</i>	21	26	47	23	15	38	17	13	30	9	13	22	6	9	15
<i>Not further specified</i>	2	4	6	0	2	2	0	1	1	1	4	5	1	0	1
Blood/tissue recipient	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skin penetration procedure	1	1	2	1	0	1	0	0	0	0	0	0	1	0	1
Healthcare exposure	2	1	3	0	1	1	1	0	1	0	0	0	0	0	0
Household contact	6	2	8	0	0	0	1	0	1	3	1	4	4	0	4
Other	1	2	3	1	0	1	0	0	0	0	0	0	3	2	5
Undetermined	33	16	49	20	18	38	17	18	35	16	4	20	23	12	35
Total	144	80	224	119	60	179	86	59	145	66	36	102	84	48	132

¹ Includes diagnoses in SA, TAS and VIC in 2002 – 2006 and diagnoses in ACT in 2004 – 2006 only.

Source: State/Territory health authorities

Table 2.1.6 Number and percentage of diagnoses¹ of newly acquired hepatitis B infection, 2002 – 2006, and the Australian population, by region/country of birth and year

Region/country of birth	Year of diagnosis												Australian population ²
	2002		2003		2004		2005		2006		Percent		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Total with a reported country of birth	211	88.3	178	82.8	137	90.7	90	67.2	155	88.6		18 972 350	
Australia	172	72.0	148	68.8	102	67.5	74	55.2	123	70.3		76.9	
Overseas born	39	16.3	30	14.0	35	23.1	16	11.9	32	18.3		23.1	
Other Oceania	6	2.5	6	2.8	4	2.6	1	0.7	9	5.1		2.6	
United Kingdom and Ireland	3	1.3	4	1.9	4	2.6	2	1.5	5	2.9		6.1	
Other Europe	7	2.9	3	1.4	12	7.9	2	1.5	5	2.9		5.9	
Middle East/North Africa	4	1.7	1	0.5	2	1.3	1	0.7	0	0.0		1.2	
Sub-Saharan Africa	1	0.4	2	0.9	1	0.7	5	3.7	5	2.9		0.8	
Asia	15	6.3	14	6.5	11	7.3	5	3.7	8	4.6		5.5	
North America	1	0.4	0	0.0	1	0.7	0	0.0	0	0.0		0.5	
South/Central America and the Caribbean	2	0.8	0	0.0	0	0.0	0	0.0	0	0.0		0.5	
Not reported	28	11.7	37	17.2	14	9.3	44	32.8	20	11.4		–	
Total	239	100.0	215	100.0	151	100.0	134	100.0	175	100.0		100.0	

1 Includes diagnoses in SA, VIC and WA in 2002 – 2006 and diagnoses in TAS in 2004 – 2006 only.

2 Population estimates by region/country of birth from 2001 Census by the Australian Bureau of Statistics.

Source: State/Territory health authorities

Table 2.1.7 Number and rate¹ of diagnosis of hepatitis C infection, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis									
	2002		2003		2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	214	62.4	252	71.9	215	61.9	174	50.5	191	55.0
NSW	6 776	102.7	5 242	78.9	4 894	73.4	4 355	64.9	4 455	65.8
NT	201	94.0	219	101.2	244	114.9	257	119.8	270	126.0
QLD	2 782	75.5	2 587	68.6	2 628	68.1	2 700	68.5	2 877	71.6
SA	665	44.9	647	43.7	666	44.9	613	41.2	571	38.0
TAS	335	76.2	358	80.5	311	69.8	240	53.8	270	59.9
VIC	3 828	77.7	3 604	72.9	3 031	60.7	2 965	58.8	2 742	54.2
WA	1 217	60.2	1 261	64.3	1 167	58.7	1 081	53.6	1 150	55.8
Total	16 018	81.3	14 170	71.5	13 156	65.7	12 385	61.3	12 526	61.1

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 2.1.8 Number of diagnoses of hepatitis C infection, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0–4	6	6	12	3	5	8	8	6	14	3	4	7	5	5	10
5–14	11	18	29	8	12	20	6	11	18	7	17	24	22	16	38
15–19	347	452	803	265	328	596	206	274	481	183	204	389	148	202	352
20–29	2 705	1 828	4 552	2 429	1 578	4 031	2 098	1 464	3 577	1 994	1 345	3 356	1 906	1 254	3 181
30–39	3 153	1 811	4 981	2 705	1 580	4 306	2 517	1 439	3 973	2 397	1 316	3 722	2 218	1 340	3 579
40–49	2 734	1 301	4 046	2 455	1 186	3 653	2 276	1 167	3 447	2 128	1 141	3 271	2 272	1 113	3 399
50–59	631	288	922	714	310	1 028	761	366	1 128	781	353	1 138	974	431	1 409
60+	305	274	588	266	243	515	255	243	502	222	248	473	281	268	550
Not reported	21	10	85	7	3	13	14	2	16	2	2	5	5	3	8
Total	9 913	5 988	16 018	8 852	5 245	14 170	8 141	4 972	13 156	7 717	4 630	12 385	7 831	4 632	12 526

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 hepatitis C infection in children aged less than 13 years, 2003 – 2006, by age group, year and notification source

Age group (years)	Notification source	Year of diagnosis							
		2003		2004		2005		2006	
		APSU ¹	NDSS ²	APSU ¹	NDSS ²	APSU ¹	NDSS ²	APSU ¹	NDSS ²
0 – 4		6	8	8	14	6	7	6	10
5 – 9		3	8	2	9	1	10	2	9
10 – 12		0	2	2	3	1	4	2	11
Total		9	18	12	26	8	21	10	30

1 APSU Australian Paediatric Surveillance Unit.

2 NDSS National Notifiable Diseases Surveillance System.

Source: Australian Paediatric Surveillance Unit; National Notifiable Diseases Surveillance System

Table 2.1.10 Number of diagnoses of newly acquired hepatitis C infection, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis ¹				
	2002	2003	2004	2005	2006
ACT	5	13	6	15	16
NSW	152	127	59	43	40
NT	–	2	0	3	3
QLD	–	–	–	–	–
SA	45	76	63	51	54
TAS	15	13	26	27	10
VIC	91	106	160	129	200
WA	144	182	139	106	108
Total	452	519	453	374	431

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.11 Number of diagnoses of newly acquired hepatitis C infection, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T
0 – 4	2	2	4	2	0	2	2	1	3	0	3	3	5	2	7
5 – 14	0	2	2	2	1	3	0	1	1	1	1	2	0	1	1
15 – 19	26	38	64	27	44	71	38	40	78	20	31	51	26	24	50
20 – 29	131	95	227	166	97	263	119	77	196	104	76	180	126	73	199
30 – 39	73	34	107	67	52	119	80	49	129	60	39	99	80	41	121
40 – 49	24	13	37	31	17	48	21	14	35	22	12	34	27	14	41
50 – 59	6	4	10	7	2	9	5	5	10	3	2	5	5	1	6
60 +	1	0	1	1	3	4	1	0	1	0	0	0	3	3	6
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	263	188	452	303	216	519	266	187	453	210	164	374	272	159	431

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.12 Number of diagnoses of newly acquired hepatitis C infection¹, 2002 – 2006, by exposure category, year and sex

Exposure category	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ²	M	F	T ²	M	F	T	M	F	T	M	F	T
Injecting drug use	152	103	256	218	146	364	204	122	326	159	132	291	187	108	295
Sexual contact	9	7	16	2	8	10	3	9	12	8	9	17	11	15	26
Blood/tissue recipient	0	1	1	1	0	1	0	1	1	2	1	3	1	1	2
Skin penetration procedure	5	8	13	7	7	14	5	7	12	6	4	10	26	11	37
Healthcare exposure	4	2	7	8	3	11	5	12	17	4	3	7	5	7	12
Household contact	0	1	1	1	0	1	1	1	2	3	0	3	1	1	2
Other ³	8	4	12	18	3	21	9	5	14	18	1	19	22	8	30
Undetermined	47	44	91	73	55	128	36	29	65	43	42	85	42	28	70
Total	225	170	397	328	222	550	263	186	449	243	192	435	295	179	474

1 Includes diagnoses in ACT, NSW, SA, TAS, VIC and WA in 2002 – 2006, and diagnoses in NT in 2005 – 2006 only.

2 Includes 1 person whose sex was reported as transgender and 1 person whose sex was not reported.

3 Includes 8 cases for which the only reported risk factor was having been born to a woman with hepatitis C infection.

Source: State/Territory health authorities

Table 2.1.13 Number and percentage of newly acquired hepatitis C infection, 2002 – 2006, and the Australian population, by region/country of birth and year

Region/country of birth	Year of diagnosis												Australian population ²
	2002		2003		2004		2005		2006		Percent		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Total with a reported country of birth	271	69.5	394	73.2	302	68.2	347	82.4	394	86.4		18 972 350	
Australia	236	60.5	340	63.2	272	61.4	313	74.3	361	79.2		76.9	
Overseas born	35	9.0	54	10.0	30	6.8	34	8.1	33	7.2		23.1	
<i>Other Oceania</i>	12	3.1	12	2.2	6	1.4	7	1.7	5	1.1		2.6	
<i>United Kingdom and Ireland</i>	8	2.1	14	2.6	7	1.6	7	1.7	5	1.1		6.1	
<i>Other Europe</i>	4	1.0	5	0.9	5	1.1	7	1.7	6	1.3		5.9	
<i>Middle East/North Africa</i>	0	0.0	3	0.6	1	0.2	1	0.2	2	0.4		1.2	
<i>Sub-Saharan Africa</i>	1	0.3	1	0.2	2	0.5	2	0.5	1	0.2		0.8	
<i>Asia</i>	7	1.8	16	3.0	8	1.8	9	2.1	12	2.6		5.5	
<i>North America</i>	2	0.5	3	0.6	1	0.2	0	0.0	0	0.0		0.5	
<i>South/Central America and the Caribbean</i>	1	0.3	0	0.0	0	0.0	1	0.2	2	0.4		0.5	
Not reported	119	30.5	144	26.8	141	31.8	74	17.6	62	13.6		–	
Total	390	100.0	538	100.0	443	100.0	421	100.0	456	100.0		100.0	

1 Includes diagnoses in NSW, SA, TAS, VIC and WA only.

2 Population estimates by region/country of birth from the 2001 Census of the Australian Bureau of Statistics.

Source: State/Territory health authorities

2.2 National surveillance for viral hepatitis in Aboriginal and Torres Strait Islander people

Table 2.2.1 Number (percent) of diagnoses of hepatitis A infection, 2006, by State/Territory and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	1 (100.0)	1
NSW	2 (2.1)	81 (85.3)	12 (12.6)	95
NT	10 (33.3)	19 (63.3)	1 (3.3)	30
QLD	0 (0.0)	19 (61.3)	12 (38.7)	31
SA	3 (37.5)	5 (62.5)	0 (0.0)	8
TAS	0 (0.0)	4 (100.0)	0 (0.0)	4
VIC	0 (0.0)	34 (77.3)	10 (22.7)	44
WA	13 (19.4)	54 (80.6)	0 (0.0)	67
Total	28 (10.0)	216 (77.1)	36 (12.9)	280

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2006, by State/Territory and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	5 (71.4)	7
NSW	6 (11.1)	29 (53.7)	19 (35.2)	54
NT	6 (54.5)	4 (36.4)	1 (9.1)	11
QLD	2 (4.0)	28 (56.0)	20 (40.0)	50
SA	2 (28.6)	5 (71.4)	0 (0.0)	7
TAS	1 (11.1)	6 (66.7)	2 (22.2)	9
VIC	3 (2.8)	98 (91.6)	6 (5.6)	107
WA	6 (12.0)	43 (86.0)	1 (2.0)	50
Total	26 (8.8)	215 (72.9)	54 (18.3)	295

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2006, by State/Territory and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	189 (99.0)	191
NSW	–	–	3 687 (82.8)	4 455
NT	34 (12.6)	200 (74.1)	36 (13.3)	270
QLD	–	–	1 916 (66.6)	2 877
SA	58 (10.2)	509 (89.1)	4 (0.7)	571
TAS	8 (3.0)	136 (50.4)	126 (46.7)	270
VIC	–	–	1 883 (68.7)	2 742
WA	108 (9.4)	686 (59.7)	356 (31.0)	1 150
Total	530 (4.2)	3 799 (30.3)	8 197 (65.4)	12 526

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 – 2006, by year and primary cause of liver disease, and hepatitis status for cases where the primary diagnosis was hepatocellular carcinoma

Diagnosis	Year												Total
	1985 – 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006 ²		
Hepatitis B	51 (6.7)	11 (8.9)	9 (7.5)	10 (11.1)	12 (10.0)	9 (9.7)	7 (5.8)	6 (5.4)	8 (5.4)	8 (6.1)	3 (2.3)	134	
Hepatitis C	77 (10.2)	20 (16.3)	27 (22.5)	19 (21.1)	31 (25.8)	16 (17.2)	30 (24.8)	30 (26.8)	43 (29.3)	45 (34.1)	31 (23.8)	369	
Hepatitis B/C/D	4 (0.5)	2 (1.6)	1 (0.8)	0 (0.0)	1 (0.8)	1 (1.1)	3 (2.5)	3 (2.7)	0 (0.0)	2 (1.5)	2 (1.5)	19	
Hepatocellular carcinoma	17 (2.2)	4 (3.3)	5 (4.2)	2 (2.2)	5 (4.2)	5 (5.4)	6 (5.0)	6 (5.4)	11 (7.5)	10 (7.6)	10 (7.7)	81	
Hepatitis B	5 (0.7)	1 (0.8)	1 (0.8)	2 (2.2)	2 (1.7)	3 (3.2)	1 (0.8)	1 (0.9)	2 (1.4)	4 (3.0)	3 (2.3)	25	
Hepatitis C	2 (0.3)	3 (2.4)	4 (3.3)	0 (0.0)	2 (1.7)	2 (2.2)	5 (4.1)	4 (3.6)	6 (4.1)	3 (2.3)	5 (3.8)	36	
Hepatitis B/C/D	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)	2	
Hepatitis negative	9 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	1 (0.9)	2 (1.4)	3 (2.3)	2 (1.5)	18	
Other¹	609 (80.3)	86 (69.9)	78 (65.0)	59 (65.6)	71 (59.2)	62 (66.7)	75 (62.0)	67 (59.8)	85 (57.8)	67 (50.8)	84 (64.6)	1 343	
Total	758(100.0)	123(100.0)	120(100.0)	90(100.0)	120(100.0)	93(100.0)	121(100.0)	112(100.0)	147(100.0)	132(100.0)	130(100.0)	1 946	

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

2 Data available to 31 December 2006.

Source: Australia and New Zealand Liver Transplant Registry

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3 National surveillance for sexually transmissible infections

