HIV/AIDS, VIRAL HEPATITIS AND SEXUALLY TRANSMISSIBLE INFECTIONS IN AUSTRALIA

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2008

edited by

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National Centre in HIV Epidemiology and Clinical Research

in collaboration with

Australian Gonococcal Surveillance Programme

Communicable Diseases Network Australia

National Centre in HIV Social Research

National Serology Reference Laboratory, Australia

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

The National Centre in HIV Epidemiology and Clinical Research is funded by the Australian Government Department of Health and Ageing and is affiliated with the Faculty of Medicine, The University of New South Wales. Its work is overseen by the Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis. The NCHECR Surveillance Program is a collaborating unit of the Australian Institute of Health and Welfare.

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Preface

This report is the twelfth 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.nchecr.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 2007 and reported by 31 March 2008, is available through the website **http://www.nchecr.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 2008,* 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 2008* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2007, as reported by 31 March 2008. 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

- Association for Prevention and Harm Reduction Programs, VIC
- Australian Injecting and Illicit Drug Users' League
- 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 Institute of Health and Welfare, Canberra, ACT
- Australian Red Cross Blood Service, Melbourne, VIC
- Communicable Diseases Network Australia, Canberra, ACT
- Hepatitis Australia, Canberra, ACT
- National Aboriginal Community Controlled Health Organisation, ACT
- 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
- AIDS/STD Program, Disease Control, Department of Health, Darwin, NT
- Queensland Health, Brisbane, QLD
- Sexually Transmitted Diseases (STD) Services, Internal Medicine Service, Royal Adelaide Hospital, SA
- Department of Community and Health Services, Hobart, TAS
- STD/Blood-Borne Virus Program, Infectious Diseases Unit, Department of Human Services, Melbourne, VIC; The Macfarlane Burnet Institute for Medical Research and Public Health Limited, Prahran, VIC
- Communicable Diseases Control Branch, Department of Health, Perth, WA

Australian Gonococcal Surveillance Programme

Reference Laboratories:

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

Collaborative group on sentinel surveillance in sexual health clinics

- Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
- RPA Sexual Health, 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

State/Territory Departments of Corrections

- ACT Corrective Services, Woden, ACT
- 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; Royal Prince Alfred Hospital Sexual Health, Camperdown; Macquarie Sexual Health Centre, Dubbo; Nepean Sexual Health and HIV Clinic, Penrith; Holden Street Clinic, Gosford; Lismore Sexual Health & AIDS Services, Lismore; St Vincent's Hospital, Darlinghurst, Sydney Sexual Health Centre, Sydney, Dr Ellis General Medical Practice, Coffs Harbour; Taylor Square, Darlinghurst; East Sydney Doctors, Surry Hills; NSW
- Communicable Disease Centre, Royal Darwin Hospital, 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; Cairns Sexual Health Services, 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

- Directions ACT, Canberra
- AIDS Council of NSW (Sydney and Hunter); Albury Community Health Centre, Albury; First Step Program, Port Kembla and Nowra; Health ConneXions, Harm Reduction Program, Liverpool; Hunter Harm Reduction Services, Newcastle; Indo-Chinese Outreach Network (ICON) Bankstown, Cabramatta and Liverpool; Kirketon Road Centre and K2, Kings Cross; NSW Users and AIDS Association (NUAA), Surry Hills; Northern Rivers Area Health Service, Ballina, Byron Bay, Lismore, Murwillumbah, Nimbin, and Tweed Heads; Resource and Education Program for IDUs, Redfern and Canterbury; Responsive User Services in Health (RUSH), Manly, Ryde and St Leonards; St George NSP, Kogarah; South Court Primary Care NSP, Nepean; Sydney West Area Health Service HIV/Hepatitis C Prevention Service, Auburn, Blacktown, Merrylands, Mt Druitt and Parramatta
- Northern Territory AIDS and Hepatitis C Council, Alice Springs, Darwin and Palmerston, NT
- Biala Community Alcohol and Drug Services, Brisbane; Cairns Base Hospital NSP, Cairns; Cairns Youthlink, Cairns; Queensland Injectors Health Network (QuIHN), Brisbane, Gold Coast and Sunshine Coast; Kobi House, Toowoomba; West Moreton Sexual Health Service, Ipswich
- Drug and Alcohol Services South Australia, Adelaide; Hindmarsh Centre, Hindmarsh; Nunkuwarrin Yunti Community Health Centre, Adelaide; South Australia Voice for Intravenous Education (SAVIVE): AIDS Council South Australia, Norwood; Parks Community Health Service, Adelaide; Port Adelaide Community Health Service, Port Adelaide; Noarlunga Community Health Service, Adelaide; Northern Metropolitan Community Health Service NSP and Shopfront, Salisbury
- Clarence Community Health Centre, Clarence; Devonport Community Health Centre, Devonport; Salvation Army Launceston, Launceston; Tasmanian Council on AIDS, Hepatitis & Related Diseases (TasCAHRD), Hobart and Glenorchy; The Link Youth Health Service, Hobart
- Barwon Health Drug and Alcohol Services, Geelong; Bendigo NSP Services, Bendigo; Darebin Community Health Centre, Northcote; Health Information Exchange, St Kilda; Health Works, Footscray; Melbourne Inner Needle Exchange, Collingwood; North Richmond NSP, North Richmond; South East Alcohol and Drug Service, Dandenong; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Melbourne
- WA AIDS Council Mobile Exchange, Perth; Western Australia Substance Users Association (WASUA), Perth and Bunbury
- Centre for Immunology, St Vincent's Hospital, Sydney, NSW

Annual Surveillance Report 2008 Advisory Committee

- Dr Russell Waddell, Australasian Chapter of Sexual Health Medicine, Sydney, NSW
- Phillip Keen, Australian Federation of AIDS Organisations, Sydney, NSW
- Rhonda Owen, Australian Government Department of Health and Ageing, Canberra, ACT
- Helen Tyrrell, Hepatitis Australia, Canberra, ACT
- Robert van der Hoek, Australian Institute of Health and Welfare, Canberra, ACT
- Dr Darrell Crawford, Australian Liver Association, Sydney, NSW
- Dr Cindy Shannon, Indigenous Australians' Sexual Health Committee
- Tadgh McMahon, Multicultural HIV/AIDS and Hepatitis C Service, Sydney, NSW
- Jo Watson, National Association of People Living with HIV/AIDS, Sydney, NSW
- 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 Handan Wand, Surveillance Program, National Centre in HIV Epidemiology and Clinical Research

Summary

HIV/AIDS

- By 31 December 2007, 27 331 diagnoses of HIV infection, 10 303 diagnoses of AIDS and 6 767 deaths following AIDS had occurred in Australia.
- The estimated number of people living with HIV infection in Australia in 2007 was 16 692, including 11 928 in the age group 15 – 49 years.
- The number of new HIV diagnoses in Australia has increased each year from 718 in 1999 to 1 051 in 2007, resulting in an increase of almost 50%.
- Differences between the States and Territories were observed in the recent trends of newly diagnosed HIV infection. New South Wales recorded a stable population rate at around 6.0 per 100 000 population over the past five years whereas in Queensland the rate increased from 3.3 in 2003 to 4.6 in 2007. The rate of HIV diagnosis also increased in South Australia, Tasmania and Western Australia, from 2.9, 0.4 and 2.9 in 2003 to 3.6, 1.1 and 3.6 in 2007, respectively. In Victoria, the rate of HIV diagnosis was stable in 2006 – 2007, after having steadily increased each year from 1999.
- Based on information collected systematically for the first time, around 10% of cases of HIV infection newly diagnosed in Australia in 2007 had been previously diagnosed overseas.
- The number of diagnoses of newly acquired HIV infection was relatively stable in 2003 – 2007 at around 280 each year. One reference laboratory has made use of a specialised assay for diagnosing recent HIV acquisition. At this laboratory, the percentage of cases with evidence of recent HIV acquisition increased from 29.5% to 46.6% when the assay detected cases were included.
- HIV continued to be transmitted primarily through sexual contact between men.
- There was a similar *per capita* rate of HIV diagnosis 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 in 2003 – 2007 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 17% over the past five years to 58.8 per 100 000 population in 2007.
- At the end of 2007, an estimated 207 600 people were living in Australia with chronic hepatitis C infection, including 47 600 with moderate to severe liver disease.
- The reported number of diagnoses of newly acquired hepatitis C infection fluctuated between 355 and 520 in 2003 – 2007.
- 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 8% in 2003 to 5% in 2007. Within this group, hepatitis C prevalence remained stable at around 20% in 2003 – 2007.
- In 2007, chronic hepatitis B infection and chronic hepatitis C infection were the underlying causes of liver disease in 2.5% and 25.2% of liver transplants, respectively.
- An estimated 3 539 people with chronic hepatitis C infection were prescribed ribavirin and pegylated interferon combination treatment or pegylated interferon only in 2007.

Sexually transmissible infections other than HIV

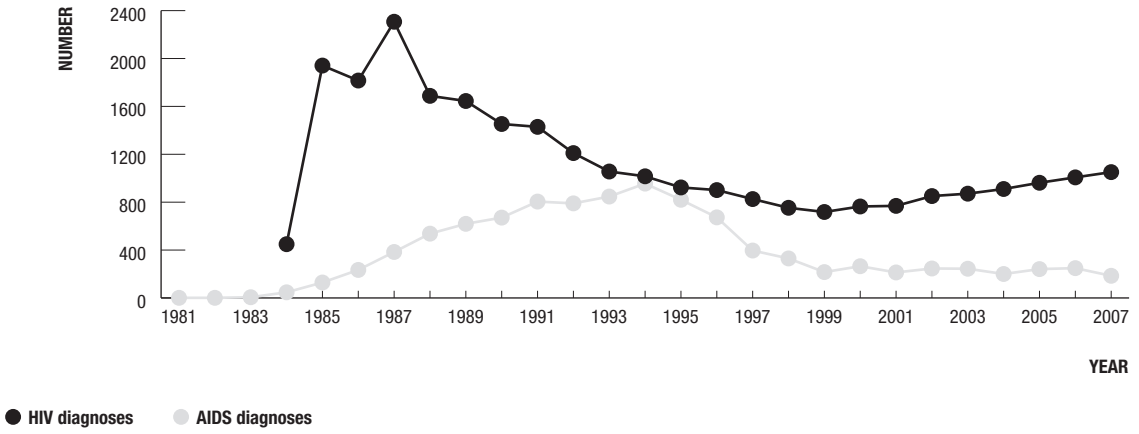
- Chlamydia was the most frequently reported notifiable condition in Australia in 2007 with 51 867 reported diagnoses. The population rate of diagnosis of chlamydia in 2007 was 245 per 100 000 population, a 7% increase over the rate in 2006, continuing the increase seen over the past ten years.
- The population rate of diagnosis of gonorrhoea increased from 33.7 in 2003 to 41.3 in 2006 and declined to 36.1 in 2007.
- The rate of diagnosis of infectious syphilis more than doubled from 3.1 in 2004 to 6.6 in 2007. These increases predominantly occurred among 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

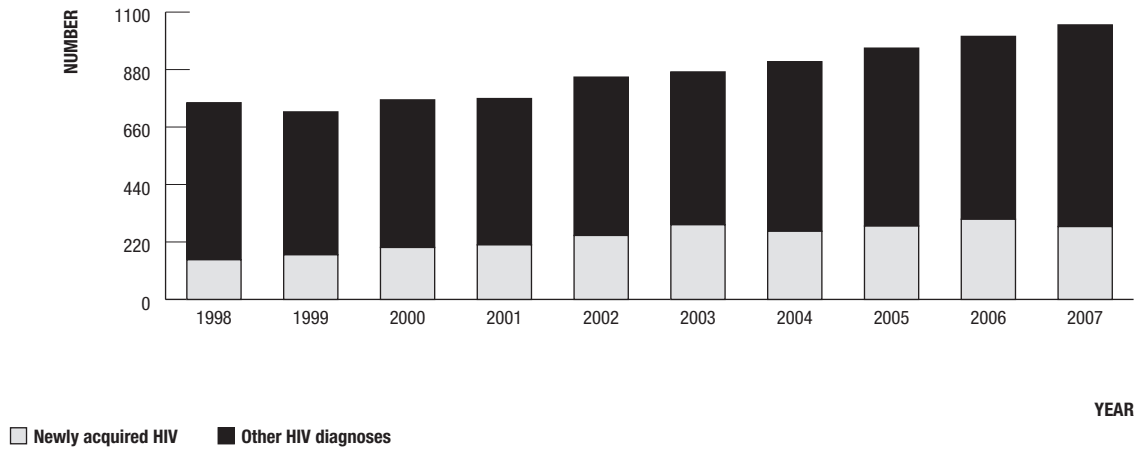
The annual number of new HIV diagnoses in Australia has steadily increased over the past eight years, from 718 cases in 1999 to 1 051 in 2007 (Figure 1). Among cases of newly diagnosed HIV infection, an increasing number were in people who had acquired HIV infection within the previous year (Figure 2).

Figure 1 Number of diagnoses of HIV infection and AIDS[1] 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 across Australia. In New South Wales, the rate of diagnosis per 100 000 population declined from 6.1 in 1998 to 5.1 in 2001 and then increased to 6.2 in 2007. The rate in Victoria almost doubled, from 2.8 in 1998 – 1999 to around 5.5 in 2006 – 2007. The rate also increased in Queensland, South Australia and Western Australia, from 2.9, 2.4 and 2.8 in 1998, to 4.6, 3.6 and 3.6, respectively, in 2007 (Figure 3). In 2007, for the first time, information was collected at a national level on whether or not each newly reported infection had been previously diagnosed overseas. Around 10% of cases of HIV infection newly diagnosed in Australia in 2007 had been previously diagnosed overseas (Table 1.2.4). These cases have generally been included in past counts and are included in the count for 2007.

Figure 3 Newly diagnosed HIV infection, 1998 – 2007, by year and State/Territory

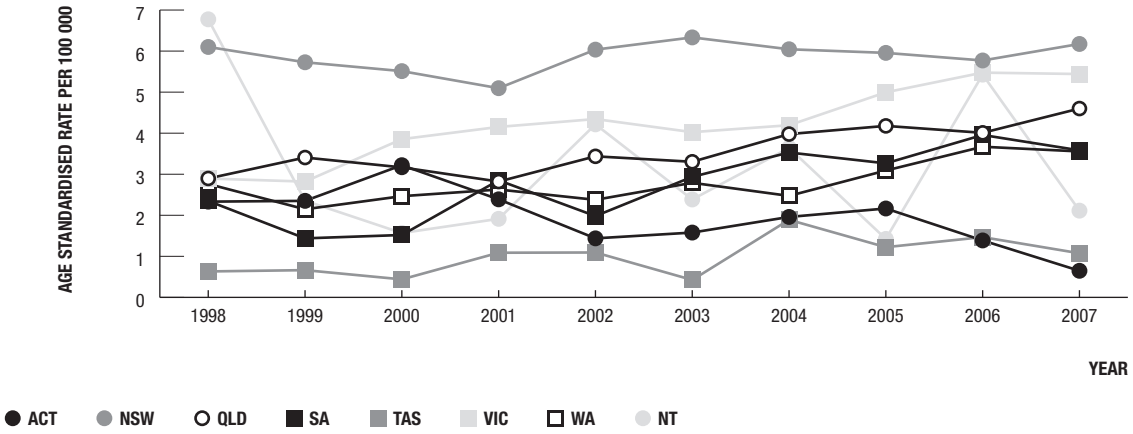
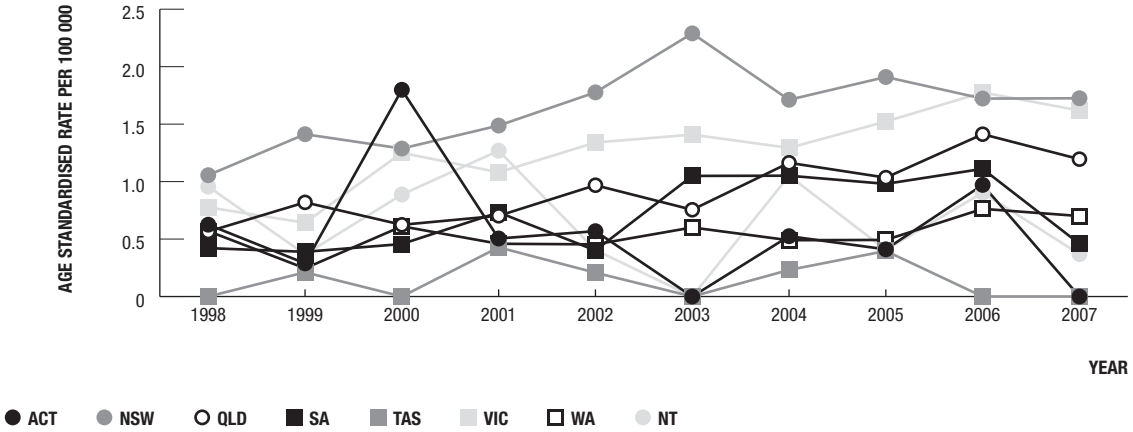


Figure 4 Newly acquired HIV infection, 1998 – 2007, by year and State/Territory

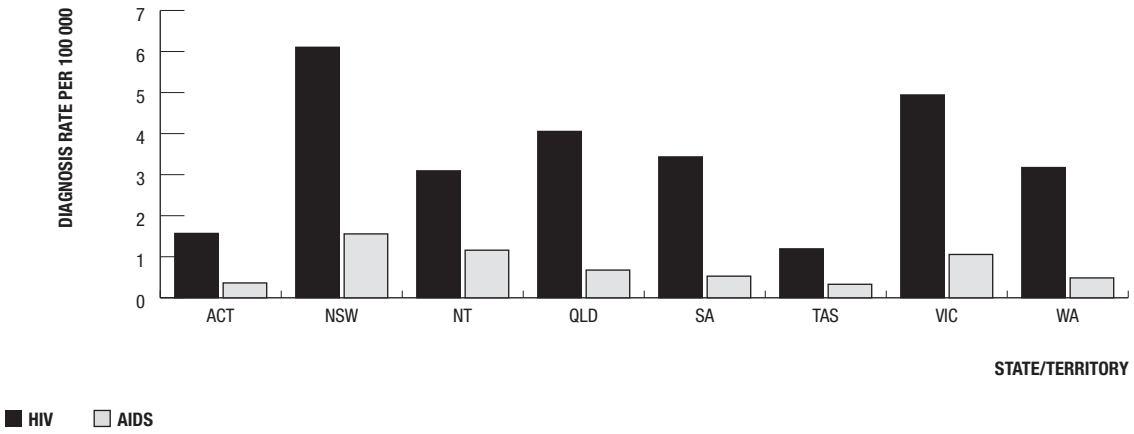


Within the newly reported cases of HIV infection are a subgroup that are documented as having been newly acquired in the previous year. The population rate of diagnosis in this subgroup increased from 0.8 in 1998 to 1.3 in 2007. In New South Wales, the rate increased from 1.1 per 100 000 in 1998 to 1.7 in 2007 (Figure 4). Over the same period, the rate increased by around 50% in Queensland and Victoria, from 0.6 to 1.2, and from 0.8 to 1.6, respectively.

One reference laboratory routinely used a specialised assay for detecting newly acquired HIV infections and identified an additional 78 cases on this basis (Table 1.2.7). At this laboratory, the percentage of newly diagnosed cases for which there was evidence of recent HIV acquisition increased from 29.5% to 46.6% when these additional cases are taken into account.

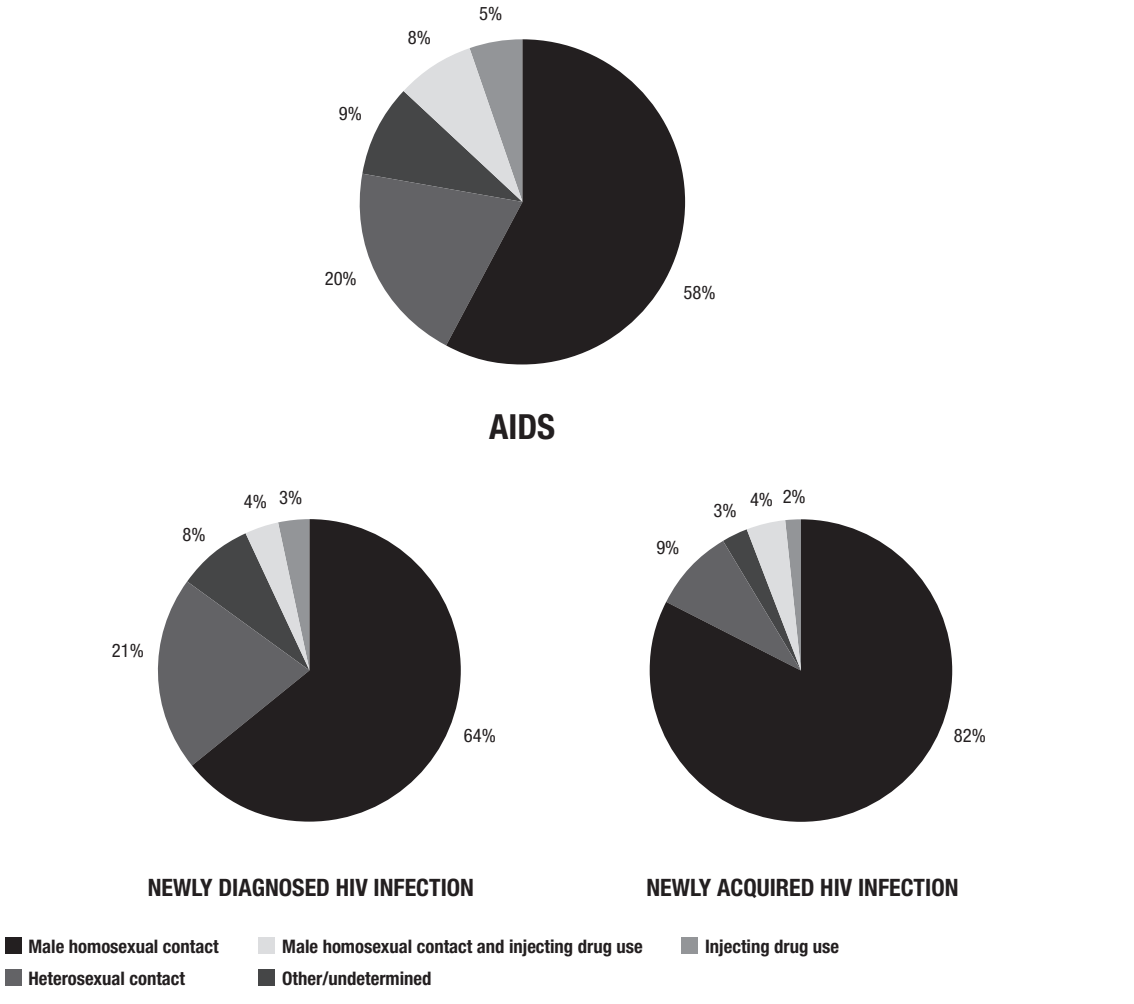
The annual number of AIDS diagnoses in Australia has remained relatively stable in 2001 – 2007 at around 240, as a result of the wide availability of effective antiretroviral therapies (Figure 1).

Figure 5 Average annual incidence of newly diagnosed HIV infection and AIDS, 2003 – 2007, 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 (1.2) and Victoria (1.1) recorded the second and third highest rate of AIDS diagnosis in Australia in 2003 – 2007. Lower population rates of AIDS diagnosis were recorded in Queensland (0.7), South Australia (0.5), Western Australia (0.5), the Australian Capital Territory (0.4) and Tasmania (0.3) (Figure 5).

Figure 6 AIDS, newly diagnosed HIV infection and newly acquired HIV infection, 2003 – 2007, by HIV exposure category



Transmission of HIV in Australia continues to occur primarily through sexual contact between men (Figure 6). In 2003 – 2007, a history of male homosexual contact was reported in 68% of cases of newly diagnosed HIV infection. Among cases of newly acquired HIV infection, male homosexual contact was reported in 86%, injecting drug use among women and heterosexual men in 2% and heterosexual contact only in 9%. In 3% of cases, exposure to HIV remained undetermined.

Figure 7 AIDS incidence in Australia, 1998 – 2007, by year and region of birth

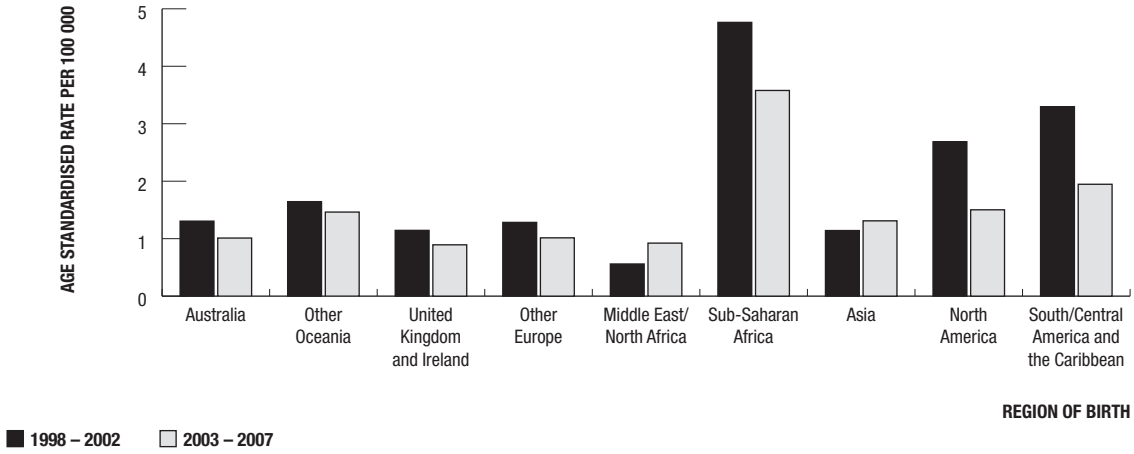
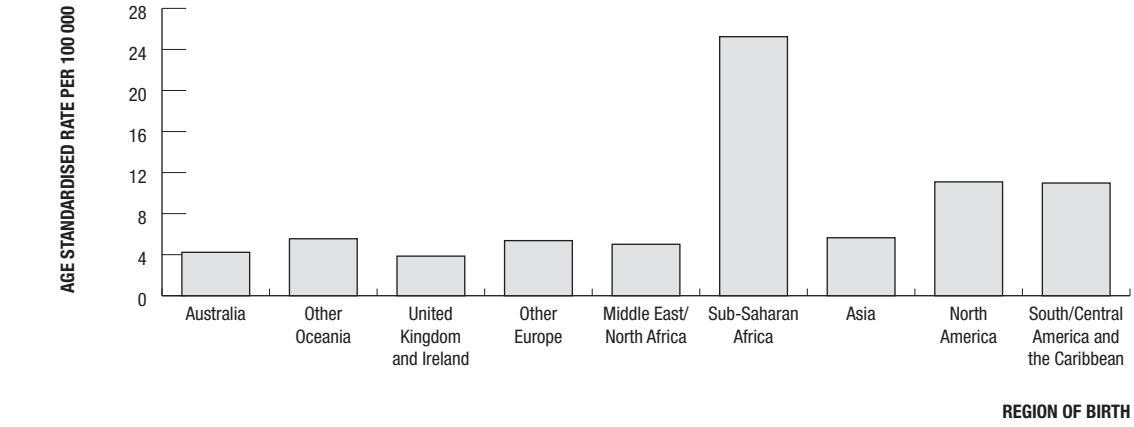
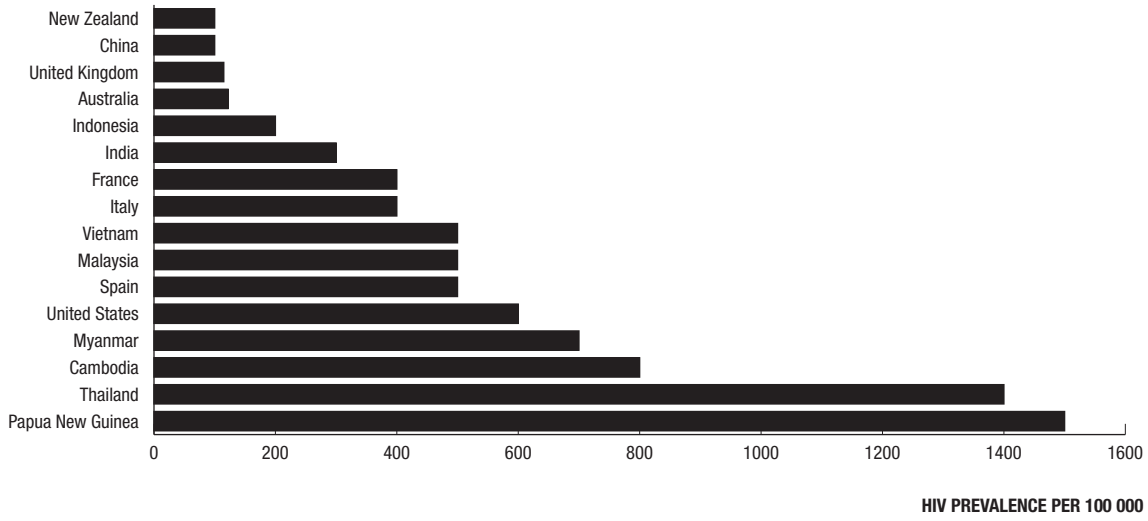


Figure 8 HIV diagnoses in Australia, 2003 – 2007, by region of birth



People born in Australia accounted for 68% and 63% of AIDS diagnoses in Australia in 1998 – 2002 and in 2003 – 2007, respectively. AIDS incidence in Australia declined in 2003 – 2007 compared with the years 1998 – 2002 among people born in regions of the world other than North Africa/Middle East and Asia (Figure 7). The percentage of new HIV diagnoses among people born in Australia also declined, from 61% in 2003 to 56% in 2007. Countries in sub-Saharan Africa were associated with the highest population rate of HIV diagnosis in Australia in 2003 – 2007 (Figure 8). Among cases of HIV infection newly diagnosed in the past three years, 9% were in people who reported speaking a language other than English at home.

Figure 9 HIV prevalence in the population aged 15 – 49 years in selected countries



In 2007, the estimated number of people aged 15 – 49 years living in Australia with HIV infection was 11 928. As a national prevalence, the rate was similar to that in the United Kingdom in 2006 and almost 5 fold lower than that in the United States. Substantially higher estimates of prevalence were estimated for Cambodia, Myanmar, Thailand and Papua New Guinea.