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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 diagnoses of chlamydia, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis									
	2002		2003		2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	444	123.0	527	145.8	625	173.3	701	193.5	821	225.0
NSW	5 823	88.8	7 787	118.8	10 019	153.1	11 284	171.7	11 863	178.4
NT	1 445	634.6	1 649	734.7	1 614	720.9	1 626	714.6	2 057	892.8
QLD	6 482	174.3	7 698	203.4	8 883	230.2	9 729	246.6	12 237	302.9
SA	1 795	125.9	1 996	140.3	2 429	170.4	2 704	188.7	3 128	215.3
TAS	467	108.1	606	139.1	620	141.5	871	199.1	1 048	236.7
VIC	4 862	100.3	6 411	131.2	7 699	156.3	9 010	181.7	9 979	201.1
WA	3 119	158.3	3 767	191.5	4 332	218.3	5 451	270.4	5 897	287.0
Total	24 437	125.2	30 441	155.2	36 221	183.5	41 376	207.6	47 030	232.1

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 3.1.2 Number of diagnoses of chlamydia, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	17	15	52	19	26	45	26	34	61	38	34	73	41	42	83
5 – 14	38	234	273	44	281	325	43	342	389	56	393	449	64	393	458
15 – 19	1 237	4 536	5 779	1 614	5 653	7 278	1 864	6 704	8 612	2 229	7 574	9 822	2 575	8 661	11 258
20 – 29	5 295	7 590	12 892	6 794	9 466	16 297	8 176	11 427	19 693	9 455	13 309	22 809	10 689	15 076	25 822
30 – 39	2 216	1 572	3 793	2 536	1 982	4 534	2 900	2 250	5 180	3 252	2 533	5 797	3 568	2 892	6 479
40 – 49	733	401	1 136	910	468	1 384	1 070	535	1 614	1 243	552	1 802	1 355	680	2 040
50 – 59	272	77	349	323	107	432	384	110	497	386	115	502	538	156	695
60 +	72	25	97	81	24	105	107	31	139	91	12	104	146	35	181
Not reported	19	15	66	21	17	41	9	15	36	9	5	18	6	5	14
Total	9 899	14 465	24 437	12 342	18 024	30 441	14 579	21 448	36 221	16 759	24 527	41 376	18 982	27 940	47 030

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, 2002 – 2006, by State/Territory¹ and year

State/Territory	Year of diagnosis				
	2002	2003	2004	2005	2006
NT	9	6	6	4	2
QLD	6	9	3	8	2
WA	2	1	1	1	0
Total	17	16	10	13	4

¹ State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T	M	F	T	M	F	T ¹	M	F	T	M	F	T
0 – 14	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0
15 – 19	4	1	5	0	3	3	1	1	2	1	2	3	0	0	0
20 – 29	1	3	4	1	2	3	1	1	2	0	2	2	0	0	0
30 – 39	1	4	5	3	2	5	3	1	4	0	3	3	2	1	3
40 – 49	0	2	2	1	2	3	0	0	0	0	1	1	0	0	0
50 +	1	0	1	1	1	2	1	0	2	2	0	2	1	0	1
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	10	17	6	10	16	6	3	10	4	9	13	3	1	4

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate¹ of diagnoses of gonorrhoea, 2002 – 2006, by State/Territory and year

State/Territory	Year of diagnosis									
	2002		2003		2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	14	3.9	30	8.4	35	9.9	33	9.2	33	9.0
NSW	1 528	23.1	1 328	20.1	1 442	21.9	1 578	23.8	1 696	25.4
NT	1 520	674.5	1 440	647.3	1 578	713.9	1 809	804.7	1 778	774.4
QLD	931	25.1	1 045	27.6	1 195	30.9	1 436	36.4	1 560	38.7
SA	208	14.4	297	20.4	378	26.2	399	27.5	499	34.4
TAS	14	3.3	23	5.2	28	6.2	35	7.8	18	4.0
VIC	813	16.6	1 171	23.7	1 110	22.3	1 211	24.2	1 300	25.9
WA	1 405	71.1	1 456	73.9	1 418	71.4	1 582	78.6	1 666	81.2
Total	6 433	32.8	6 790	34.5	7 184	36.3	8 083	40.5	8 550	42.2

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 3.1.6 Number of diagnoses of gonorrhoea, 2002 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis														
	2002			2003			2004			2005			2006		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	2	12	31	5	9	14	4	8	12	2	9	11	1	10	11
5 – 14	32	130	162	43	121	164	27	141	170	40	168	208	24	140	164
15 – 19	496	646	1 144	596	743	1 340	678	738	1 446	790	860	1 650	690	827	1 517
20 – 29	1 628	773	2 405	1 751	814	2 569	1 921	838	2 790	2 041	989	3 033	2 401	1 101	3 508
30 – 39	1 386	354	1 740	1 353	269	1 625	1 315	318	1 654	1 545	379	1 928	1 562	454	2 018
40 – 49	559	86	646	640	92	733	677	91	772	746	126	878	774	143	921
50 – 59	181	32	213	239	26	265	235	35	274	249	36	287	285	31	316
60 +	50	5	55	67	3	70	57	4	63	80	7	87	82	10	92
Not reported	7	12	37	8	2	10	3	0	3	0	0	1	2	0	3
Total	4 341	2 050	6 433	4 702	2 079	6 790	4 917	2 173	7 184	5 493	2 574	8 083	5 821	2 716	8 550

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate¹ of diagnoses of infectious syphilis, 2004 – 2006, by State/Territory and year

State/Territory	Year of diagnosis					
	2004		2005		2006	
	Number	Rate	Number	Rate	Number	Rate
ACT	4	1.1	4	1.1	2	0.6
NSW	302	4.5	243	3.6	210	3.1
NT	57	25.8	94	44.0	150	65.5
QLD	111	2.9	138	3.5	165	4.1
SA	7	0.5	7	0.5	4	0.3
TAS	2	0.5	6	1.4	5	1.1
VIC	85	1.7	121	2.4	231	4.6
WA	50	2.5	19	0.9	48	2.3
Total	618	3.1	632	3.1	815	4.0

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 3.1.8 Number of diagnoses of infectious syphilis, 2004 – 2006, by age group, year and sex

Age group (years)	Year of diagnosis								
	2004			2005			2006		
	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	0	0	0	0	0	0	1	0	1
5 – 14	0	6	7	2	3	5	2	13	15
15 – 19	29	24	54	25	34	60	31	49	80
20 – 29	118	52	171	121	48	169	137	58	195
30 – 39	190	18	208	187	22	209	207	28	236
40 – 49	107	11	118	115	8	124	174	17	191
50 – 59	37	5	42	39	6	45	62	7	69
60 +	16	2	18	15	5	20	25	2	27
Not reported	0	0	0	0	0	0	1	0	1
Total	497	118	618	504	126	632	640	174	815

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 Aboriginal and Torres Strait Islander people

Table 3.2.1 Number and rate¹ of diagnosis of chlamydia, 2002 – 2006, by year, State/Territory² and Aboriginal and Torres Strait Islander status

Year of diagnosis	NT		SA		VIC		WA		Total	
	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³
2002	Number	891	165	1 630	28	4 834	652	2 467	1 736	9 485
	Rate	1 390	585	116	89	101	925	130	901	115
2003	Number	1 073	168	1 828	37	6 374	965	2 802	2 243	11 580
	Rate	1 716	348	130	123	133	1 355	149	1 174	140
2004	Number	1 044	239	2 190	57	7 642	1 064	3 268	2 404	13 670
	Rate	1 666	346	156	179	159	1 504	174	1 258	165
2005	Number	1 019	246	2 458	56	8 954	1 178	4 273	2 499	16 292
	Rate	1 595	364	176	184	187	1 621	227	1 285	197
2006	Number	1 258	310	2 818	45	9 934	1 169	4 728	2 782	18 279
	Rate	2 049	485	201	139	207	1 596	252	1 455	222

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from 2001 Census of Population and Housing (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.2 Number of diagnoses of chlamydia¹, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and age group

Year of diagnosis	Aboriginal and Torres Strait Islander status	Age group (years)								Total ³
		0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
2002	Aboriginal and Torres Strait Islander	3	89	606	747	219	56	12	3	1 736
	Non-Indigenous ²	23	45	1 993	5 273	1 490	440	130	47	9 485
2003	Aboriginal and Torres Strait Islander	8	101	812	890	320	82	21	4	2 243
	Non-Indigenous ²	0	65	2 323	6 639	1 792	525	186	34	11 580
2004	Aboriginal and Torres Strait Islander	4	101	834	999	359	91	15	1	2 404
	Non-Indigenous ²	15	83	2 876	7 811	1 972	602	216	63	13 670
2005	Aboriginal and Torres Strait Islander	3	165	938	976	310	89	13	5	2 499
	Non-Indigenous ²	18	79	3 403	9 466	2 336	707	224	43	16 292
2006	Aboriginal and Torres Strait Islander	2	127	1 004	1 154	367	95	27	5	2 782
	Non-Indigenous ²	13	85	3 819	10 548	2 621	835	273	75	18 279

1 In State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.3 Number of diagnoses of chlamydia¹, 2006, by Aboriginal and Torres Strait Islander status, sex and age group

Aboriginal and Torres Strait Islander Status	Sex	Age group (years)								Total ⁴
		0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
Aboriginal and Torres Strait Islander	Male	0	23	351	464	173	43	17	2	1 074
	Female	2	104	652	690	194	52	10	3	1 707
	Total³	2	127	1 004	1 154	367	95	27	5	2 782
Non-Indigenous ²	Male	8	5	823	4 428	1 474	567	214	61	7 584
	Female	5	80	2 979	6 074	1 131	264	58	14	10 608
	Total³	13	85	3 819	10 548	2 621	835	273	75	18 279
Total	Male	8	28	1 174	4 892	1 647	610	231	63	8 658
	Female	7	184	3 631	6 764	1 325	316	68	17	12 315
	Total³	15	212	4 823	11 702	2 988	930	300	80	21 061

1 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose sex was not reported.

4 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.4 Number (percent) of diagnoses of chlamydia, 2006, by State/Territory¹ and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	788 (96.0)	821
NSW	–	–	10 716 (90.3)	11 863
NT	1 258 (61.2)	601 (29.2)	198 (9.6)	2 057
QLD	–	–	7 929 (64.8)	12 237
SA	310 (9.9)	2 803 (89.6)	15 (0.5)	3 128
TAS	22 (2.1)	740 (70.6)	286 (27.3)	1 048
VIC	45 (0.5)	5 440 (54.5)	4 494 (45.0)	9 979
WA	1 169 (19.8)	2 348 (39.8)	2 380 (40.4)	5 897
Total	4 887 (10.4)	15 337 (32.6)	26 806 (57.0)	47 030

1 Data not shown for State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Rate¹ of diagnosis of chlamydia, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and area of residence

Year of diagnosis	Aboriginal and Torres Strait Islander status	Area of residence					Total
		Major cities	Inner regional	Outer regional	Remote	Very remote	
2002	Aboriginal and Torres Strait Islander	349	137	726	2 219	1 723	1 100
	Non-Indigenous ²	115	82	115	167	312	119
2003	Aboriginal and Torres Strait Islander	554	209	839	2 806	2 217	1 422
	Non-Indigenous ²	146	101	131	193	196	146
2004	Aboriginal and Torres Strait Islander	622	215	905	3 279	2 249	1 524
	Non-Indigenous ²	175	126	158	190	141	172
2005	Aboriginal and Torres Strait Islander	754	209	894	3 537	2 253	1 584
	Non-Indigenous ²	211	153	182	203	195	205
2006	Aboriginal and Torres Strait Islander	894	248	1 129	3 408	2 603	1 763
	Non-Indigenous ²	233	181	214	269	257	230

1 In State/Territory health jurisdictions (NT, SA, VIC and WA) in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year. Rate per 100 000 population. Population estimates from *2001 Census of Population and Housing* (Australian Bureau of Statistics).

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.6 Number and rate¹ of diagnosis of gonorrhoea, 2002 – 2006, by year, State/Territory² and Aboriginal and Torres Strait Islander status

Year of diagnosis	NT		QLD		SA		VIC		WA		Total	
	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³
2002	Number	1 181	339	407	524	95	113	10	803	869	536	2 315
	Rate	1 916	209	305	15	378	8	39	17	1 306	28	820
2003	Number	1 205	235	408	637	95	202	6	1 165	1 048	408	2 647
	Rate	1 895	147	300	19	366	14	31	24	1 531	22	861
2004	Number	1 351	227	474	721	218	160	7	1 103	1 066	352	2 563
	Rate	2 170	145	341	21	809	11	27	23	1 510	19	967
2005	Number	1 553	256	608	828	272	127	4	1 207	1 160	422	2 840
	Rate	2 527	161	443	24	963	9	13	25	1 682	22	1 129
2006	Number	1 525	253	606	954	361	138	6	1 294	1 271	395	3 034
	Rate	2 549	153	440	28	1 357	10	21	27	1 908	21	1 213

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from 2001 Census of Population and Housing (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.7 Number of diagnoses of gonorrhoea¹, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and age group

Year of diagnosis	Aboriginal and Torres Strait Islander status	Age group (years)								Total ³
		0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
2002	Aboriginal and Torres Strait Islander	12	128	774	1 027	462	121	28	7	2 562
	Non-Indigenous ²	17	29	277	859	684	275	116	33	2 315
2003	Aboriginal and Torres Strait Islander	11	128	969	1 132	362	125	24	7	2 762
	Non-Indigenous ²	1	31	285	935	775	385	185	46	2 647
2004	Aboriginal and Torres Strait Islander	11	147	1 092	1 245	465	129	21	4	3 116
	Non-Indigenous ²	0	18	243	990	691	392	192	36	2 563
2005	Aboriginal and Torres Strait Islander	9	186	1 190	1 454	569	151	30	8	3 597
	Non-Indigenous ²	2	19	317	990	805	465	179	62	2 840
2006	Aboriginal and Torres Strait Islander	7	146	1 096	1 646	645	181	36	12	3 769
	Non-Indigenous ²	2	15	305	1 175	825	468	183	58	3 034

1 In State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.8 Number of diagnoses of gonorrhoea¹, 2006, by Aboriginal and Torres Strait Islander status, sex and age group

		Age group (years)								Total ⁴
Aboriginal and Torres Strait Islander status	Sex	0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
Aboriginal and Torres Strait Islander	Male	0	20	431	872	343	109	28	7	1 810
	Female	7	126	665	774	302	72	8	5	1 959
	Total	7	146	1 096	1 646	645	181	36	12	3 769
Non-Indigenous ²	Male	1	4	181	955	716	421	166	56	2 502
	Female	1	11	124	217	107	45	17	2	524
	Total ³	2	15	305	1 175	825	468	183	58	3 034
Total	Male	1	24	612	1 827	1 059	530	194	63	4 312
	Female	8	137	789	991	409	117	25	7	2 483
	Total ³	9	161	1 401	2 821	1 470	649	219	70	6 803

1 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose sex was not reported.