Viral hepatitis

The population rate of reported diagnoses of hepatitis A infection in Australia declined over the past five years, from 2.1 per 100 000 population in 2003 to 0.8 in 2007. The decline in the annual number of new diagnoses of hepatitis A infection occurred predominantly among people in the age groups 30 – 39 years and 20 – 29 years.

The population rate of diagnosis of newly acquired hepatitis B infection declined from 1.7 in 2003 to 1.4 per 100 000 population in 2007 (Figure 10). From 2002 to 2005, the rate of diagnosis of newly acquired hepatitis B infection declined substantially among people aged 15 – 19 years and 20 – 29 years and stabilised from 2005 to 2007. Adolescent "catch up" vaccination programs may have played a role in this reduction by increasing vaccine coverage. 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

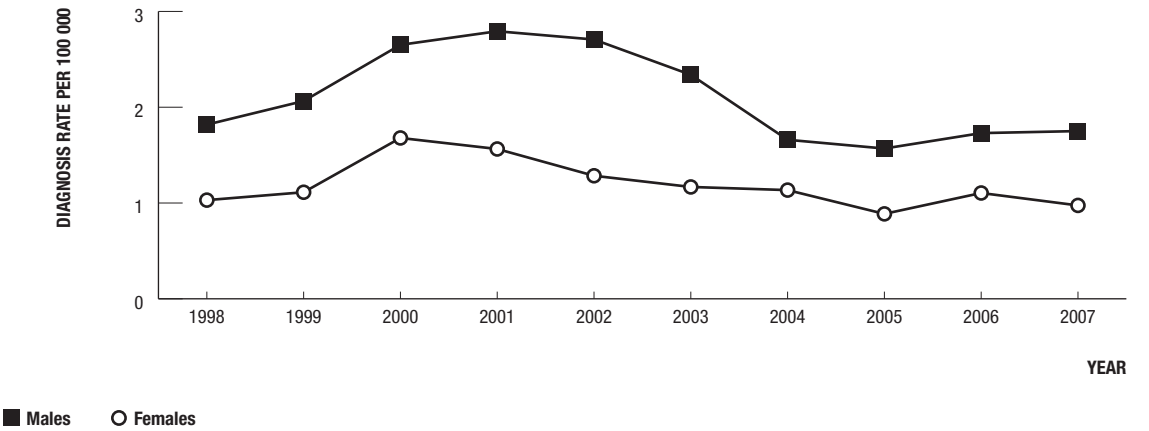
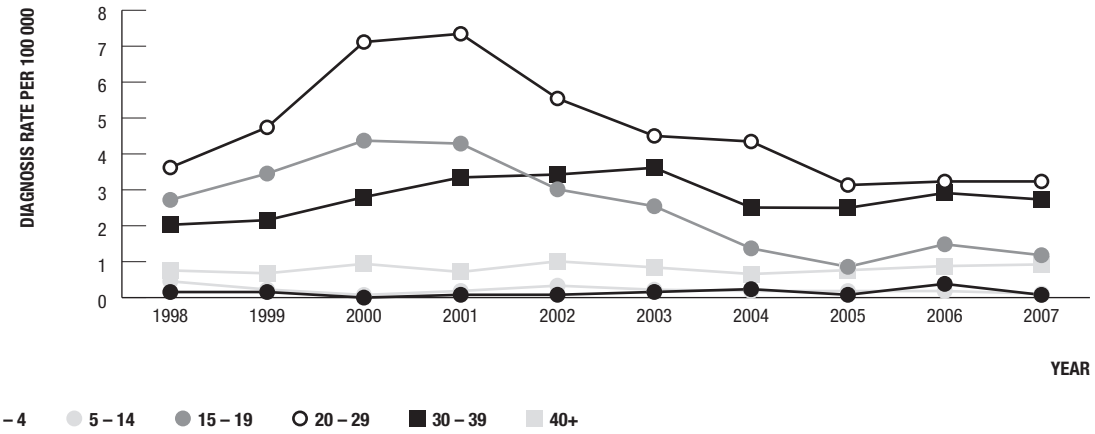
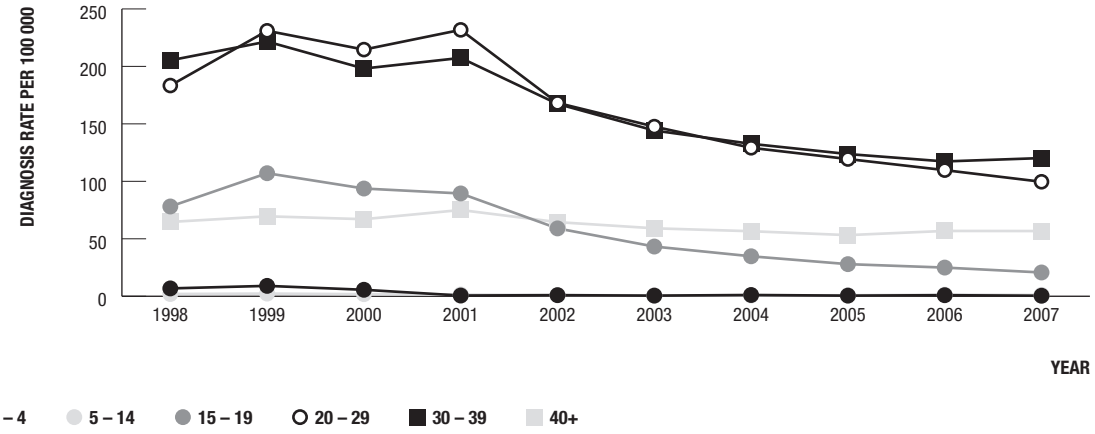


Figure 11 Newly acquired hepatitis B infection by year and age group



Information on the source of exposure to hepatitis B infection, 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 over the years from 2003 to 2007. The proportion of diagnoses attributed to heterosexual contact declined from 21% in 2003 to 16% in 2007 and the source of exposure to hepatitis B was undetermined in around 21% 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 70.7 in 2003 to 58.8 in 2007. It declined by 33% in the 20 – 29 year age group and by 17% 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 52% from 2003 to 2007. Mathematical modelling of the hepatitis C virus epidemic in Australia by the Hepatitis C Virus Projections Working Group (Razali *et al* 2007) suggested 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 2003 – 2007 were documented as having been acquired within the previous two years (Figure 13). 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 2.1.11). Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence declined from 15.1 per 100 person years in 2003 to 8.6 per 100 person years in 2007 (Table 4.3.1).

Figure 13 Newly acquired hepatitis C by year and sex

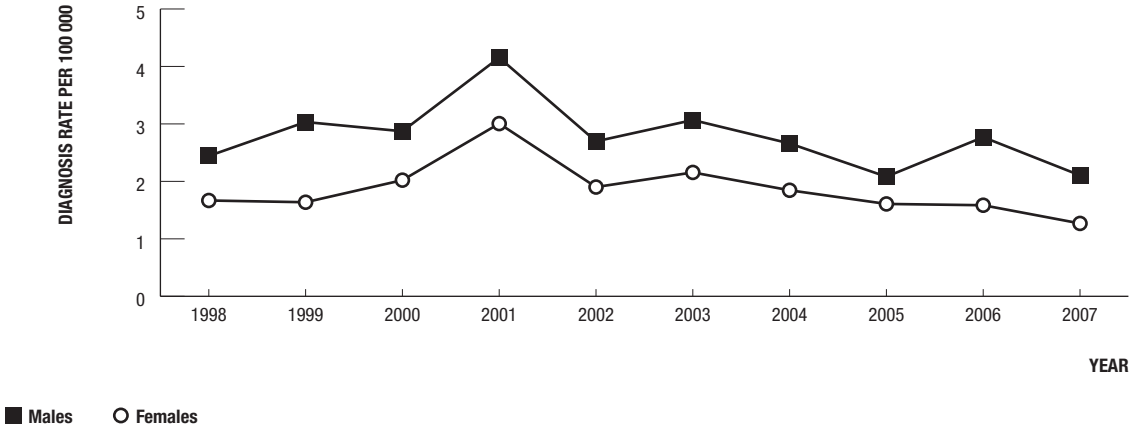
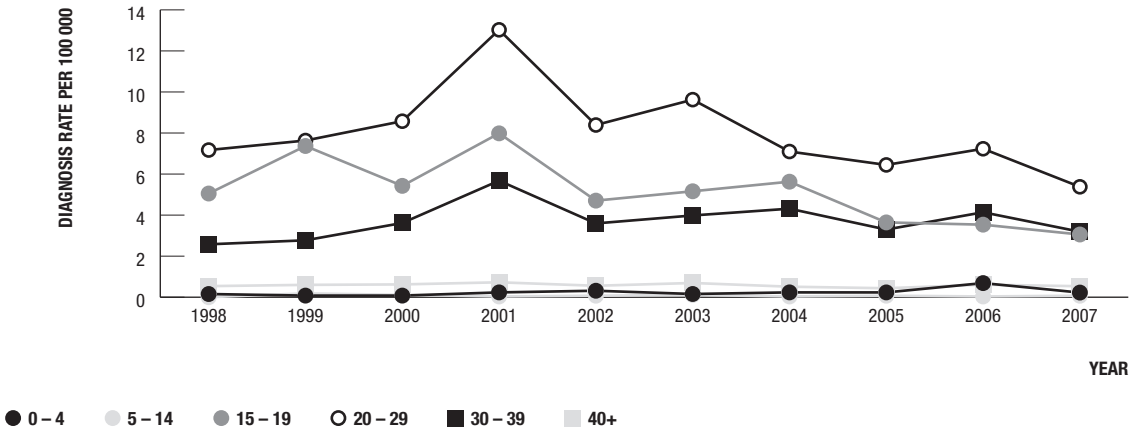


Figure 14 Newly acquired hepatitis C by year and age group



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 2.1.12).

In 2007, an estimated 278 000 people living in Australia had been exposed to hepatitis C virus. Of these, 70 400 people were estimated to have cleared their infection, 160 000 had chronic hepatitis C infection and early liver disease (stage F0/1), 42 000 had chronic hepatitis C infection and moderate liver disease (stage F2/3), and 5 600 were living with hepatitis C related cirrhosis.

Hepatitis C prevalence in 2007 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 (1.4%) (Figure 40).

Sexually transmissible infections other than HIV

Chlamydia was the most frequently reported infection notified in Australia in 2007, with 51 867 newly diagnosed cases. Among males, the population rate of reported diagnoses per 100 000 population more than doubled, from 46.7 in 1998 to 101.5 in 2002 and almost doubled again to 199.0 in 2007. Among females, the rate of chlamydia diagnoses doubled from 74.8 in 1998 to 146.3 in 2002, and then doubled again to 293.0 in 2007 (Figure 15). Increasing rates of diagnosis of chlamydia were reported in all States and Territories and were greatest in the 20 – 29 and 15 – 19 year age groups, which accounted for almost 80% of the annual number (Figure 16). From 2003 to 2007, the female to male sex ratio in the 15 – 19 year age group was 3.4:1 whereas in the 20 – 29 year age group it was 1.4:1. The rate of testing for chlamydial infection has increased over time and is likely to be partly responsible for the ongoing increase in numbers of cases. Age and sex specific patterns of diagnosis may also be influenced by differential testing rates.

Figure 15 Chlamydia by year and sex

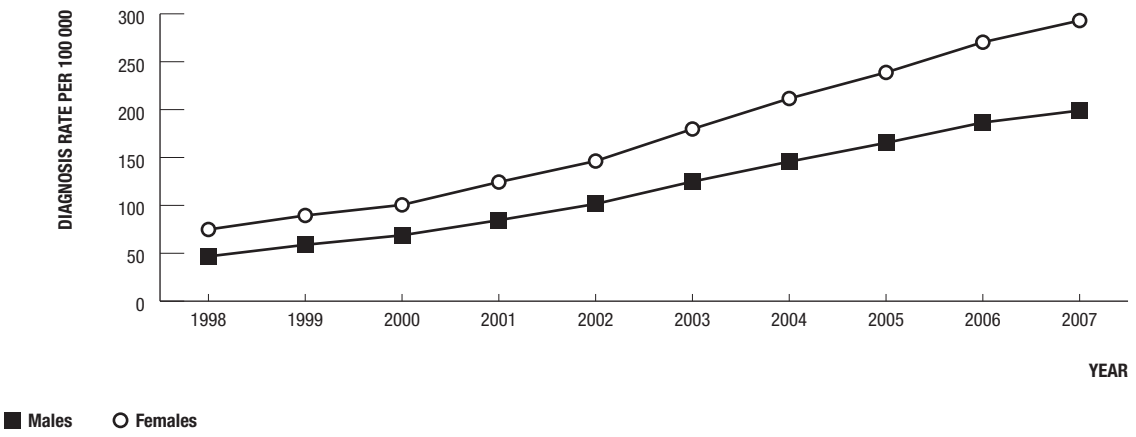
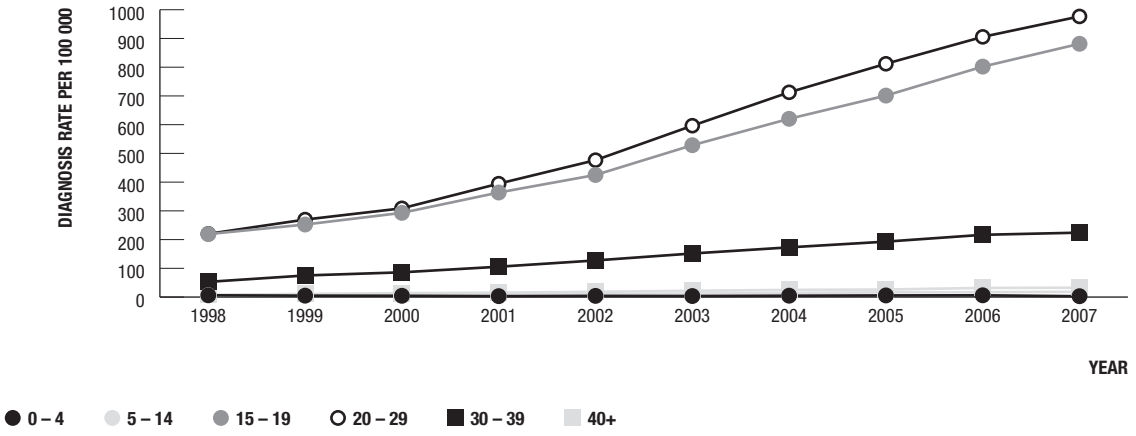


Figure 16 Chlamydia by year and age group



The population rate of diagnosis of gonorrhoea increased from 1998 to 2002 by about 16% among males and by 4% among females whereas from 2003 to 2006, the rate increased by 20% in males and 26% in females. From 2006 to 2007, the population rate of diagnosis of gonorrhoea declined by 15% among males and by 6% among females (Figure 17). Substantial declines in the rate of gonorrhoea diagnosis occurred from 2006 to 2007 in Victoria (23.8% decline), New South Wales (20.3% decline) and Queensland (13.4% decline) whereas the Australian Capital Territory, Tasmania and Western Australia recorded an increased rate of gonorrhoea diagnosis. The decline in the rate of diagnosis occurred first in the age group 15 – 19 years in 2006 and was followed in 2007 by a decline in the 20 – 29 and 30 – 39 year age groups (Figure 18).

Figure 17 Gonorrhoea by year and sex

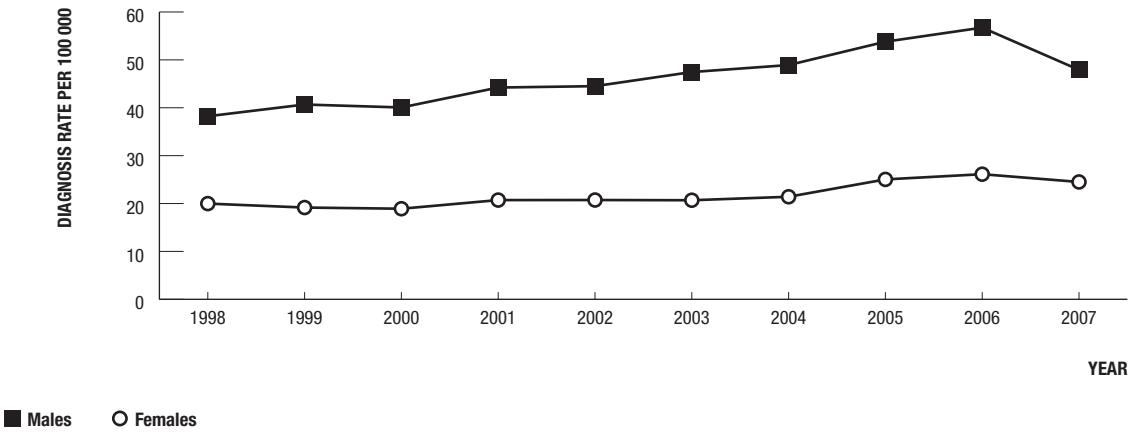
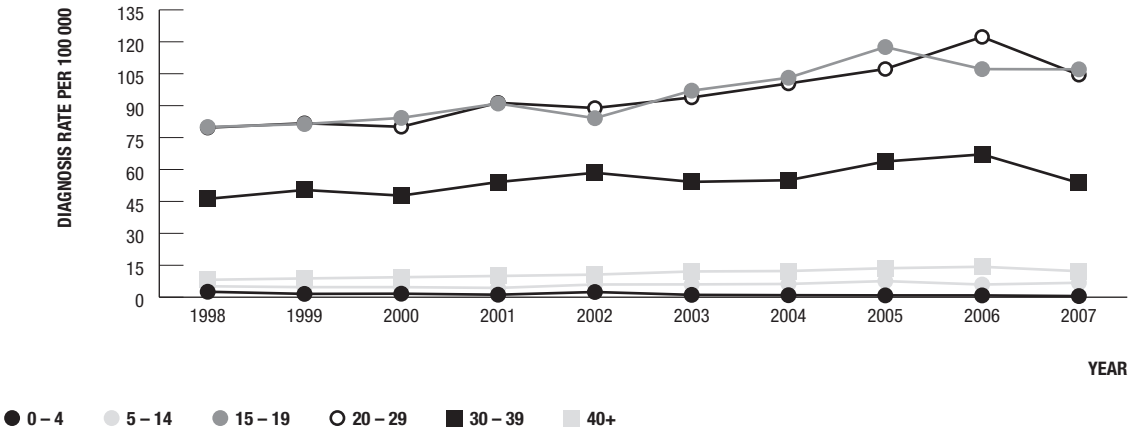


Figure 18 Gonorrhoea by year and age group



The population rate of diagnosis of infectious syphilis more than doubled, from 3.1 per 100 000 in 2004 to 6.6 in 2007 (Figure 19). The rate of diagnosis of infectious syphilis increased by 14% in the age group 15 – 19 years, by 60% in the 20 – 29 year age group and almost doubled in the 40 – 49 year age group (Figure 20). The increases occurred in New South Wales, Victoria and Queensland and were almost completely confined to homosexually active men. In contrast, reported diagnoses of infectious syphilis in the Northern Territory declined from 62.9 in 2006 to 49.0 in 2007.

Figure 19 Infectious syphilis by year and sex

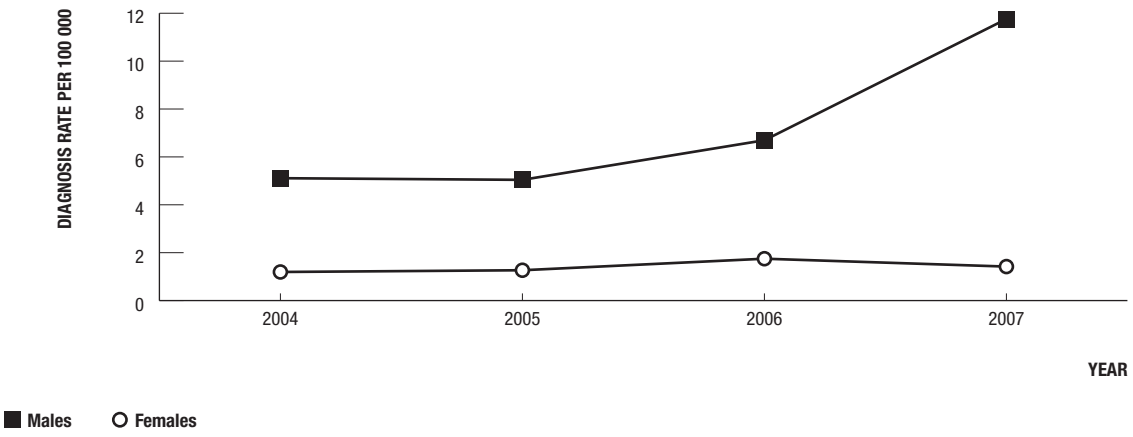
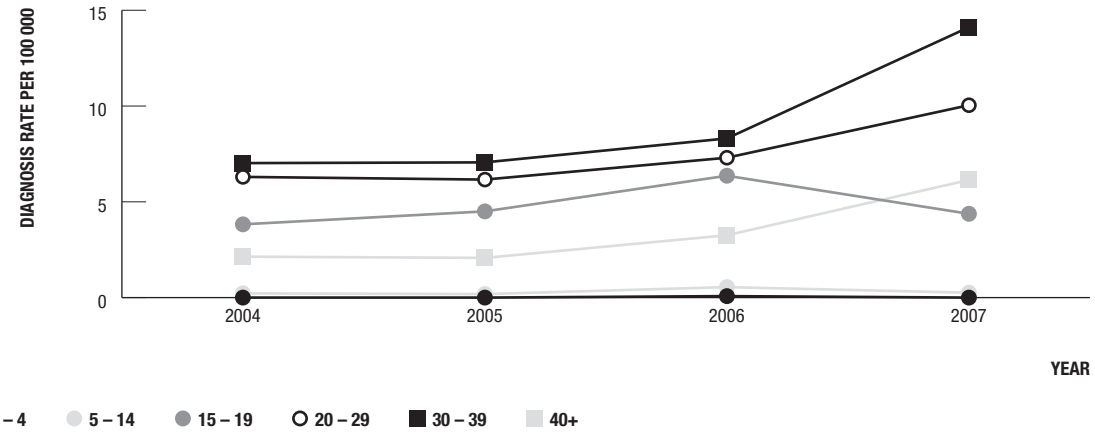


Figure 20 Infectious syphilis by year and age group



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 16 in 2003 to 3 in 2007, may be a consequence of improved case ascertainment and treatment.

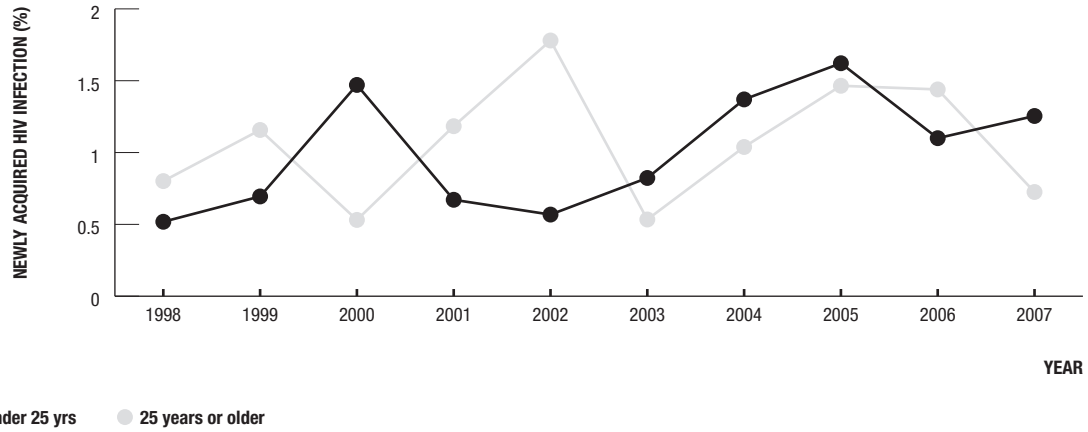
HIV, viral hepatitis and sexually transmissible infections in selected populations

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

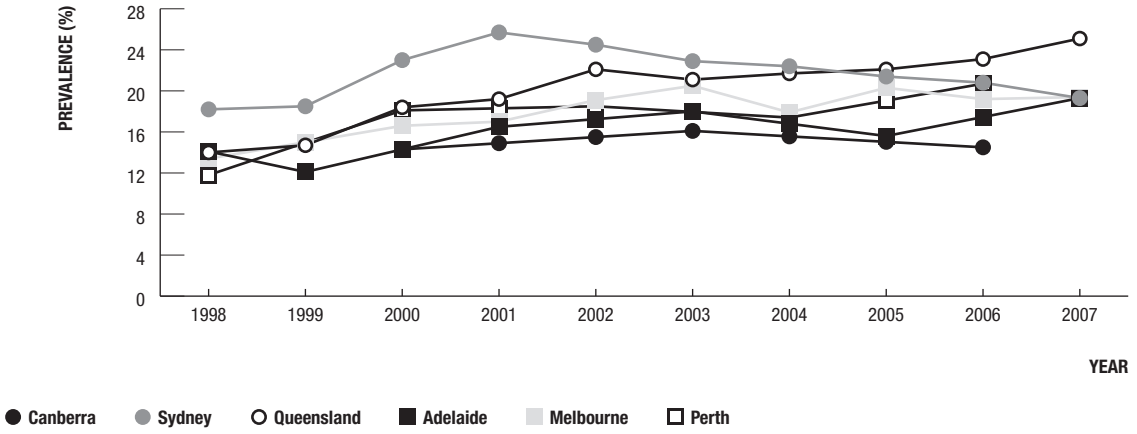
Men with a history of homosexual contact continue to make up the majority of people diagnosed with HIV infection in Australia. The overall number of new HIV diagnoses in this category was 2 575 and 3 262, including 846 (32.9%) and 1 222 (37.5%) diagnoses of newly acquired HIV infection in 1998 – 2002 and 2003 – 2007, respectively. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (89%) than total HIV diagnoses (75%) in 2007. This difference may partly reflect higher levels of HIV antibody testing among gay and other homosexually active men.

Figure 21 Newly acquired HIV infection among gay and other homosexually active men seen at sexual health clinics by year and age group



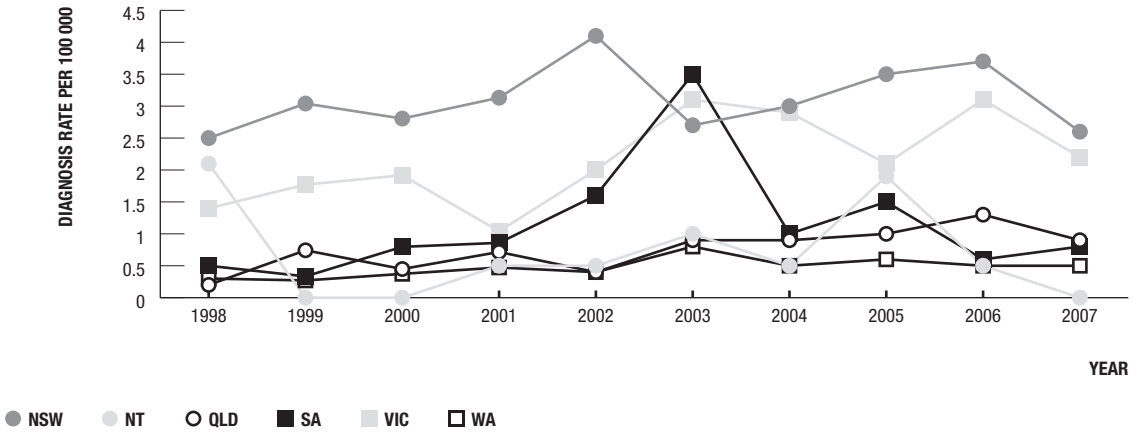
Among gay men seen at metropolitan sexual health clinics, the percentage with newly acquired HIV infection increased both in those aged less than 25 years, from 0.8% in 2003 to 1.2% in 2007, and in those aged 25 years or older, from 0.5% in 2003 to 0.7% in 2007 (Figure 21). In the Health in Men (HIM) cohort study among homosexually active men in Sydney, 8 and 1 were diagnosed with newly acquired HIV infection in 2003 and 2007, respectively, giving an incidence of 0.71 and 0.15 per 100 person years, respectively (Table 4.1.1).

Figure 22 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 peaked in 2001 at 25.7% and then steadily declined to 19.3% by 2007 (Figure 22). The same surveys carried out among gay and other homosexually active men in Adelaide and Melbourne indicated that the level of reported unsafe sexual behaviour had plateaued at around 17% and 19%, respectively, over the past five years whereas the level of reported unsafe sexual behaviour had increased in Brisbane to 25.1% by 2007 and in Perth to 20.7% by 2006.

Figure 23 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 2.7 per 100 000 population in 2003 to 3.7 in 2006 and then declined to 2.6 in 2007. In Victoria, the rate declined from 3.1 in 2003 to 2.2 in 2007 (Figure 23).

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 in 1998 – 2007 (Figure 24). The rate of HIV diagnosis in the non-Indigenous population increased steadily from 3.7 per 100 000 population in 1998 to 5.2 in 2007, whereas the rate in the Aboriginal and Torres Strait Islander population has remained relatively stable at around 4.6 in 1998 – 2002 and around 4.5 in 2003 – 2007. The rate of AIDS diagnosis in the Aboriginal and Torres Strait Islander population declined from a peak of 2.7 in 2003 – 2004 to 0.7 in 2007. 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 around 1.3 in 1998 – 2002 to 1.1 in 2003 – 2007 (Figure 25). The recent trends in the rates of HIV and AIDS diagnoses in the Aboriginal and Torres Strait Islander population are based on small numbers and may reflect localised occurrences rather than national patterns (see Tables 1.3.1 – 1.3.4).

Figure 24 Newly diagnosed HIV infection, 1998 – 2007, by Aboriginal and Torres Strait Islander status and year

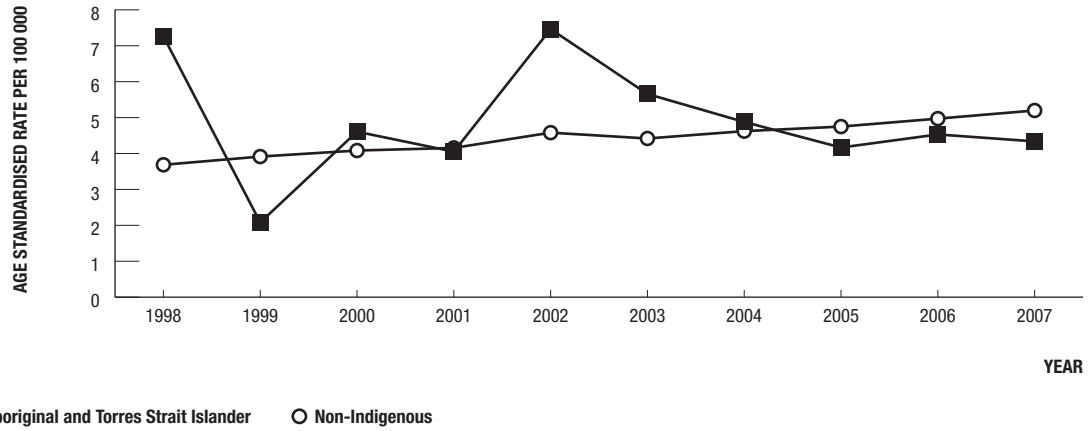
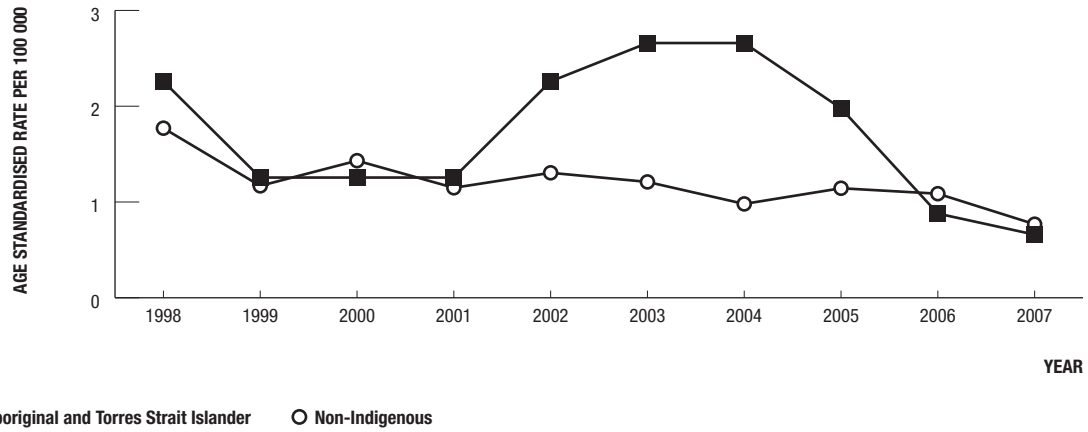
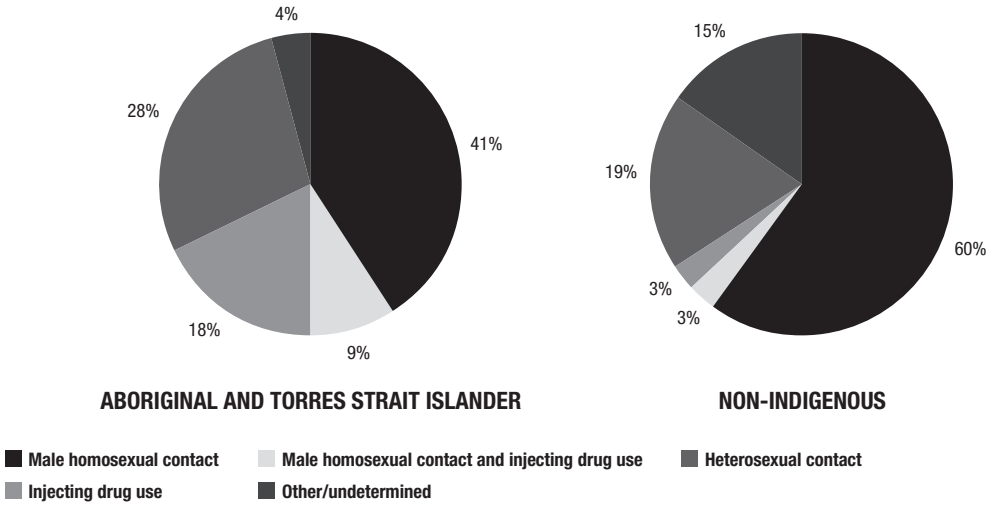


Figure 25 AIDS incidence, 1998 – 2007, by Aboriginal and Torres Strait Islander status and year



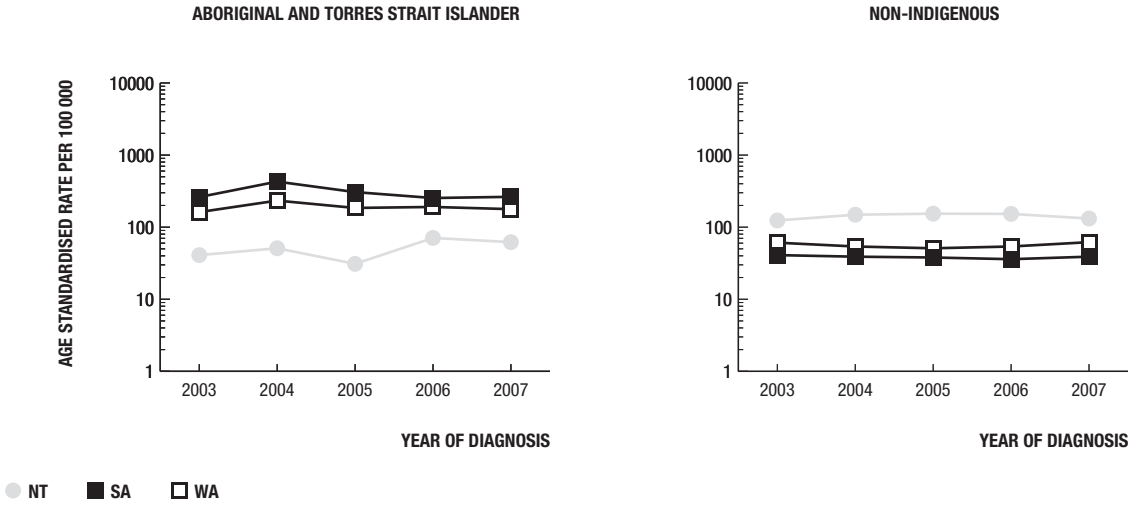
The most frequently reported route of HIV transmission in the non-Indigenous population in 2003 – 2007 was male homosexual contact (60%). In the Aboriginal and Torres Strait Islander population, exposure to HIV was attributed to male homosexual contact in 41% of cases and in 28%, heterosexual contact was the reported source of exposure to HIV (Figure 26). 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 (25% among Aboriginal and Torres Strait Islander cases vs 15.9% for non-Indigenous cases).

Figure 26 HIV diagnoses in Australia, 2003 – 2007, 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 around a third, and around a half of that in the non-Indigenous population in 2003 – 2005 and 2006 – 2007, respectively. In Western Australia, the population rate of newly diagnosed hepatitis C infection in the Aboriginal and Torres Strait Islander population was between two and four times higher than in the non-Indigenous population. This difference was even more marked in South Australia where the rate of hepatitis C diagnosis was between 6 and 11 times higher in the Aboriginal and Torres Strait Islander population.

Figure 27 Hepatitis C diagnoses by Aboriginal and Torres Strait Islander status, State/Territory and year



From 2003 to 2007, the rates of diagnosis of chlamydia increased in both the Aboriginal and Torres Strait Islander and the non-Indigenous population. The rate of diagnosis of gonorrhoea increased in the Aboriginal and Torres Strait Islander population in the Northern Territory, South Australia, Tasmania and Western Australia and declined in Victoria in both populations from 2003 to 2007 (Figures 28 and 29). The rate of diagnosis of infectious syphilis almost doubled to 163 per 100 000 Aboriginal and Torres Strait Islander population in the Northern Territory whereas in the non-Indigenous population, the rate increased by 58% to 10 per 100 000 population in 2007 (Figure 30). 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 28 Chlamydia by Aboriginal and Torres Strait Islander status, State/Territory and year

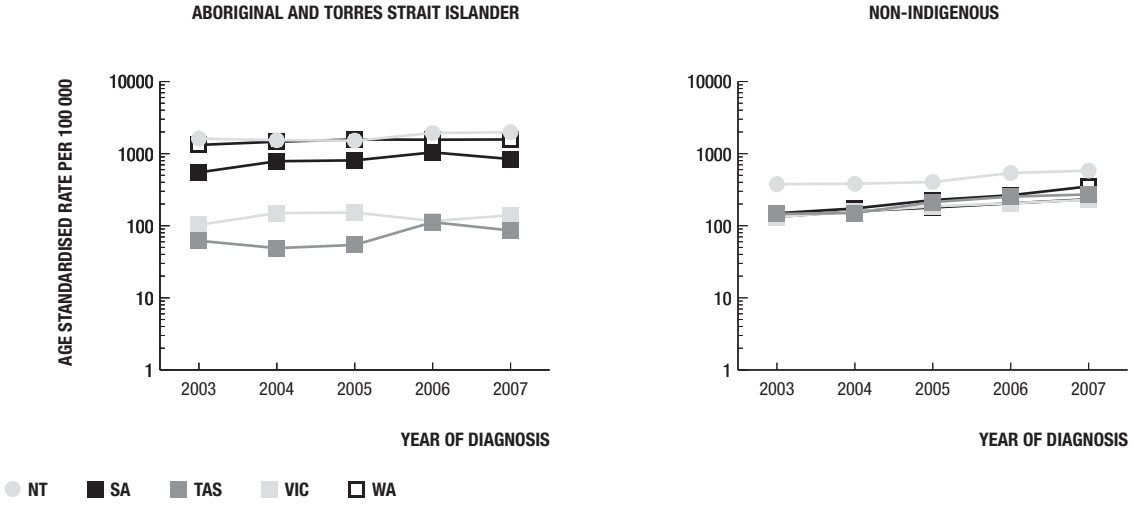


Figure 29 Gonorrhoea by Aboriginal and Torres Strait Islander status, State/Territory and year

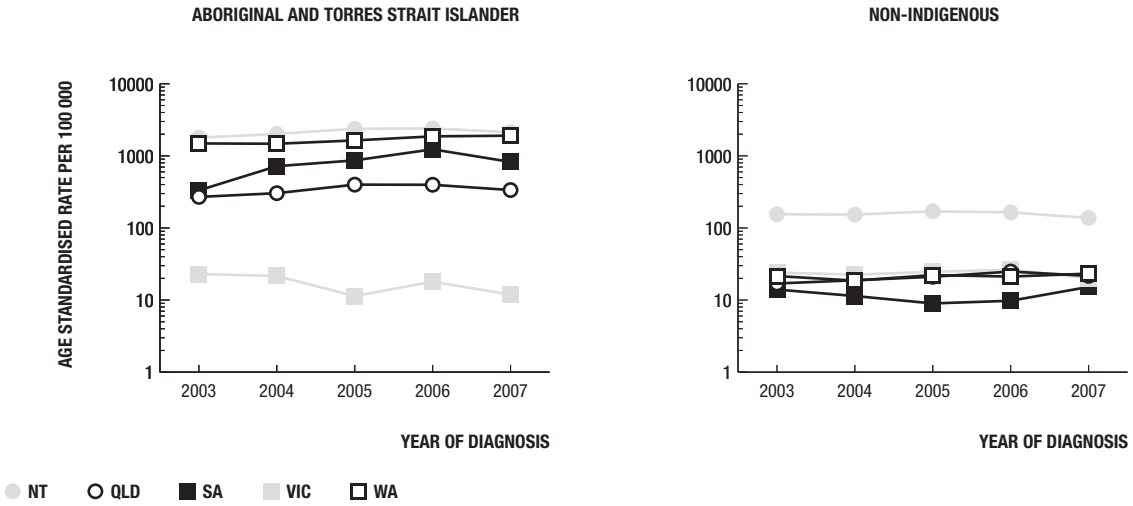
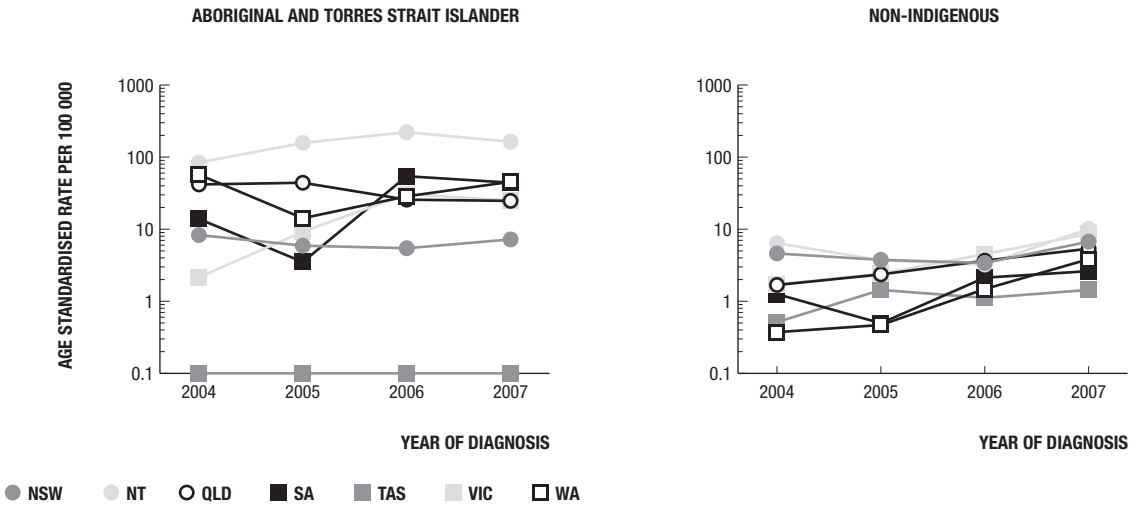


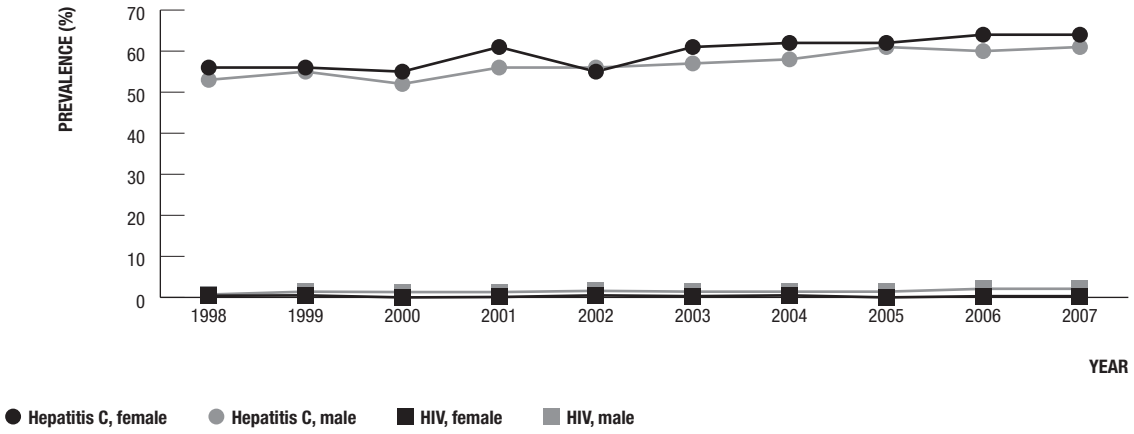
Figure 30 Infectious syphilis by Aboriginal and Torres Strait Islander status, State/Territory and year



People who have injected drugs

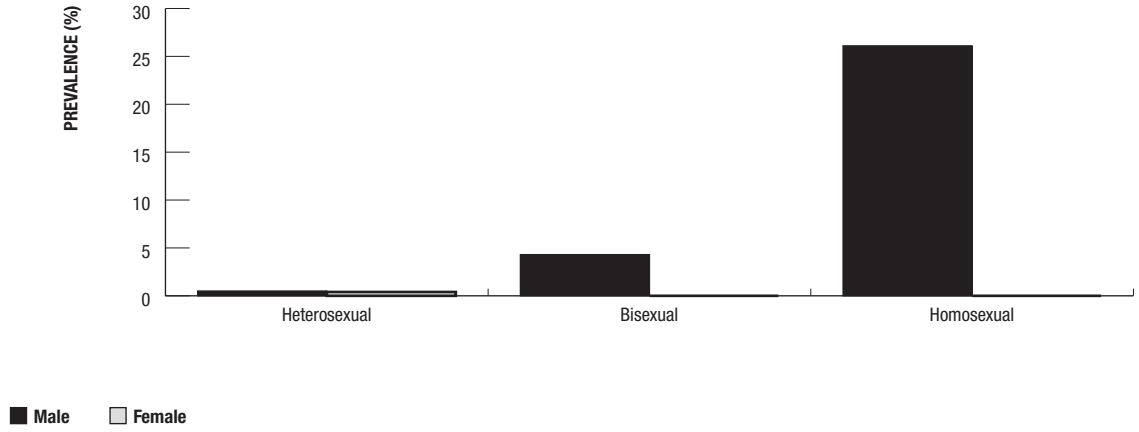
In 1998 – 2007, approximately 8% of HIV diagnoses in Australia were in people with a history of injecting drug use, of whom more than half were men who also reported a history of homosexual contact.

Figure 31 HIV and hepatitis C prevalence in needle and syringe programs by year and sex



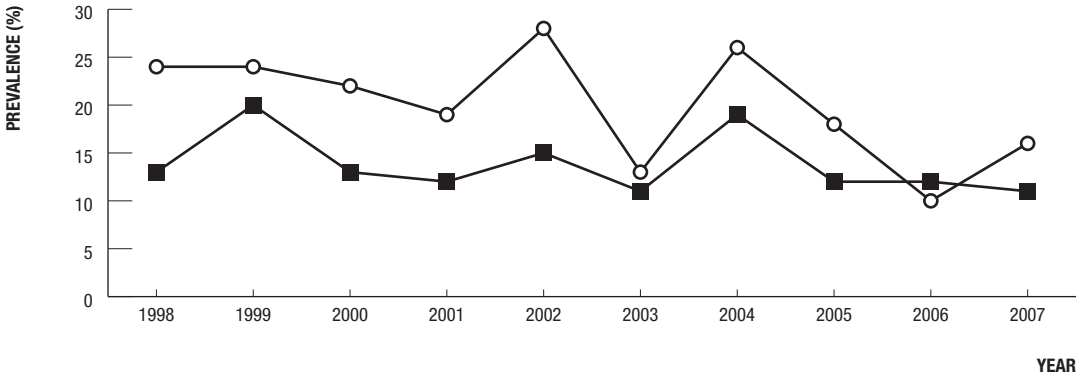
HIV prevalence among people attending needle and syringe programs has remained low (around 1% in 1998 – 2007) (Figure 31) but in the subgroup of men who identified as homosexual, it was 26.1% in 2007 (Figure 32). Of 724 men and 456 women with a history of injecting drug use who were tested for HIV antibody at metropolitan sexual health centres in 2006 – 2007, three men (0.4%) and two women (0.4%) were diagnosed with HIV infection (Figures 38 and 39).

Figure 32 HIV prevalence in people seen at needle and syringe programs, 2007, 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 1998 – 2007 (Figure 31).

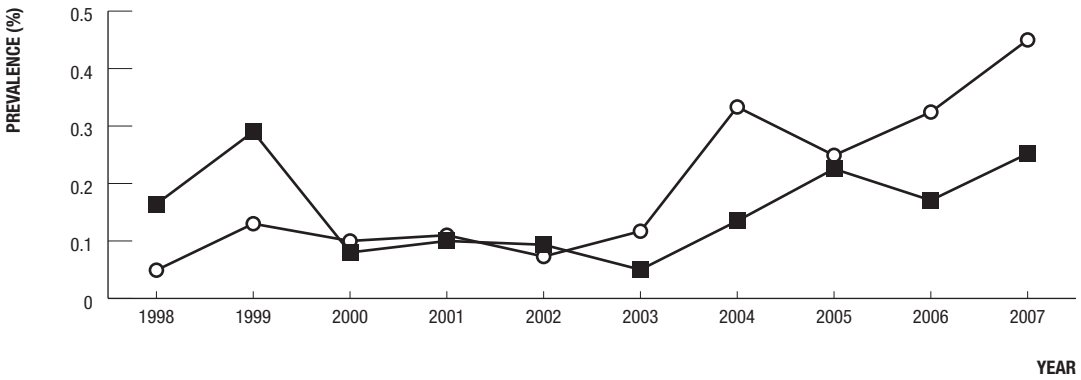
Figure 33 Prevalence of sharing among people[1] seen at needle and syringe programs, by year and sex



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

The number of people attending needle and syringe programs who reported having injected drugs for three years or less halved from 201 in 2003 to 98 in 2007 and hepatitis C prevalence remained stable at around 20%. 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 1998 to 16% in 2007 whereas the prevalence of sharing among men remained stable at around 12% in 1998 – 2007 (Figure 33). The decline in the number of people in the survey who reported having injected drugs for three years or less and the decline in the number of survey respondents aged less than 20 years (from 93 in 2003 to 33 in 2007), 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 32% in 2003 to 20% in 2007 (Table 4.2.2).

Figure 34 HIV prevalence in prison entrants by year and sex



HIV prevalence among people entering Australian prisons from 1998 to 2007 has remained low, at levels of less than 0.5% (Figure 34). Prevalence increased from 2004 to 2007 in both males and females, due primarily to increases in the number of HIV diagnoses in prison entrants in New South Wales.

Heterosexual transmission of HIV infection

The number of new HIV diagnoses for which exposure to HIV was attributed to heterosexual contact increased from 804 in 1998 – 2002 to 994 in 2003 – 2007, accounting for 21% of total HIV diagnoses in both five year periods.

Figure 35 Newly diagnosed HIV infection among men who report an exposure other than male homosexual contact, by year and HIV exposure category

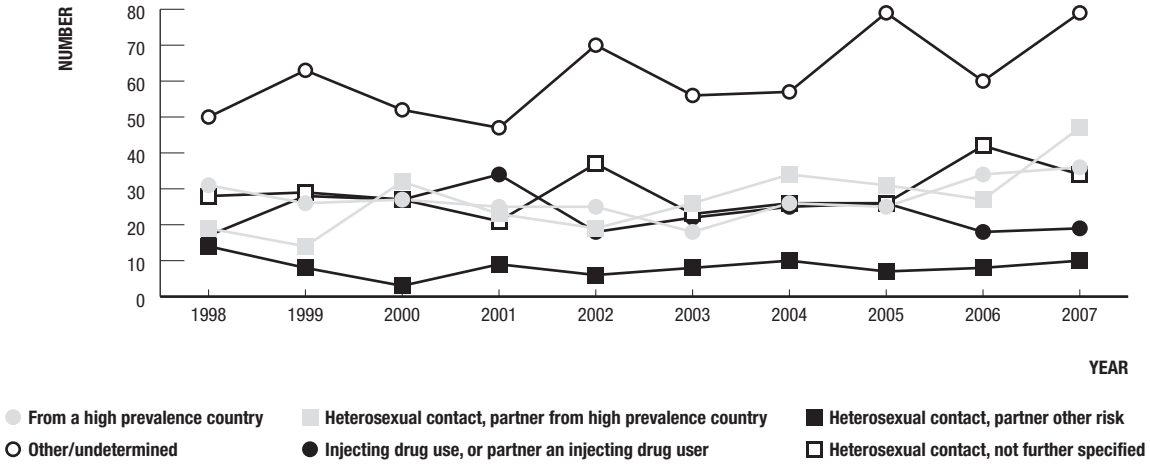
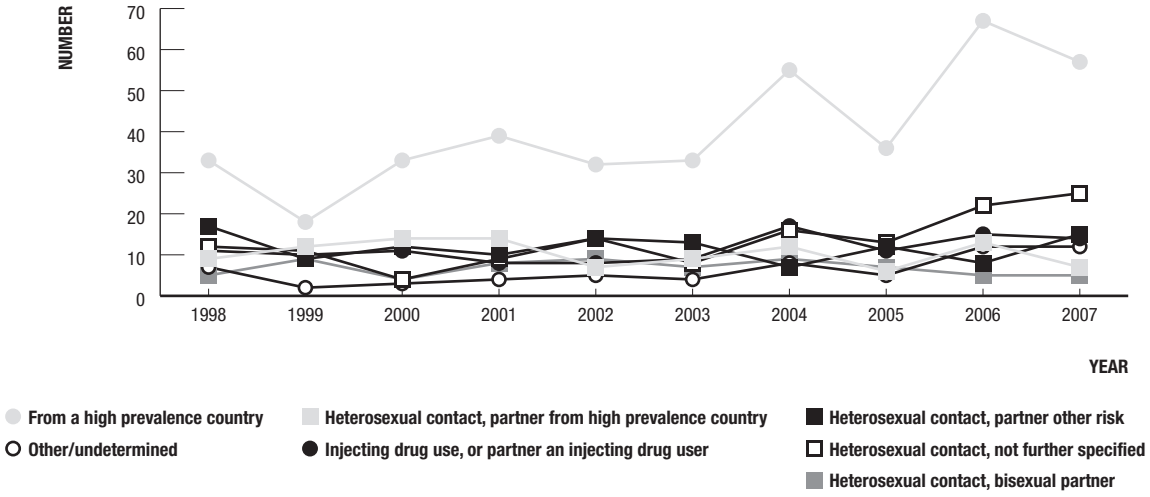


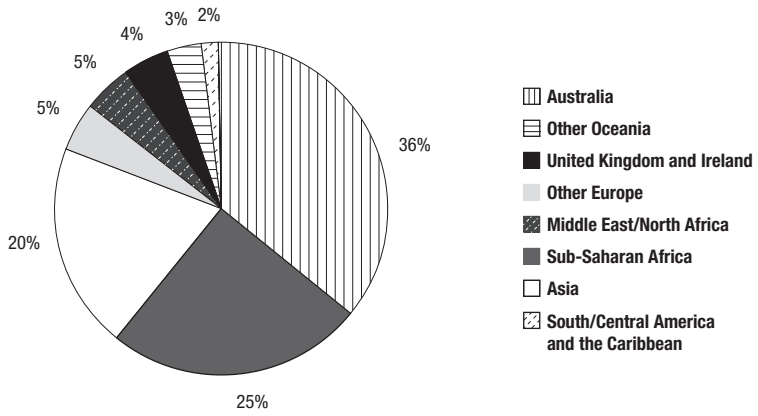
Figure 36 Newly diagnosed HIV infection among women, by year and HIV exposure category



Men and women who came from a country with high HIV prevalence accounted for 36% and 39% of HIV diagnoses attributed to heterosexual contact in 1998 – 2002 and 2003 – 2007, respectively. In both five year intervals, the majority of cases came from high HIV prevalence countries in sub-Saharan Africa (63% and 60%) and South East Asia (36% and 31%). The proportion of cases from high prevalence countries that were among women increased from 57% in 1998 – 2002 to 66% in 2003 – 2007. The increasing number of diagnoses among women from high prevalence countries resulted in a 58% increase in women in this category in New South Wales, an 80% increase in Queensland, a 43% increase in Victoria, a 50% increase in Western Australia and a 61% increase in Australia from 2003 to 2007 over the numbers in the previous five years.

Excluding cases from a high prevalence country, there was an 18% increase in the number of new HIV diagnoses attributed to heterosexual contact in 2003 – 2007 over the numbers diagnosed in 1998 – 2002, including a 24% increase among men and a 10% increase among women. Men and women with HIV infection who reported a partner from a high prevalence country accounted for 20% and 21% of new HIV diagnoses attributed to heterosexual contact in 1998 – 2002 and 2003 – 2007, respectively. Of new HIV diagnoses from 2003 to 2007 for which the country of birth of the heterosexual partner was reported (64%), 66% and 27% of partners were from South East Asia and sub-Saharan Africa, respectively. Heterosexual contact, not further specified, was reported in 24% of cases attributed to heterosexual contact in both 1998 – 2002 and in 2003 – 2007. The percentage of men whose exposure was attributed to heterosexual contact, not further specified, declined from 74% in 1998 – 2002 to 64% in 2003 – 2007. The source of exposure to HIV remained undetermined for substantial numbers of men in 1998 – 2007 (Figure 35).

Figure 37 HIV infection attributed to heterosexual contact, 2003 – 2007, by region of birth



Among cases of HIV infection newly diagnosed in Australia from 2003 to 2007 and attributed to heterosexual contact, country of birth was reported as Australia in 36%, sub-Saharan Africa in 25% and South East Asia in 20% (Figure 37).