4 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.9 Number (percent) of diagnoses of gonorrhoea, 2006, by State/Territory¹ and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	31 (93.9)	33
NSW	–	–	1 613 (95.1)	1 696
NT	1 525 (85.8)	152 (8.5)	101 (5.7)	1 778
QLD	606 (38.8)	385 (24.7)	569 (36.5)	1 560
SA	361 (72.3)	137 (27.5)	1 (0.2)	499
TAS	0 (0.0)	16 (88.9)	2 (11.1)	18
VIC	6 (0.5)	962 (74.0)	332 (25.5)	1 300
WA	1 271 (76.3)	336 (20.2)	59 (3.5)	1 666
Total	3 786 (44.3)	2 056 (24.0)	2 708 (31.7)	8 550

1 Data not shown for State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.10 Rate¹ of diagnosis of gonorrhoea, 2002 – 2006, by year, Aboriginal and Torres Strait Islander status and area of residence

Year of diagnosis	Aboriginal and Torres Strait Islander status	Area of residence					Total
		Major cities	Inner regional	Outer regional	Remote	Very remote	
2002	Aboriginal and Torres Strait Islander	203	128	631	1 860	2 019	947
	Non-Indigenous ²	17	6	21	70	219	20
2003	Aboriginal and Torres Strait Islander	220	123	656	1 987	2 223	1 021
	Non-Indigenous ²	23	7	20	43	68	23
2004	Aboriginal and Torres Strait Islander	251	153	755	2 702	2 281	1 152
	Non-Indigenous ²	23	8	20	29	68	22
2005	Aboriginal and Torres Strait Islander	304	315	829	2 838	2 712	1 329
	Non-Indigenous ²	25	8	27	34	78	25
2006	Aboriginal and Torres Strait Islander	263	131	877	2 975	2 980	1 393
	Non-Indigenous ²	27	8	32	36	97	27

1 In State/Territory health jurisdictions (NT, SA, VIC and WA) in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year. Rate per 100 000 population. Population estimates from 2001 Census of Population and Housing (Australian Bureau of Statistics).

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.11 Number and rate¹ of diagnosis of infectious syphilis, 2004 – 2006, by year, State/Territory² and Aboriginal and Torres Strait Islander status

Year of diagnosis	NSW		NT		QLD		SA		VIC		WA		Total	
	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³	Aboriginal and Torres Strait Islander	Non-Indigenous ³
2004	Number	11	291	47	10	49	0	7	1	84	43	7	151	461
	Rate	9	5	91	6	44	0	0	3	2	59	0.4	37	3
2005	Number	7	236	88	6	58	0	7	3	118	10	9	166	456
	Rate	7	4	167	3	51	0	0	11	2	14	0.5	43	3
2006	Number	7	203	145	5	34	1	3	9	222	21	27	217	591
	Rate	6	3	235	3	32	2	0	38	5	29	1	51	3

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from 2001 Census of Population and Housing (Australian Bureau of Statistics).

2 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.12 Number of diagnoses of infectious syphilis¹, 2004 – 2006, by year, Aboriginal and Torres Strait Islander status and age group

Year of diagnosis	Aboriginal and Torres Strait Islander	Age group (years)								Total ³
		0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
2004	Aboriginal and Torres Strait Islander	0	6	39	62	26	12	5	1	151
	Non-Indigenous ²	0	1	15	106	179	106	37	17	461
2005	Aboriginal and Torres Strait Islander	0	2	48	61	33	11	7	4	166
	Non-Indigenous ²	0	3	11	104	174	111	37	16	456
2006	Aboriginal and Torres Strait Islander	0	12	65	81	35	18	6	0	217
	Non-Indigenous ²	1	3	14	114	198	171	62	27	591

1 In State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.13 Number of diagnoses of infectious syphilis¹, 2006, by Aboriginal and Torres Strait Islander status, sex and age group

Aboriginal and Torres Strait Islander status	Sex	Age group (years)								Total ⁴
		0 – 4	5 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 +	
Aboriginal and Torres Strait Islander	Male	0	2	21	40	20	10	2	0	95
	Female	0	10	44	41	15	8	4	0	122
	Total	0	12	65	81	35	18	6	0	217
Non-Indigenous ²	Male	1	0	10	97	185	162	59	25	540
	Female	0	3	4	17	12	9	3	2	50
	Total³	1	3	14	114	198	171	62	27	591
Total	Male	1	2	31	137	205	172	61	25	635
	Female	0	13	48	58	27	17	7	2	172
	Total³	1	15	79	195	233	189	68	27	808

1 State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year.

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

3 Includes diagnoses in people whose sex was not reported.

4 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.14 Number (percent) of diagnoses of infectious syphilis, 2006, by State/Territory¹ and Aboriginal and Torres Strait Islander status

State/Territory	Aboriginal and Torres Strait Islander status			Total
	Aboriginal and Torres Strait Islander	Non-Indigenous	Not reported	
ACT	–	–	2 (100.0)	2
NSW	7 (3.3)	188 (89.5)	15 (7.1)	210
NT	145 (96.7)	4 (2.7)	1 (0.7)	150
QLD	34 (20.6)	117 (70.9)	14 (8.5)	165
SA	1 (25.0)	3 (75.0)	0 (0.0)	4
TAS	0 (0.0)	5 (100.0)	0 (0.0)	5
VIC	9 (3.9)	217 (93.9)	5 (2.2)	231
WA	21 (43.8)	27 (56.3)	0 (0.0)	48
Total	217 (26.6)	561 (68.8)	37 (4.5)	815

1 Data not shown for State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.15 Rate¹ of diagnosis of infectious syphilis, 2004 – 2006, by year, Aboriginal and Torres Strait Islander status and area of residence

Year of diagnosis	Aboriginal and Torres Strait Islander status	Area of residence					Total
		Major cities	Inner regional	Outer regional	Remote	Very remote	
2004	Aboriginal and Torres Strait Islander	10	15	45	52	99	39
	Non-Indigenous ²	3	1	1	0	3	3
2005	Aboriginal and Torres Strait Islander	4	15	51	92	100	43
	Non-Indigenous ²	3	1	1	0	3	3
2006	Aboriginal and Torres Strait Islander	12	16	21	156	162	56
	Non-Indigenous ²	4	1	1	1	2	3

1 In State/Territory health jurisdictions (NT, SA, VIC and WA) in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year. Rate per 100 000 population. Population estimates from *2001 Census of Population and Housing* (Australian Bureau of Statistics).

2 Includes diagnoses in people whose Aboriginal and Torres Strait Islander status was not reported.

Source: National Notifiable Diseases Surveillance System

3.3 Gonococcal isolates

3.3.1 Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2006 by State/Territory, sex and site and antibiotic sensitivity

Sex and Site	State/Territory						Total ¹
	NSW	NT ²	QLD	SA	VIC	WA	
Males							
Urethra	698	360	370	145	601	289	2 482
Rectal	255	1	53	10	159	10	495
Pharynx	149	0	16	18	107	8	303
Other/not specified	8	4	11	2	7	3	35
Total	1 110	365	450	175	874	310	3 315
Females							
Cervix	79	175	110	65	64	80	575
Other/not specified	9	8	5	4	13	7	46
Total	88	183	115	69	77	87	621
Antibiotic sensitivity (%)							
PPNG	8.6	3.9	12.9	4.8	9.6	11.3	8.9
RR	42.7	0.7	14.8	12.5	32.0	8.0	25.0
LS	47.7	95.0	69.0	80.5	56.4	79.7	64.5
FS	1.0	0.4	3.3	2.2	2.0	1.0	1.6
Total^{1,2}	1 198	549	565	244	951	397	3 937

1 Total includes gonococcal isolates from ACT (19) and TAS (14).

2 Totals includes 1 case whose sex and/or 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

3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 2002 – 2006, by sex, site and year

Sex and Site	Year of diagnosis				
	2002 ¹	2003 ²	2004	2005 ³	2006
Males					
Urethra	1 061	720	695	665	698
Rectal	270	181	201	238	255
Pharynx	145	101	118	171	149
Other/not specified	39	44	21	48	8
Total	1 515	1 046	1 035	1 122	1 110
Females					
Cervix	84	53	73	90	79
Rectal	3	2	0	1	3
Pharynx	7	8	3	3	2
Other/not specified	5	4	2	1	4
Total	99	67	78	95	88
Total	1 625	1 116	1 113	1 218	1 198

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

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

3 Total includes 1 case whose sex and site of isolation was not reported.

Source: Australian Gonococcal Surveillance Programme

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4 HIV, viral hepatitis and sexually transmissible infections in selected populations

4.1 HIV incidence and incidence of specific sexually transmissible infections among homosexually active men

Table 4.1.1 Number of homosexually active men enrolled in the Health in Men (HIM) cohort study, 2002 – 2006, number (incidence) with newly acquired HIV infection, number (incidence) with newly acquired chlamydia, number (incidence) with newly acquired gonorrhoea and number (incidence) with newly acquired syphilis, by year

Characteristic	Year				
	2002	2003	2004	2005	2006
Sample size					
Cumulative number of enrolments	903	1 333	1 427	1 427	1 427
HIV					
Number with newly acquired HIV infection	13	8	15	12	5
Person years at risk	718.4	1 116.9	1 343.4	1 363.5	1 291.1
Incidence (per 100 person years)	1.81	0.72	1.12	0.88	0.39
Chlamydia					
<i>Urethral chlamydia</i>					
Number with newly acquired urethral chlamydia	3	13	7	5	1
Person years at risk	494.8	1 076.1	1 026.2	912.2	416.4
Incidence (per 100 person years)	0.61	1.21	0.68	0.55	0.24
<i>Anal chlamydia</i>					
Number with newly acquired anal chlamydia	26	30	19	14	6
Person years at risk	484.1	1 073.6	1 025.6	911.4	413.9
Incidence (per 100 person years)	5.37	2.79	1.85	1.54	1.45
Gonorrhoea					
<i>Urethral gonorrhoea</i>					
Number with newly acquired urethral gonorrhoea	2	5	0	1	0
Person years at risk	495.1	1 076.2	1 027.2	913.0	416.4
Incidence (per 100 person years)	0.40	0.46	0.00	0.11	0.00
<i>Anal gonorrhoea</i>					
Number with newly acquired anal gonorrhoea	5	9	10	8	1
Person years at risk	493.9	1 074.5	1 025.3	910.8	415.0
Incidence (per 100 person years)	1.01	0.84	0.98	0.88	0.24
Syphilis					
Number with newly acquired syphilis	7	4	4	3	2
Person years at risk	631.4	939.8	1 050.6	936.3	424.1
Incidence (per 100 person years)	1.11	0.43	0.38	0.32	0.47

Source: National Centre in HIV Epidemiology and Clinical Research

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

Table 4.2.1 Number of participating needle and syringe programs (NSP), 2002 – 2006, 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

2002

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
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)

2003

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	41	19	60 (58)	0 (0.0)	0 (0.0)	0 (0.0)	30 (73)	18 (95)	48 (80)
NSW	19	533	230	772 (39)	12 (2.3)	0 (0.0)	13 (1.7)	359 (67)	161 (70)	526 (68)
NT	1	43	18	61 (78)	1 (2.3)	0 (0.0)	1 (1.6)	20 (45)	9 (50)	29 (47)
QLD	10	504	219	730 (50)	7 (1.4)	0 (0.0)	7 (1.0)	241 (48)	123 (56)	366 (50)
SA	6	190	115	308 (50)	1 (0.5)	1 (0.9)	2 (0.7)	86 (45)	53 (46)	142 (46)
TAS	4	70	46	117 (32)	0 (0.0)	0 (0.0)	0 (0.0)	36 (51)	31 (67)	67 (57)
VIC	4	144	90	237 (25)	1 (0.7)	1 (1.1)	2 (0.8)	95 (66)	59 (66)	157 (66)
WA	3	75	57	133 (-)	0 (0.0)	0 (0.0)	0 (0.0)	47 (63)	29 (51)	77 (58)
Total	48	1 600	794	2 418 (45)	22 (1.4)	2 (0.3)	25 (1.0)	914 (57)	483 (61)	1 412 (58)

2004

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	18	5	23 (58)	0 (0.0)	0 (0.0)	0 (0.0)	12 (67)	4 (80)	16 (70)
NSW	17	407	194	606 (39)	6 (1.5)	1 (0.5)	7 (1.2)	288 (70)	141 (72)	433 (71)
NT	1	11	4	16 (78)	0 (0.0)	0 (0.0)	0 (0.0)	6 (55)	3 (75)	9 (56)
QLD	7	379	165	544 (50)	10 (2.6)	1 (0.6)	11 (2.0)	188 (50)	94 (57)	282 (52)
SA	6	145	80	229 (50)	0 (0.0)	1 (1.3)	1 (0.4)	67 (46)	39 (49)	108 (47)
TAS	4	65	39	105 (32)	0 (0.0)	0 (0.0)	0 (0.0)	30 (45)	20 (51)	50 (47)
VIC	5	122	65	189 (25)	1 (0.8)	0 (0.0)	1 (0.5)	82 (67)	48 (74)	130 (69)
WA	3	69	43	113 (65)	0 (0.0)	0 (0.0)	0 (0.0)	42 (61)	22 (51)	65 (58)
Total	44	1 216	595	1 825 (50)	17 (1.4)	3 (0.5)	20 (1.1)	715 (59)	371 (62)	1 093 (60)

2005

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	24	7	31 (57)	0 (0.0)	0 (0.0)	0 (0.0)	16 (67)	7 (100)	23 (74)
NSW	23	446	246	698 (45)	6 (1.3)	0 (0.0)	6 (0.9)	302 (68)	168 (68)	474 (68)
NT	3	16	9	25 (30)	0 (0.0)	0 (0.0)	0 (0.0)	6 (38)	6 (67)	12 (48)
QLD	7	194	89	285 (36)	4 (2.1)	0 (0.0)	4 (1.4)	105 (54)	40 (45)	146 (51)
SA	7	126	83	210 (51)	1 (0.8)	0 (0.0)	1 (0.5)	54 (43)	40 (48)	95 (45)
TAS	3	86	51	137 (67)	0 (0.0)	0 (0.0)	0 (0.0)	51 (59)	30 (59)	81 (59)
VIC	5	112	76	188 (65)	1 (0.9)	0 (0.0)	1 (0.5)	64 (57)	55 (72)	119 (63)
WA	3	109	57	166 (47)	3 (2.8)	0 (0.0)	3 (1.8)	59 (54)	31 (54)	90 (54)
Total	52	1 113	618	1 740 (46)	15 (1.3)	0 (0.0)	15 (0.9)	657 (59)	377 (61)	1 040 (60)