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

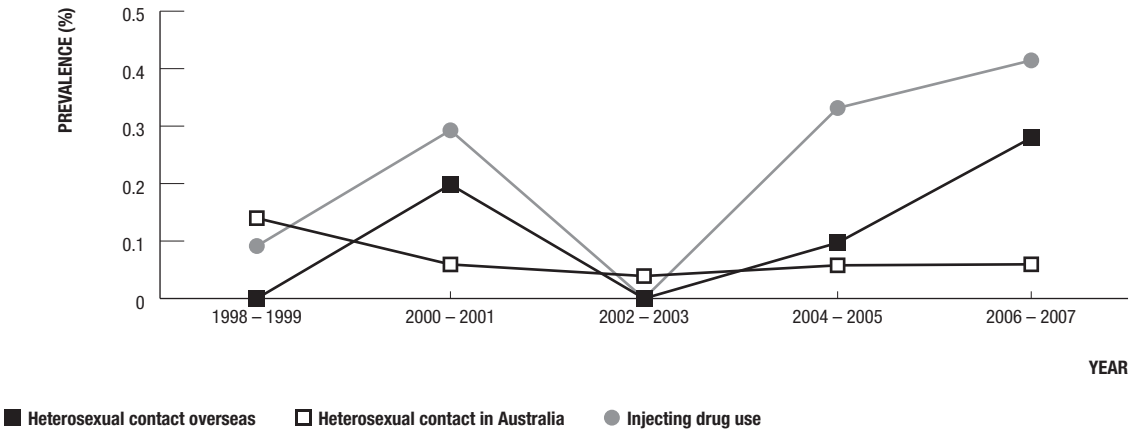
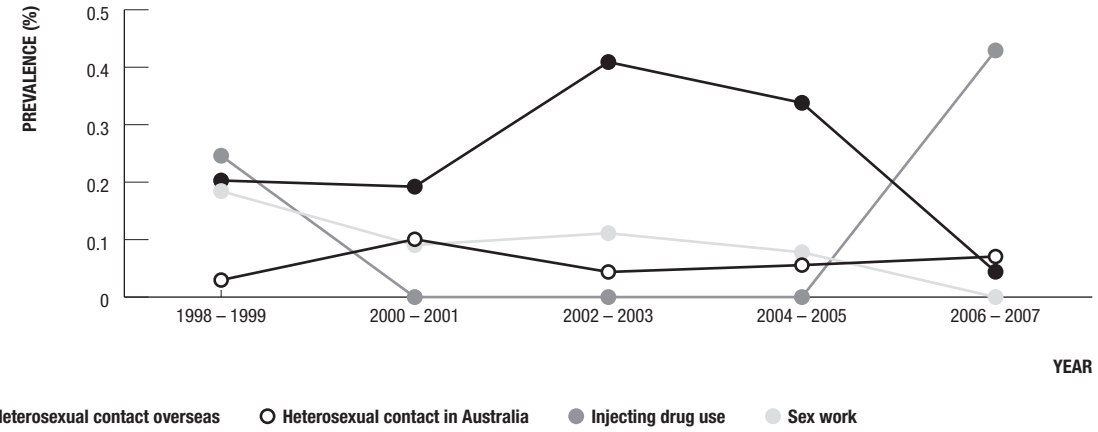
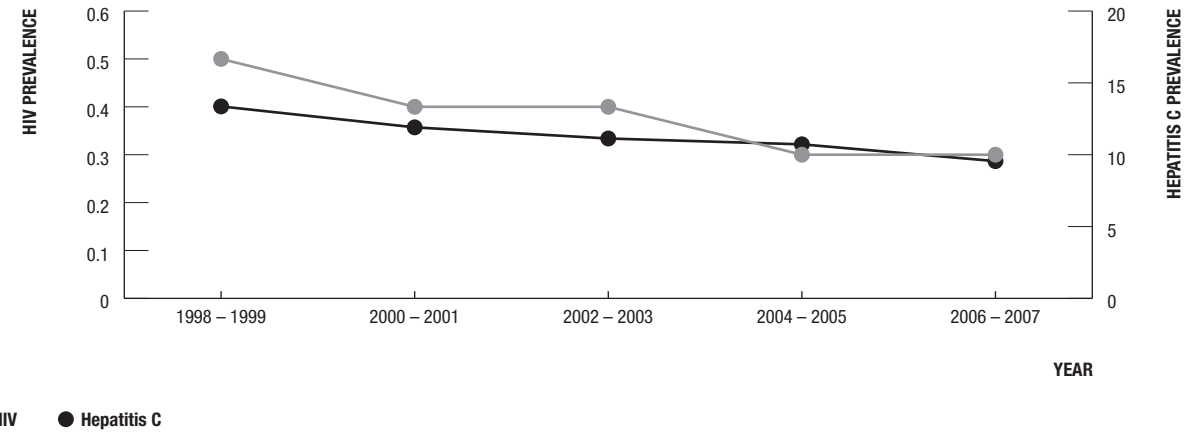


Figure 39 HIV prevalence among heterosexually active women seen at sexual health clinics by year and HIV exposure category



HIV prevalence has remained less than 0.5% among heterosexually active men and women seen through metropolitan sexual health clinics. From 1998 to 2007, HIV prevalence was less than 0.2% among men and women who reported a history of heterosexual contact in Australia (Figures 38 and 39). Among men who reported heterosexual contact overseas, HIV prevalence increased to 0.3% in 2007. HIV prevalence has remained low among women self-identifying as sex workers, with or without a history of injecting drug use (Figure 39).

Figure 40 HIV and hepatitis C prevalence[1] 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 40).

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 continuing 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 41). 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 41 AIDS diagnoses, 1998 – 2007, by year and timing of HIV diagnosis

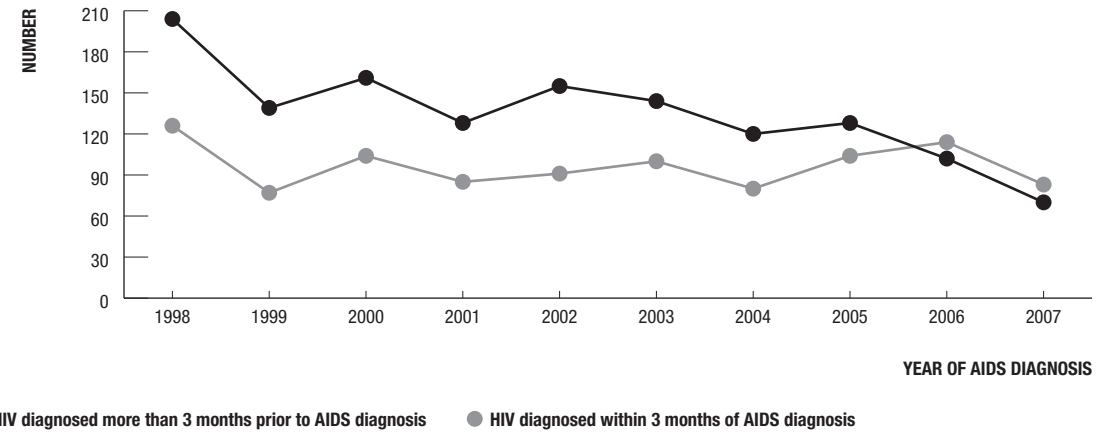
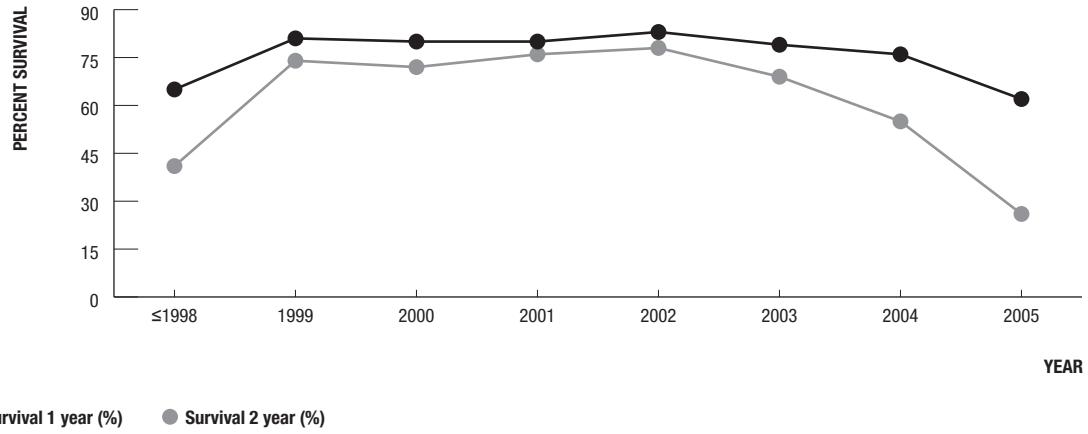
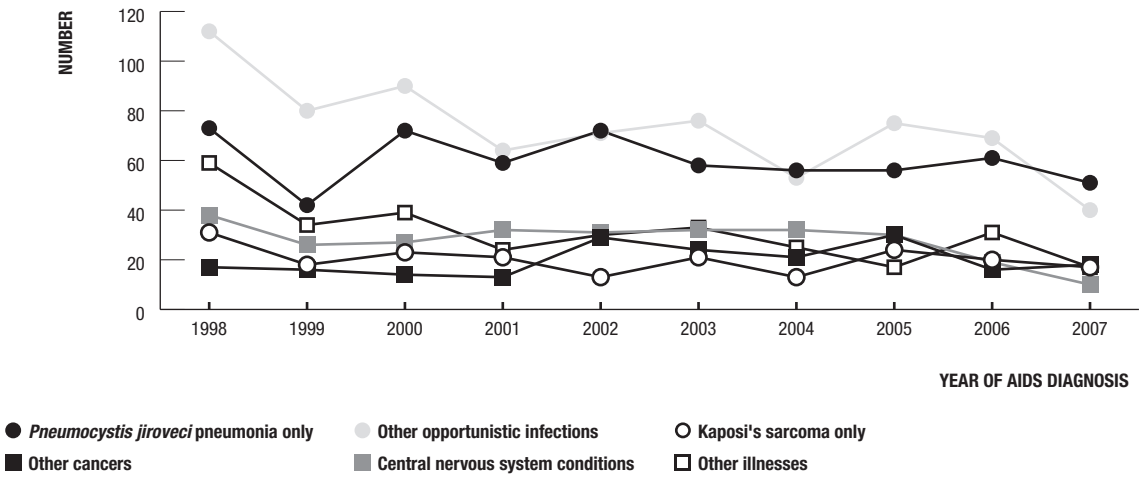


Figure 42 Survival following AIDS by year



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 42). Median survival among people diagnosed with AIDS increased from 19 months prior to 1998 to 69 months among cases diagnosed with AIDS in 2002.

Figure 43 AIDS diagnoses, 1998 – 2007, by AIDS defining illness and year



The proportion of new AIDS cases in people with late HIV diagnosis was relatively stable from 1998 to 2002 at around 38% and has increased with now 55% 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 from 2003 to 2007, 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 30%, 19.5%, 11.8% and 11.8%, respectively (Figure 43). In 2003 – 2007, PCP (32% vs 22.7%) and other multiple illnesses (14.6% vs 9.4%) were more frequently diagnosed, and opportunistic infections other than PCP (31.6% vs 28.5%) were diagnosed as frequently, among cases with late HIV diagnosis as among cases with non-late HIV diagnosis. Kaposi's sarcoma and other cancers (25.4% vs 12.7%), and central nervous system conditions (14% vs 9.1%) were diagnosed more frequently among cases with non-late HIV diagnosis than among cases with late HIV diagnosis.

Figure 44 AIDS diagnoses, 1998 – 2007, by late HIV diagnosis, year and exposure category

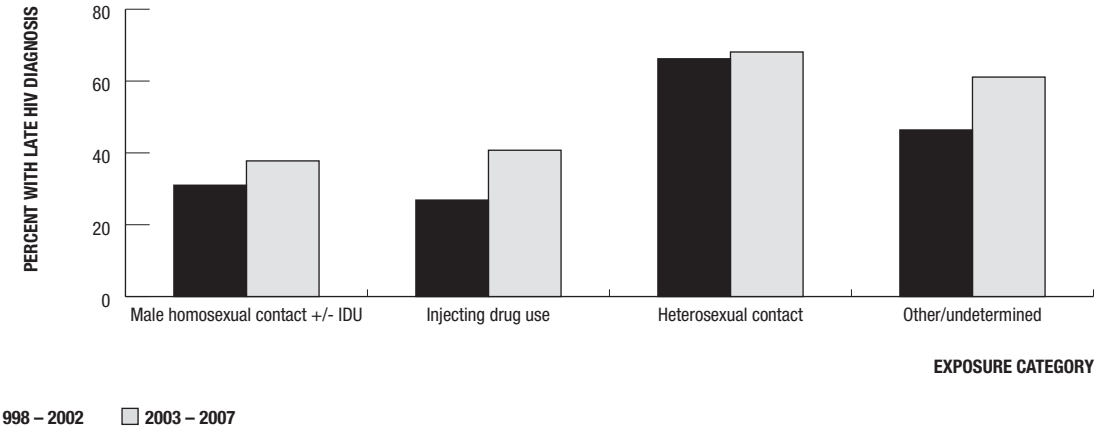
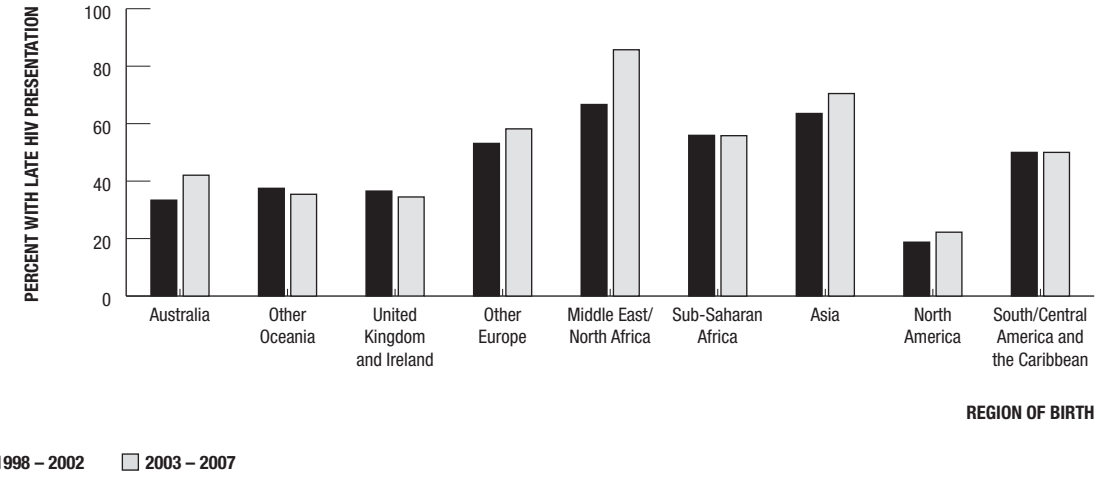


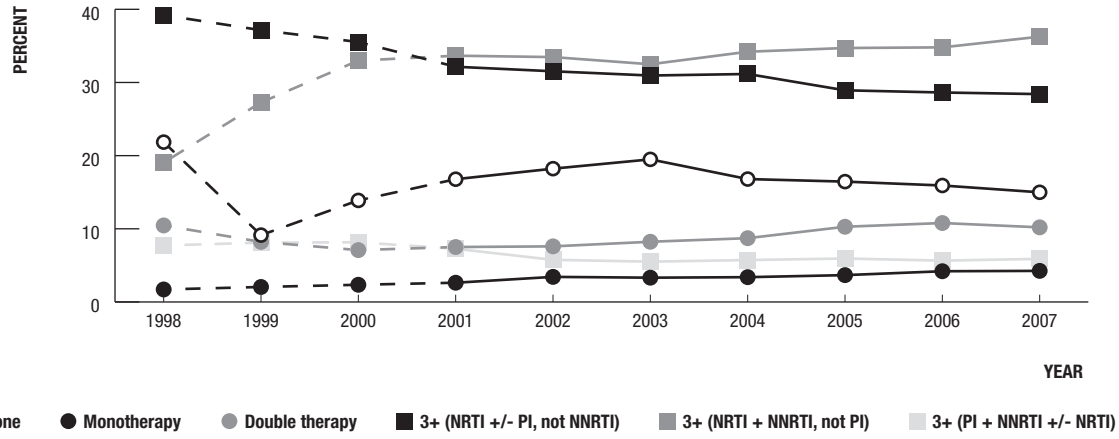
Figure 45 AIDS diagnoses, 1998 – 2007, by late HIV diagnosis, year and region of birth



Late HIV diagnosis has disproportionately affected men and women with a history of heterosexual contact and those with an undetermined exposure history (Figure 44). Late HIV diagnosis was also associated with region of birth. Compared to Australian born cases, a substantially higher percentage of cases of late diagnosis 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 45). Based on small number of cases, the percentage of cases of late HIV diagnosis among people born in countries in the Middle East or North Africa was notably high.

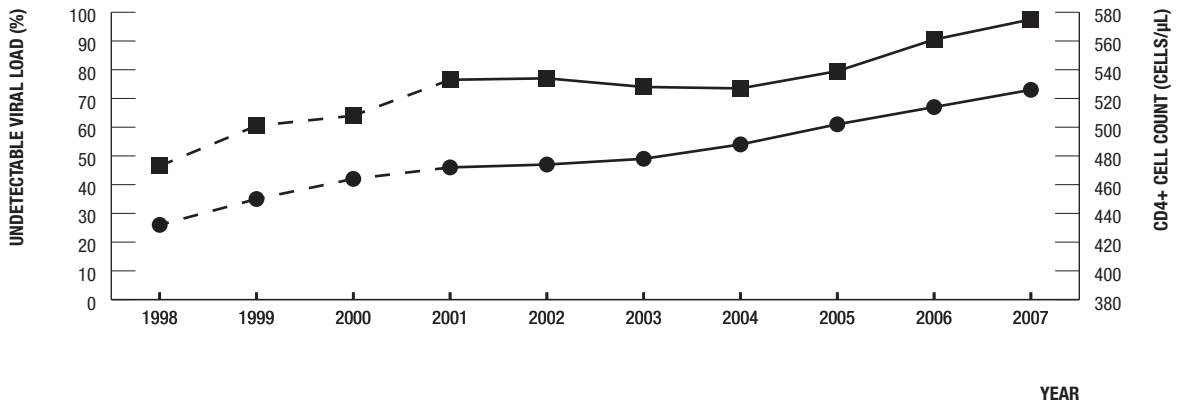
There is no comprehensive registry of advanced illness related to hepatitis B and C in Australia. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 119 people who had a liver transplant in 2007, 30 (25.2%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 3 (2.5%) people having liver transplants (Table 2.3.1).

Figure 46 Treatment uptake among people enrolled on the Australian HIV Observational Database by year



1 Dashed lines indicate the years of retrospective data collection.

Figure 47 HIV viral load and CD4+cell count among people enrolled on the Australian HIV Observational Database



1 Dashed lines indicate the years of retrospective data collection.

The Australian HIV Observational Database indicated that 68% of 1 834 people under follow up in 2007 were receiving triple combination antiretroviral treatment for HIV infection (Figure 46). 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 1999 (Figure 46). Of people enrolled in the Australian HIV Observational Database in 2007, 10.0% 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% from 2003 to 2007 and was 64% or less in Melbourne. In Brisbane, the proportion of gay and other homosexually active men reporting use of combination antiretroviral therapy has steadily increased to 65% in 2007.

Figure 48 People prescribed reverse transcriptase inhibitors through the Highly Specialised Drugs Program

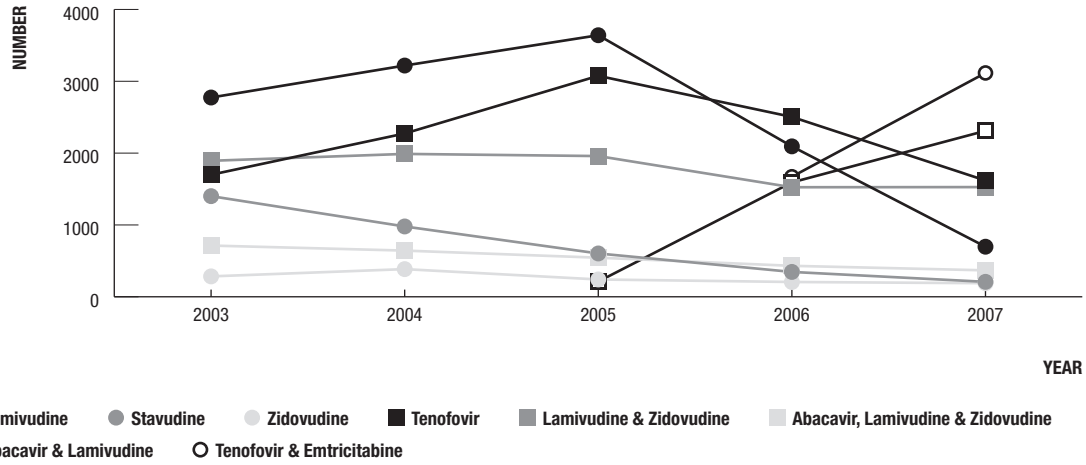
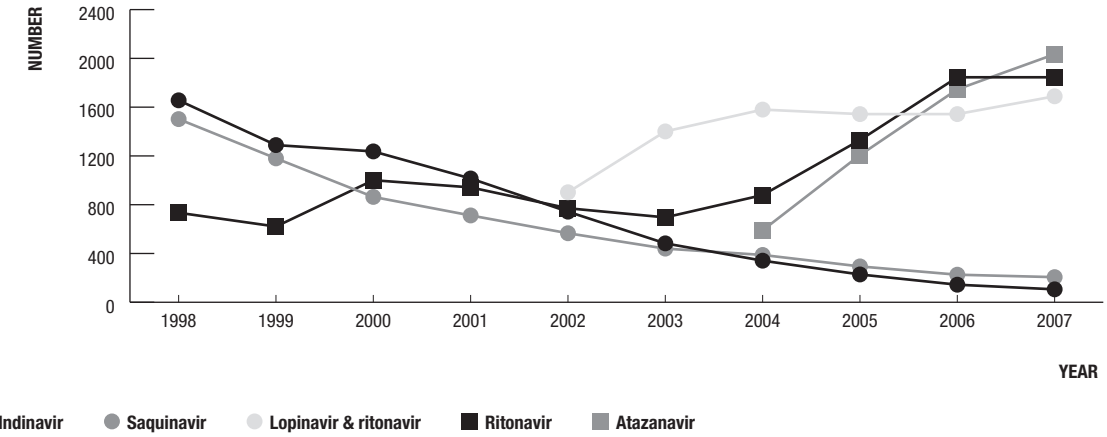
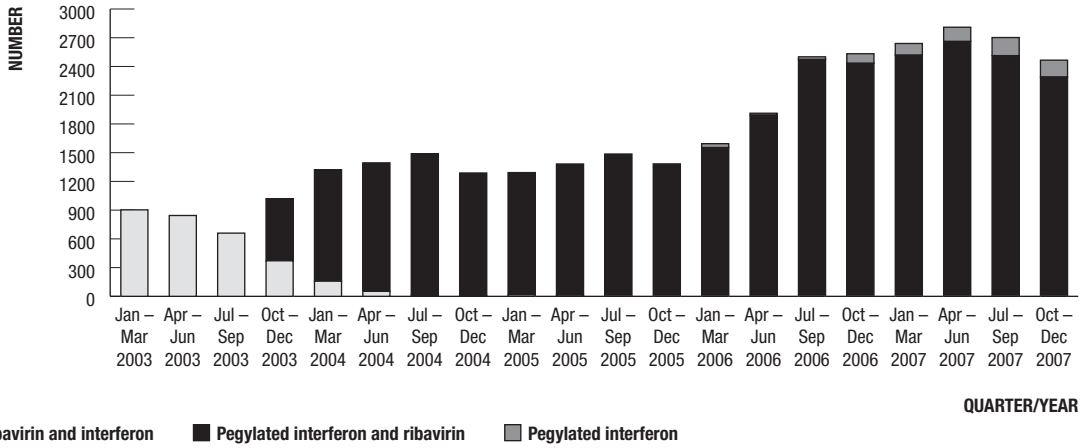


Figure 49 People prescribed protease inhibitors through the Highly Specialised Drugs Program



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 7 173 in 2003 to 9 933 during 2007. Tenofovir and emtricitabine were the most frequently prescribed reverse transcriptase inhibitors in 2007 (Figure 48). The most commonly prescribed protease inhibitors in 2007 were ritonavir (2 071 people), and atazanavir (2 034 people) (Figure 49).

Figure 50 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 50). Pegylated interferon only became available for treatment of hepatitis C infection in 2006. An estimated 3 539 people were receiving treatment for hepatitis C infection in 2007. 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.

Tables

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

1.2 National HIV Registry

1.3 National surveillance for HIV/AIDS in Aboriginal and Torres Strait Islander people

1.4 National surveillance for perinatal exposure to HIV

1.5 Global comparisons

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

Table 1.1.1 Characteristics of AIDS cases by year[1]. 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

		Year of AIDS diagnosis										
Characteristic		**≤ 98[2]**	**99**	**00**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**Total[1]**
Total cases		**8 245**	**216**	**265**	**213**	**246**	**244**	**200**	**232**	**216**	**153**	**10 230**
Males (%)		95.4	89.4	90.9	88.7	91.1	92.6	88.0	87.9	89.4	89.5	94.3
Median age (years)	Male	37	39	40	40	41	42	43	42	43	44	38
	Female	33	34	32.5	36	33	35	44.5	39	34	43	34
Late HIV diagnosis (%)	Male	37.6	36.8	38.6	37.0	35.7	40.7	37.5	43.6	51.8	54.7	39.2
	Female	47.8	27.3	45.8	60.9	50.0	47.1	63.6	53.6	60.0	46.7	49.2
State/Territory (%)												
ACT		1.1	0.0	1.1	0.0	0.8	1.6	0.5	0.4	0.0	0.0	1.0
NSW		58.1	58.3	49.4	46.9	45.9	59.8	49.0	47.8	47.2	45.8	56.6
NT		0.4	0.9	0.0	0.5	0.4	1.6	1.5	0.4	0.9	1.3	0.5
QLD		10.2	15.7	15.8	13.6	20.7	9.8	16.0	15.9	10.2	13.1	11.0
SA		4.4	4.6	3.0	4.2	6.1	2.0	5.5	3.9	6.0	2.0	4.3
TAS		0.6	0.0	0.4	0.5	0.8	0.0	0.5	0.9	1.4	1.3	0.6
VIC		20.7	18.1	24.5	24.9	19.5	19.3	22.0	27.2	29.6	32.0	21.3
WA		4.5	2.3	5.7	9.4	5.7	5.7	5.0	3.4	4.6	4.6	4.7
HIV exposure category (%)												
Male homosexual contact		82.9	66.0	68.7	68.6	71.9	65.6	62.6	62.2	58.2	67.2	79.7
Male homosexual contact and injecting drug use		4.7	6.1	6.4	4.4	6.8	7.5	9.6	9.2	8.0	7.3	5.2
Injecting drug use		3.0	5.6	6.0	4.4	3.8	6.6	6.4	6.9	5.0	1.5	3.4
Heterosexual contact		5.6	21.3	16.9	19.6	16.2	18.9	19.8	20.3	27.9	21.9	8.3
Haemophilia/coagulation disorder		1.5	0.5	1.2	1.0	0.9	0.4	0.5	0.0	0.0	0.7	1.3
Receipt of blood/tissue		1.9	0.5	0.4	0.5	0.4	0.4	1.1	0.9	1.0	1.5	1.7
Mother with/at risk for HIV infection		0.3	0.0	0.4	1.5	0.0	0.4	0.0	0.5	0.0	0.0	0.3
Other/undetermined		3.1	9.6	6.4	4.4	4.7	7.5	7.0	6.9	7.5	11.7	3.8
AIDS defining condition (%)												
Pneumocystis jirovecii pneumonia (PCP)		27.8	19.4	27.2	27.7	29.3	23.8	28.0	24.1	28.2	33.3	27.5
Kaposi's sarcoma (KS)		12.0	8.3	8.7	9.9	5.3	8.6	6.5	10.3	9.3	11.1	11.3
PCP and other (not KS)		5.5	8.3	6.8	8.0	7.3	8.6	6.5	9.1	5.1	7.2	5.9
Oesophageal candidiasis		10.1	13.4	12.1	7.0	12.6	8.2	7.0	10.3	11.6	7.8	10.1
Mycobacterium avium		4.8	2.8	3.0	2.3	1.6	2.0	2.0	1.3	1.9	1.3	4.3
HIV wasting disease		5.1	13.0	6.0	3.8	4.9	7.0	3.0	2.2	4.2	5.2	5.2
Other conditions		34.7	34.7	36.2	41.3	39.0	41.8	47.0	42.7	39.8	34.0	35.7

1 Not adjusted for reporting delay.

2 Percentage with late HIV diagnosis for 1998 only. Total percentage with late HIV diagnosis in 1998 – 2007 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

		Year of AIDS diagnosis										
State/Territory	**Sex**	**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05[1]**	**06[1]**	**07[1]**	**Total**
ACT	M	84	0	2	0	2	3	0	1	0	0	92
	F	7	0	1	0	0	1	1	0	0	0	10
NSW	M	4 604	111	114	91	105	140	89	100	112	82	5 548
	F	175	15	16	9	6	5	8	14	5	9	262
NT	M	33	2	0	1	1	3	1	0	2	2	45
	F	0	0	0	0	0	1	2	1	0	0	4
QLD	M	792	32	39	28	47	20	27	34	24	21	1 064
	F	45	2	3	1	4	4	5	4	4	1	73
SA	M	339	8	8	6	13	5	9	11	16	3	416
	F	23	2	0	3	2	0	1	0	1	0	32
TAS	M	44	0	1	1	1	0	1	2	3	2	55
	F	3	0	0	0	1	0	0	0	0	0	4
VIC	M	1 626	35	62	45	45	43	39	58	63	52	2 068
	F	72	3	3	7	3	4	5	8	6	5	116
WA	M	346	5	14	17	10	12	10	7	6	7	434
	F	27	0	1	3	4	2	0	1	4	0	42
Total[2]		**8 245**	**216**	**264**	**213**	**246**	**244**	**200**	**241**	**249**	**185**	**10 303**

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

2 Includes 36 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

		Year of AIDS diagnoses										
HIV exposure category	**Sex**	**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05[1]**	**06[1]**	**07[1]**	**Total**
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact	M	6 624	129	170	140	168	149	119	134	143	117	7 893
Male homosexual contact and injecting drug use	M	364	12	16	9	15	16	17	21	22	15	507
Injecting drug use[2]	M	159	7	11	5	8	12	10	17	9	1	239
	F	81	4	4	3	1	2	2	3	0	1	101
Heterosexual contact	M	274	26	25	24	23	32	18	27	38	17	504
	F	174	16	17	16	15	12	17	21	15	15	318
Haemophilia/coagulation disorder	M	111	1	3	2	2	1	1	0	0	1	122
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	78	0	0	0	0	1	2	1	1	2	85
	F	61	1	1	1	1	0	0	1	0	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	228	18	15	8	9	16	10	15	15	15	349
	F	13	1	1	1	2	1	2	0	3	0	24
Total adult/adolescents[3]		**8 199**	**216**	**263**	**210**	**246**	**243**	**200**	**240**	**249**	**185**	**10 251**
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	13	0	0	1	0	0	0	1	0	0	15
	F	14	0	1	2	0	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	1	0	0	0	0	1
Total children		**46**	**0**	**1**	**3**	**0**	**1**	**0**	**1**	**0**	**0**	**52**
Total[3]		**8 245**	**216**	**264**	**213**	**246**	**244**	**200**	**241**	**249**	**185**	**10 303**

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

		Year of death following AIDS										
State/Territory	**Sex**	**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05[1]**	**06[1]**	**07[1]**	**Total[2]**
ACT	M	63	1	3	2	0	1	0	2	1	0	73
	F	2	1	1	0	1	1	0	1	0	0	7
NSW	M	3 183	67	79	60	49	44	43	31	32	21	3 609
	F	114	1	4	3	5	2	2	3	1	1	136
NT	M	24	0	0	1	1	0	0	0	1	3	30
	F	0	0	0	0	0	0	1	0	0	0	1
QLD	M	554	14	16	18	16	11	11	14	13	11	678
	F	30	1	2	3	1	2	2	1	2	1	45
SA	M	228	5	5	8	10	5	11	2	6	2	282
	F	15	0	1	0	2	2	0	0	0	0	20
TAS	M	29	1	0	1	1	0	0	0	1	0	33
	F	2	0	0	0	0	0	0	0	0	0	2
VIC	M	1 248	39	29	21	14	17	12	14	25	13	1 432
	F	48	2	1	6	0	1	1	0	2	3	64
WA	M	253	8	7	5	3	4	7	6	3	7	303
	F	18	0	1	2	1	1	1	0	2	3	29
Total[2]		**5 830**	**141**	**149**	**130**	**104**	**91**	**91**	**74**	**90**	**67**	**6 767**

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

2 Includes 24 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

		Year of death following AIDS										
Exposure category	**Sex**	**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05[1]**	**06[1]**	**07[1]**	**Total[3]**
Adults/adolescents (13 years and older at death following AIDS)												
Male homosexual contact	M	4 778	97	104	85	73	55	58	42	52	32	5 376
Male homosexual contact and injecting drug use	M	248	9	7	11	6	9	8	7	4	5	314
Injecting drug use[2]	M	95	7	7	7	3	6	6	5	1	2	139
	F	49	0	2	1	4	3	0	3	0	2	64
Heterosexual contact	M	136	11	10	5	7	7	6	8	12	8	210
	F	103	4	7	9	5	5	6	1	5	5	150
Haemophilia/ coagulation disorder	M	84	4	3	3	1	0	0	2	1	3	101
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	69	0	0	0	0	0	2	0	2	2	75
	F	51	1	0	3	1	0	1	1	1	1	60
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	150	7	8	3	4	5	4	4	12	5	202
	F	10	0	1	0	0	1	0	0	0	0	12
Total adult/adolescents[3]		**5 798**	**141**	**149**	**128**	**104**	**91**	**91**	**73**	**90**	**67**	**6 732**
Children (less than 13 years at death following AIDS)												
Mother with/at risk for HIV infection	M	7	0	0	1	0	0	0	1	0	0	9
	F	9	0	0	1	0	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		**32**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**35**
Total[3]		**5 830**	**141**	**149**	**130**	**104**	**91**	**91**	**74**	**90**	**67**	**6 767**

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, 1998 – 2007, and age standardised annual incidence per 100 000 population[1] by year of AIDS diagnosis and region of birth

	1998 – 2002			2003 – 2007		
Region/ Country of birth	**Number**	**Percent**	**Age standardised incidence**	**Number**	**Percent**	**Age standardised incidence**
Australia	860	67.7	1.3	661	63.3	1.0
Overseas born	372	29.3	1.2	344	32.9	1.0
Other Oceania	*56*	*4.4*	*1.6*	*48*	*4.6*	*1.5*
United Kingdom and Ireland	*52*	*4.1*	*1.1*	*58*	*5.6*	*0.9*
Other Europe	*64*	*5.0*	*1.3*	*55*	*5.3*	*1.0*
Middle East/North Africa	*9*	*0.7*	*0.6*	*14*	*1.3*	*0.9*
Sub-Saharan Africa	*59*	*4.6*	*4.8*	*43*	*4.1*	*3.6*
Asia	*96*	*7.6*	*1.1*	*105*	*10.0*	*1.3*
North America	*16*	*1.3*	*2.7*	*9*	*0.9*	*1.5*
South/Central America and the Caribbean	*20*	*1.6*	*3.3*	*12*	*1.1*	*1.9*
Total with a reported country of birth	**1 232**	**97.0**	**1.2**	**1 005**	**96.2**	**1.0**
Not reported	38	3.0		40	3.8	
Total	**1 270**	**100.0**		**1 045**	**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 07[1]	Alive at 1 Jan 07[2]	Left Australia[3]	Other[4]	Median (months)	% Survival 1 year	% Survival 2 year
≤ 98	8 245	6 337	101	55	1 752	19	65	41
99	216	55	3	2	156	86	81	74
00	265	77	4	0	184	64	80	72
01	213	47	5	0	161	69	80	76
02	246	56	4	0	186	48	83	78
03	244	46	6	0	192	48	79	69
04	200	41	8	0	151	20	76	55
05	232	41	9	0	182	19	62	26
06	216	27	28	0	161	–	–	–
07	153	14	139	0	–	–	–	–
Total	**10 230**	**6 741**	**307**	**57**	**3 125**	**20.3**	**67**	**44**

1 Deaths occurring prior to 1 January 2008.

2 Last medical contact on or after 1 January 2007.

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

4 Last medical contact prior to 1 January 2007.

Source: State/Territory health authorities

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

	Year of AIDS diagnosis											
	≤ 98		99 – 01		02 – 04		05 – 07		Cumulative to 31 Dec 07			
AIDS defining condition	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**Total[1]**	**%**
Pneumocystis jirovecii pneumonia (PCP)	2 209	76	158	15	170	13	152	15	2 689	119	2 818	27.5
Kaposi's sarcoma (KS)	984	5	62	0	47	0	61	0	1 154	5	1 160	11.3
KS and PCP alone	60	0	2	0	2	0	6	0	70	0	70	0.7
KS and other (not PCP)	137	0	5	0	10	0	4	0	156	0	156	1.5
PCP and other (not KS)	417	29	45	8	47	5	38	5	547	47	599	5.9
Oesophageal candidiasis	788	39	70	6	57	8	56	5	971	58	1 031	10.1
Toxoplasmosis	261	11	19	1	15	1	11	2	306	15	325	3.2
Cryptococcosis	292	12	27	1	27	4	16	1	362	18	382	3.7
Non-Hodgkin's lymphoma	317	15	35	2	52	0	55	3	459	20	479	4.7
Mycobacterium avium	366	30	18	1	12	1	8	1	404	33	438	4.3
Herpes simplex virus	172	16	8	1	7	0	4	0	191	17	209	2.0
HIV encephalopathy	276	14	33	4	44	2	26	3	379	23	402	3.9
Cytomegalovirus	302	5	10	3	11	0	13	2	336	10	349	3.4
HIV wasting disease	391	31	45	7	32	3	19	3	487	44	533	5.2
Cryptosporidiosis	185	6	8	0	11	0	5	0	209	6	215	2.1
Mycobacterium tuberculosis	40	6	9	4	8	1	5	6	62	17	79	0.8
Pulmonary tuberculosis[2]	38	4	18	7	12	7	15	7	83	25	109	1.1
Recurrent pneumonia[2]	48	3	9	1	7	4	8	2	72	10	84	0.8
Cervical cancer[2]	–	4	–	1	–	1	–	0	–	6	6	0.1
Other single diagnoses	97	10	9	1	19	1	5	1	130	13	143	1.4
Other multiple diagnoses	488	36	33	6	36	8	27	7	584	57	643	6.3
Total[1]	**7 868**	**352**	**623**	**69**	**626**	**59**	**534**	**63**	**9 651**	**543**	**10 230**	**100.0**

1 Includes 36 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 year[1]. Number of cases, median age, language spoken at home[2], and percent of total cases by sex, State/Territory and HIV exposure category

	Year of HIV diagnosis										
Characteristic	**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**Total[1]**
Total cases	**19 428**	**718**	**764**	**769**	**851**	**871**	**910**	**962**	**1 007**	**1 051**	**27 331**
Males (%)	92.8	89.6	88.7	87.4	88.8	89.9	85.9	90.2	85.2	86.6	91.4
Median age (years)											
Males	32	35	35	35	35	36	37	37	38	38	33
Females	29	28	29	29	32	31	31	32	31	32	30
Language spoken at home[2]											
English	–	–	–	–	–	–	380	472	575	760	2 187
Other language	–	–	–	–	–	–	34	43	65	74	216
Not reported	–	–	–	–	–	–	496	447	367	217	1 527
State/Territory (%)											
ACT	1.2	1.1	1.4	1.0	0.6	0.6	0.8	0.7	0.5	0.2	1.1
NSW	58.9	52.7	48.7	45.1	47.9	49.1	45.0	42.2	39.2	40.6	54.9
NT	0.6	0.7	0.4	0.5	0.9	0.6	0.9	0.3	1.1	0.5	0.6
QLD	9.9	17.1	15.2	13.5	15.3	14.6	17.3	17.5	16.4	18.4	11.7
SA	3.6	3.1	3.0	5.6	3.5	5.2	5.9	5.3	6.1	5.3	4.0
TAS	0.4	0.4	0.3	0.6	0.6	0.2	1.0	0.6	0.7	0.5	0.4
VIC	20.3	19.2	24.9	26.9	25.7	23.4	23.6	26.8	28.4	27.3	21.8
WA	5.1	5.7	6.1	6.6	5.4	6.3	5.5	6.6	7.6	7.2	5.5
HIV exposure category (%)[3]											
Male homosexual/bisexual contact	79.1	66.0	68.0	66.2	70.9	73.4	67.5	72.3	67.6	68.4	76.0
Male homosexual/bisexual contact and injecting drug use	4.3	6.6	4.1	5.3	4.3	4.6	4.0	4.3	4.0	2.8	4.3
Injecting drug use[4]	4.2	5.2	4.4	5.7	2.6	3.5	4.4	3.4	2.8	2.8	4.0
Heterosexual contact	8.6	21.4	23.1	22.2	21.9	18.3	23.7	19.3	25.0	25.2	12.9
Partner with/at risk of HIV infection	*56.7*	*71.4*	*81.0*	*81.1*	*69.8*	*79.1*	*79.0*	*77.1*	*72.7*	*75.6*	*67.2*
Not further specified	*43.3*	*28.6*	*19.0*	*18.9*	*30.2*	*20.9*	*21.0*	*22.9*	*27.3*	*24.4*	*32.8*
Haemophilia/coagulation disorder	1.8	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Receipt of blood/tissue	1.4	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	1.0
Mother with/at risk of HIV infection	0.4	0.2	0.4	0.4	0.3	0.2	0.2	0.6	0.6	0.8	0.4
Health care setting	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
Other/undetermined	17.0	9.1	7.5	6.8	9.2	7.2	7.1	8.5	7.2	8.5	14.3

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 year[1]

		Year of HIV diagnosis										
State/Territory		**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**Total**
ACT	M	196	5	10	7	3	4	5	7	3	2	242
	F	23	3	1	1	0	1	1	0	2	0	32
NSW	M	9 402	338	316	306	363	361	337	363	320	358	12 469
	F	569	30	34	32	30	33	61	31	57	51	928
NT	M	96	4	2	3	4	3	5	2	4	5	128
	F	8	1	1	0	4	1	3	0	5	0	23
QLD	M	1 750	102	94	85	114	108	132	149	130	152	2 816
	F	132	17	14	18	13	17	22	12	25	27	298
SA	M	633	19	20	32	23	39	44	48	51	45	954
	F	57	3	2	9	6	3	7	4	9	11	111
TAS	M	70	2	0	5	3	0	4	5	6	3	98
	F	4	1	1	0	2	0	2	0	0	2	12
VIC	M	3 525	120	165	179	192	183	188	218	249	254	5 273
	F	193	12	20	23	22	17	23	30	27	33	400
WA	M	869	36	36	37	31	38	35	46	52	60	1 240
	F	109	6	9	12	13	13	7	15	21	16	221
Total	M	15 872	610	572	593	731	728	724	820	810	842	22 302
	F	1 093	73	82	95	90	84	126	92	145	140	2 025
Total		**17 015**	**685**	**658**	**690**	**825**	**813**	**851**	**913**	**958**	**983**	**24 391**

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 infection[1] by age group, sex and year, cumulative to 31 December 2007

		Year of HIV diagnosis										
Age group (years)		**≤ 98**	**99**	**00**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**Total[2]**
0 – 1	M	43	0	1	0	0	0	0	0	1	1	46
	F	18	1	1	2	0	0	1	1	3	1	28
2 – 12	M	85	3	1	0	1	0	0	2	2	3	97
	F	19	1	0	1	1	2	0	2	1	4	31
13 – 19	M	406	6	7	13	2	5	8	9	9	8	473
	F	72	7	3	4	5	4	6	3	7	3	114
20 – 29	M	6 295	159	162	159	180	163	161	181	168	197	7 825
	F	452	28	37	41	26	28	51	25	54	40	782
30 – 39	M	6 622	263	280	276	321	318	309	321	298	305	9 313
	F	293	23	29	29	41	30	30	42	46	57	620
40 – 49	M	3 115	130	133	145	156	164	189	215	242	250	4 739
	F	111	9	7	13	10	11	22	15	24	19	241
50 – 59	M	1 014	58	68	59	69	99	85	98	100	98	1 748
	F	47	2	0	3	3	5	12	4	9	12	97
60+	M	330	23	20	17	27	34	30	41	38	47	607
	F	53	2	4	1	4	5	4	1	2	4	80
Not reported	M	127	1	6	3	0	0	0	1	0	1	139
	F	30	0	1	1	0	0	0	0	0	0	32
Total	M	18 037	643	678	672	756	783	782	868	858	910	24 987
	F	1 095	73	82	95	90	85	126	93	146	140	2 025
Total[2]		**19 428**	**718**	**764**	**769**	**851**	**871**	**910**	**962**	**1 007**	**1 051**	**27 331**

1 Not adjusted for multiple reporting.

2 Totals include 69 people whose sex was reported as transgender and 250 people whose sex was not reported.

Source: State/Territory health authorities

Table 1.2.4 Number of new diagnoses of HIV infection in Australia in 2007 by State/Territory and whether or not HIV infection was newly diagnosed in Australia

State/Territory	Newly diagnosed in Australia	Newly diagnosed overseas	Total
ACT	2	0	2
NSW	402	25	427
NT	5	0	5
QLD	166	27	193
SA	49	7	56
TAS	3	2	5
VIC	263	24	287
WA	63	13	76
Total	**953**	**98**	**1 051**

Source: State/Territory health authorities

Table 1.2.5 Number (percent) of new HIV diagnoses in Australia, 2003 – 2007, and age standardised rate per 100 000 population[1] by year of HIV diagnosis and region of birth

Region/ Country of birth	2003 Number	2003 %	2003 Age standardised rate	2004 Number	2004 %	2004 Age standardised rate	2005 Number	2005 %	2005 Age standardised rate	2006 Number	2006 %	2006 Age standardised rate	2007 Number	2007 %	2007 Age standardised rate
Australia	534	61.3	4.0	557	61.2	4.1	585	60.8	4.4	574	57.0	4.3	585	55.7	4.4
Overseas born	268	30.8	4.3	279	30.7	4.4	279	29.0	4.5	346	34.4	5.7	360	34.3	6.0
Other Oceania	*35*	*4.0*	*5.3*	*31*	*3.4*	*4.8*	*36*	*3.7*	*5.9*	*45*	*4.5*	*6.8*	*34*	*3.2*	*5.1*
United Kingdom and Ireland	*45*	*5.2*	*4.4*	*39*	*4.3*	*3.3*	*49*	*5.1*	*4.1*	*39*	*3.9*	*3.5*	*44*	*4.2*	*4.0*
Other Europe	*42*	*4.8*	*5.7*	*36*	*4.0*	*5.0*	*39*	*4.1*	*4.9*	*42*	*4.2*	*5.4*	*34*	*3.2*	*5.8*
Middle East/North Africa	*8*	*0.9*	*2.7*	*15*	*1.6*	*5.2*	*11*	*1.1*	*5.4*	*19*	*1.9*	*6.8*	*15*	*1.4*	*4.9*
Sub-Saharan Africa	*45*	*5.2*	*19.6*	*58*	*6.4*	*24.0*	*47*	*4.9*	*20.0*	*64*	*6.4*	*28.3*	*68*	*6.5*	*34.3*
Asia	*74*	*8.5*	*4.4*	*69*	*7.6*	*4.2*	*73*	*7.6*	*4.3*	*119*	*11.8*	*7.6*	*126*	*12.0*	*7.7*
North America	*11*	*1.3*	*9.0*	*17*	*1.9*	*13.9*	*15*	*1.6*	*12.3*	*11*	*1.1*	*9.6*	*13*	*1.2*	*10.7*
South/Central America and the Caribbean	*8*	*0.9*	*7.3*	*14*	*1.5*	*11.3*	*9*	*0.9*	*7.4*	*7*	*0.7*	*5.8*	*26*	*2.5*	*23.2*
Total with a reported country of birth	**802**	**92.1**	**4.0**	**836**	**91.9**	**4.2**	**864**	**89.8**	**4.4**	**920**	**91.4**	**4.6**	**945**	**89.9**	**4.8**
Not reported	69	7.9		74	8.1		98	10.2		87	8.6		106	10.1	
Total	**871**	**100.0**		**910**	**100.0**		**962**	**100.0**		**1 007**	**100.0**		**1 051**	**100.0**	

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

Source: State/Territory health authorities

Table 1.2.6 Characteristics of diagnoses of newly acquired HIV infection[1], 1998 – 2007, 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

		Year of HIV diagnosis										
Characteristic	**Sex**	**98**	**99**	**00**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**Total[2]**
Total cases		**152**	**171**	**199**	**209**	**245**	**286**	**261**	**281**	**307**	**279**	**2 390**
Males (%)		97.4	94.2	95.0	92.3	95.1	96.2	94.3	96.8	93.5	96.1	95.0
Median age (years)	M	31	32	32	34	34	33	35	35	37	35	34
	F	19	27	25	34	38	34	24	27	35	37	31
State/Territory												
ACT	M	2	1	6	2	2	0	2	1	2	0	18
	F	0	0	0	0	0	0	0	0	1	0	1
NSW	M	71	92	84	95	118	153	112	128	110	116	1 079
	F	0	2	3	7	2	4	5	3	7	4	37
NT	M	2	1	1	3	1	0	2	1	2	1	14
	F	0	0	1	0	0	0	0	0	0	0	1
QLD	M	21	27	21	23	34	26	43	41	57	47	340
	F	0	3	2	3	3	3	3	1	1	3	22
SA	M	6	6	6	10	6	15	15	15	17	7	103
	F	0	0	1	1	0	1	1	0	0	0	4
TAS	M	0	1	0	2	1	0	1	2	0	0	7
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	38	30	59	51	67	69	62	75	85	83	619
	F	1	3	3	3	0	3	4	4	8	3	32
WA	M	8	3	10	7	4	12	9	9	14	14	90
	F	3	1	1	2	5	0	1	1	2	1	17
HIV exposure category												
Male homosexual/bisexual contact	M	125	130	160	165	212	243	208	234	247	234	1 958
Male homosexual/bisexual contact and injecting drug use	M	13	15	7	10	9	12	11	15	13	5	110
Injecting drug use[3]	M	1	5	6	5	0	5	2	2	2	1	29
	F	2	2	3	2	0	2	4	1	2	1	19
Heterosexual contact	M	6	9	12	8	8	13	16	9	16	20	117
	F	2	6	8	13	9	9	10	8	16	9	90
Health care setting[4]	M	0	0	0	0	0	0	1	0	0	0	1
	F	0	0	0	0	1	0	0	0	0	0	1
Other/undetermined	M	3	2	2	5	4	2	8	12	9	8	55
	F	0	1	0	1	0	0	0	0	1	1	4
Evidence of newly acquired infection												
Testing history only	M	71	80	77	91	98	139	105	128	149	124	1 062
	F	3	2	5	9	1	5	10	5	7	4	51
Illness only	M	35	35	61	46	51	44	46	49	44	61	472
	F	0	6	3	1	3	0	3	2	9	5	32
Testing history and illness	M	42	46	49	56	84	92	95	95	94	83	736
	F	1	1	3	6	6	6	1	2	3	2	31

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 6 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 1.2.7 Number of cases of newly diagnosed HIV infection[1], 2005 – 2007, number with newly acquired HIV infection, number with recent HIV infection diagnosed using the BED capture enzyme immunoassay and total number (%) of recent infections, by year and sex

	Newly diagnosed infection		Newly acquired infection[2]		Recent infection[3]		Total recent infection[4]			
Year of HIV diagnosis	Male	Female	Male	Female	Male	Female	Male	Female	Total	%[5]
2005	151	3	41	0	29	0	70	0	70	45.5
2006	131	7	41	0	21	1	62	1	63	45.6
2007	154	9	51	1	26	1	77	2	79	48.5
Total	**436**	**19**	**133**	**1**	**76**	**2**	**209**	**3**	**212**	**46.6**

1 Based on cases tested at the NSW Reference Laboratory for HIV, St Vincent's Hospital, Sydney.

2 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.

3 Recent infection diagnosed by the BED capture enzyme immunoassay among cases without AIDS and without evidence of newly acquired HIV infection.

4 Number of cases of newly acquired HIV infection plus number of cases of recent HIV infection diagnosed by the BED capture enzyme immunoassay.

5 Percentage of cases of newly diagnosed HIV infection.

Source: State/Territory health authorities

Table 1.2.8 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 2003 – 2007, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

		Year of HIV diagnosis				
Characteristic	**Sex**	**2003**	**2004**	**2005**	**2006**	**2007**
State/Territory						
ACT	M	40 (3)	560 (5)	403 (6)	525 (2)	– (0)
	F	4 (1)	470 (1)	– (0)	320 (1)	– (0)
NSW	M	410 (245)	472 (226)	463 (244)	440 (237)	436 (230)
	F	390 (23)	459 (36)	243 (20)	389 (38)	300 (20)
NT	M	555 (4)	266 (5)	509 (3)	419 (6)	650 (5)
	F	40 (1)	342 (3)	– (0)	65 (5)	– (0)
QLD	M	520 (101)	450 (129)	450 (145)	410 (130)	440 (142)
	F	495 (16)	220 (20)	480 (12)	380 (25)	360 (24)
SA	M	473 (38)	454 (41)	393 (43)	362 (50)	435 (44)
	F	325 (3)	619 (7)	421 (3)	494 (8)	336 (10)
TAS	M	270 (2)	506 (4)	430 (6)	234 (5)	422 (3)
	F	– (0)	612 (1)	– (0)	– (0)	677 (2)
VIC	M	418 (163)	436 (177)	510 (206)	397 (229)	440 (212)
	F	220 (13)	290 (21)	392 (24)	490 (23)	363 (31)
WA	M	420 (37)	410 (42)	325 (45)	396 (47)	444 (56)
	F	324 (10)	494 (6)	560 (15)	456 (18)	420 (14)
Exposure category						
Male homosexual contact[1]	M	480 (501)	468 (499)	490 (568)	450 (569)	466 (549)
Injecting drug use[2]	M	200 (14)	370 (21)	256 (22)	255 (14)	388 (14)
	F	605 (4)	680 (9)	1 050 (4)	730 (5)	452 (6)
Heterosexual contact	M	190 (55)	340 (81)	330 (69)	234 (93)	316 (100)
	F	321 (59)	390 (83)	375 (65)	380 (105)	350 (87)
Other/undetermined	M	149 (23)	485 (28)	370 (39)	217 (30)	410 (29)
	F	334 (4)	190 (3)	390 (5)	235 (8)	523 (8)
Newly acquired HIV infection status						
Diagnoses of newly	M	539 (216)	566 (220)	574 (234)	530 (254)	550 (213)
acquired HIV infection[3]	F	491 (7)	866 (14)	799 (7)	617 (15)	565 (8)
Other HIV diagnoses	M	375 (377)	400 (409)	379 (464)	319 (452)	390 (479)
	F	316 (60)	336 (81)	368 (67)	364 (103)	355 (93)
Total[4]		**434 (661)**	**446 (725)**	**450 (773)**	**410 (826)**	**422 (793)**

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 5 people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.2.9 Number of specimens tested for HIV antibody in public health laboratories, 1998 – 2007, by State/Territory and year of test

	Year of HIV antibody test									
State/Territory	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
ACT	8 293	6 976	5 762	5 446	5 712	7 978	14 388	15 551	16 565	17 602
NSW	299 434	324 126	311 904	328 295	357 526	358 063	347 064	356 046	322 569	251 724
NT	13 137	15 149	14 835	15 158	15 710	16 407	15 323	15 217	7 247	6 686
QLD	164 388	179 336	183 533	185 028	184 994	188 403	206 322	222 558	238 509	251 430
SA	80 586	76 987	76 275	77 219	75 360	79 409	83 970	88 158	88 552	80 664
TAS	11 883	12 243	13 152	12 714	12 574	12 967	12 754	13 041	12 573	12 248
VIC	113 342	161 600	160 611	177 949	202 682	204 561	152 284	165 461	183 508	253 145
WA	79 308	82 040	89 426	100 225	93 271	100 483	102 694	114 203	101 277	104 540
Total	**770 371**	**858 457**	**855 498**	**902 034**	**947 829**	**968 271**	**934 799**	**990 235**	**970 800**	**978 039**

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 people[1], 1998 – 2007, by year. Number of cases, median age and percent[2] of total cases by sex, newly acquired infection, State/Territory and HIV exposure category

	Year of HIV diagnosis										
Characteristic	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Total**
Total cases	**28**	**9**	**16**	**14**	**27**	**23**	**21**	**18**	**20**	**18**	**194**
Males (%)	67.9	66.7	87.5	57.1	55.6	73.9	71.4	83.3	70.0	77.8	70.6
Median age (years)	31	28	30	29	36	34	30	33	30	33	33
Newly acquired infection	21.4 (6)	33.3 (3)	18.7 (3)	14.3 (2)	22.2 (6)	17.4 (4)	28.6 (6)	22.2 (4)	30.0 (6)	22.2 (4)	22.7(44)
State/Territory											
ACT	–	–	–	–	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)
NSW	28.6 (8)	55.6 (5)	37.5 (6)	28.6 (4)	29.6 (8)	17.4 (4)	19.0 (4)	11.1 (2)	45.0 (9)	44.4 (8)	29.9(58)
NT	14.3 (4)	0.0 (0)	6.2 (1)	7.1 (1)	7.4 (2)	4.3 (1)	4.8 (1)	0.0 (0)	0.0 (0)	0.0 (0)	5.2(10)
QLD	7.1 (2)	11.1 (1)	18.7 (3)	21.4 (3)	18.5 (5)	26.1 (6)	23.8 (5)	38.9 (7)	15.0 (3)	22.2 (4)	20.1(39)
SA	3.6 (1)	11.1 (1)	6.2 (1)	7.1 (1)	7.4 (2)	8.7 (2)	9.5 (2)	0.0 (0)	0.0 (0)	5.6 (1)	5.7(11)
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)	3.7 (1)	21.7 (5)	19.0 (4)	16.7 (3)	10.0 (2)	16.7 (3)	10.8(21)
WA	42.8(12)	22.2 (2)	31.3 (5)	21.4 (3)	33.3 (9)	21.7 (5)	23.8 (5)	33.3 (6)	30.0 (6)	11.1 (2)	28.4(55)
HIV exposure category											
Male homosexual/ bisexual contact	32.0 (8)	25.0 (2)	50.0 (8)	42.9 (6)	20.0 (7)	31.8 (7)	50.0(10)	33.3 (6)	52.6(10)	47.1 (8)	38.7(72)
Male homosexual/bisexual contact & injecting drug use	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)	11.8 (2)	8.1(15)
Injecting drug use[3]	12.0 (3)	25.0 (2)	25.0 (4)	28.6 (4)	16.0 (4)	13.6 (3)	20.0 (4)	16.7 (3)	26.3 (5)	17.6 (3)	18.8(35)
Heterosexual contact	40.0(10)	37.5 (3)	18.7 (3)	21.4 (3)	60.0(15)	40.9 (9)	30.0 (6)	27.8 (5)	21.1 (4)	23.5 (4)	33.3(62)
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	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)	0.0 (0)	1.1 (2)
Other/undetermined[4]	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)	5.6 (1)	4.1 (8)

1 Information on Indigenous status was available in ACT from 1 January 2005. Information on Indigenous 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 Rate[1] of diagnosis of HIV infection, 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and area of residence

		Area of residence					
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**Major cities**	**Inner regional**	**Outer regional**	**Remote**	**Very remote**	**Total**
2003	Aboriginal and Torres Strait Islander	9.5	3.0	5.1	2.5	0.0	5.1
	Non-Indigenous[2]	5.4	1.5	1.3	0.4	3.5	4.4
2004	Aboriginal and Torres Strait Islander	8.8	1.0	5.1	5.1	0.0	4.6
	Non-Indigenous[2]	5.5	1.4	2.5	2.0	3.5	4.6
2005	Aboriginal and Torres Strait Islander	5.4	4.0	2.0	2.5	1.5	4.0
	Non-Indigenous[2]	6.1	1.4	1.6	0.8	0.0	4.9
2006	Aboriginal and Torres Strait Islander	8.8	2.0	1.0	5.1	1.5	4.4
	Non-Indigenous[2]	6.1	1.8	2.4	3.5	4.7	5.1
2007	Aboriginal and Torres Strait Islander	8.1	3.0	2.0	0.0	0.0	4.0
	Non-Indigenous[2]	6.3	1.7	2.8	3.9	0.0	5.3

1 Rate per 100 000 population. Population estimates from *2006 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 Indigenous people[1], 1998 – 2007, by year. Number of AIDS diagnoses, median age and percent[2] of total cases by sex, late HIV diagnosis, State/Territory and HIV exposure category

	Year of AIDS diagnosis										
Characteristic	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Total**
Total cases	**9**	**5**	**5**	**5**	**9**	**12**	**12**	**9**	**4**	**3**	**73**
Males (%)	77.8	100.0	100.0	100.0	55.6	75.0	91.7	88.9	50.0	66.7	80.8
Median age (years)	34	37	37	40	37	36	44	36	43	26	37
Late HIV diagnosis	44.4 (4)	40.0 (2)	80.0 (4)	20.0 (1)	44.4 (4)	33.3 (4)	33.3 (4)	55.5 (5)	25.0 (1)	33.3 (1)	41.1(30)
State/Territory											
ACT	–	–	–	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
NSW	33.3 (3)	60.0 (3)	20.0 (1)	60.0 (3)	44.4 (4)	33.3 (4)	33.3 (4)	33.3 (3)	50.0 (2)	66.7 (2)	39.7(29)
NT	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)	0.0 (0)	4.1 (3)
QLD	11.1 (1)	0.0 (0)	40.0 (2)	20.0 (1)	22.2 (2)	25.0 (3)	33.3 (4)	22.2 (2)	0.0 (0)	0.0 (0)	20.5(15)
SA	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)	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)	33.3 (1)	8.2 (6)
WA	33.3 (3)	20.0 (1)	40.0 (2)	20.0 (1)	33.3 (3)	25.0 (3)	8.3 (1)	11.1 (1)	50.0 (2)	0.0 (0)	23.3(17)
HIV exposure category											
Male homosexual/ bisexual contact	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)	50.0 (1)	49.3(34)
Male homosexual/bisexual contact & injecting drug use	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)	0.0 (0)	8.7 (6)
Injecting drug use[3]	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)	0.0 (0)	11.6 (8)
Heterosexual contact	37.5 (3)	20.0 (1)	0.0 (0)	20.0 (1)	37.5 (4)	27.2 (3)	18.2 (3)	11.1 (1)	75.0 (3)	50.0 (1)	29.0(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)	11.1 (1)	0.0 (0)	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]	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)	33.3 (1)	5.4 (4)