2006

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT ³	1	30	18	49 (-)	0 (0.0)	0 (0.0)	0 (0.0)	23 (79)	10 (63)	33 (72)
NSW	21	424	232	663 (46)	12 (2.8)	1 (0.4)	14 (2.1)	292 (69)	173 (75)	468 (71)
NT	1	9	11	20 (61)	0 (0.0)	0 (0.0)	0 (0.0)	4 (57)	1 (10)	5 (29)
QLD	7	350	142	495 (39)	11 (3.1)	1 (0.7)	12 (2.4)	185 (53)	88 (62)	276 (56)
SA	6	112	85	197 (71)	1 (0.9)	0 (0.0)	1 (0.5)	49 (44)	35 (41)	84 (43)
TAS	2	94	56	150 (52)	0 (0.0)	0 (0.0)	0 (0.0)	53 (57)	32 (58)	85 (57)
VIC	4	122	68	191 (55)	1 (0.8)	0 (0.0)	1 (0.5)	84 (69)	50 (75)	135 (71)
WA	3	82	49	132 (46)	1 (1.2)	0 (0.0)	1 (0.8)	46 (56)	30 (61)	76 (58)
Total	45	1 223	661	1 897 (48)	26 (2.1)	2 (0.3)	29 (1.5)	736 (60)	419 (63)	1 162 (61)

1 At first attendance during the survey week.

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

3 The percentage of clients seen in the ACT who were tested for HIV and hepatitis C antibody was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.2 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2002 – 2006, 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

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+ 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

2003

	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	46	47	93	0.0	0.0	0.0	20	45	32
20 to 24 years	264	145	412	1.9	0.0	1.2	38	46	41
25 to 29 years	324	187	515	0.9	0.0	0.6	46	60	51
30 to 34 years	316	151	471	0.6	0.7	0.9	54	56	55
35+ years	647	262	922	1.9	0.4	1.4	75	75	75
Not reported	3	2	5	0.0	0.0	0.0	33	50	40
<i>History of injecting drug use</i>									
Less than 3 years	132	68	201	1.5	0.0	1.0	22	21	21
3 to 5 years	192	119	313	1.6	0.0	1.0	34	44	38
6 to 10 years	379	226	610	1.9	0.0	1.3	50	60	54
10+ years	842	357	1 211	1.1	0.6	0.9	72	76	73
Not reported	55	24	83	1.8	0.0	1.2	35	42	39
Total	1 600	794	2 418	1.4	0.3	1.0	57	61	58
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	52	40	93	1.9	0.0	1.1	19	20	19
Heroin/opiates	47	21	68	0.0	0.0	0.0	28	24	26
Combination	3	3	6	0.0	0.0	0.0	33	33	33
Other/Not reported	30	4	34	3.3	0.0	2.9	17	0	15
Total	132	68	201	1.5	0.0	1.0	22	21	21

2004

	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	30	33	64	0.0	0.0	0.0	20	36	28
20 to 24 years	176	103	279	1.1	1.0	1.1	37	54	43
25 to 29 years	239	125	366	0.4	0.0	0.3	50	46	49
30 to 34 years	266	94	360	1.5	0.0	1.1	55	63	57
35+ years	502	240	748	1.8	0.8	1.5	74	77	75
Not reported	3	0	8	33.3	–	12.5	67	–	38
<i>History of injecting drug use</i>									
Less than 3 years	84	51	135	2.4	0.0	1.5	27	22	25
3 to 5 years	138	84	224	1.5	0.0	0.9	31	38	33
6 to 10 years	312	161	474	1.0	0.0	0.6	53	60	56
10+ years	656	290	949	1.4	1.0	1.3	71	77	73
Not reported	26	9	43	3.9	0.0	2.3	54	67	53
Total	1 216	595	1 825	1.4	0.5	1.1	59	62	60
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	35	27	62	5.7	0.0	3.2	31	11	23
Heroin/opiates	27	17	44	0.0	0.0	0.0	41	29	36
Combination	4	4	8	0.0	0.0	0.0	0	75	38
Other/not reported	18	3	21	0.0	0.0	0.0	6	0	5
Total	84	51	135	2.4	0.0	1.5	27	22	25

2005

	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	17	24	41	0.0	0.0	0.0	18	45	33
20 to 24 years	111	92	203	0.9	0.0	0.5	31	51	40
25 to 29 years	186	139	326	0.0	0.0	0.0	52	54	53
30 to 34 years	236	121	357	1.3	0.0	0.9	53	54	54
35+ years	551	240	798	2.1	0.0	1.4	75	76	75
Not reported	12	2	15	0.0	0.0	0.0	75	100	80
<i>History of injecting drug use</i>									
Less than 3 years	57	30	88	3.7	0.0	2.4	7	34	17
3 to 5 years	101	75	177	2.0	0.0	1.1	32	34	33
6 to 10 years	103	109	213	0.0	0.0	0.0	47	55	51
10+ years	805	374	1 185	1.2	0.0	0.8	70	72	71
Not reported	47	30	77	4.4	0.0	2.6	60	63	61
Total	1 113	618	1 740	1.3	0.0	0.9	59	61	60
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	28	15	43	7.4	0.0	4.8	4	0	2
Heroin/opiates	17	12	30	0.0	0.0	0.0	18	82	41
Combination	0	0	0	0.0	0.0	0.0	0	0	0
Other/not reported	12	3	15	0.0	0.0	0.0	0	33	8
Total	57	30	88	3.7	0.0	2.4	7	34	17

2006

	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	19	24	43	0.0	0.0	0.0	6	26	17
20 to 24 years	101	81	182	2.0	0.0	1.1	42	54	48
25 to 29 years	230	124	357	0.0	0.0	0.3	51	62	55
30 to 34 years	262	141	407	1.9	0.7	1.5	50	57	53
35+ years	606	289	901	3.1	0.4	2.2	73	74	73
Not reported	5	2	7	0.0	0.0	0.0	80	100	86
<i>History of injecting drug use</i>									
Less than 3 years	59	42	102	1.7	0.0	1.0	16	22	18
3 to 5 years	81	67	148	2.5	0.0	1.4	32	28	30
6 to 10 years	227	159	390	1.8	0.6	1.5	49	65	55
10+ years	799	378	1 185	1.3	0.3	1.6	70	75	72
Not reported	57	15	72	1.8	0.0	1.4	59	60	59
Total	1 223	661	1 897	2.1	0.3	1.5	60	63	61
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	33	21	54	3.0	0.0	1.9	9	5	8
Heroin/opiates	11	15	27	0.0	0.0	0.0	55	36	42
Combination	1	2	3	0.0	0.0	0.0	0	100	67
Other/not reported	14	4	18	0.0	0.0	0.0	0	25	6
Total	59	42	102	1.7	0.0	1.0	16	22	18

Source: Collaboration of Australian Needle and Syringe Program

Table 4.2.3 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2002 – 2006, and percent with HIV or hepatitis C antibody by year, sexual orientation, sex work last month, region of birth, main language spoken at home by parents (2003 – 2006), and sex

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

2003

	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	1 336	513	1 856	0.5	0.2	0.4	58	58	58
Bisexual	60	168	232	3.3	0.6	1.7	53	67	63
Homosexual	73	48	124	16.4	0.0	9.7	47	60	52
Not reported	131	65	206	0.8	0.0	0.5	58	69	62
<i>Sex work last month</i>									
No	1 481	666	2 162	1.2	0.3	0.9	56	59	57
Yes	68	103	178	7.4	0.0	3.4	66	79	72
Not reported	51	25	78	0.0	0.0	0.0	65	48	60
<i>Country/region of birth</i>									
Australia	1 267	670	1 959	1.3	0.3	1.0	56	60	57
Overseas born	314	117	433	1.9	0.0	1.4	62	66	63
<i>Other Oceania</i>	51	39	91	3.9	0.0	2.2	57	69	62
<i>Asia</i>	123	21	144	0.8	0.0	0.7	69	71	69
<i>United Kingdom and Ireland</i>	76	33	110	4.0	0.0	2.7	54	64	57
<i>Other</i>	64	24	88	0.0	0.0	0.0	63	58	61
Not reported	19	7	26	0.0	0.0	0.0	58	57	58
<i>Main language spoken at home by parents</i>									
English	1 304	721	2 048	1.5	0.3	1.1	57	60	58
Other language	214	47	262	0.9	0.0	0.8	62	62	62
Not reported	82	26	108	1.2	0.0	0.9	54	73	58
Total	1 600	794	2 418	1.4	0.3	1.0	57	61	58

2004

	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	1 058	435	1 496	0.1	0.5	0.2	58	62	59
Bisexual	45	108	155	2.2	0.9	1.3	62	61	61
Homosexual	45	30	75	28.9	0.0	17.3	56	63	59
Not reported	68	22	99	2.9	0.0	2.0	63	64	63
<i>Sex work last month</i>									
No	1 123	487	1 615	1.3	0.4	1.0	58	58	58
Yes	64	93	161	3.1	1.1	1.9	59	81	72
Not reported	29	15	49	3.5	0.0	2.0	59	63	56
<i>Country/region of birth</i>									
Australia	941	498	1 450	1.5	0.6	1.2	56	62	58
Overseas born	252	90	344	0.8	0.0	0.6	66	64	65
<i>Other Oceania</i>	29	27	56	0.0	0.0	0.0	55	67	61
<i>Asia</i>	119	19	138	0.0	0.0	0.0	73	53	71
<i>United Kingdom and Ireland</i>	58	23	81	3.5	0.0	2.5	63	65	63
<i>Other</i>	46	21	69	0.0	0.0	0.0	57	68	60
Not reported	23	7	31	4.4	0.0	3.2	70	57	68
<i>Main language spoken at home by parents</i>									
English	755	454	1 219	1.5	0.4	1.1	57	62	58
Other language	162	43	205	0.0	0.0	0.0	67	57	65
Not reported	299	98	401	2.0	1.0	1.8	58	66	60
Total	1 216	595	1 825	1.4	0.5	1.1	59	62	60

2005

	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	974	444	1 419	0.4	0.0	0.3	61	61	61
Bisexual	37	107	145	0.0	0.0	0.0	54	60	59
Homosexual	57	33	95	20.8	0.0	12.2	57	75	65
Not reported	45	34	81	0.0	0.0	0.0	67	65	65
<i>Sex work last month</i>									
No	1 061	532	1 600	1.4	0.0	0.9	61	59	61
Yes	28	73	103	3.7	0.0	1.0	67	78	75
Not reported	24	13	37	0.0	0.0	0.0	58	69	62
<i>Country/region of birth</i>									
Australia	946	547	1 500	1.4	0.0	0.9	60	61	61
Overseas born	160	66	228	1.2	0.0	0.9	65	66	65
<i>Other Oceania</i>	33	14	49	3.2	0.0	2.1	45	64	51
<i>Asia</i>	10	4	14	0.0	0.0	0.0	40	25	36
<i>United Kingdom and Ireland</i>	62	32	94	1.6	0.0	1.1	75	69	73
<i>Other</i>	55	16	71	0.0	0.0	0.0	70	67	69
Not reported	7	5	12	0.0	0.0	0.0	71	80	75
<i>Main language spoken at home by parents</i>									
English	921	552	1 480	1.7	0.0	1.0	62	61	61
Other language	76	26	104	0.0	0.0	0.0	58	64	59
Not reported	116	40	156	0.0	0.0	0.0	61	70	64
Total	1 113	618	1 740	1.3	0.0	0.9	59	62	61

2006

	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	1 070	484	1 557	0.3	0.2	0.3	63	64	63
Bisexual	55	110	171	7.3	0.9	3.5	45	70	60
Homosexual	59	46	107	32.2	0.0	17.8	44	51	48
Not reported	39	21	62	0.0	0.0	0.0	42	57	49
<i>Sex work last month</i>									
No	1 123	548	1 678	2.1	0.4	1.6	60	63	61
Yes	34	81	121	5.9	0.0	2.5	56	69	64
Not reported	66	32	98	0.0	0.0	0.0	77	58	71
<i>Country/region of birth</i>									
Australia	1 026	577	1 611	2.1	0.4	1.5	60	64	61
Overseas born	171	78	252	2.3	0.0	2.0	60	60	60
<i>Other Oceania</i>	38	23	62	2.6	0.0	3.2	53	74	60
<i>Asia</i>	11	4	15	0.0	0.0	0.0	55	50	53
<i>United Kingdom and Ireland</i>	73	30	104	2.7	0.0	1.9	67	63	65
<i>Other</i>	49	21	71	2.0	0.0	1.4	58	45	54
Not reported	26	6	34	0.0	0.0	0.0	79	88	82
<i>Main language spoken at home by parents</i>									
English	1 063	610	1 683	2.3	0.3	1.6	61	64	62
Other language	84	28	114	2.4	0.0	1.8	54	52	54
Not reported	76	23	100	0.0	0.0	0.0	63	64	64
Total	1 223	661	1 897	2.1	0.3	1.5	60	63	61

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.4 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2002 – 2006, and percent with HIV or hepatitis C antibody by year, re-use of someone else's used needle and syringe last month, age group, and sex

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>Reuse of someone else's used syringe</i>									
Less than 25 years									
No	233	162	396	0.0	0.0	0.0	42	47	44
Yes	59	45	104	0.0	2.2	1.0	47	47	47
Not reported	8	7	15	0.0	0.0	0.0	50	43	47
25 – 29 years									
No	262	126	390	1.5	0.8	1.3	44	48	45
Yes	67	34	101	3.0	0.0	2.0	61	56	59
Not reported	3	4	7	0.0	0.0	0.0	0	75	43
30 – 34 years									
No	217	112	332	1.4	0.0	1.2	58	57	58
Yes	45	15	60	2.2	0.0	1.7	71	53	67
Not reported	7	5	12	14.3	0.0	8.3	43	40	42
35+ years									
No	420	162	591	1.9	1.2	1.9	72	70	71
Yes	60	21	81	1.7	0.0	1.2	68	76	70
Not reported	20	8	28	0.0	0.0	0.0	75	63	71
Total²	1 404	702	2 121	1.4	0.6	1.2	57	56	57

2003

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Reuse of someone else's used syringe</i>									
Less than 25 years									
No	209	138	348	1.4	0.0	0.9	34	50	41
Yes	44	31	77	4.6	0.0	2.6	57	39	51
Not reported	8	6	14	0.0	0.0	0.0	25	33	29
25 – 29 years									
No	237	132	373	0.8	0.0	0.5	41	60	47
Yes	43	28	71	2.3	0.0	1.4	77	71	75
Not reported	9	3	12	0.0	0.0	0.0	67	67	67
30 – 34 years									
No	231	121	355	0.9	0.0	0.9	53	55	54
Yes	45	16	61	0.0	0.0	0.0	67	69	67
Not reported	13	0	13	0.0	–	0.0	46	–	46
35+ years									
No	503	194	708	2.2	0.0	1.6	75	74	75
Yes	84	22	107	0.0	0.0	0.0	83	91	84
Not reported	13	8	21	0.0	0.0	0.0	69	88	76
Total²	1 441	700	2 163	1.5	0.0	1.0	59	62	60

2004

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Reuse of someone else's used syringe</i>									
Less than 25 years									
No	143	95	239	1.4	1.1	1.3	36	47	40
Yes	45	31	76	0.0	0.0	0.0	36	65	47
Not reported	2	2	4	0.0	0.0	0.0	50	0	25
25 – 29 years									
No	172	99	271	0.6	0.0	0.4	49	42	47
Yes	44	13	58	0.0	0.0	0.0	66	69	67
Not reported	7	3	10	0.0	0.0	0.0	43	67	50
30 – 34 years									
No	199	71	270	2.0	0.0	1.5	52	67	56
Yes	39	14	53	0.0	0.0	0.0	74	57	70
Not reported	9	–	9	0.0	–	0.0	67	–	67
35+ years									
No	357	181	541	1.7	1.1	1.5	76	77	76
Yes	89	27	117	2.3	0.0	1.7	75	81	77
Not reported	15	9	24	6.7	0.0	4.2	80	89	83
Total²	1 122	545	1 673	1.4	0.6	1.1	60	63	61