1 Information on Indigenous status was available in the ACT from 1 January 2005. Information on Indigenous 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 Rate[1] of diagnosis of AIDS, 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and area of residence

		Area of residence					
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**Major cities**	**Inner regional**	**Outer regional**	**Remote**	**Very remote**	**Total**
2003	Aboriginal and Torres Strait Islander	5.4	0.0	3.0	2.5	0.0	2.6
	Non-Indigenous[2]	1.4	0.5	0.7	0.4	0.0	1.2
2004	Aboriginal and Torres Strait Islander	4.1	2.0	3.0	2.5	0.0	2.6
	Non-Indigenous[2]	1.2	0.5	0.5	0.4	1.2	1.0
2005	Aboriginal and Torres Strait Islander	3.4	2.0	1.0	2.5	0.0	2.0
	Non-Indigenous[2]	1.4	0.6	0.5	0.4	0.0	1.1
2006	Aboriginal and Torres Strait Islander	0.7	0.0	1.0	5.1	0.0	0.9
	Non-Indigenous[2]	1.3	0.4	0.8	0.8	0.0	1.1
2007	Aboriginal and Torres Strait Islander	2.0	0.0	0.0	0.0	0.0	0.7
	Non-Indigenous[2]	1.0	0.3	0.4	0.0	0.0	0.8

1 Rate per 100 000 population. Population estimates from *2006 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 National surveillance for perinatal exposure to HIV

Table 1.4.1 Number and population rate[1] of perinatal exposure to HIV, 1998 – 2007, by State/Territory and year of birth

State/ Territory	1998 – 1999		2000 – 2001		2002 – 2003		2004 – 2005		2006 – 2007	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	1	12.2	1	12.0	0	0.0	0	12.0	0	0.0
NSW	16	9.3	27	15.6	20	11.7	31	17.9	18	10.4
NT	1	13.8	1	13.8	0	0.0	1	13.6	1	13.6
QLD	9	9.6	5	5.3	8	8.4	8	8.1	11	10.5
SA	0	0.0	1	2.8	2	8.7	2	5.8	4	11.1
TAS	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0
VIC	5	4.1	10	8.5	7	5.8	7	5.7	17	13.2
WA	12	24.3	10	20.0	7	14.7	2	4.0	1	1.9
Total	**45**	**9.0**	**55**	**11.0**	**44**	**8.8**	**51**	**10.1**	**52**	**9.9**

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 1.4.2 Number of women with perinatally HIV exposed children, 1998 – 2007, by time of the woman's HIV diagnosis relative to the first exposed child's birth

	Interval of the woman's HIV diagnosis					
First exposed child's year of birth	Before the birth (years)				At or after the birth	Total
	< 1	1 – 2	> 2	Total		
1998 – 1999	10	4	14	28	7	35
2000 – 2001[1]	19	2	16	37	6	44
2002 – 2003	11	1	20	32	2	34
2004 – 2005	18	4	11	33	4	37
2006 – 2007	10	8	12	30	2	32
Total[1]	**68**	**19**	**73**	**160**	**21**	**182**

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 1.4.3 Number of women with perinatally HIV exposed children, 1998 – 2007, 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	1998 – 2002		2003 – 2007		1998 – 2007	
	Number of women	Number of exposed children	Number of women	Number of exposed children	Number of women	Number of exposed children
Injecting drug use	5	10	8	10	13	20
Heterosexual contact	88	111	76	109	164	221
Sex with injecting drug user	*12*	*16*	*7*	*13*	*19*	*29*
Sex with bisexual male	*4*	*8*	*3*	*4*	*7*	*12*
From high prevalence country	*26*	*31*	*33*	*46*	*59*	*77*
Sex with person from a high prevalence country	*15*	*17*	*11*	*20*	*26*	*37*
Sex with person with medically acquired HIV	*0*	*0*	*1*	*1*	*1*	*1*
Sex with person with HIV infection, other exposure	*11*	*17*	*4*	*5*	*15*	*23*
Not further specified	*20*	*22*	*17*	*20*	*37*	*42*
Receipt of blood/tissue	1	1	0	0	1	1
Other/undetermined	2	2	2	3	4	5
Total	**96**	**124**	**86**	**122**	**182**	**247**

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

Table 1.4.4 Number of perinatally exposed children, 1998 – 2007, 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
1998 – 1999	36	0	9	5	45	5
2000 – 2001[1]	48	0	6	5	55	5
2002 – 2003	42	3	2	1	44	4
2004 – 2005	46	0	5	4	51	4
2006 – 2007	50	2	2	1	52	3
Total	**222**	**5**	**24**	**16**	**247**	**21**

1 Includes 1 woman whose exposed child was born in 2000 – 2001 whose date of HIV diagnosis was not reported.

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

Table 1.4.5 Number of perinatally exposed children, born in 1998 – 2007 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
1998 – 1999	36	0
No reported use of interventions	*5.5*	*0*
Use of 1 intervention	*13.9*	*0*
Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding	*50.0*	*0*
Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding	*30.6*	*0*
2000 – 2001	48	0
No reported use of interventions	*0*	*0*
Use of 1 intervention	*14.6*	*0*
Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding	*33.3*	*0*
Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding	*52.1*	*0*
2002 – 2003	42	3
No reported use of interventions	*4.8*	*1*
Use of 1 intervention	*16.7*	*1*
Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding	*33.3*	*0*
Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding	*45.2*	*1*
2004 – 2005	46	0
No reported use of interventions	*2.2*	*0*
Use of 1 intervention	*0.0*	*0*
Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding only	*32.6*	*0*
Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding	*60.9*	*0*
2006 – 2007	50	2
No reported use of interventions	*6.0*	*1*
Use of 1 intervention	*4.0*	*0*
Use of antiretroviral therapy in pregnancy and avoidance of breastfeeding	*38.0*	*0*
Use of antiretroviral therapy in pregnancy, elective caesarean delivery and avoidance of breastfeeding	*48.0*	*1*
Total	**222**	**5**

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

1.5 Global comparisons

Table 1.5.1 Estimated HIV prevalence and AIDS incidence in selected countries

	HIV prevalence		AIDS incidence	
Country	**2007[1]**	**Rate[2]**	**2007**	**Rate[3]**
Asia Pacific				
Australia	16 692	60	185	0.9
Cambodia	75 000	800	–	–
China	700 000	100	–	–
India	2 400 000	300	–	–
Indonesia	270 000	200	–	–
Japan	9 600	<100	–	–
Malaysia	80 000	500	–	–
Myanmar	240 000	700	–	–
New Zealand	1 400	<100	31	0.7
Papua New Guinea	54 000	1 500	–	–
Philippines	8 300	<100	–	–
Republic of Korea	13 000	<100	–	–
Thailand	610 000	1 400	–	–
Vietnam	290 000	500	–	–
Europe				
France[4]	140 000	400	1 020	1.6
Germany[4]	53 000	100	367	0.4
Italy[4]	150 000	400	1 126	1.9
Spain[4]	140 000	500	1 519	3.5
United Kingdom[4,5]	73 000	115	857	1.4
North America				
Canada[4]	73 000	400	255	0.8
United States[4]	1 200 000	600	39 002	12.8

1 Estimated number of people living with HIV/AIDS in 2007.

2 Estimated HIV prevalence per 100 000 population aged 15 – 49 years.

3 Rate per 100 000 population.

4 AIDS incidence in 2006.

5 Estimated HIV prevalence per 100 000 population aged 15 – 59 years in 2006.

Tables

2 National surveillance for viral hepatitis

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

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

2.3 Long term outcomes among people with chronic viral hepatitis

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 rate[1] of diagnoses of hepatitis A infection, 2003 – 2007, by State/Territory and year

	Year of diagnosis									
	2003		2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	5	1.5	1	0.3	3	0.8	1	0.3	2	0.5
NSW	124	1.8	137	2.0	83	1.2	95	1.4	65	0.9
NT	42	17.9	14	5.6	65	27.6	30	12.0	5	1.9
QLD	48	1.2	27	0.7	51	1.3	31	0.8	28	0.7
SA	13	0.8	11	0.7	10	0.7	8	0.5	6	0.4
TAS	14	2.9	1	0.2	2	0.4	4	0.9	3	0.6
VIC	89	1.8	71	1.4	59	1.2	44	0.9	36	0.7
WA	95	4.7	57	2.8	53	2.6	68	3.3	21	1.0
Total	**430**	**2.1**	**319**	**1.6**	**326**	**1.6**	**281**	**1.4**	**166**	**0.8**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.2 Number of diagnoses of hepatitis A infection, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T	M	F	T	M	F	T[1]	M	F	T	M	F	T
0 – 4	26	11	37	19	6	25	21	11	32	15	10	25	5	8	13
5 – 14	49	31	80	42	32	74	34	34	68	35	33	68	10	19	29
15 – 19	15	19	34	11	7	18	12	14	26	9	10	19	4	4	8
20 – 29	48	31	79	30	24	54	32	37	69	32	20	52	23	17	40
30 – 39	40	25	65	31	26	57	25	17	43	16	20	36	15	9	24
40 – 49	41	26	67	26	9	35	23	13	36	21	15	36	14	8	22
50 – 59	19	17	36	11	9	20	13	14	27	14	9	23	7	5	12
60 +	17	15	32	17	19	36	13	12	25	13	9	22	8	10	18
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**255**	**175**	**430**	**187**	**132**	**319**	**173**	**152**	**326**	**155**	**126**	**281**	**86**	**80**	**166**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate[1] of diagnoses of newly acquired hepatitis B infection, 2003 – 2007, by State/Territory and year

	Year of diagnosis									
	2003		2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	0	0.0	5	1.4	3	0.9	6	1.7	13	3.4
NSW	74	1.1	53	0.8	56	0.8	54	0.8	56	0.8
NT	15	6.7	7	3.1	5	2.2	11	4.9	9	3.7
QLD	42	1.1	53	1.4	62	1.5	50	1.2	63	1.5
SA	10	0.7	8	0.5	8	0.5	7	0.5	11	0.7
TAS	10	2.2	16	3.7	3	0.7	9	2.0	9	2.0
VIC	152	3.0	110	2.2	79	1.5	107	2.1	84	1.6
WA	45	2.3	29	1.4	35	1.7	50	2.4	42	2.0
Total	**348**	**1.7**	**281**	**1.4**	**251**	**1.2**	**294**	**1.4**	**287**	**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 2.1.4 Number of diagnoses of newly acquired hepatitis B infection, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T	M	F	T	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	2	0	2	2	1	3	1	0	1	4	1	5	0	1	1
5 – 14	4	2	6	4	1	5	3	1	5	2	3	5	1	2	3
15 – 19	14	21	35	8	11	19	3	9	12	8	13	21	8	9	17
20 – 29	76	47	123	58	62	120	48	40	88	60	33	93	56	39	95
30 – 39	80	28	108	53	22	75	56	19	75	51	36	88	56	27	83
40 – 49	24	10	34	21	11	32	30	11	41	33	19	52	28	14	42
50 – 59	19	5	24	12	5	17	10	8	18	15	6	21	20	7	27
60 +	12	4	16	8	2	10	8	3	11	5	4	9	14	4	19
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**231**	**117**	**348**	**166**	**115**	**281**	**159**	**91**	**251**	**178**	**115**	**294**	**183**	**103**	**287**

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 infection[1], 2003 – 2007, by exposure category, year and sex

	Year of diagnosis														
	2003			2004			2005			2006			2007		
Exposure category	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Injecting drug use	66	24	90	49	27	76	30	14	44	43	25	68	32	17	49
Sexual contact	31	17	48	18	14	32	17	17	34	10	9	19	9	11	20
Male homosexual contact	*8*	*–*	*8*	*1*	*–*	*1*	*7*	*–*	*7*	*3*	*–*	*3*	*3*	*–*	*3*
Heterosexual contact	*23*	*15*	*38*	*17*	*13*	*30*	*9*	*13*	*22*	*6*	*9*	*15*	*6*	*11*	*17*
Not further specified	*0*	*2*	*2*	*0*	*1*	*1*	*1*	*4*	*5*	*1*	*0*	*1*	*0*	*0*	*0*
Blood/tissue recipient	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skin penetration procedure	1	0	1	0	0	0	0	0	0	1	0	1	4	0	4
Healthcare exposure	0	1	1	1	0	1	0	0	0	0	0	0	1	0	1
Household contact	0	0	0	1	0	1	3	1	4	4	0	4	3	2	5
Other	1	0	1	0	0	0	0	0	0	3	2	5	15	5	20
Undetermined	20	18	38	17	18	35	16	4	20	23	12	35	1	3	4
Total	**119**	**60**	**179**	**86**	**59**	**145**	**66**	**36**	**102**	**84**	**48**	**132**	**65**	**38**	**103**

1 Includes diagnoses in SA, TAS and VIC in 2003 – 2007 and diagnoses in ACT in 2004 – 2006 only.

Source: State/Territory health authorities

Table 2.1.6 Number and percentage of diagnoses of newly acquired hepatitis B infection[1], 2003 – 2007, and the Australian population, by region/country of birth and year

	Year of diagnosis										
	2003		2004		2005		2006		2007		Australian
Region/country of birth	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	population[2]
Total with a reported country of birth	**178**	**82.8**	**137**	**90.7**	**90**	**67.2**	**155**	**88.6**	**159**	**82.0**	**19 855 288**
Australia	148	68.8	102	67.5	74	55.2	123	70.3	133	68.6	70.9
Overseas born	30	14.0	35	23.1	16	11.9	32	18.3	26	13.4	22.2
Other Oceania	*6*	*2.8*	*4*	*2.6*	*1*	*0.7*	*9*	*5.1*	*4*	*2.1*	*2.5*
United Kingdom and Ireland	*4*	*1.9*	*4*	*2.6*	*2*	*1.5*	*5*	*2.9*	*6*	*3.1*	*5.5*
Other Europe	*3*	*1.4*	*12*	*7.9*	*2*	*1.5*	*5*	*2.9*	*8*	*4.1*	*5.0*
Middle East/North Africa	*1*	*0.5*	*2*	*1.3*	*1*	*0.7*	*0*	*0.0*	*1*	*0.5*	*1.3*
Sub-Saharan Africa	*2*	*0.9*	*1*	*0.7*	*5*	*3.7*	*5*	*2.9*	*1*	*0.5*	*1.0*
Asia	*14*	*6.5*	*11*	*7.3*	*5*	*3.7*	*8*	*4.6*	*5*	*2.6*	*6.1*
North America	*0*	*0.0*	*1*	*0.7*	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*0.5*
South/Central America and the Caribbean	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*1*	*0.5*	*0.4*
Not reported	37	17.2	14	9.3	44	32.8	20	11.4	35	18.0	6.9
Total	**215**	**100.0**	**151**	**100.0**	**134**	**100.0**	**175**	**100.0**	**194**	**100.0**	

1 Includes diagnoses in SA, VIC and WA in 2003 – 2007 and diagnoses in TAS in 2004 – 2007 only.

2 Population estimates by region/country of birth from 2006 Census by the Australian Bureau of Statistics.

Source: State/Territory health authorities

Table 2.1.7 Number and rate[1] of diagnosis of hepatitis C infection, 2003 – 2007, by State/Territory and year

	Year of diagnosis									
	2003		2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	252	70.2	215	60.2	174	48.9	193	53.8	200	55.0
NSW	5 241	78.2	4 891	72.7	4 352	64.5	4 383	64.5	4 243	62.0
NT	219	99.3	261	120.8	257	117.6	269	123.6	227	104.5
QLD	2 598	67.9	2 604	66.6	2 683	67.1	2 851	69.7	2 726	65.5
SA	647	43.1	667	44.2	616	40.6	581	37.8	624	40.3
TAS	358	78.9	311	68.6	240	52.7	269	58.4	274	59.4
VIC	3 603	72.0	3 032	60.0	2 969	58.0	2 743	52.8	2 766	53.3
WA	1 261	63.6	1 167	57.9	1 080	52.9	1 129	54.2	1 274	60.1
Total	**14 179**	**70.7**	**13 148**	**64.9**	**12 371**	**60.4**	**12 418**	**59.9**	**12 334**	**58.8**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number of diagnoses of hepatitis C infection, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	3	4	7	9	5	14	3	4	7	7	5	12	3	3	6
5 – 14	8	12	20	6	11	18	7	17	24	22	16	38	17	16	33
15 – 19	264	328	595	205	276	482	184	205	391	149	202	353	121	176	298
20 – 29	2 427	1 583	4 033	2 090	1 460	3 567	1 996	1 340	3 353	1 891	1 244	3 156	1 739	1 171	2 926
30 – 39	2 703	1 584	4 308	2 508	1 437	3 967	2 395	1 312	3 716	2 202	1 320	3 543	2 333	1 304	3 654
40 – 49	2 463	1 184	3 659	2 271	1 164	3 446	2 124	1 139	3 265	2 246	1 108	3 368	2 176	1 096	3 282
50 – 59	712	312	1 028	765	365	1 134	778	355	1 137	963	426	1 392	1 071	514	1 589
60 +	266	244	516	257	243	504	223	247	473	279	268	548	294	237	534
Not reported	7	3	13	14	2	16	2	2	5	5	3	8	5	3	12
Total	**8 853**	**5 254**	**14 179**	**8 125**	**4 963**	**13 148**	**7 712**	**4 621**	**12 371**	**7 764**	**4 592**	**12 418**	**7 759**	**4 520**	**12 334**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number of diagnoses of newly acquired hepatitis C infection, 2003 – 2007, by State/Territory and year

	Year of diagnosis[1]				
State/Territory	2003	2004	2005	2006	2007
ACT	13	6	15	18	9
NSW	127	59	43	55	53
NT	2	–	3	3	4
QLD	–	–	–	–	–
SA	76	63	51	55	48
TAS	13	26	27	10	20
VIC	106	160	131	200	145
WA	182	139	106	109	76
Total	**519**	**453**	**376**	**450**	**355**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.10 Number of diagnoses of newly acquired hepatitis C infection, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T[1]
0 – 4	2	0	2	2	1	3	0	3	3	7	2	9	2	1	3
5 – 14	2	1	3	0	1	1	1	1	2	0	1	1	0	2	2
15 – 19	27	44	71	38	40	78	20	31	51	26	24	50	19	25	44
20 – 29	166	97	263	119	77	196	105	76	181	131	77	208	104	53	158
30 – 39	67	52	119	80	49	129	60	39	99	84	41	125	65	32	97
40 – 49	31	17	48	21	14	35	22	13	35	29	16	45	26	14	40
50 – 59	7	2	9	5	5	10	3	2	5	5	1	6	4	3	7
60 +	1	3	4	1	0	1	0	0	0	3	3	6	0	4	4
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**303**	**216**	**519**	**266**	**187**	**453**	**211**	**165**	**376**	**285**	**165**	**450**	**220**	**134**	**355**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.11 Number of diagnoses of newly acquired hepatitis C infection[1], 2003 – 2007, by exposure category, year and sex

	Year of diagnosis														
	2003			2004			2005			2006			2007		
Exposure category	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T[2]
Injecting drug use[2]	218	146	364	204	122	326	159	132	291	187	108	295	135	71	207
Sexual contact	2	8	10	3	9	12	8	9	17	11	15	26	4	3	7
Blood/tissue recipient	1	0	1	0	1	1	2	1	3	1	1	2	1	2	3
Skin penetration procedure	7	7	14	5	7	12	6	4	10	26	11	37	2	2	4
Healthcare exposure	8	3	11	5	12	17	4	3	7	5	7	12	1	1	2
Household contact	1	0	1	1	1	2	3	0	3	1	1	2	0	0	0
Other[3]	18	3	21	9	5	14	18	1	19	22	8	30	9	5	14
Undetermined	73	55	128	36	29	65	43	42	85	42	28	70	17	13	30
Total	**328**	**222**	**550**	**263**	**186**	**449**	**243**	**192**	**435**	**295**	**179**	**474**	**169**	**97**	**267**

1 Includes diagnoses in ACT, NSW, SA, TAS, VIC and WA in 2003 – 2006, diagnoses in NT in 2005 – 2006 and diagnoses in SA, TAS, VIC and WA only in 2007.

2 Includes 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 2.1.12 Number and percentage of diagnoses[1] of newly acquired hepatitis C infection, 2003 – 2007, and the Australian population, by region/country of birth and year

Region/ Country of birth	Year of diagnosis 2003 Number	2003 Percent	2004 Number	2004 Percent	2005 Number	2005 Percent	2006 Number	2006 Percent	2007 Number	2007 Percent	Australian population[2]
Total with a reported country of birth	**394**	**73.2**	**302**	**68.2**	**347**	**82.4**	**394**	**86.4**	**317**	**82.8**	**19 855 288**
Australia	340	63.2	272	61.4	313	74.3	361	79.2	285	74.4	70.9
Overseas born	54	10.0	30	6.8	34	8.1	33	7.2	32	8.4	22.2
Other Oceania	*12*	*2.2*	*6*	*1.4*	*7*	*1.7*	*5*	*1.1*	*4*	*1.0*	*2.5*
United Kingdom and Ireland	*14*	*2.6*	*7*	*1.6*	*7*	*1.7*	*5*	*1.1*	*6*	*1.6*	*5.5*
Other Europe	*5*	*0.9*	*5*	*1.1*	*7*	*1.7*	*6*	*1.3*	*6*	*1.6*	*5.0*
Middle East/North Africa	*3*	*0.6*	*1*	*0.2*	*1*	*0.2*	*2*	*0.4*	*3*	*0.8*	*1.3*
Sub-Saharan Africa	*1*	*0.2*	*2*	*0.5*	*2*	*0.5*	*1*	*0.2*	*2*	*0.5*	*1.0*
Asia	*16*	*3.0*	*8*	*1.8*	*9*	*2.1*	*12*	*2.6*	*10*	*2.6*	*6.1*
North America	*3*	*0.6*	*1*	*0.2*	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*0.5*
South/Central America and the Caribbean	*0*	*0.0*	*0*	*0.0*	*1*	*0.2*	*2*	*0.4*	*1*	*0.3*	*0.4*
Not reported	144	26.8	141	31.8	74	17.6	62	13.6	66	17.2	6.9
Total	**538**	**100.0**	**443**	**100.0**	**421**	**100.0**	**456**	**100.0**	**383**	**100.0**	

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

2 Population estimates by region/country of birth from the 2006 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, 2007, by State/Territory and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status						
State/Territory	Aboriginal and Torres Strait Islander		Non-Indigenous		Not reported		Total
ACT	–		–		2	(100.0)	2
NSW	0	(0.0)	56	(86.2)	9	(13.8)	65
NT	–		–		3	(60.0)	5
QLD	0	(0.0)	22	(78.6)	6	(21.4)	28
SA	0	(0.0)	6	(100.0)	0	(0.0)	6
TAS	0	(0.0)	2	(66.7)	1	(33.3)	3
VIC	0	(0.0)	29	(80.6)	7	(19.4)	36
WA	0	(0.0)	20	(95.2)	1	(4.8)	21
Total	**0**	**(0.0)**	**137**	**(82.5)**	**29**	**(17.5)**	**166**

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2007, by State/Territory and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status						
State/Territory	Aboriginal and Torres Strait Islander		Non-Indigenous		Not reported		Total
ACT	–		–		10	(76.9)	13
NSW	1	(1.8)	36	(64.3)	19	(33.9)	56
NT	2	(22.2)	3	(33.3)	4	(44.4)	9
QLD	6	(9.5)	31	(49.2)	26	(41.3)	63
SA	1	(9.1)	10	(90.9)	0	(0.0)	11
TAS	1	(11.1)	7	(77.8)	1	(11.1)	9
VIC	1	(1.2)	79	(94.0)	4	(4.8)	84
WA	3	(7.1)	39	(92.9)	0	(0.0)	42
Total	**16**	**(5.6)**	**207**	**(72.1)**	**64**	**(22.3)**	**287**

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2007, by State/Territory and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status						
State/Territory	Aboriginal and Torres Strait Islander		Non-Indigenous		Not reported		Total
ACT	–		–		182	(91.0)	200
NSW	–		–		3 331	(78.5)	4 243
NT	26	(11.5)	119	(52.4)	82	(36.1)	227
QLD	–		–		1 640	(60.2)	2 726
SA	62	(9.9)	547	(87.7)	15	(2.4)	624
TAS	8	(2.9)	168	(61.3)	98	(35.8)	274
VIC	–		–		1 996	(72.2)	2 766
WA	102	(8.0)	716	(56.2)	456	(35.8)	1 274
Total	**535**	**(4.3)**	**3 999**	**(32.4)**	**7 800**	**(63.2)**	**12 334**

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 – 2007, by year and primary cause of liver disease, and hepatitis status for cases where the primary diagnosis was hepatocellular carcinoma

	Year											
Diagnosis	**1985 – 1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007[2]**	**Total**
Hepatitis B	62 (7.0)	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)	3 (2.5)	137
Hepatitis C	97 (11.0)	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)	30 (25.2)	399
Hepatitis B/C/D	6 (0.7)	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)	2 (1.7)	21
Hepatocellular carcinoma	21 (2.4)	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)	19 (16.0)	100
Hepatitis B	6 (0.7)	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)	6 (5.0)	31
Hepatitis C	5 (0.6)	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)	11 (9.2)	47
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)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	2
Hepatitis negative	9 (1.0)	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)	2 (1.7)	20
Other[1]	695 (78.9)	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)	65 (54.6)	1 408
Total	**881 (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)**	**119 (100.0)**	**2 065**

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

2 Data available to 31 December 2007.

Source: Australia and New Zealand Liver Transplant Registry

Tables

3 National surveillance for sexually transmissible infections

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

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

3.3 Gonococcal isolates

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 rate[1] of diagnoses of chlamydia, 2003 – 2007, by State/Territory and year

	Year of diagnosis									
	2003		2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	527	140.8	625	166.2	701	183.3	821	213.1	905	230.3
NSW	7 781	116.6	10 016	150.1	11 276	168.1	12 054	177.8	12 435	181.3
NT	1 637	710.9	1 588	687.6	1 625	686.4	2 057	858.9	2 180	885.9
QLD	7 692	199.6	8 875	225.8	9 724	241.8	12 232	296.3	12 875	303.9
SA	1 996	137.1	2 429	165.8	2 705	182.8	3 125	208.1	3 471	227.9
TAS	605	136.7	618	138.8	870	194.8	1 049	232.7	1 126	246.9
VIC	6 412	128.3	7 695	152.2	9 007	176.2	9 970	191.0	11 131	213.2
WA	3 767	187.8	4 331	213.7	5 447	263.8	6 141	292.3	7 744	359.8
Total	**30 417**	**151.9**	**36 177**	**179.2**	**41 355**	**202.3**	**47 449**	**228.2**	**51 867**	**245.1**

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, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	19	26	45	26	34	61	38	34	73	40	40	80	18	21	39
5 – 14	44	280	324	43	342	388	59	390	449	66	396	463	70	435	505
15 – 19	1 610	5 649	7 270	1 858	6 705	8 598	2 225	7 571	9 814	2 592	8 732	11 346	2 975	9 696	12 695
20 – 29	6 793	9 464	16 294	8 175	11 423	19 677	9 452	13 304	22 801	10 796	15 191	26 044	11 945	16 688	28 688
30 – 39	2 534	1 980	4 530	2 897	2 250	5 173	3 250	2 531	5 793	3 613	2 912	6 544	3 658	3 140	6 813
40 – 49	909	465	1 380	1 069	533	1 611	1 244	551	1 802	1 384	682	2 071	1 406	747	2 163
50 – 59	323	107	432	382	110	496	385	115	501	548	157	706	541	190	732
60 +	81	24	105	107	30	139	91	12	104	148	35	183	181	32	214
Not reported	19	15	37	8	14	34	9	5	18	6	4	12	7	5	18
Total	**12 332**	**18 010**	**30 417**	**14 565**	**21 441**	**36 177**	**16 753**	**24 513**	**41 355**	**19 193**	**28 149**	**47 449**	**20 801**	**30 954**	**51 867**

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, 2003 – 2007, by State/Territory[1] and year

	Year of diagnosis				
State/Territory	2003	2004	2005	2006	2007
NT	6	6	4	2	1
QLD	9	3	8	4	2
WA	1	1	2	0	0
Total	**16**	**10**	**14**	**6**	**3**

1 State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T	M	F	T[1]	M	F	T	M	F	T	M	F	T
0 – 14	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0
15 – 19	0	3	3	1	1	2	1	2	3	0	0	0	0	0	0
20 – 29	1	2	3	1	1	2	0	2	2	1	1	2	0	1	1
30 – 39	3	2	5	3	1	4	1	3	4	2	1	3	0	0	0
40 – 49	1	2	3	0	0	0	0	1	1	0	0	0	1	0	1
50 +	1	1	2	1	0	2	2	0	2	1	0	1	1	0	1
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**6**	**10**	**16**	**6**	**3**	**10**	**5**	**9**	**14**	**4**	**2**	**6**	**2**	**1**	**3**

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate[1] of diagnoses of gonorrhoea, 2003 – 2007, by State/Territory and year

	Year of diagnosis									
	2003		2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	30	8.2	35	9.5	33	8.8	33	8.5	45	12.0
NSW	1 326	19.7	1 438	21.4	1 572	23.3	1 731	25.5	1 379	20.1
NT	1 433	628.2	1 555	683.3	1 805	772.6	1 778	745.2	1 600	653.1
QLD	1 036	26.9	1 176	29.9	1 403	34.9	1 541	37.4	1 335	31.6
SA	297	20.0	376	25.3	399	26.6	497	33.1	459	30.1
TAS	23	5.2	28	6.1	35	7.7	18	3.9	38	8.4
VIC	1 170	23.3	1 110	21.9	1 210	23.6	1 296	24.9	988	19.0
WA	1 455	72.4	1 418	69.7	1 581	76.6	1 676	79.8	1 760	82.0
Total	**6 770**	**33.7**	**7 136**	**35.3**	**8 038**	**39.2**	**8 570**	**41.3**	**7 604**	**36.1**

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 3.1.6 Number of diagnoses of gonorrhoea, 2003 – 2007, by age group, year and sex

	Year of diagnosis														
Age group	2003			2004			2005			2006			2007		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	5	9	14	4	8	12	2	9	11	1	10	11	2	5	7
5 – 14	43	121	164	27	141	170	40	167	207	24	139	163	48	138	186
15 – 19	593	741	1 335	671	738	1 429	784	861	1 645	689	827	1 516	746	796	1 542
20 – 29	1 748	812	2 564	1 911	838	2 773	2 021	987	3 011	2 405	1 106	3 517	1 968	1 101	3 070
30 – 39	1 349	267	1 619	1 308	317	1 644	1 533	378	1 915	1 571	454	2 027	1 232	395	1 632
40 – 49	638	92	731	675	89	768	745	125	876	779	143	926	664	119	784
50 – 59	237	26	263	235	35	274	248	36	286	288	31	319	265	28	293
60 +	67	3	70	57	4	63	79	7	86	80	10	90	82	6	88
Not reported	8	2	10	3	0	3	0	0	1	1	0	1	1	1	2
Total	**4 688**	**2 073**	**6 770**	**4 891**	**2 170**	**7 136**	**5 452**	**2 570**	**8 038**	**5 838**	**2 720**	**8 570**	**5 008**	**2 589**	**7 604**

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate[1] of diagnoses of infectious syphilis, 2004 – 2007, by State/Territory and year

	Year of diagnosis							
	2004		2005		2006		2007	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	4	1.1	4	1.1	2	0.6	9	2.4
NSW	301	4.5	244	3.6	222	3.3	434	6.4
NT	57	25.2	94	43.0	150	62.9	119	49.0
QLD	115	2.9	147	3.7	168	4.1	232	5.6
SA	21	1.4	8	0.5	45	3.0	50	3.3
TAS	2	0.5	6	1.3	5	1.1	7	1.4
VIC	85	1.7	121	2.4	231	4.4	427	8.3
WA	50	2.4	19	0.9	49	2.4	101	4.8
Total	**635**	**3.1**	**643**	**3.1**	**872**	**4.2**	**1 379**	**6.6**

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 – 2007, by age group, year and sex

	Year of diagnosis											
Age group	2004			2005			2006			2007		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T
0 – 4	0	0	0	0	0	0	1	0	1	0	0	0
5 – 14	0	5	6	2	3	5	2	13	15	3	4	7
15 – 19	29	23	53	27	35	63	36	54	90	34	29	63
20 – 29	119	54	174	123	50	173	150	60	210	243	52	295
30 – 39	191	19	210	190	22	212	222	28	251	393	36	429
40 – 49	118	13	131	114	9	124	185	17	202	346	18	364
50 – 59	38	5	43	40	6	46	67	8	75	148	7	155
60 +	16	2	18	15	5	20	25	2	27	62	4	66
Not reported	0	0	0	0	0	0	1	0	1	0	0	0
Total	**511**	**121**	**635**	**511**	**130**	**643**	**689**	**182**	**872**	**1 229**	**150**	**1 379**

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.9 Number of diagnoses of infectious syphilis, 2007, by sexual exposure, history of sex work, place of diagnosis and sex

	Sex		
Characteristic	**Male**	**Female**	**Total**
Sexual exposure[1]			
Heterosexual contact	38	36	74
Male homosexual contact/bisexual contact	204	–	204
Undetermined[3]	25	8	33
Not reported[3]	70	12	82
Total	**337**	**56**	**393**
Sex work in the past 12 months[1]			
Current sex work	2	1	3
No sex work	105	10	115
Undetermined[3]	61	20	81
Not reported[3]	169	25	194
Total	**337**	**56**	**393**
Place of diagnosis[2]			
Public hospital	23	6	29
Sexual health clinic	98	4	102
Family planning clinic	1	0	1
General practice	27	4	31
Other	49	23	72
Undetermined[3]	134	19	153
Not reported[3]	1	0	1
Total	**333**	**56**	**389**

1 Includes diagnoses in QLD, SA, VIC and WA.

2 Includes diagnoses in QLD, SA and WA.

3 A characteristic was recorded as "undetermined" when the information was reportable but not specified, and as "not reported" when the information was not sought.

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 rate[1] of diagnosis of chlamydia, 2003 – 2007, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

		NT		SA		TAS		VIC		WA		Total	
Year of diagnosis		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]
2003	**Number**	1 073	564	168	1 828	13	592	37	6 375	965	2 802	2 256	12 161
	Rate	1 620	378	550	133	62	146	103	132	1 324	149	1 001	141
2004	**Number**	1 019	569	239	2 190	10	608	57	7 638	1 064	3 267	2 389	14 272
	Rate	1 540	382	786	159	49	150	150	158	1 466	174	1 063	165
2005	**Number**	1 019	606	246	2 459	13	857	56	8 951	1 176	4 271	2 510	17 144
	Rate	1 516	405	808	179	54	213	153	185	1 574	227	1 094	199
2006	**Number**	1 257	800	310	2 815	22	1 027	45	9 925	1 177	4 964	2 811	19 531
	Rate	1 937	539	1 043	205	112	254	116	205	1 563	265	1 248	226
2007	**Number**	1 313	867	272	3 199	20	1 106	52	11 079	1 168	6 576	2 825	22 827
	Rate	1 988	582	843	233	86	272	140	229	1 576	351	1 241	264

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2006 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 chlamydia[1], 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and age group

		Age group (years)								
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[3]**
2003	Aboriginal and Torres Strait Islander	8	102	817	895	322	82	21	4	2 256
	Non-Indigenous[2]	5	67	2 513	6 953	1 838	543	190	36	12 161
2004	Aboriginal and Torres Strait Islander	4	101	829	993	355	91	15	1	2 389
	Non-Indigenous[2]	17	87	3 084	8 134	2 023	615	216	64	14 272
2005	Aboriginal and Torres Strait Islander	3	165	946	978	311	89	13	5	2 510
	Non-Indigenous[2]	22	87	3 685	9 930	2 417	717	226	44	17 144
2006	Aboriginal and Torres Strait Islander	2	130	1 017	1 164	369	95	27	6	2 811
	Non-Indigenous[2]	17	96	4 230	11 208	2 744	868	283	76	19 531
2007	Aboriginal and Torres Strait Islander	1	126	1 081	1 148	363	75	24	7	2 825
	Non-Indigenous[2]	0	118	4 992	13 260	3 027	986	334	95	22 827

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 chlamydia[1], 2007, by Aboriginal and Torres Strait Islander status, sex and age group

		Age group (years)								
Aboriginal and Torres Strait Islander Status	**Sex**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[4]**
Aboriginal and	Male	1	26	379	454	141	43	11	4	1 059
Torres Strait Islander	Female	0	100	702	694	222	32	13	3	1 766
	Total	**1**	**126**	**1 081**	**1 148**	**363**	**75**	**24**	**7**	**2 825**
Non-Indigenous[2]	Male	0	11	1 094	5 542	1 626	634	247	81	9 240
	Female	0	107	3 886	7 684	1 389	344	86	13	13 513
	Total[3]	**0**	**118**	**4 992**	**13 260**	**3 027**	**986**	**334**	**95**	**22 827**
Total	Male	1	37	1 473	5 996	1 767	677	258	85	10 299
	Female	0	207	4 588	8 378	1 611	376	99	16	15 279
	Total[3]	**1**	**244**	**6 073**	**14 408**	**3 390**	**1 061**	**358**	**102**	**25 652**

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, 2007, by State/Territory[1] and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status			
State/Territory	**Aboriginal and Torres Strait Islander**	**Non-Indigenous**	**Not reported**	**Total**
ACT	–	–	816 (90.2)	905
NSW	–	–	11 222 (90.2)	12 435
NT	1 313 (60.2)	604 (27.7)	263 (12.1)	2 180
QLD	–	–	7 254 (56.3)	12 875
SA	272 (7.8)	3 171 (91.4)	28 (0.8)	3 471
TAS	20 (1.8)	769 (68.3)	337 (29.9)	1 126
VIC	52 (0.5)	5 221 (46.9)	5 858 (52.6)	11 131
WA	1 168 (15.1)	3 259 (42.1)	3 317 (42.8)	7 744
Total	**5 048 (9.7)**	**17 724 (34.2)**	**29 095 (56.1)**	**51 867**

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 Rate[1] of diagnosis of chlamydia, 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and area of residence

		Area of residence					
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**Major cities**	**Inner regional**	**Outer regional**	**Remote**	**Very remote**	**Total**
2003	Aboriginal and Torres Strait Islander	496	157	623	2 497	2 312	1 221
	Non-Indigenous[2]	137	103	124	208	267	137
2004	Aboriginal and Torres Strait Islander	552	150	683	2 799	2 340	1 292
	Non-Indigenous[2]	163	123	146	208	202	161
2005	Aboriginal and Torres Strait Islander	674	150	677	2 961	2 416	1 358
	Non-Indigenous[2]	197	152	176	213	293	193
2006	Aboriginal and Torres Strait Islander	795	210	859	2 939	2 759	1 521
	Non-Indigenous[2]	221	180	208	298	373	220
2007	Aboriginal and Torres Strait Islander	774	202	886	2 541	2 959	1 528
	Non-Indigenous[2]	258	212	253	348	371	257

1 Rate per 100 000 population. Population estimates from *2006 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 rate[1] of diagnosis of gonorrhoea, 2003 – 2007, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

		NT		QLD		SA		VIC		WA		Total	
Year of diagnosis		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]
2003	**Number**	1 203	230	416	620	95	202	6	1 164	1 047	408	2 767	2 624
	Rate	1 793	155	270	17	333	14	23	24	1 491	22	786	22
2004	**Number**	1 329	226	477	699	216	160	7	1 103	1 066	352	3 095	2 540
	Rate	2 021	153	304	19	721	11	22	23	1 475	19	876	21
2005	**Number**	1 550	255	622	781	272	127	4	1 206	1 159	422	3 607	2 791
	Rate	2 382	171	400	21	868	9	11	25	1 642	22	1 032	23
2006	**Number**	1 527	251	619	922	360	137	6	1 290	1 275	401	3 787	3 001
	Rate	2 403	165	398	25	1 235	10	18	26	1 869	21	1 114	25
2007	**Number**	1 398	202	532	803	243	216	4	984	1 320	440	3 497	2 645
	Rate	2 130	138	336	22	826	15	12	20	1 910	23	1 007	22

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2006 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 gonorrhoea[1], 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and age group

		Age group (years)								
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[3]**
2003	Aboriginal and Torres Strait Islander	11	129	971	1 136	360	125	24	7	2 767
	Non-Indigenous[2]	1	30	278	926	772	384	183	46	2 624
2004	Aboriginal and Torres Strait Islander	11	147	1 081	1 239	462	128	21	4	3 095
	Non-Indigenous[2]	0	18	237	980	686	390	192	36	2 540
2005	Aboriginal and Torres Strait Islander	9	188	1 201	1 452	568	150	31	8	3 607
	Non-Indigenous[2]	2	16	301	974	795	464	177	61	2 791
2006	Aboriginal and Torres Strait Islander	8	146	1 102	1 655	647	181	36	12	3 787
	Non-Indigenous[2]	1	14	297	1 164	822	464	182	56	3 001
2007	Aboriginal and Torres Strait Islander	4	157	1 123	1 444	580	157	27	5	3 497
	Non-Indigenous[2]	3	25	312	1 093	614	370	173	53	2 645

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 gonorrhoea[1], 2007, by Aboriginal and Torres Strait Islander status, sex and age group

		Age group (years)								
Aboriginal and Torres Strait Islander Status	**Sex**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[4]**
Aboriginal and Torres Strait Islander	Male	0	41	505	710	310	93	21	4	1 684
	Female	4	116	618	734	270	64	6	1	1 813
	Total	**4**	**157**	**1 123**	**1 444**	**580**	**157**	**27**	**5**	**3 497**
Non-Indigenous[2]	Male	2	7	174	836	521	334	157	51	2 083
	Female	1	18	138	257	89	36	16	2	558
	Total[3]	**3**	**25**	**312**	**1 093**	**614**	**370**	**173**	**53**	**2 645**
Total	Male	2	48	679	1 546	831	427	178	55	3 767
	Female	5	134	756	991	359	100	22	3	2 371
	Total[3]	**7**	**182**	**1 435**	**2 537**	**1 194**	**527**	**200**	**58**	**6 142**

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, 2007, by State/Territory[1] and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status						
State/Territory	Aboriginal and Torres Strait Islander		Non-Indigenous		Not reported		Total
ACT	–		–		41	(91.1)	45
NSW	–		–		1 237	(89.7)	1 379
NT	1 398	(87.4)	111	(6.9)	91	(5.7)	1 600
QLD	532	(39.9)	242	(18.1)	561	(42.0)	1 335
SA	243	(52.9)	216	(47.1)	0	(0.0)	459
TAS	3	(7.9)	33	(86.8)	2	(5.3)	38
VIC	4	(0.4)	664	(67.2)	320	(32.4)	988
WA	1 320	(75.0)	417	(23.7)	23	(1.3)	1 760
Total	**3 518**	**(46.3)**	**1 811**	**(23.8)**	**2 275**	**(29.9)**	**7 604**

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 Rate[1] of diagnosis of gonorrhoea, 2003 – 2007, by year, Aboriginal and Torres Strait Islander status and area of residence

		Area of residence					
Year of diagnosis	Aboriginal and Torres Strait Islander status	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
2003	Aboriginal and Torres Strait Islander	189	64	651	1 932	2 233	936
	Non-Indigenous[2]	21	6	21	49	98	21
2004	Aboriginal and Torres Strait Islander	211	84	743	2 518	2 291	1 047
	Non-Indigenous[2]	21	6	20	34	98	21
2005	Aboriginal and Torres Strait Islander	260	121	831	2 778	2 757	1 220
	Non-Indigenous[2]	23	7	26	41	111	23
2006	Aboriginal and Torres Strait Islander	225	89	878	2 687	3 073	1 281
	Non-Indigenous[2]	24	7	31	40	145	25
2007	Aboriginal and Torres Strait Islander	232	39	787	2 294	2 968	1 183
	Non-Indigenous[2]	22	6	26	49	102	22

1 Rate per 100 000 population. Population estimates from *2006 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 rate[1] of diagnosis of infectious syphilis, 2004 – 2007, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

		NSW		NT		QLD		SA		TAS		VIC		WA		Total	
Year of diagnosis		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]	Aboriginal and Torres Strait Islander	Non-Indigenous[3]
2004	**Number**	11	290	47	10	52	63	3	18	0	2	1	84	43	7	157	474
	Rate	8	5	84	6	42	2	14	1	0	0.5	2	2	57	0	33	3
2005	**Number**	7	237	88	6	59	88	1	7	0	6	3	118	10	9	168	471
	Rate	6	4	157	4	44	2	4	0.5	0	1	9	2	14	0.5	37	2
2006	**Number**	7	215	145	5	31	137	15	30	0	5	9	222	21	28	228	642
	Rate	5	3	221	3	26	4	54	2	0	1	31	5	28	1	46	3
2007	**Number**	9	425	103	16	32	200	13	37	0	7	7	420	28	73	192	1 178
	Rate	7	7	163	10	25	5	44	3	0	1	25	9	45	4	40	6

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2006 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 syphilis[1], 2004 – 2007, by year, Aboriginal and Torres Strait Islander status and age group

		Age group (years)								
Year of diagnosis	**Aboriginal and Torres Strait Islander status**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[3]**
2004	Aboriginal and Torres Strait Islander	0	5	40	63	27	16	5	1	157
	Non-Indigenous[2]	0	1	13	109	181	115	38	17	474
2005	Aboriginal and Torres Strait Islander	0	2	50	62	34	9	7	4	168
	Non-Indigenous[2]	0	3	12	109	177	115	39	16	471
2006	Aboriginal and Torres Strait Islander	0	12	69	83	37	20	7	0	228
	Non-Indigenous[2]	1	3	20	127	213	182	68	27	642
2007	Aboriginal and Torres Strait Islander	0	5	49	76	40	17	4	1	192
	Non-Indigenous[2]	0	2	14	215	386	346	150	65	1 178

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 syphilis[1], 2007, by Aboriginal and Torres Strait Islander status, sex and age group

		Age group (years)								
Aboriginal and Torres Strait Islander Status	**Sex**	**0 – 4**	**5 – 14**	**15 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60 +**	**Total[3]**
Aboriginal and Torres Strait Islander	Male	0	2	23	43	23	8	4	1	104
	Female	0	3	26	33	17	9	0	0	88
	Total	**0**	**5**	**49**	**76**	**40**	**17**	**4**	**1**	**192**
Non-Indigenous[2]	Male	0	1	11	197	367	337	143	61	1 117
	Female	0	1	3	18	19	9	7	4	61
	Total	**0**	**2**	**14**	**215**	**386**	**346**	**150**	**65**	**1 178**
Total	Male	0	3	34	240	390	345	147	62	1 221
	Female	0	4	29	51	36	18	7	4	149
	Total	**0**	**7**	**63**	**291**	**426**	**363**	**154**	**66**	**1 370**

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 age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.14 Number (percent) of diagnoses of infectious syphilis, 2007, by State/Territory[1] and Aboriginal and Torres Strait Islander status

	Aboriginal and Torres Strait Islander status						
State/Territory	Aboriginal and Torres Strait Islander		Non-Indigenous		Not reported		Total
ACT	–		–		9	(100.0)	9
NSW	9	(2.1)	384	(88.5)	41	(9.4)	434
NT	103	(86.6)	10	(8.4)	6	(5.0)	119
QLD	32	(13.8)	193	(83.2)	7	(3.0)	232
SA	13	(26.0)	37	(74.0)	0	(0.0)	50
TAS	0	(0.0)	7	(100.0)	0	(0.0)	7
VIC	7	(1.6)	401	(93.9)	19	(4.4)	427
WA	28	(27.7)	73	(72.3)	0	(0.0)	101
Total	**192**	**(13.9)**	**1 105**	**(80.1)**	**82**	**(5.9)**	**1 379**

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 Rate[1] of diagnosis of infectious syphilis, 2004 – 2007, by year, Aboriginal and Torres Strait Islander status and area of residence

		Area of residence					
Year of diagnosis	Aboriginal and Torres Strait Islander status	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
2004	Aboriginal and Torres Strait Islander	9	9	45	69	93	35
	Non-Indigenous[2]	3	1	1	0	6	2
2005	Aboriginal and Torres Strait Islander	3	14	45	89	102	37
	Non-Indigenous[2]	3	1	1	0	5	2
2006	Aboriginal and Torres Strait Islander	12	7	22	147	177	51
	Non-Indigenous[2]	4	1	1	1	4	3
2007	Aboriginal and Torres Strait Islander	15	8	19	71	164	43
	Non-Indigenous[2]	8	2	1	0	4	6

1 Rate per 100 000 population. Population estimates from *2006 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

Table 3.3.1 Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2007 by State/Territory, sex and site and antibiotic sensitivity

	State/Territory						
Sex and Site	**NSW**	**NT[2]**	**QLD**	**SA[2]**	**VIC**	**WA**	**Total[1]**
Males							
Urethra	572	262	294	148	366	259	1 922
Rectal	178	0	38	13	117	11	364
Pharynx	106	2	21	12	75	6	226
Other/not specified	17	3	6	4	5	11	48
Total	**873**	**267**	**359**	**177**	**563**	**287**	**2 560**
Females							
Cervix	82	132	89	50	57	72	488
Other/not specified	18	4	7	12	5	7	53
Total	**100**	**136**	**96**	**62**	**62**	**79**	**541**
Antibiotic sensitivity (%)							
PPNG	15.5	3.1	13.6	6.1	12.8	12.7	12.1
RR	38.3	1.0	23.6	33.3	30.8	11.1	26.2
LS	45.1	95.9	61.7	61.6	55.4	76.2	60.9
FS	1.1	0.0	1.1	0.0	1.0	0.0	0.8
Total[1,2]	**973**	**404**	**455**	**240**	**625**	**366**	**3 103**

1 Total includes gonococcal isolates from ACT (20) and TAS (20).

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

Table 3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 2003 – 2007, by sex, site and year

	Year of diagnosis				
Sex and Site	**2003[1]**	**2004**	**2005[2]**	**2006**	**2007**
Males					
Urethra	720	695	665	698	572
Rectal	181	201	238	255	178
Pharynx	101	118	171	149	106
Other/not specified	44	21	48	8	17
Total	**1 046**	**1 035**	**1 122**	**1 110**	**873**
Females					
Cervix	53	73	90	79	82
Rectal	2	0	1	3	2
Pharynx	8	3	3	2	14
Other/not specified	4	2	1	4	2
Total	**67**	**78**	**95**	**88**	**100**
Total	**1 116**	**1 113**	**1 218**	**1 198**	**973**

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

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

Source: Australian Gonococcal Surveillance Programme

Tables

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

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

4.3 Incidence of hepatitis C infection among injecting drug users

4.4 National monitoring of HIV infection among entrants into Australian prisons

4.5 HIV seroprevalence among people seen at sexual health clinics

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

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 – 2007, 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

	Year					
Characteristic	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Sample size						
Cumulative number of enrolments	903	1 333	1 427	1 427	1 427	1427
HIV						
Number with newly acquired HIV infection	12	8	15	12	5	1
Person years at risk	7 23.2	1 128.0	1 369.0	1 384.7	1 376.8	676.6
HIV incidence (per 100 person years)	1.66	0.71	1.10	0.87	0.36	0.15
Chlamydia						
Urethral chlamydia						
Number with newly acquired infection	3	13	7	5	3	0
Person years at risk	491.9	1 074.5	1 036.3	923.9	720.4	84.7
Incidence (per 100 person years)	0.61	1.21	0.68	0.54	0.42	0.00
Anal Chlamydia						
Number with newly acquired infection	26	30	19	15	12	0
Person years at risk	483.9	1 075.2	1 037.5	923.8	718.8	84.0
Incidence (per 100 person years)	5.37	2.79	1.83	1.62	1.67	0.00
Gonorrhoea						
Urethral gonorrhoea						
Number with newly acquired infection	2	5	0	1	1	0
Person years at risk	492.3	1 074.7	1 037.9	925.0	721.2	84.7
Incidence (per 100 person years)	0.41	0.47	0.00	0.11	0.14	0.00
Anal gonorrhoea						
Number with newly acquired infection	5	9	10	8	4	0
Person years at risk	493.6	1 076.1	1 037.2	922.8	719.6	84.3
Incidence (per 100 person years)	1.01	0.84	0.96	0.87	0.56	0.00
Syphilis						
Number with newly acquired syphilis	7	4	4	4	3	0
Person years at risk	643.5	938.6	1 049.8	939.7	720.7	84.2
Syphilis incidence (per 100 person years)	1.09	0.43	0.38	0.43	0.42	0.00

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), 2003 – 2007, 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

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)**

2007

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	10 (–)	8 (–)	18 (–)	0 (0.0)	0 (0.0)	0 (0.0)	10 (100)	6 (75)	18 (89)
NSW	21	439 (38)	240 (49)	683 (40)	12 (2.7)	2 (0.8)	15 (2.2)	289 (68)	169 (73)	460 (69)
NT	3	20 (38)	9 (50)	29 (39)	0 (0.0)	0 (0.0)	0 (0.0)	13 (65)	5 (56)	18 (62)
QLD	7	279 (38)	130 (46)	413 (40)	10 (3.6)	0 (0.0)	10 (2.4)	158 (57)	85 (66)	247 (60)
SA	7	120 (62)	89 (95)	211 (72)	2 (1.7)	0 (0.0)	2 (1.0)	50 (42)	31 (35)	82 (39)
TAS	5	110 (58)	56 (57)	166 (57)	0 (0.0)	0 (0.0)	0 (0.0)	52 (57)	30 (70)	82 (61)
VIC[3]	7	163 (–)	76 (–)	240 (–)	0 (0.0)	0 (0.0)	0 (0.0)	100 (72)	48 (74)	149 (73)
WA	2	54 (38)	31 (42)	85 (39)	1 (1.9)	0 (0.0)	1 (1.2)	23 (43)	14 (45)	37 (44)
Total	**53**	**1 195 (48)**	**639 (60)**	**1 845 (51)**	**25 (2.1)**	**2 (0.3)**	**28 (1.5)**	**695 (58)**	**388 (61)**	**1 091 (59)**

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 and Victoria who were tested for HIV and hepatitis C was not reported for all sites.

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, 2003 – 2007, 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

2003

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
Age group									
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
History of injecting drug use									
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**
Last drug injected among those reporting less than 3 years of drug injection									
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]
Age group									
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
History of injecting drug use									
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**
Last drug injected among those reporting less than 3 years of drug injection									
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]
Age group									
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
History of injecting drug use									
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**
Last drug injected among those reporting less than 3 years of drug injection									
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]
Age group									
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
History of injecting drug use									
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**
Last drug injected among those reporting less than 3 years of drug injection									
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**

2007

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	**Female**	**Total[1]**	**Male**	**Female**	**Total[1]**	**Male**	**Female**	**Total[1]**
Age group									
Less than 20 years	18	15	33	0.0	0.0	0.0	22	36	28
20 to 24 years	72	69	142	0.0	0.0	0.0	34	51	43
25 to 29 years	202	131	334	1.5	0.0	0.9	51	60	55
30 to 34 years	251	105	359	1.2	0.0	0.8	57	59	58
35+ years	650	318	974	2.9	0.6	2.3	69	72	70
Not reported	2	1	3	0.0	0.0	0.0	100	0	67
History of injecting drug use									
Less than 3 years	61	37	98	1.6	0.0	1.0	14	30	20
3 to 5 years	67	58	126	3.0	0.0	1.6	33	53	42
6 to 10 years	210	132	345	1.0	0.0	0.6	43	55	48
10+ years	826	394	1 227	2.4	0.5	1.8	71	72	71
Not reported	31	18	49	3.2	0.0	2.0	71	76	73
Total	**1 195**	**639**	**1 845**	**2.1**	**0.3**	**1.5**	**58**	**61**	**59**
Last drug injected among those reporting less than 3 years of drug injection									
Amphetamines	35	19	54	2.9	0.0	1.9	15	28	19
Heroin/opiates	13	13	26	0.0	0.0	0.0	8	38	24
Combination	2	0	2	0.0	0.0	0.0	0	0	0
Other/Not reported	11	5	16	0.0	0.0	0.0	18	17	18
Total	**61**	**37**	**98**	**1.6**	**0.0**	**1.0**	**14**	**30**	**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 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, 2003 – 2007, and percent with HIV or hepatitis C antibody by year, sexual identity, sex work last month, region of birth, main language spoken at home by parents and sex

2003

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total	Male	Female	Total
Sexual identity									
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
Sex work last month									
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
Country/region of birth									
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
Other Oceania	*51*	*39*	*91*	*3.9*	*0.0*	*2.2*	*57*	*69*	*62*
Asia	*123*	*21*	*144*	*0.8*	*0.0*	*0.7*	*69*	*71*	*69*
United Kingdom and Ireland	*76*	*33*	*110*	*4.0*	*0.0*	*2.7*	*54*	*64*	*57*
Other	*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
Main language spoken at home by parents									
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
Sexual identity									
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
Sex work last month									
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
Country/region of birth									
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
Other Oceania	*29*	*27*	*56*	*0.0*	*0.0*	*0.0*	*55*	*67*	*61*
Asia	*119*	*19*	*138*	*0.0*	*0.0*	*0.0*	*73*	*53*	*71*
United Kingdom and Ireland	*58*	*23*	*81*	*3.5*	*0.0*	*2.5*	*63*	*65*	*63*
Other	*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
Main language spoken at home by parents									
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
Sexual identity									
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
Sex work last month									
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
Country/region of birth									
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
Other Oceania	*33*	*14*	*49*	*3.2*	*0.0*	*2.1*	*45*	*64*	*51*
Asia	*10*	*4*	*14*	*0.0*	*0.0*	*0.0*	*40*	*25*	*36*
United Kingdom and Ireland	*62*	*32*	*94*	*1.6*	*0.0*	*1.1*	*75*	*69*	*73*
Other	*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
Main language spoken at home by parents									
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
Sexual identity									
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
Sex work last month									
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
Country/region of birth									
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
Other Oceania	*38*	*23*	*62*	*2.6*	*0.0*	*3.2*	*53*	*74*	*60*
Asia	*11*	*4*	*15*	*0.0*	*0.0*	*0.0*	*55*	*50*	*53*
United Kingdom and Ireland	*73*	*30*	*104*	*2.7*	*0.0*	*1.9*	*67*	*63*	*65*
Other	*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
Main language spoken at home by parents									
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**

2007

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	**Female**	**Total[1]**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Sexual identity									
Heterosexual	1 055	458	1 514	0.5	0.4	0.5	58	56	57
Bisexual	47	120	170	4.3	0.0	1.8	54	56	56
Homosexual	69	42	114	26.1	0.0	15.8	38	53	45
Not reported	24	19	47	0.0	0.0	0.0	57	71	86
Sex work last month									
No	1 108	541	1 656	2.1	0.4	1.5	62	64	62
Yes	34	76	114	2.9	0.0	1.8	58	63	58
Not reported	53	22	75	1.9	0.0	0.1	47	73	55
Country/region of birth									
Australia	1 023	557	1 590	2.2	0.4	1.6	61	64	62
Overseas born	145	75	221	0.3	0.0	1.4	64	57	65
Other Oceania	*25*	*19*	*45*	*4.0*	*0.0*	*2.2*	*67*	*53*	*60*
Asia	*13*	*9*	*22*	*0.0*	*0.0*	*0.0*	*75*	*75*	*75*
United Kingdom and Ireland	*56*	*28*	*84*	*3.6*	*0.0*	*2.4*	*62*	*71*	*65*
Other	*51*	*19*	*70*	*0.0*	*0.0*	*0.0*	*62*	*74*	*65*
Not reported	27	7	34	0.0	0.0	0.0	54	71	58
Main language spoken at home by parents									
English	1 100	609	1 719	2.2	0.3	1.6	61	64	62
Other language	70	27	98	1.4	0.0	1.0	60	65	62
Not reported	25	3	28	0.0	0.0	0.0	50	67	52
Total	**1 195**	**639**	**1 845**	**2.1**	**0.3**	**1.5**	**58**	**61**	**59**

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

Source: Collaboration of Australian Needle and Syringe Programs

4.3 Incidence of hepatitis C infection among injecting drug users

Table 4.3.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 2003 – 2007

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
2003			
less than 20 years	3.7	3	80.8
20 – 29 years	35.1	4	11.4
30+ years	27.2	3	11.0
Total	**66.1**	**10**	**15.1**
2004			
less than 20 years	2.8	0	–
20 – 29 years	31.7	3	9.5
30+ years	27.6	2	7.2
Total	**62.1**	**5**	**8.1**
2005			
less than 20 years	7.8	2	25.5
20 – 29 years	28.6	2	7.0
30+ years	25.3	3	11.8
Total	**61.7**	**7**	**11.3**
2006			
less than 20 years	4.0	1	24.7
20 – 29 years	18.0	2	11.1
30+ years	26.7	1	3.7
Total	**48.7**	**4**	**8.2**
2007			
less than 20 years	3.8	0	–
20 – 29 years	6.3	0	–
30+ years	13.2	2	15.1
Total	**23.4**	**2**	**8.6**

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, 2003 – 2007, percentage tested for HIV antibody at reception and number (%) with diagnosed HIV infection by year and Corrections jurisdiction of reception

	State/Territory Corrections jurisdiction							
Year of reception	**NSW**	**NT**	**QLD**	**SA**	**TAS**	**VIC[1]**	**WA**	**Total**
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)
2007								
Number of receptions	15 112	2 797	8 085	3 244	1 794	5 788	7 000	43 820
Number (%) male	13 216 (87)	2 623 (94)	7 194 (89)	2 892 (89)	1 582 (88)	5 231 (90)	6 036 (86)	38 774 (88)
Tested for HIV antibody (%)	29.0	100.0	100.0	25.6	21.2	27.5	46.8	48.7
% males tested	30.0	100.0	100.0	24.9	17.2	27.9	46.8	49.1
Number (%) with HIV	37 (0.8)	0 (0.0)	13 (0.2)	3 (0.4)	1 (0.3)	2 (0.1)	2 (0.06)	58 (0.3)
Number (%) male	29 (0.7)	0 (0.0)	12 (0.2)	2 (0.3)	1 (0.4)	2 (0.1)	2 (0.07)	48 (0.3)

1 For Victoria, 2005-2007 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, 2003 – 2007, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, clinic and year

		Sexual Health Clinic						
Males		**Sydney Sexual Health Centre, NSW**	**RPA Sexual Health Centre, NSW[1]**	**Brisbane Sexual Health Clinic, QLD**	**Gold Coast Sexual Health Clinic, QLD**	**Clinic 275 Adelaide, SA**	**Melbourne Sexual Health Centre, VIC[2]**	**Total**
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)
2007	Seen	4 735	921	3 413	1 682	4 084	6 596	21 431
	Tested	2 458	463	2 124	750	3 350	3 842	12 987
	Newly diagnosed (%)	24 (1.0)	1 (0.2)	8 (0.4)	9 (1.2)	7 (0.2)	40 (1.0)	89 (0.7)
	Previously negative (%)	21 (1.1)	0 (0.0)	6 (0.7)	1 (0.5)	6 (0.3)	30 (1.1)	64 (0.8)

		Sexual Health Clinic						
Females		**Sydney Sexual Health Centre, NSW**	**RPA Sexual Health Centre, NSW[1]**	**Brisbane Sexual Health Clinic, QLD**	**Gold Coast Sexual Health Clinic, QLD**	**Clinic 275 Adelaide, SA**	**Melbourne Sexual Health Centre, VIC[2]**	**Total**
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)
2007	Seen	2 643	452	2 407	1 268	2 497	4 307	13 574
	Tested	1 232	137	1 228	533	1 964	2 161	7 255
	Newly diagnosed (%)	1 (0.1)	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	4 (0.1)
	Previously negative (%)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.07)	2 (0.05)

1 Livingstone Road Sexual Health Centre, Marrickville, closed is 2006. The RPA Sexual Health Centre, Camperdown, was established in 2007.