2005

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Reuse of someone else's used syringe</i>									
Less than 25 years									
No	94	87	181	1.1	0.0	0.6	29	55	41
Yes	18	16	34	0.0	0.0	0.0	39	53	45
Not reported	2	2	4	0.0	0.0	0.0	50	0	25
25 – 29 years									
No	130	113	243	0.0	0.0	0.0	51	52	52
Yes	30	14	45	0.0	0.0	0.0	71	57	67
Not reported	8	3	11	0.0	0.0	0.0	43	100	60
30 – 34 years									
No	186	93	279	1.1	0.0	0.7	51	55	52
Yes	30	17	47	3.3	0.0	2.1	70	63	67
Not reported	6	7	13	0.0	0.0	0.0	50	43	46
35+ years									
No	413	169	587	2.5	0.0	1.8	74	74	74
Yes	52	21	74	0.0	0.0	0.0	84	80	82
Not reported	34	15	49	0.0	0.0	0.0	66	80	70
Total	1 003	557	1 567	1.4	0.0	0.9	62	62	62

2006

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Reuse of someone else's used syringe</i>									
Less than 25 years									
No	89	63	152	2.3	0.0	1.3	34	51	41
Yes	19	28	47	0.0	0.0	0.0	47	52	50
Not reported	2	4	6	0.0	0.0	0.0	50	0	17
25 – 29 years									
No	165	87	253	0.0	0.0	0.0	48	60	52
Yes	35	21	57	0.0	0.0	1.8	66	67	65
Not reported	11	4	15	0.0	0.0	0.0	64	100	73
30 – 34 years									
No	198	112	313	2.0	0.0	1.3	48	55	51
Yes	33	15	49	3.0	0.0	2.0	61	67	61
Not reported	10	5	15	0.0	0.0	0.0	50	50	50
35+ years									
No	443	223	668	3.2	0.0	2.1	72	71	71
Yes	73	21	94	4.1	0.0	3.2	82	90	84
Not reported	32	10	44	3.1	1.0	4.6	78	70	73
Total	1 110	593	1 713	2.3	0.2	1.6	60	63	61

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

2 Totals include people whose age was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

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

Table 4.3.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 2002 – 2006

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
2002			
Less than 20 years	6.1	3	49.2
20 – 29 years	38.9	7	18.0
30+ years	26.0	1	3.8
Total	71.0	11	15.5
2003			
Less than 20 years	3.7	3	81.1
20 – 29 years	33.5	3	9.0
30+ years	23.1	3	13.0
Total	60.3	9	14.9
2004			
Less than 20 years	2.8	0	–
20 – 29 years	31.2	3	9.6
30+ years	22.6	2	8.8
Total	56.7	5	8.8
2005			
Less than 20 years	7.6	2	26.3
20 – 29 years	26.4	2	7.6
30+ years	19.7	3	15.2
Total	53.7	7	13.0
2006			
Less than 20 years	3.7	1	27.0
20 – 29 years	14.3	2	13.9
30+ years	18.8	1	5.3
Total	36.9	4	10.8

Source: Kirketon Road Centre

4.4 National monitoring of HIV infection among entrants into Australian prisons

Table 4.4.1 Number of receptions into Australian prisons, 2002 – 2006, percentage tested for HIV antibody at reception and number (%) with diagnosed HIV infection by year and Corrections jurisdiction of reception

Year of reception	State/Territory Corrections jurisdiction								Total
	ACT ¹	NSW	NT	QLD	SA	TAS	VIC ²	WA	
2002									
Number of receptions	108	11 433	1 751	11 108	2 643	1 520	5 090	6 207	39 860
Number (%) male	99 (92)	10 115 (88)	1 655 (95)	9 701 (87)	2 579 (98)	1 343 (88)	4 491 (88)	5 328 (86)	35 311 (89)
Tested for HIV antibody (%)	25.9	35.6	100.0	100.0	24.8	30.6	27.6	40.9	55.2
% males tested	28.3	36.2	100.0	100.0	23.4	32.2	20.6	42.4	54.6
Number (%) with HIV	0 (0.0)	4 (0.1)	2 (0.1)	7 (0.06)	3 (0.5)	1 (0.2)	0 (0.0)	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)	0 (0.0)	4 (0.2)	18 (0.09)
2003									
Number of receptions	–	12 406	2 104	10 605	3 501	1 399	5 090	6 145	41 250
Number (%) male	–	10 925 (88)	1 993 (95)	9 321 (88)	3 141 (90)	1 236 (88)	4 519 (89)	5 207 (85)	36 342 (88)
Tested for HIV antibody (%)	–	41.0	91.7	100.0	26.2	15.9	23.8	41.0	54.5
% males tested	–	43.8	91.3	100.0	26.4	15.8	17.7	41.7	54.8
Number (%) with HIV	–	2 (0.04)	3 (0.2)	2 (0.02)	2 (0.2)	1 (0.4)	1 (0.08)	2 (0.08)	13 (0.06)
Number (%) male	–	2 (0.04)	3 (0.2)	1 (0.2)	1 (0.1)	1 (0.5)	0 (0.0)	2 (0.1)	10 (0.05)
2004									
Number of receptions	–	14 504	2 180	7 277	3 449	1 514	4 955	6 836	40 715
Number (%) male	–	12 750 (88)	2 063 (95)	6 481 (89)	3 076 (89)	1 319 (87)	4 331 (87)	5 827 (85)	35 847 (88)
Tested for HIV antibody (%)	–	53.1	100.0	100.0	29.3	17.6	10.9	40.9	54.4
% males tested	–	57.5	100.0	100.0	29.4	17.4	8.6	39.5	55.9
Number (%) with HIV	–	21 (0.3)	3 (0.1)	6 (0.08)	1 (0.1)	0 (0.0)	1 (0.2)	2 (0.07)	34 (0.2)
Number (%) male	–	20 (0.3)	3 (0.1)	2 (0.03)	0 (0.0)	0 (0.0)	1 (0.3)	1 (0.04)	27 (0.1)
2005									
Number of receptions	–	14 753	2 436	7 433	3 203	1 793	4 832	6 634	41 084
Number (%) male	–	12 999 (88)	2 308 (95)	6 660 (90)	2 877 (90)	1 578 (88)	4 267 (88)	5 735 (86)	36 424 (88)
Tested for HIV antibody (%)	–	31.5	100.0	100.0	41.9	16.4	26.0	39.5	49.2
% males tested	–	33.1	100.0	100.0	40.8	17.3	26.9	37.6	49.9
Number (%) with HIV	–	26 (0.6)	2 (0.08)	3 (0.04)	10 (0.7)	0 (0.0)	1 (0.08)	4 (0.2)	46 (0.2)
Number (%) male	–	24 (0.6)	2 (0.08)	3 (0.05)	7 (0.6)	0 (0.0)	1 (0.09)	4 (0.2)	41 (0.2)
2006									
Number of receptions	–	14 720	2 648	7 335	3 504	1 704	5 249	5 375	40 535
Number (%) male	–	12 920 (88)	2 484 (94)	6 511 (89)	3 141 (90)	1 494 (88)	4 439 (85)	4 722 (88)	35 711 (88)
Tested for HIV antibody (%)	–	28.0	100.0	100.0	29.1	20.1	20.1	43.2	48.5
% males tested	–	30.7	100.0	100.0	27.5	21.2	19.4	42.1	49.7
Number (%) with HIV	–	27 (0.7)	0 (0.0)	4 (0.05)	3 (0.3)	0 (0.0)	0 (0.0)	1 (0.04)	35 (0.2)
Number (%) male	–	23 (0.6)	0 (0.0)	4 (0.06)	1 (0.1)	0 (0.0)	0 (0.0)	1 (0.05)	29 (0.2)

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 two months of 2002.

2 For Victoria, 2005 – 2006 data are based on the number of tests at the reception prison.

Source: State/Territory Departments of Corrections



4.5 HIV seroprevalence among people seen at sexual health clinics

Table 4.5.1 Number of people seen at selected metropolitan sexual health clinics in Australia, 2002 – 2006, 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								Total
	Sydney Sexual Health Centre, NSW	Sydney South West Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC			
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)	
2003	Seen	4 637	1 227	2 879	1 023	3 557	–	13 323	
	Tested	2 574	724	1 437	463	2 864	–	8 062	
	Newly diagnosed (%)	18 (0.7)	2 (0.3)	3 (0.2)	6 (1.3)	6 (0.2)	–	35 (0.4)	
	Previously negative (%)	11 (0.7)	0 (0.0)	3 (0.8)	2 (1.6)	4 (0.2)	–	20 (0.5)	
2004	Seen	4 312	1 183	2 798	1 087	3 664	6 067	19 111	
	Tested	2 451	670	1 174	430	2 928	2 603	10 256	
	Newly diagnosed (%)	19 (0.8)	4 (0.6)	5 (0.4)	5 (1.2)	11 (0.4)	7 (0.3)	51 (0.5)	
	Previously negative (%)	15 (0.9)	2 (1.3)	4 (1.2)	1 (0.8)	11 (0.6)	5 (0.3)	38 (0.7)	
2005	Seen	4 501	1 066	3 043	1 466	3 892	5 216	19 184	
	Tested	2 616	570	1 073	632	3 134	2 735	10 760	
	Newly diagnosed (%)	27 (1.0)	6 (1.1)	8 (0.7)	14 (2.2)	8 (0.3)	13 (0.5)	76 (0.7)	
	Previously negative (%)	20 (1.2)	1 (0.6)	6 (0.8)	1 (0.6)	4 (0.6)	12 (0.3)	44 (0.7)	
2006	Seen	4 509	1 102	3 043	1 539	4 026	5 902	20 121	
	Tested	2 587	353	1 196	566	3 266	3 207	11 175	
	Newly diagnosed (%)	22 (0.9)	3 (0.8)	5 (0.4)	10 (1.8)	10 (0.3)	32 (1.0)	82 (0.7)	
	Previously negative (%)	16 (0.9)	0 (0.0)	5 (0.6)	4 (2.5)	10 (0.5)	29 (1.2)	64 (0.9)	

Sexual Health Clinic

Females	Sexual Health Clinic							Total
	Sydney Sexual Health Centre, NSW	Sydney South West Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC		
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)	
2003	Seen 3 271	1 221	2 497	1 383	2 589	-	10 961	
	Tested 1 528	495	951	630	1 849	-	5 453	
	Newly diagnosed (%) 3 (0.2)	1 (0.2)	0 (0.0)	1 (0.2)	1 (0.1)	-	6 (0.1)	
	Previously negative (%) 1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-	1 (0.03)	
2004	Seen 2 680	1 016	2 471	1 257	2 492	4 068	13 984	
	Tested 1 354	356	805	506	1 925	1 586	6 532	
	Newly diagnosed (%) 4 (0.3)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	7 (0.1)	
	Previously negative (%) 1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	2 (0.1)	
2005	Seen 2 477	781	2 496	1 405	2 491	3 899	13 549	
	Tested 1 248	226	522	562	1 881	1 746	6 185	
	Newly diagnosed (%) 5 (0.4)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	7 (0.1)	
	Previously negative (%) 2 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	
2006	Seen 2 447	713	2 410	1 252	2 517	4 491	13 830	
	Tested 1 216	152	626	435	1 897	2 036	6 362	
	Newly diagnosed (%) 0 (0.0)	1 (0.7)	0 (0.0)	2 (0.5)	0 (0.0)	1 (0.05)	4 (0.1)	
	Previously negative (%) 0 (0.0)	0 (0.0)	0 (0.0)	1 (0.5)	0 (0.0)	1 (0.07)	2 (0.05)	

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.2 Number of people seen at selected metropolitan sexual health clinics in Australia, 2002 – 2006, 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							Total
	Male homosexual contact ¹	Male homosexual contact ¹ , age < 25 years	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males		
2002	Seen	3 661	704	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)
2003	Seen	3 827	764	587	1 622	6 587	700	13 323
	Tested	2 623	614	420	1 074	3 783	162	8 062
	Newly diagnosed (%)	33 (1.3)	2 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.2)	35 (0.4)
	Previously negative (%)	19 (1.1)	2 (0.6)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.5)	20 (0.5)
2004	Seen	5 664	1 172	710	2 260	9 687	790	19 111
	Tested	3 815	888	453	1 425	4 389	174	10 256
	Newly diagnosed (%)	46 (1.2)	6 (0.7)	0 (0.0)	2 (0.1)	3 (0.1)	0 (0.0)	51 (0.5)
	Previously negative (%)	35 (1.4)	3 (0.6)	0 (0.0)	2 (0.3)	1 (0.1)	0 (0.0)	38 (0.7)
2005	Seen	6 174	1 268	697	2 741	8 820	752	19 184
	Tested	4 232	980	452	1 668	4 265	143	10 760
	Newly diagnosed (%)	68 (1.8)	11 (1.1)	3 (0.7)	1 (0.1)	2 (0.1)	2 (1.1)	76 (0.7)
	Previously negative (%)	43 (1.4)	6 (1.1)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	44 (0.7)
2006	Seen	7 313	1 539	613	2 819	8 387	989	20 121
	Tested	5 003	1 189	368	1 613	4 015	176	11 175
	Newly diagnosed (%)	66 (1.3)	10 (0.8)	3 (0.8)	7 (0.4)	4 (0.1)	2 (1.1)	82 (0.7)
	Previously negative (%)	55 (1.4)	9 (1.1)	2 (0.7)	3 (0.4)	4 (0.2)	0 (0.0)	64 (0.9)

HIV exposure category

Females	Sex worker ²	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females	Total
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)
2003						
Seen	1 159	328	1 407	7 306	761	10 961
Tested	907	194	812	3 327	213	5 453
Newly diagnosed (%)	1 (0.1)	0 (0.0)	2 (0.2)	3 (0.1)	0 (0.0)	6 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	1 (0.03)
2004						
Seen	1 897	517	1 824	8 848	898	13 984
Tested	1 297	303	1 027	3 708	197	6 532
Newly diagnosed (%)	0 (0.0)	0 (0.0)	4 (0.4)	2 (0.1)	1 (0.5)	7 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	2 (0.5)	0 (0.0)	0 (0.0)	2 (0.1)
2005						
Seen	1 981	378	1 987	8 337	866	13 549
Tested	1 268	192	1 044	3 483	198	6 185
Newly diagnosed (%)	2 (0.1)	0 (0.0)	3 (0.3)	2 (0.1)	0 (0.0)	7 (0.1)
Previously negative (%)	1 (0.4)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	2 (0.1)
2006						
Seen	2 493	371	2 021	7 994	951	13 830
Tested	1 572	188	1 036	3 349	217	6 362
Newly diagnosed (%)	0 (0.0)	0 (0.0)	1 (0.1)	3 (0.1)	0 (0.0)	4 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	2 (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 4.5.3 Number of people seen at selected metropolitan sexual health clinics in Australia, 2002 – 2006, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, age group and year

	Age group (years)							Total
	13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+		
Males								
2002								
Seen	547	5 365	4 074	1 963	892	371	13 212	
Tested	357	3 450	2 280	990	449	167	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)	
2003								
Seen	533	5 386	4 157	1 944	911	392	13 323	
Tested	320	3 576	2 411	1 067	494	194	8 062	
Newly diagnosed (%)	0 (0.0)	7 (0.2)	20 (0.8)	4 (0.4)	3 (0.6)	1 (0.5)	35 (0.4)	
Previously negative (%)	0 (0.0)	5 (0.3)	9 (0.6)	4 (0.7)	2 (0.7)	0 (0.0)	20 (0.5)	
2004								
Seen	659	7 727	5 875	2 999	1 288	563	19 111	
Tested	411	4 547	3 096	1 367	615	220	10 256	
Newly diagnosed (%)	0 (0.0)	18 (0.4)	14 (0.5)	14 (1.0)	2 (0.3)	3 (1.4)	51 (0.5)	
Previously negative (%)	0 (0.0)	14 (0.6)	11 (0.5)	9 (1.0)	1 (0.3)	3 (2.5)	38 (0.7)	
2005								
Seen	741	8 121	5 734	2 877	1 184	527	19 184	
Tested	426	4 800	3 171	1 509	608	246	10 760	
Newly diagnosed (%)	2 (0.5)	18 (0.4)	29 (0.9)	19 (1.3)	6 (1.0)	2 (0.8)	76 (0.7)	
Previously negative (%)	1 (0.8)	11 (0.5)	17 (0.8)	10 (1.1)	3 (0.8)	2 (1.7)	44 (0.7)	
2006								
Seen	704	8 642	5 739	3 069	1 405	562	20 121	
Tested	405	5 021	3 172	1 546	736	295	11 175	
Newly diagnosed (%)	3 (0.7)	23 (0.5)	31 (1.0)	16 (1.0)	6 (0.8)	3 (1.0)	82 (0.7)	
Previously negative (%)	2 (1.4)	18 (0.6)	24 (1.0)	14 (1.2)	4 (0.8)	2 (1.0)	64 (0.9)	

Age group (years)

		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Total
2002	Seen	1 463	5 693	2 469	894	299	77	10 895
	Tested	636	3 020	1 284	470	135	24	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)
2003	Seen	1 519	5 707	2 441	931	291	72	10 961
	Tested	661	2 898	1 269	461	149	15	5 453
	Newly diagnosed (%)	1 (0.2)	5 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.03)
2004	Seen	1 624	7 298	3 385	1 211	366	100	13 984
	Tested	665	3 499	1 610	578	151	29	6 532
	Newly diagnosed (%)	0 (0.0)	3 (0.1)	3 (0.2)	1 (0.2)	0 (0.0)	0 (0.0)	7 (0.1)
	Previously negative (%)	0 (0.0)	0 (0.0)	1 (0.1)	1 (0.3)	0 (0.0)	0 (0.0)	2 (0.1)
2005	Seen	1 484	7 241	3 184	1 202	356	82	13 549
	Tested	543	3 374	1 492	590	158	28	6 185
	Newly diagnosed (%)	0 (0.0)	2 (0.1)	4 (0.3)	1 (0.2)	0 (0.0)	0 (0.0)	7 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)
2006	Seen	1 481	7 289	3 276	1 344	379	61	13 830
	Tested	521	3 368	1 626	671	160	16	6 362
	Newly diagnosed (%)	0 (0.0)	1 (0.03)	1 (0.1)	1 (0.1)	1 (0.6)	0 (0.0)	4 (0.1)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.2)	1 (1.0)	0 (0.0)	2 (0.1)

Source: Collaborative group on sentinel surveillance in sexual health clinics

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

4.6.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody¹, 1985 – 2006, by State/Territory and years of donation

State/Territory	1985 ² – 1996		1997 – 1998		1999 – 2000		2001 – 2002		2003 – 2004		2005 – 2006		All years		
	Tests	Positive Prevalence	Tests	Positive Prevalence	Tests	Positive Prevalence	Tests	Positive Prevalence	Tests	Positive Prevalence	Tests	Positive Prevalence	Tests	Positive Prevalence	
ACT ³	186 553	1	0.5	9 080	0	0.0	–	–	–	–	–	–	195 633	1	0.5
NSW	3 401 935	36	1.1	565 689	1	0.2	577 431	0	0.0	731 741	2	0.3	6 556 393	47	0.7
NT	105 391	0	0.0	14 805	1	6.8	18 429	0	0.0	19 322	0	0.0	192 952	1	0.5
QLD	1 969 266	23	1.2	372 520	3	0.8	385 192	2	0.5	476 755	1	0.2	4 061 479	35	0.9
SA	1 114 559	4	0.4	168 787	2	1.2	176 357	0	0.0	222 315	1	0.4	2 054 011	8	0.4
TAS	294 618	0	0.0	51 345	1	1.9	13 013	0	0.0	59 686	0	0.0	518 709	1	0.2
VIC	2 955 185	15	0.5	449 148	1	0.2	499 954	1	0.2	505 378	1	0.2	5 448 815	18	0.3
WA	908 031	7	0.8	178 088	1	0.6	200 097	2	1.0	220 642	0	0.0	1 940 974	13	0.7
Total	10 935 538	86	0.8	1 809 462	10	0.6	1 870 473	5	0.3	2 235 839	5	0.2	20 968 966	124	0.6

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.

Source: Australian Red Cross Blood Service

4.6.2 Number of blood donors in Australia with HIV antibody, 1985 – 2006, 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 – 1996		1997 – 1998		1999 – 2000		2001 – 2002		2003 – 2004		2005 – 2006		All years		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Male homosexual contact	17 ¹	–	2	–	1	–	0	–	4	–	1	–	25	–	25
Injecting drug use	2	0	1	0	0	0	1	0	1	0	0	0	5	0	5
Heterosexual contact	20	16	1	3	0	2	3	4	1	1	1	3	26	29	55
Person from a high prevalence country	0	0	0	1	0	0	0	0	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	3	0	1	0	1	0	0	0	0	0	0	0	0	5
Undetermined	24	2	1	0	0	1	1	0	2	0	0	0	28	3	31
Total	64	22	5	5	1	4	5	4	8	1	2	3	85	39	124
New HIV infection²	24	12	2	1	1	2	3	1	5	0	0	1	35	17	52

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

4.6.3 Number of donations tested for hepatitis B surface antigen at blood services, 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	2002			2003			2004		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW/ACT	316 309	50	15.8	328 235	35	10.7	331 775	38	11.5
NT	7 847	2	25.5	9 103	3	33.0	10 936	2	18.3
QLD	205 121	22	10.7	221 838	20	9.0	240 667	28	11.6
SA	93 890	5	5.3	88 659	4	4.5	101 254	2	2.0
TAS	23 870	0	0.0	25 584	0	0.0	24 744	0	0.0
VIC	254 521	33	13.0	258 685	31	12.0	278 021	41	14.7
WA	103 505	14	13.5	111 641	9	8.1	122 199	14	11.5
Total	1 005 063	126	12.5	1 043 745	102	9.8	1 109 596	125	11.3

State/Territory	2005			2006		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW/ACT	353 992	52	14.7	377 749	36	9.5
NT	10 003	0	0.0	9 319	3	32.2
QLD	232 386	19	8.2	244 369	27	11.0
SA	102 924	8	7.8	119 391	8	6.7
TAS	28 061	0	0.0	31 625	2	6.3
VIC	244 678	25	10.2	260 700	25	9.6
WA	110 150	6	5.4	110 492	6	5.4
Total	1 082 194	110	10.2	1 153 645	107	9.3

¹ Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

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

State/Territory	2002			2003			2004		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW/ACT	316 309	53	16.8	328 235	34	10.4	331 775	48	14.5
NT	7 847	1	12.7	9 103	3	33.0	10 936	3	27.4
QLD	205 121	48	23.4	221 838	43	19.4	240 667	32	13.3
SA	93 890	12	12.8	88 659	3	3.4	101 254	7	6.9
TAS	23 870	4	16.8	25 584	1	3.9	24 744	6	24.2
VIC	254 521	35	13.8	258 685	31	12.0	278 021	38	13.7
WA	103 505	20	19.3	111 641	15	13.4	122 199	14	11.5
Total	1 005 063	173	17.2	1 043 745	130	12.5	1 109 596	148	13.3

State/Territory	2005			2006		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW/ACT	353 992	49	13.8	377 749	37	9.8
NT	10 003	1	10.0	9 319	1	10.7
QLD	232 386	37	15.9	244 369	21	8.6
SA	102 924	4	3.9	119 391	5	4.2
TAS	28 061	4	14.3	31 625	0	0.0
VIC	244 678	16	6.5	260 700	30	11.5
WA	110 150	16	14.5	110 492	7	6.3
Total	1 082 194	127	11.7	1 153 645	101	8.8

¹ Prevalence per 100 000 donations.

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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5.2 Sexual and injecting behaviour among people who have injected drugs

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5 Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Gay Community Periodic Surveys, 2002 – 2006, 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								
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006					
Sample size	2 884	2 541	2 821	3 413	3 732	1 787	1 511	1 667	1 382	1 276	1 877	2 064	1 962	1 804	1 988
Anal intercourse with regular partners															
Men with regular partners	63.0	59.6	61.6	60.1	63.3	59.3	59.4	61.8	61.6	62.4	63.6	62.9	65.0	64.6	65.7
Unprotected anal intercourse	36.9	33.4	36.1	35.2	35.1	33.1	34.7	34.9	33.1	36.7	34.9	33.4	36.5	37.2	38.6
Anal intercourse with casual partners															
Men with casual partners	71.5	70.0	69.7	70.0	68.8	69.8	69.9	69.3	70.5	66.8	67.6	69.2	68.2	68.5	65.9
Unprotected anal intercourse	24.5	22.9	22.4	21.4	20.8	22.1	21.1	21.7	22.1	23.1	19.1	20.5	17.9	20.3	19.2
Injecting drug use¹	5.4	6.5	6.8	5.2	5.2	10.1	6.6	5.7	5.1	7.4	4.8	4.7	5.0	4.7	4.4
HIV antibody testing²	50.3	50.1	54.2	53.3	54.4	50.5	48.9	48.8	52.3	53.6	39.4	42.1	46.9	43.2	44.1

	Adelaide		Canberra		Perth	
	2003	2005	2003	2006	2004	2006
Sample size	834	629	255	282	1 014	927
Anal intercourse with regular partners						
Men with regular partners	61.3	65.2	62.7	66.0	65.3	64.9
Unprotected anal intercourse	31.8	37.0	32.9	37.6	36.6	39.6
Anal intercourse with casual partners						
Men with casual partners	72.4	64.1	70.6	59.2	61.2	61.9
Unprotected anal intercourse	18.0	15.6	16.1	14.5	17.4	20.7
Injecting drug use¹	4.6	4.6	1.6	1.8	4.2	5.2
HIV antibody testing²	49.6	48.8	39.6	40.3	41.2	39.5

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 and injecting behaviour among people who have injected drugs

Table 5.2.1 Number of injecting drug users seen at Needle and Syringe Programs who were tested for HIV or hepatitis C antibody, 2002 – 2006, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting injecting drug use (IDU) in the past month, and percent reporting use of a needle and syringe after someone else in the past month by year, history of injecting drug use, last drug injected and sex

2002

	Number tested			% 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 injecting drug use</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

2003

	Number tested			% 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 injecting drug use</i>															
Less than 3 years	132	68	201	42	63	49	42	62	49	112	62	175	11	13	11
3 to 5 years	192	119	313	58	66	62	61	63	62	173	106	281	14	17	16
6 to 10 years	379	226	610	64	70	66	64	68	66	338	204	547	15	14	15
11 or more years	842	357	1 211	65	64	65	66	67	66	785	320	1 116	16	13	15
Not reported	55	24	83	49	63	54	56	71	61	33	8	44	12	25	14
<i>Last drug injected</i>															
Amphetamine	538	253	797	56	62	58	59	64	61	489	220	715	14	9	12
Heroin/opiates	806	419	1 237	66	68	73	67	67	67	746	383	1 141	15	15	15
Combination	134	64	199	69	73	70	71	70	71	128	58	187	23	21	22
Other/not reported	122	58	185	48	55	54	47	64	52	78	39	120	6	18	11
Total	1 600	794	2 418	61	66	63	63	66	64	1 441	700	2 163	15	14	15

2004

	Number tested			% 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 injecting drug use</i>															
Less than 3 years	84	51	135	45	59	50	54	57	55	75	47	122	19	26	21
3 to 5 years	138	84	224	58	61	59	52	68	58	127	77	206	16	16	16
6 to 10 years	312	161	474	61	66	63	66	68	67	291	153	444	19	14	17
11 or more years	656	290	949	62	58	60	64	63	64	615	260	878	21	15	19
Not reported	26	9	43	50	33	40	42	56	42	14	8	23	0	13	9
<i>Last drug injected</i>															
Amphetamine	360	221	581	57	58	57	57	61	58	331	198	529	20	17	19
Heroin/opiates	687	304	998	61	61	61	65	67	66	652	281	939	18	14	17
Combination	83	49	132	60	69	64	65	69	67	78	48	126	26	21	24
Other/not reported	86	21	114	59	52	55	53	62	53	61	18	79	18	6	15
Total	1 216	595	1 825	60	60	60	62	64	63	1 122	545	1 673	19	16	18

2005

	Number tested			% 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 injecting drug use</i>															
Less than 3 years	57	30	88	47	57	51	47	60	52	50	28	79	12	18	14
3 to 5 years	101	75	177	59	61	60	58	64	60	93	67	161	15	6	11
6 to 10 years	153	136	290	56	60	58	59	63	61	136	127	264	15	14	14
11 or more years	755	347	1 108	56	58	57	59	65	61	692	309	1 006	12	13	13
Not reported	47	30	77	57	77	65	47	80	60	44	27	71	16	7	13
<i>Last drug injected</i>															
Amphetamine	363	196	564	55	53	54	53	58	55	329	174	507	11	13	12
Heroin/Opiates	613	358	974	57	61	59	62	68	64	570	327	900	14	11	13
Combination	11	8	20	64	75	70	55	75	65	11	7	19	36	29	32
Other/not reported	126	56	182	55	71	60	52	68	57	105	50	155	16	18	17
Total	1 113	618	1 740	56	60	57	58	65	60	1 015	558	1 581	13	12	13

2006

	Number tested			% 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 injecting drug use</i>															
Less than 3 years	59	42	102	46	71	56	46	67	54	59	42	102	12	10	11
3 to 5 years	81	67	148	58	66	61	62	67	64	80	65	145	7	13	10
6 to 10 years	227	159	390	56	63	59	57	65	61	226	159	389	13	16	15
11 or more years	799	378	1 185	55	57	56	60	61	60	791	378	1 177	13	11	12
Not reported	57	15	72	60	47	57	58	53	57	56	13	69	23	33	25
<i>Last drug injected</i>															
Methamphetamine	448	261	713	50	59	53	54	61	57	447	258	709	13	12	13
Heroin/Opiates	625	349	982	59	59	59	62	62	62	618	348	974	12	14	13
Combination	33	17	50	52	71	58	64	71	66	30	17	47	18	18	18
Other/not reported	117	34	152	53	74	58	56	74	61	117	34	152	18	12	16
Total	1 223	661	1 897	55	60	57	59	62	60	1 212	657	1 882	13	13	13

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 5.2.2 Number of injecting drug users seen at Needle and Syringe Programs who were tested for HIV or hepatitis C antibody, 2002 – 2006, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting sexual intercourse in the last month, and percent reporting condom use at last intercourse by year, age group, sexual identity and sex

2002

	Number tested			% 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

2003

	Number tested			% 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	46	47	93	43	72	58	50	70	60	38	42	80	65	34	49
20 to 24 years	264	145	412	65	70	67	67	68	67	203	123	329	40	37	39
25 to 34 years	640	338	986	63	68	65	63	67	65	455	266	728	31	23	28
35 or more years	647	262	922	60	60	60	62	63	62	400	169	575	28	23	26
Not reported	3	2	5	67	100	80	67	100	80	1	1	2	67	50	60
<i>Sexual identity</i>															
Heterosexual	1 336	513	1 856	60	64	61	62	64	62	900	384	1 289	30	25	29
Bisexual	60	168	232	62	72	69	60	73	69	46	130	179	30	36	35
Homosexual	73	48	124	75	67	72	67	67	68	57	40	99	59	17	43
Not reported	131	65	206	63	66	64	70	71	71	94	47	147	38	17	31
Total	1 600	794	2 418	61	66	63	63	66	64	1 097	601	1 714	32	26	30

2004

	Number tested			% 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	30	33	64	50	70	61	63	76	70	23	27	51	53	36	45
20 to 24 years	176	103	279	60	64	61	65	73	68	132	82	214	40	31	37
25 to 34 years	505	219	726	61	62	61	62	63	62	351	168	521	32	25	30
35 or more years	502	240	748	60	56	58	62	60	61	290	145	438	27	25	26
Not reported	3	0	8	33	0	13	0	0	0	1	0	1	33	0	13
<i>Sexual identity</i>															
Heterosexual	1 058	435	1 496	58	58	58	61	63	62	690	304	997	31	23	28
Bisexual	45	108	155	73	65	67	71	69	70	31	83	115	29	42	37
Homosexual	45	30	75	71	63	68	71	57	65	36	19	55	44	20	35
Not reported	68	22	99	68	73	66	65	73	65	40	16	58	41	23	33
Total	1 216	595	1 825	60	60	60	62	65	63	797	422	1 225	32	26	30

2005

	Number tested			% 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	17	24	41	76	63	68	82	67	73	9	18	27	41	38	39
20 to 24 years	111	92	203	56	67	61	56	72	63	73	72	145	37	28	33
25 to 34 years	422	260	683	57	63	59	58	66	61	278	197	475	29	23	27
35 or more years	551	240	798	55	54	55	57	61	58	285	135	423	18	17	18
Not reported	12	2	15	75	0	60	67	0	53	7	0	8	33	0	27
<i>Sexual identity</i>															
Heterosexual	974	444	1 419	56	57	56	58	63	60	569	302	871	23	21	22
Bisexual	37	107	145	57	64	62	41	64	58	22	85	107	41	36	37
Homosexual	57	33	95	70	76	72	67	82	73	35	18	55	42	12	32
Not reported	45	34	81	51	74	60	51	76	62	26	17	45	24	9	19
Total	1 113	618	1 740	56	60	57	58	65	60	652	422	1 078	25	22	24

2006

	Number tested			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% reporting condom use last month		
	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	19	24	43	47	71	60	53	75	65	14	20	34	52	33	42
20 to 24 years	101	81	182	58	70	64	59	73	65	69	72	141	32	28	30
25 to 34 years	492	265	764	57	65	60	60	65	62	319	194	520	23	21	23
35 or more years	606	289	901	53	53	53	57	57	57	317	167	487	15	14	15
Not reported	5	2	7	80	0	57	40	0	29	3	1	4	0	0	0
<i>Sexual identity</i>															
Heterosexual	1 070	484	1 557	54	58	55	58	61	59	619	320	941	18	15	17
Bisexual	55	110	171	71	64	66	67	65	66	37	92	135	36	35	36
Homosexual	59	46	107	64	72	68	64	72	68	42	30	73	47	20	35
Not reported	39	21	62	49	57	52	54	62	56	24	12	37	26	38	31
Total	1 223	661	1 897	55	60	57	59	62	60	722	454	1 186	20	19	20

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 hepatitis C infection

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

Table 6.1.1	Estimated number of people living with hepatitis C virus infection in 2006 by stage of liver disease	126
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6 Estimates of the number of people living with hepatitis C infection

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

Table 6.1.1 Estimated number of people living with hepatitis C virus infection in 2006 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2006	271 000	(210 000 – 328 000)
<i>Exposed to hepatitis C virus but not chronically infected</i>	<i>68 500</i>	<i>(53 000 – 85 000)</i>
<i>Chronic hepatitis C infection with stage F0/1 liver disease</i>	<i>157 000</i>	<i>(121 000 – 192 000)</i>
<i>Chronic hepatitis C infection with stage F2/3 liver disease</i>	<i>40 000</i>	<i>(32 000 – 47 000)</i>
<i>Living with hepatitis C-related cirrhosis</i>	<i>5 400</i>	<i>(4 000 – 6 600)</i>
During 2006		
Hepatitis C-related liver failure	216	(161 – 265)
Hepatitis C-related hepatocellular carcinoma	108	(80 – 132)

Source: Hepatitis C Virus Projections Working Group 2006

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7 Uptake of treatment for HIV infection and viral hepatitis

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 2006

	Current antiretroviral treatment ¹					Total
	None	Mono/Double	3+ (NRTI +/- PI, no NNRTI)	3+ (NRTI + NNRTI, no PI)	3+ (NNRTI + PI, +/- NRTI)	
Total	218 (12%)	279 (15%)	558 (31%)	661 (37%)	86 (5%)	1 802
Sex						
Male	202 (12%)	261 (15%)	524 (31%)	627 (37%)	82 (5%)	1 696
Female	16 (15%)	18 (17%)	34 (32%)	34 (32%)	4 (4%)	106
Age at enrolment (years)						
Less than 30	39 (28%)	13 (9%)	36 (26%)	49 (35%)	3 (2%)	140
30 – 39	86 (13%)	80 (12%)	233 (34%)	261 (38%)	27 (4%)	687
40 – 49	64 (10%)	113 (19%)	184 (30%)	211 (35%)	36 (6%)	608
50+	29 (8%)	73 (20%)	105 (29%)	140 (38%)	20 (5%)	367
Exposure category						
Male homosexual contact	155 (12%)	195 (15%)	389 (31%)	466 (37%)	62 (5%)	1 267
Other/not reported	63 (12%)	84 (16%)	169 (32%)	195 (36%)	24 (4%)	535
Viral load at enrolment (copies/ml)						
Less than 400	70 (7%)	142 (14%)	295 (28%)	499 (48%)	38 (3%)	1 044
400 – 10,000	62 (19%)	59 (18%)	116 (36%)	60 (18%)	28 (9%)	325
10,000+	76 (22%)	61 (17%)	125 (36%)	74 (21%)	15 (4%)	351
Not reported	10	17	22	28	5	82
CD4+ count at enrolment (cells/μl)						
Less than 200	5 (2%)	58 (25%)	98 (43%)	58 (25%)	10 (4%)	229
200 – 500	65 (9%)	108 (15%)	224 (32%)	261 (37%)	41 (6%)	699
500+	137 (17%)	98 (12%)	219 (27%)	322 (40%)	32 (4%)	808
Not reported	11	15	17	20	3	66
AIDS prior to enrolment						
No	211 (14%)	210 (14%)	435 (30%)	548 (38%)	54 (4%)	1 458
Yes	7 (2%)	69 (20%)	123 (36%)	113 (33%)	32 (9%)	344
Hepatitis C antibody positive						
No	173 (13%)	228 (17%)	391 (28%)	515 (37%)	65 (5%)	1 372
Yes	18 (10%)	34 (18%)	75 (40%)	54 (29%)	8 (4%)	189
No test done	27 (11%)	17 (7%)	92 (38%)	92 (38%)	13 (5%)	241
Regimen of longest duration in 2005						
None	205 (72%)	20 (7%)	35 (12%)	25 (9%)	1 (0%)	286
Mono/double	2 (1%)	217 (88%)	14 (6%)	10 (4%)	3 (1%)	246
3+ (NRTI+/-PI, no NNRTI)	7 (1%)	23 (4%)	488 (92%)	12 (2%)	3 (1%)	533
3+ (NRTI+NNRTI, no PI)	3 (0%)	19 (3%)	15 (2%)	612 (94%)	3 (1%)	652
3+ (NNRTI+PI,+/-NRTI)	1 (1%)	0 (0%)	6 (7%)	2 (2%)	76 (89%)	85

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 Gay Community Periodic Surveys, 2002 – 2006, and proportion reporting use of antiretroviral treatment for HIV infection, by city and year

City	Year of survey ¹				
	2002	2003	2004	2005	2006
Adelaide					
Sample size	–	42	–	36	–
Proportion reporting use of antiretroviral therapy	–	59.5	–	69.4	–
Brisbane					
Sample size	121	94	122	81	68
Proportion reporting use of antiretroviral therapy	48.8	55.3	63.9	55.6	64.7
Canberra					
Sample size	–	13	–	–	16
Proportion reporting use of antiretroviral therapy	–	92.3	–	–	100
Melbourne					
Sample size	150	177	159	162	153
Proportion reporting use of antiretroviral therapy	70.0	55.9	60.4	58.6	58.8
Perth					
Sample size	27	–	49	–	41
Proportion reporting use of antiretroviral therapy	74.1	–	71.4	–	78.0
Sydney					
Sample size	420	330	416	483	516
Proportion reporting use of antiretroviral therapy	68.1	66.7	66.1	64.2	65.7

1 Dashes (–) indicate that the survey was not carried out in the specified city and year.

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; State AIDS Councils, State/Territory organisations representing 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 antiretroviral agent and year

Antiretroviral agent	Year of prescription ^{1,2}				
	2002	2003	2004	2005	2006
Nucleoside analogue reverse transcriptase inhibitors					
Abacavir	1 355	1 425	1 542	1 592	830
Didanosine	1 319	1 250	1 203	873	601
Emtricitabine	–	–	–	238	163
Lamivudine ³	2 533	2 774	3 219	3 641	2 094
Stavudine	2 036	1 401	979	603	346
Zalcitabine	64	34	21	13	4
Zidovudine	315	284	385	241	206
Lamivudine & Zidovudine	1 850	1 893	1 989	1 959	1 525
Abacavir & Lamivudine	–	–	–	212	1 592
Abacavir, Lamivudine & Zidovudine	576	713	643	544	431
Tenofovir	862	1 699	2 273	3 076	2 504
Tenofovir & Emtricitabine	–	–	–	–	1 671
Non-nucleoside analogue reverse transcriptase inhibitors					
Delavirdine	49	38	32	20	16
Efavirenz	1 208	1 416	1 656	1 896	2 208
Nevirapine	2 334	2 311	2 412	2 697	2 387
Protease inhibitors					
Amprenavir	145	144	98	39	17
Fosamprenavir	–	–	3	119	194
Indinavir	744	483	341	228	144
Lopinavir & ritonavir	902	1 401	1 580	1 543	1 543
Nelfinavir	622	461	349	230	136
Ritonavir	771	696	879	1 330	1 845
Saquinavir	566	440	388	294	226
Atazanavir	–	–	590	1 207	1 746
Fusion inhibitors					
Enfuvirtide	–	–	54	172	197
Total patients⁴	6 440	7 173	7 598	8 453	9 463
Total cost⁵ (\$'000s)	89 449	78 712	85 293	98 485	110 512

1 The number of people dispensed each antiretroviral drug during a calendar year was estimated by calculating the average of the total number of people dispensed each drug during the corresponding financial year quarters.

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

3 The number of people prescribed lamivudine per calendar year was estimated by deducting the number of person years of lamivudine treatment for hepatitis B infection (calculated from the National Pack Number Report) from the total number of people dispensed lamivudine for treatment of HIV and/or hepatitis B infection.

4 Total patients calculated as (Lamivudine + Combivir (Lamivudine & Zidovudine)+Trizivir (Abacavir, Lamivudine & Zidovudine)+Kivexa (Abacavir & Lamivudine)+Emtricitabine +Truvada(Tenofovir & Emtricitabine))/the proportion of patients in the Australian HIV Observational Database receiving any of the previously mentioned drugs in each year.

5 Public Hospital Expenditure.

Source: Highly Specialised Drugs (S100) Program

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

Treatment	Year of prescription				
	2002	2003	2004	2005	2006
Azithromycin	188	202	204	181	160
Cidofovir	2	1	0	1	1
Clarithromycin	268	242	211	266	255
Doxorubicin	11	7	11	13	11
Foscarnet	8	5	2	0	0.25
Ganciclovir	260	245	149	56	32
Rifabutin	41	44	40	41	32
Valaciclovir	194	220	243	192	146
Valganciclovir ¹	14	24	211	388	458
Total cost (\$'000s)	4 735	4 769	6 250	6 884	7 793

1 Includes valganciclovir used as prophylaxis of cytomegalovirus retinitis and disease in solid organ transplant patients.

Source: Highly Specialised Drugs (S100) Program

7.3 Monitoring prescriptions for treatment of viral hepatitis

Table 7.3.1 Number of people dispensed drugs for hepatitis B infection through the Highly Specialised Drugs (S100) Program, by year

Year	Lamivudine ¹	Adefovir ²	Entacavir ³	Total cost ⁴ (\$'000s)
2002				
January – March	835	–	–	331
April – June	871	–	–	346
July – September	947	–	–	375
October – December	980	–	–	389
2003				
January – March	942	–	–	374
April – June	1 023	–	–	405
July – September	1 030	–	–	408
October – December	1 130	–	–	448
2004				
January – March	1 068	–	–	421
April – June	1 120	–	–	442
July – September	1 197	–	–	472
October – December	1 245	357	–	815
2005				
January – March	1 145	502	–	1 334
April – June	1 177	568	–	1 526
July – September	1 156	617	–	1 545
October – December	1 255	646	–	1 709
2006				
January – March	1 178	673	–	1 629
April – June	1 638	657	–	1 785
July – September	1 320	694	–	1 789
October – December	1 292	711	282	2 052

1 Number of person years of treatment with lamivudine 100mg estimated from the HSD Program Public Hospital Dispensed National Pack Number Report.

2 Adefovir included in S100 Program from October 2004.

3 Entacavir included in S100 Program from October 2006.

4 Public hospital expenditure only.

Source: Highly Specialised Drugs (S100) Program

Table 7.3.2 Number of people dispensed drugs for hepatitis C infection through the Highly Specialised Drugs (S100) Program, by year¹

Year	Ribavirin and Interferon	Pegylated Interferon and Ribavirin ²	Pegylated interferon	Total cost ³ (\$'000s)
2002				
January – March	1 123	–	–	4 213
April – June	1 142	–	–	4 515
July – September	1 133	–	–	4 488
October – December	976	–	–	3 912
2003				
January – March	903	–	–	3 132
April – June	844	–	–	3 111
July – September	660	–	–	2 556
October – December ³	371	648	–	3 805
2004				
January – March	158	1 164	–	5 423
April – June	52	1 342	–	6 353
July – September	12	1 477	–	6 896
October – December	3	1 285	–	6 154
2005				
January – March	17	1 275	–	5 306
April – June	15	1 367	–	6 075
July – September	0	1 486	–	6 782
October – December	0	1 383	–	6 742
2006				
January – March	0	1 553	41	6 942
April – June	0	1 892	20	9 620
July – September	0	2 473	28	10 844
October – December	0	2 433	100	12 187

1 An estimated 1,458, 1,142, 1, 831, 1,847 and 2,847 people were receiving treatment throughout 2002 to 2006, 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. From 1 April 2006, biopsy proven liver damage was no longer a requirement for treatment of hepatitis C infection.

2 Pegylated interferon and ribavirin included in S100 Program from 1 November 2003.

3 Public hospital expenditure only.

Source: Highly Specialised Drugs (S100) Program

7.4 Monitoring transmitted drug resistance in Australian HIV-1 isolates

Table 7.4.1 Number and percent of isolates with resistance at one or more loci, by drug class against which resistance was detected and year

Year of diagnosis	Drug class against which resistance was detected				
	Total	% non-B subtypes	PI ¹ Number (%)	NRTI ¹ Number (%)	NNRTI ¹ Number (%)
2002	51	2.0	1 (2.0)	4 (7.8)	1 (2.0)
2003	63	4.8	0 (0.0)	8 (12.7)	1 (1.6)
2004	45	0.0	2 (4.4)	3 (6.7)	2 (4.4)
2005	42	2.4	0 (0.0)	5 (11.9)	0 (0.0)
2006	46	2.2	3 (6.5)	4 (8.7)	3 (6.5)

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

Source: NSW State Reference Laboratory for HIV/AIDS; Victorian Infectious Diseases Reference Laboratory (2006 only)



Methodological notes

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

National surveillance for AIDS diagnoses

AIDS is a notifiable condition by the diagnosing doctor in each State/Territory health jurisdiction in Australia. Under national HIV/AIDS surveillance procedures, AIDS notifications are forwarded to the national HIV/AIDS surveillance centre for national collation and analysis. Information sought at AIDS notification includes State/Territory of diagnosis, namecode (based on the first two letters of the family name and given name), sex, date of birth, country of birth, date of AIDS diagnosis, AIDS defining illness, CD4+ cell count at AIDS diagnosis, date of first HIV diagnosis, and source of exposure to HIV. Late HIV diagnosis in adults/adolescents was defined as HIV infection newly diagnosed within three months of AIDS diagnosis (Kaldor and French 1993, McDonald *et al* 2003). 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 (Communicable Diseases Network Australia 2004). AIDS defining illnesses were grouped, in Figure 42, as *Pneumocystis jirovecii* 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 2004 to 31 December 2006 and notified by 31 March 2007. 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 2004 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 2006 and reported to the *National AIDS Registry* by 31 March 2007. Cases without any follow-up information after AIDS diagnosis were excluded from the analysis. Survival following AIDS was calculated as the interval from the date of AIDS diagnosis to the date of death if the person had died; otherwise to the date of last medical contact or 31 December 2006, whichever came first. Survival rates at 1 and 2 years following AIDS diagnosis, and median survival, were estimated by the Kaplan-Meier method. Further information on survival following AIDS is available in Li *et al* (2000) and Dore *et al* (2002).

1.2 National HIV Registry

National surveillance for newly diagnosed HIV infection

Newly diagnosed HIV infection, as well as AIDS, is a notifiable condition in each State/Territory health jurisdiction in Australia. Cases of newly 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, namecode (based on the first two letters of the family name and the first two letters of the given name), sex, date of birth, Aboriginal and Torres Strait Islander status, date of HIV diagnosis, CD4+ cell count at diagnosis, source of exposure to HIV and evidence of newly acquired HIV infection. Information on country of birth has been reported by all health jurisdictions for cases of HIV infection newly diagnosed in Australia from 1 January 2002 and information on language spoken at home has been reported by health jurisdictions in New South Wales, Victoria and Queensland for cases of HIV infection newly diagnosed from 1 January 2004.

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 primary HIV infection, 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 Registry*, to AIDS diagnoses, notified to the *National AIDS Registry*. HIV and AIDS diagnoses were matched by namecode, 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 Vandebelt 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 Registry* 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 among Aboriginal and Torres Strait Islander people

Information on Aboriginal and Torres Strait Islander status was routinely sought at diagnosis of HIV infection and AIDS in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia. Information on Aboriginal and Torres Strait Islander status was available for cases of HIV infection and AIDS newly diagnosed in New South Wales from January 1992 and from June 1998 in Victoria. Information on Aboriginal and Torres Strait Islander status was available for cases of HIV/AIDS diagnosed in the Australian Capital Territory from January 2005. Nationally, information on Aboriginal and Torres Strait Islander status at HIV/AIDS diagnosis was sought prospectively from May 1995. For HIV/AIDS diagnoses prior to 1995, Aboriginal and Torres Strait Islander status was obtained retrospectively through State/Territory health authorities. In 1997 – 2006, Aboriginal and Torres Strait Islander status was reported at HIV diagnosis by State/Territory health authorities other than the Australian Capital Territory prior to January 2005 and Victoria prior to June 1998 in 98% of Australian born cases. Further information is available in Guthrie *et al* (2000).

Rates of HIV/AIDS diagnosis by Aboriginal and Torres Strait Islander status and area of residence in Australia were calculated using the 2001 census population distribution, based on the Australian Standard Geographical Classification.

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 diagnosed 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:

- Boulos D, Yan P, Schanzer D, Remis RS and Archibald CP. Estimates of HIV prevalence and incidence in Canada, 2005. *Canada Communicable Disease Report* 2006; 32 (15): 165-174
- Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report*, 2005; 17. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2007
- European Centre for the Epidemiological Monitoring of AIDS. *HIV/AIDS in Europe. End-year report 2006*. Saint-Maurice: Institut de Veille Sanitaire, 2007. No 75
- Institute of Environmental Science and Research (ESR). *Notifiable and other diseases in New Zealand: Annual Report 2006*. Population and Environment Health Group, ESR, 2007
- Joint United Nations Programme on HIV/AIDS (UNAIDS). 2006 Report on the global HIV/AIDS epidemic: a UNAIDS 10th anniversary special edition. UNAIDS, 2006. <http://www.unaids.org>
- Joint United Nations Programme on HIV/AIDS (UNAIDS). 2.5 Million People living with HIV in India: press release. UNAIDS, 2007. http://www.unaids.org/en/MediaCentre/PressMaterials/FeatureStory/20070704_India_new_data.asp
- National Center for HIV/AIDS Dermatology and STDs (NCHADS). Consensus Workshop on HIV Estimation for Cambodia. NCHADS, 2007. <http://www.nchads.org/>
- Public Health Agency of Canada. *HIV and AIDS in Canada. Surveillance report to June 30, 2006*. Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada, 2006

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. Population rates of diagnosis of viral hepatitis were calculated for each State/Territory using yearly population estimates, provided by the Australian Bureau of Statistics.

Hepatitis B infection and hepatitis C infection was classified as newly acquired if evidence was available of acquisition in the 24 months prior to diagnosis (Communicable Diseases Network Australia 2004). Diagnoses of newly acquired hepatitis B infection was notifiable in all health jurisdictions. Diagnoses of newly acquired hepatitis C infection were recorded in all health jurisdictions other than Queensland.

Information on self-report of exposure to hepatitis B and hepatitis C is reported in a subset of diagnoses of newly acquired infection in the health jurisdiction which monitor transmission of hepatitis B and C. Exposure to hepatitis C was categorised into a hierarchy of risk for infection. For example, if injecting drug use was reported as well as a history of surgery, blood transfusion or tattoos, exposure was categorised as injecting drug use. Exposure to hepatitis C was categorised as household transmission when 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 among Aboriginal and Torres Strait Islander people

Information was sought on Aboriginal and Torres Strait Islander 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 Aboriginal and Torres Strait Islander status was reported in more than 50% of diagnoses in each year 2002 – 2006) using 2001 census data, provided by the Australian Bureau of Statistics.

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. The information was forwarded to the Liver Transplant Registry located at Royal Prince Alfred Hospital in Sydney.

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 Australian Government 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 was a notifiable condition in all health jurisdictions and infectious syphilis became notifiable in all jurisdictions in 2004. 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	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor
Infectious syphilis	Doctor Laboratory Hospital	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor
Chlamydia	Doctor Laboratory Hospital	Laboratory	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor
Donovanosis	Not notifiable	Laboratory	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor Laboratory

3.2 National surveillance for sexually transmissible infections among Aboriginal and Torres Strait Islander people

Information on Aboriginal and Torres Strait Islander status in diagnosed cases of chlamydia, gonorrhoea and infectious syphilis was sought through doctor notification in the Australian Capital Territory, the Northern Territory, Queensland, South Australia, Victoria and Western Australia. New South Wales and Tasmania were the only health authorities that sought information on Aboriginal and Torres Strait Islander status through laboratory notification.

Population rates of diagnosis of specific sexually transmissible infections were calculated by year and State/Territory of diagnosis using 2001 census data, available through the Australian Bureau of Statistics.

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 2007).

4 HIV, viral hepatitis and sexually transmissible infections in selected populations

4.1 HIV incidence and incidence of specific sexually transmissible infections among homosexually active men

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% also consented to syphilis testing. The date of HIV acquisition was calculated as the midpoint between the date of the last negative HIV test in HIM and the date of diagnosis of HIV infection, recorded either in HIM or the *National HIV Registry*, whichever was the earliest. Date of acquisition for syphilis was calculated as the midpoint between the date of last negative and the date of first positive test in HIM. Person years at risk was calculated from the date of study entry to the date of acquisition, or for those who did not acquire infection, to the date of the last negative test in HIM. Incidence of infection in the most recent year is subject to revision.

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

All clients attending needle and syringe program (NSP) sites during one week in 2002 (46 sites), 2003 (48 sites), 2004 (44 sites), 2005 (52 sites) and 2006 (45 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. Further information is available in MacDonald *et al* (1997 and 2000).

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

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

4.4 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).

4.5 HIV seroprevalence among people seen at sexual health clinics

A network of selected metropolitan sexual health clinics provided, at the end of each quarter and annually, 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 last HIV antibody test. Further information is available in McDonald *et al* (2001).

4.6 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 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).

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, 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, 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 46 needle and syringe programs in 2002, 48 sites in 2003, 44 sites in 2004, 52 in 2005 and 45 in 2006. Further information is available in MacDonald *et al* (1997 and 2000).

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

6.1 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 MACASHH'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 2003 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 (MACASHH, 2006).

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 2007, 27 participating clinical sites enrolled a total of 2,493 people into the AHOD.

Data from 20 of the 27 participating clinical sites were included in the analysis in Table 7.1.1. A person with HIV infection was classified as not on treatment if they were under active follow up in 2006 and either had no treatment records or had received treatment for at most 14 days. If the person received more than one treatment regimen during 2006, the treatment regimen of longest duration was included in the analysis in Table 7.1.1. Viral load and CD4+ cell counts were measured within three months of the date of cohort enrolment. In the years 1997 – 2000, information on the pattern of treatment uptake, shown in Figure 45, and viral load and CD4+ cell count at enrolment, shown in Figure 46, was based on data collected retrospectively through the clinical sites. The denominator used in these years was the number of people under active follow up in 2000.

A detailed summary of treatments data from the AHOD is published in the *Australian HIV Observational Database Annual Report* (NCHECR 2006).

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

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 Australian Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Australian Government 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 Australian 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 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.

The number of people dispensed each antiretroviral drug during a calendar year was estimated by calculating the average of the total number of people dispensed each drug during the corresponding financial year quarters. The number of people dispensed lamivudine per calendar year was estimated by deducting the number of person years of lamivudine treatment for hepatitis B infection (based on information from the National Pack Number Report) from the total number of people dispensed lamivudine for treatment of HIV and/or hepatitis B infection. The total number of people receiving treatment for HIV infection was estimated as the number of people dispensed (lamivudine + kivexa + combivir + trizivir + emtricitabine + truvada) through the S100 Program, divided by the proportion of people enrolled on AHOD who were receiving any of these mutually exclusive antiretroviral treatments during the same calendar year.

7.3 Monitoring prescriptions for treatment of viral hepatitis

The number of prescriptions for lamivudine, adefovir and entecavir for treatment of hepatitis B infection, for interferon and ribavirin therapy, pegylated interferon and ribavirin combination therapy and pegylated interferon only, was monitored through the Highly Specialised Drugs (HSDs) Program, a joint Australian Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Australian Government Department of Health and Ageing. The estimated number of people who were previously hepatitis C treatment naïve and received combination interferon and ribavirin for hepatitis C infection was approximately 1,458 in 2002. In 2003, the estimated number receiving treatment dropped to 1,142, possibly due to the expected inclusion of pegylated interferon and ribavirin into the HSD program in late 2003. In 2004 and 2005, the estimated number of people receiving combination interferon and ribavirin for hepatitis C infection was 1,831 and 1,847, respectively. In 2006, the number receiving treatment for hepatitis C infection increased to 2,847, due to removal in April 2006, of the requirement for biopsy proven liver damage prior to treatment. The estimates were based on the assumption that 50% of patients were receiving treatment for 6 months, and the remaining were receiving treatment for 12 months.

7.4 Monitoring transmitted drug resistance in Australian HIV-1 isolates

The NSW State Reference Laboratory for HIV/AIDS at St Vincent's Hospital, Sydney, and the Victorian Infectious Diseases Reference Laboratory, Melbourne, perform genotypic antiretroviral drug resistance testing on a selection of cases of newly acquired HIV-1 infection. Results from these tests, including HIV-1 subtype and HIV-1 drug resistance mutations, were compiled and forwarded to the NCHECR for analysis. The specific drug resistance mutations collected were based on the recommended World Health Organisation form, as published by Shafer *et al* 2007. For this analysis, HIV-1 drug resistance mutations were grouped by the class of drug they conferred resistance against.

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