2 Melbourne Sexual Health Centre, VIC, data not available for 2003.

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, 2003 – 2007, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, HIV exposure category and year

		HIV exposure category						
Males		**Male homosexual contact[1]**	**Male homosexual contact[1], age < 25 years**	**Injecting drug use**	**Heterosexual contact overseas**	**Heterosexual contact in Australia**	**Other males**	**Total**
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)
2007	Seen	7 972	1 707	550	3 324	8 648	937	21 431
	Tested	6 100	1 402	356	1 964	4 388	179	12 987
	Newly diagnosed (%)	81(1.3)	17 (1.2)	0 (0.0)	3 (0.2)	1 (0.02)	4 (2.2)	89 (0.7)
	Previously negative (%)	62 (1.4)	12 (1.4)	0 (0.0)	2 (0.2)	0 (0.0)	0 (0.0)	64 (0.8)

		HIV exposure category					
Females		**Sex worker[2]**	**Injecting drug use**	**Heterosexual contact overseas**	**Heterosexual contact in Australia**	**Other females**	**Total**
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)
2007	Seen	2 058	373	2 308	7 970	865	13 574
	Tested	1 740	268	1 233	3 739	275	7 255
	Newly diagnosed (%)	0 (0.0)	2 (0.7)	0 (0.0)	2 (0.03)	0 (0.0)	4 (0.06)
	Previously negative (%)	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.05)	0 (0.0)	2 (0.05)

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, 2003 – 2007, 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)						
Males		**13 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60+**	**Total**
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)
2007	Seen	853	9 487	5 911	3 143	1 362	675	21 431
	Tested	472	5 811	3 657	1 847	820	380	12 987
	Newly diagnosed (%)	2 (0.4)	33 (0.6)	26 (0.7)	20 (1.1)	7 (0.9)	1 (0.3)	89 (0.7)
	Previously negative (%)	0 (0.0)	26 (0.8)	19 (0.8)	13 (1.0)	5 (0.9)	1 (0.4)	64 (0.8)

Females		Age group (years) 13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Total
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)
2007	Seen	1 481	7 456	3 057	1 153	340	87	13 574
	Tested	579	3 927	1 812	706	192	39	7 255
	Newly diagnosed (%)	1 (0.2)	1 (0.03)	0 (0.0)	2 (0.3)	0 (0.0)	0 (0.0)	4 (0.1)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.4)	0 (0.0)	0 (0.0)	2 (0.05)

Source: Collaborative group on sentinel surveillance in sexual health clinics

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

Table 4.6.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody[1], 1985 – 2007, by State/Territory and years of donation

State/Territory	1985[2] – 1997			1998 – 1999			2000 – 2001		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT[3]	186 553	1	0.5	9 080	0	0.0	–	–	–
NSW	3 698 398	37	1.0	540 888	0	0.0	609 047	3	0.5
NT	111 056	1	0.9	18 854	0	0.0	15 834	0	0.0
QLD	2 149 511	23	1.1	381 527	4	1.0	386 060	3	0.8
SA	1 196 123	4	0.3	175 752	2	1.1	176 018	0	0.0
TAS	319 744	1	0.3	39 232	0	0.0	25 849	0	0.0
VIC	3 171 061	16	0.5	475 212	1	0.2	505 937	0	0.0
WA	994 118	7	0.7	192 380	2	1.0	196 489	1	0.5
Total	**11 826 564**	**90**	**0.8**	**1 832 925**	**9**	**0.5**	**1 915 234**	**7**	**0.4**

State/Territory	2002 – 2003			2004 – 2005			2006 – 2007			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT[3]	–	–	–	–	–	–	–	–	–	195 633	1	0.5
NSW	644 544	3	0.5	685 767	3	0.4	767 349	2	0.3	6 945 993	48	0.7
NT	16 950	0	0.0	20 939	0	0.0	20 292	0	0.0	203 925	1	0.5
QLD	426 959	2	0.5	473 053	2	0.4	482 500	2	0.4	4 299 610	36	0.8
SA	182 549	0	0.0	204 178	1	0.5	244 895	2	0.8	2 179 515	9	0.4
TAS	49 454	0	0.0	52 805	0	0.0	62 294	0	0.0	549 378	1	0.2
VIC	513 206	0	0.0	522 699	1	0.2	536 212	1	0.2	5 724 327	19	0.3
WA	215 146	3	1.4	232 349	0	0.0	231 209	1	0.4	2 061 691	14	0.7
Total	**2 048 808**	**8**	**0.4**	**2 191 790**	**7**	**0.3**	**2 344 751**	**8**	**0.3**	**22 160 072**	**129**	**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

Table 4.6.2 Number of blood donors in Australia with HIV antibody, 1985 – 2007, 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 – 1997		1998 – 1999		2000 – 2001		2002 – 2003		2004 – 2005		2006 – 2007		All years		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Male homosexual contact[1]	19	–	0	–	1	–	2	–	3	–	0	–	25	–	25
Injecting drug use	2	0	1	0	1	0	0	0	1	0	1	0	6	0	6
Heterosexual contact	21	16	0	4	2	2	1	4	1	1	3	2	28	29	57
Person from a high prevalence country	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
Receipt of blood/tissue	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Other	0	4	0	1	0	0	0	0	0	0	0	0	0	5	5
Undetermined	24	2	1	1	1	0	1	0	1	0	2	0	30	3	33
Total	**67**	**23**	**2**	**7**	**5**	**2**	**4**	**4**	**6**	**1**	**6**	**2**	**90**	**39**	**129**
New HIV infection[2]	**24**	**13**	**2**	**1**	**4**	**2**	**5**	**0**	**0**	**1**	**1**	**0**	**36**	**17**	**53**

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

Table 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 antigen[1], by State/Territory and year of donation

State/Territory	2003 Tests	2003 Positive	2003 Prevalence	2004 Tests	2004 Positive	2004 Prevalence	2005 Tests	2005 Positive	2005 Prevalence
NSW/ACT	328 235	35	10.7	331 775	38	11.5	353 992	52	14.7
NT	9 103	3	33.0	10 936	2	18.3	10 003	0	0.0
QLD	221 838	20	9.0	240 667	28	11.6	232 386	19	8.2
SA	88 659	4	4.5	101 254	2	2.0	102 924	8	7.8
TAS	25 584	0	0.0	24 744	0	0.0	28 061	0	0.0
VIC	258 685	31	12.0	278 021	41	14.7	244 678	25	10.2
WA	111 641	9	8.1	122 199	14	11.5	110 150	6	5.4
Total	**1 043 745**	**102**	**9.8**	**1 109 596**	**125**	**11.3**	**1 082 194**	**110**	**10.2**

State/Territory	2006 Tests	2006 Positive	2006 Prevalence	2007 Tests	2007 Positive	2007 Prevalence
NSW/ACT	377 749	37	9.8	389 600	40	10.3
NT	9 319	1	10.7	10 973	3	27.3
QLD	244 369	21	8.6	238 131	20	8.4
SA	119 391	5	4.2	125 504	9	7.2
TAS	31 625	0	0.0	30 669	0	0.0
VIC	260 700	30	11.5	275 512	43	15.6
WA	110 492	7	6.3	120 717	8	6.6
Total	**1 153 645**	**101**	**8.8**	**1 191 106**	**123**	**10.3**

1 Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

Table 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 antibody[1], by State/Territory and year of donation

State/Territory	2003 Tests	2003 Positive	2003 Prevalence	2004 Tests	2004 Positive	2004 Prevalence	2005 Tests	2005 Positive	2005 Prevalence
NSW/ACT	328 235	34	10.4	331 775	48	14.5	353 992	49	13.8
NT	9 103	3	33.0	10 936	3	27.4	10 003	1	10.0
QLD	221 838	43	19.4	240 667	32	13.3	232 386	37	15.9
SA	88 659	3	3.4	101 254	7	6.9	102 924	4	3.9
TAS	25 584	1	3.9	24 744	6	24.2	28 061	4	14.3
VIC	258 685	31	12.0	278 021	38	13.7	244 678	16	6.5
WA	111 641	15	13.4	122 199	14	11.5	110 150	16	14.5
Total	**1 043 745**	**130**	**12.5**	**1 109 596**	**148**	**13.3**	**1 082 194**	**127**	**11.7**

State/Territory	2006 Tests	2006 Positive	2006 Prevalence	2007 Tests	2007 Positive	2007 Prevalence
NSW/ACT	377 749	36	9.5	389 600	41	10.5
NT	9 319	3	32.2	10 973	0	0.0
QLD	244 369	27	11.0	238 131	34	14.3
SA	119 391	8	6.7	125 504	7	5.6
TAS	31 625	2	6.3	28 061	2	6.5
VIC	260 700	25	9.6	275 512	28	10.2
WA	110 492	6	5.4	120 717	9	7.5
Total	**1 153 645**	**107**	**9.3**	**1 188 498**	**121**	**10.2**

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 in gay and other homosexually active men

5.2 Sexual and injecting behaviour among people who have injected drugs

5 Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 2003 – 2007, 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				
	2003	2004	2005	2006	2007[3]	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Sample size	**2 541**	**2 821**	**3 413**	**3 732**	**2 342**	**1 511**	**1 667**	**1 382**	**1 276**	**1 417**	**2 064**	**1 962**	**1 804**	**1 988**	**2 043**
Anal intercourse with regular partners															
Men with regular partners	59.6	61.6	60.1	63.3	65.4	59.4	61.8	61.6	62.4	64.4	62.9	65.0	64.6	65.7	64.0
Unprotected anal intercourse	33.4	36.1	35.2	35.1	37.4	34.7	34.9	33.1	36.7	39.0	33.4	36.5	37.2	38.6	34.4
Anal intercourse with casual partners															
Men with casual partners	70.0	69.7	70.0	68.8	65.0	69.9	69.3	70.5	66.8	69.2	69.2	68.2	68.5	65.9	66.4
Unprotected anal intercourse	22.9	22.4	21.4	20.8	19.3	21.1	21.7	22.1	23.1	25.1	20.5	17.9	20.3	19.2	19.4
Injecting drug use[1]	6.5	6.8	5.2	5.2	6.0	6.6	5.7	5.1	7.4	5.6	4.7	5.0	4.7	4.4	4.7
HIV antibody testing[2]	50.1	54.2	53.3	54.4	53.3	48.9	48.8	52.3	53.6	53.7	42.1	46.9	43.2	44.1	46.5

	Adelaide			Canberra		Perth	
	2003	2005	2007	2003	2006	2004	2006
Sample size	**834**	**629**	**527**	**255**	**282**	**1 014**	**927**
Anal intercourse with regular partners							
Men with regular partners	61.3	65.2	61.3	62.7	66.0	65.3	64.9
Unprotected anal intercourse	31.8	37.0	36.0	32.9	37.6	36.6	39.6
Anal intercourse with casual partners							
Men with casual partners	72.4	64.1	62.4	70.6	59.2	61.2	61.9
Unprotected anal intercourse	18.0	15.6	19.3	16.1	14.5	17.4	20.7
Injecting drug use[1]	4.6	4.6	2.6	1.6	1.8	4.2	5.2
HIV antibody testing[2]	49.6	48.8	50.4	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.

3 The Sydney Gay Community Periodic Survey questionnaire was modified in August 2007. Data from the Sydney Gay Community Periodic Survey in February 2007 are shown.

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, 2003 – 2007, 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

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
History of injecting drug use															
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
Last drug injected															
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
History of injecting drug use															
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
Last drug injected															
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
History of injecting drug use															
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
Last drug injected															
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
History of injecting drug use															
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
Last drug injected															
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**

2007

	Number tested			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU past month			% using after someone else		
	M	F	T[1]	M	F	T	M	F	T	M	F	T[1]	M	F	T
History of injecting drug use															
Less than 3 years	61	38	99	39	61	47	41	61	48	61	38	99	11	16	13
3 to 5 years	67	58	126	55	57	56	64	64	64	66	56	123	19	9	14
6 to 10 years	210	132	345	56	67	61	64	73	68	209	129	341	14	17	15
11 or more years	826	394	1 227	57	56	57	59	59	59	811	389	1 207	13	11	13
Not reported	31	18	49	48	50	49	55	67	59	27	16	43	13	17	14
Last drug injected															
Methamphetamine	348	204	552	53	55	54	52	62	55	339	201	540	12	12	12
Heroin/Opiates	348	222	574	57	62	59	61	60	61	494	294	792	14	13	14
Combination	31	18	49	57	77	62	65	85	70	36	12	48	14	15	14
Other/not reported	468	195	670	55	54	55	63	66	64	305	121	433	15	13	14
Total	**1 195**	**639**	**1 845**	**55**	**58**	**57**	**59**	**63**	**60**	**1 174**	**628**	**1 813**	**14**	**13**	**14**

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, 2003 – 2007, 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

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
Age group															
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
Sexual identity															
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
Age group															
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
Sexual identity															
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
Age group															
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
Sexual identity															
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
Age group															
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
Sexual identity															
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**

2007

	Number tested			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% reporting condom use last month[2]		
	M	F	T[1]	M	F	T	M	F	T	M	F	T[1]	M	F	T
Age group															
Less than 20 years	18	15	33	56	56	56	56	69	62	12	12	24	17	8	13
20 to 24 years	72	69	142	57	67	61	63	81	71	55	51	107	20	16	18
25 to 34 years	453	236	693	60	67	62	64	64	64	283	185	471	18	17	18
35 or more years	650	318	974	52	52	52	55	57	56	328	179	510	12	12	12
Not reported	2	1	3	50	0	33	50	100	67	2	0	2	50	0	50
Sexual identity															
Heterosexual	1 055	458	1 514	54	55	54	58	59	59	599	304	904	14	10	12
Bisexual	47	119	170	66	69	68	68	70	70	29	88	121	17	32	28
Homosexual	69	42	114	61	67	63	61	67	63	40	23	63	35	9	25
Not reported	24	20	47	67	65	66	71	80	74	12	12	26	25	8	19
Total	**1 195**	**639**	**1 845**	**55**	**58**	**57**	**59**	**63**	**60**	**680**	**427**	**1 114**	**15**	**15**	**15**

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

2 Includes only those who reported sexual intercourse in the last month.

Source: Collaboration of Australian Needle and Syringe Programs

Tables

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

6.1 Estimates of the number of people living with HIV/AIDS

Table 6.1.1 Estimated number of people living with HIV/AIDS in 2007 by State/Territory of diagnosis

State/Territory	Male	Female	Total	%
ACT	137	24	161	1.0
NSW	8 312	701	9 013	54.0
NT	91	19	110	0.7
QLD	1 904	252	2 156	12.9
SA	600	87	687	4.1
TAS	68	10	78	0.5
VIC	3 244	309	3 553	21.3
WA	752	182	934	5.6
Total	**15 108**	**1 584**	**16 692**	**100.0**

Source: State/Territory health authorities

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

Table 6.2.1 Estimated number of people living with hepatitis C infection in 2007 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2007	278 000	(218 000 – 338 000)
Exposed to hepatitis C virus but not chronically infected	*70 400*	*(55 000 – 86 000)*
Chronic hepatitis C infection with stage F0/1 liver disease	*160 000*	*(123 000 – 196 000)*
Chronic hepatitis C infection with stage F2/3 liver disease	*42 000*	*(33 000 – 50 000)*
Living with hepatitis C-related cirrhosis	*5 600*	*(4 100 – 6 900)*
During 2007		
Hepatitis C-related liver failure	222	(163 – 275)
Hepatitis C-related hepatocellular carcinoma	111	(82 – 137)

Source: Hepatitis C Virus Projections Working Group 2006

Tables

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 2007

	Current antiretroviral treatment[1]					
	None	Mono/Double	3+ (NRTI +/- PI, no NNRTI)	3+ (NRTI + NNRTI , no PI)	3+ (NNRTI + PI, +/- NRTI)	Total
Total	**275 (15%)**	**265 (14%)**	**521 (28%)**	**665 (36%)**	**108 (6%)**	**1 834**
Sex						
Male	253 (15%)	245 (14%)	485 (28%)	632 (37%)	105 (6%)	1 720
Female	22 (19%)	20 (18%)	36 (32%)	33 (29%)	3 (3%)	114
Age at enrolment (years)						
Less than 30	57 (38%)	13 (9%)	40 (27%)	37 (25%)	2 (1%)	149
30 – 39	109 (16%)	79 (12%)	198 (30%)	246 (37%)	33 (5%)	665
40 – 49	76 (12%)	100 (16%)	174 (28%)	229(37%)	48 (8%)	627
50+	33 (8%)	73 (19%)	109 (28%)	153 (39%)	25 (6%)	393
Exposure category						
Male homosexual contact	222 (16%)	202 (14%)	404 (29%)	502 (35%)	84 (6%)	1 414
Other/not reported	53 (13%)	63 (15%)	117 (28%)	163 (39%)	24 (6%)	420
Viral load at enrolment (copies/ml)						
Less than 400	87 (8%)	144 (14%)	279 (27%)	482 (46%)	55 (5%)	1 047
400 – 10,000	77 (23%)	56 (17%)	105 (32%)	62 (19%)	30 (9%)	330
10,000+	96 (25%)	56 (14%)	120 (31%)	97 (25%)	19 (5%)	388
Not reported	15	9	17	24	4	69
CD4+ count at enrolment (cells/µl)						
Less than 200	4 (2%)	39 (20%)	76 (38%)	63 (32%)	16 (8%)	198
200 – 500	76 (10%)	120 (16%)	223 (31%)	264 (36%)	50 (7%)	733
500+	181 (21%)	99 (12%)	207 (24%)	321 (38%)	40 (5%)	848
Not reported	14	7	15	17	2	55
AIDS prior to enrolment						
No	271 (18%)	213 (14%)	411 (27%)	550 (36%)	72 (5%)	1 517
Yes	4 (1%)	52 (16%)	110 (35%)	115 (36%)	36 (11%)	317
Hepatitis C antibody positive						
No	215 (15%)	222 (16%)	387 (27%)	525 (37%)	80 (6%)	1 429
Yes	22 (12%)	25 (14%)	66 (36%)	57 (31%)	14 (8%)	184
No test done	38 (17%)	18 (8%)	68 (31%)	83 (38%)	14 (6%)	221
Regimen of longest duration in 2006						
None	253 (78%)	12 (4%)	18 (6%)	37 (11%)	3 (1%)	323
Mono/double	4 (1%)	225 (84%)	21 (8%)	15 (6%)	2 (1%)	267
3+ (NRTI+/-PI, no NNRTI)	13 (3%)	13 (3%)	464 (91%)	17 (3%)	5 (1%)	512
3+ (NRTI+NNRTI, no PI)	5 (1%)	9 (1%)	15 (2%)	595 (95%)	2 (0%)	626
3+ (NNRTI+PI,+/-NRTI)	0 (0%)	4 (4%)	3 (3%)	0 (0%)	96 (93%)	103

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, 2003 – 2007, and proportion reporting use of antiretroviral treatment for HIV infection, by city and year

	Year of survey[1]				
City	**2003**	**2004**	**2005**	**2006**	**2007**
Adelaide					
Sample size	42	–	36	–	43
Proportion reporting use of antiretroviral therapy	59.5	–	69.4	–	81.4
Brisbane					
Sample size	94	122	81	68	88
Proportion reporting use of antiretroviral therapy	55.3	63.9	55.6	64.7	64.8
Canberra					
Sample size	13	–	–	16	–
Proportion reporting use of antiretroviral therapy	92.3	–	–	100	–
Melbourne					
Sample size	177	159	162	153	150
Proportion reporting use of antiretroviral therapy	55.9	60.4	58.6	58.8	64.0
Perth					
Sample size	–	49	–	41	–
Proportion reporting use of antiretroviral therapy	–	71.4	–	78.0	–
Sydney[2]					
Sample size	330	416	483	516	286
Proportion reporting use of antiretroviral therapy	66.7	66.1	64.2	65.7	66.8

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

2 The Sydney Gay Community Periodic Survey questionnaire was modified in August 2007. Data from the Sydney Gay Community Periodic Survey in February 2007 only is shown.

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

	Year of prescription[1,2]				
Antiretroviral agent	**2003**	**2004**	**2005**	**2006**	**2007**
Nucleoside analogue reverse transcriptase inhibitors					
Abacavir	1 425	1 542	1 592	830	617
Didanosine	1 250	1 203	873	601	600
Emtricitabine	–	–	238	163	28
Lamivudine[3]	2 774	3 219	3 641	2 094	697
Stavudine	1 401	979	603	346	208
Zalcitabine	34	21	13	4	0
Zidovudine	284	385	241	206	189
Lamivudine & Zidovudine	1 893	1 989	1 959	1 525	1 527
Abacavir & Lamivudine	–	–	212	1 592	2 310
Abacavir, Lamivudine & Zidovudine	713	643	544	431	368
Tenofovir	1 699	2 273	3 076	2 504	1 619
Tenofovir & Emtricitabine	–	–	–	1 671	3 116
Non-nucleoside analogue reverse transcriptase inhibitors					
Delavirdine	38	32	20	16	11
Efavirenz	1 416	1 656	1 896	2 208	2 413
Nevirapine	2 311	2 412	2 697	2 387	2 436
Protease inhibitors					
Amprenavir	144	98	39	17	7
Atazanavir	–	590	1 207	1 746	2 034
Darunavir	–	–	–	–	69
Fosamprenavir	–	3	119	194	188
Indinavir	483	341	228	144	106
Lopinavir & ritonavir	1 401	1 580	1 543	1 543	1 689
Nelfinavir	461	349	230	136	95
Ritonavir	696	879	1 330	1 845	2 071
Saquinavir	440	388	294	226	206
Tipranavir	–	–	–	–	36
Fusion inhibitors					
Enfuvirtide	–	54	172	197	191
Total patients[4]	**7 173**	**7 598**	**8 453**	**9 463**	**9 933**
Total cost[5] ($'000s)	**78 712**	**85 293**	**98 485**	**110 512**	**118 847**

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

	Year of prescription				
Treatment	**2003**	**2004**	**2005**	**2006**	**2007**
Azithromycin	202	204	181	160	169
Cidofovir	1	0	1	1	3
Clarithromycin	242	211	266	255	249
Doxorubicin	7	11	13	11	8
Foscarnet	5	2	0	0.25	0.25
Ganciclovir	245	149	56	32	32
Rifabutin	44	40	41	32	46
Valaciclovir	220	243	192	146	108
Valganciclovir[1]	24	211	388	458	531
Total cost ($'000s)	**4 769**	**6 250**	**6 884**	**7 793**	**8 188**

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)
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
2007				
January – March	1 077	700	562	3 289
April – June	1 263	744	689	3 591
July – September	1 365	738	802	3 916
October – December	1 410	719	857	3 707

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. 2007 data includes cost for all lamivudine for all doses (not just 100mg).

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 year[1]

Year	Ribavirin and Interferon	Pegylated Interferon and Ribavirin[2]	Pegylated interferon	Total cost[3] ($'000s)
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
2007				
January – March	0	2 518	122	11 233
April – June	0	2 661	149	12 266
July – September	0	2 513	189	10 844
October – December	0	2 290	176	12 187

1 An estimated 1 142, 1 831, 1 847, 2 847 and 3 539 people were receiving treatment throughout 2003 to 2007, 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

			Drug class against which resistance was detected		
Year of diagnosis	Total	% non-B subtypes	PI[1] Number (%)	NRTI[1] Number (%)	NNRTI[1] Number (%)
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)
2007	85	9.4	0 (0.0)	3 (3.5)	6 (7.1)

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 (from 2006)

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 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 2005 to 31 December 2007 and notified by 31 March 2008. 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 2005 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 2007 and reported to the *National AIDS Registry* by 31 March 2008. 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 2007, 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. Reporting of a previous HIV diagnosis overseas was introduced for cases of HIV infection newly diagnosed in Australia from 1 January 2007 (Table 1.2.4).

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. HIV and AIDS diagnoses were matched by namecode, sex and date of birth.

Cases of HIV infection diagnosed at the NSW State Reference Laboratory for HIV/AIDS, Sydney, were tested with the BED capture enzyme immunoassay to detect recent HIV infection (Parekh *et al* 2002). Cases with a normalised optical density of at most 1.0, without long duration of HIV diagnosis (more than 180 days between the assay specimen date and the date of first HIV diagnosis in Australia) and without AIDS, were classified as cases of recent HIV infection (Table 1.2.7).

The surveillance systems for newly diagnosed HIV infection and newly acquired HIV infection are described in Guy *et al* (2007), McDonald *et al* (1994a) and McDonald *et al* (1994b). The National Serology Reference Laboratory, Australia (Dax and Vandenbelt 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, from June 1998 in Victoria and from January 2005 in the Australian Capital Territory. 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 1998 – 2007, 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 2006 census population distribution, based on the Australian Standard Geographical Classification.

1.4 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).

1.5 Global comparisons

The data in Table 1.5.1 were obtained from the following sources:

Joint United Nations Programme on HIV/AIDS (UNAIDS). 2008 Report on the global HIV/AIDS epidemic. UNAIDS, 2008. 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/in

National Center for HIV/AIDS Dermatology and STDs (NCHADS). Consensus Workshop on HIV Estimation for Cambodia. NCHADS, 2007. http://www.nchads.org/

The UK Collaborative Group for HIV and STI Surveillance. Testing Times. HIV and other Sexually Transmitted Infections in the United Kingdom: 2007: London: Health Protection Agency, Centre for Infections. November 2007

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 jurisdictions which monitor incident 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 2003 – 2007) using 2006 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 2006 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 2008).

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 end of June 2008. 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 2003 (48 sites), 2004 (44 sites), 2005 (52 sites), 2006 (45 sites) and 2007 (53 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 48 needle and syringe programs in 2003, 44 sites in 2004, 52 sites in 2005, 45 in 2006 and 53 in 2007. Further information is available in MacDonald *et al* (1997 and 2000).

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

6.1 Estimates of the number of people living with HIV infection

Cases of newly diagnosed HIV infection notified to the National HIV Registry were linked to reported deaths following AIDS notified to the National AIDS Registry by 31 March 2008, by matching on namecode, sex and date of birth. The State/Territory of HIV diagnosis was the State/Territory notified to the National HIV Registry for cases with a unique HIV-AIDS match and the State/Territory of AIDS diagnosis for cases with a non-unique match.

The number of people living with HIV/AIDS in each year by age, State/Territory of HIV/AIDS diagnosis and sex, was estimated to be equal to the number living in the previous year at one year younger, plus cases of HIV infection newly diagnosed in the next year for each age and sex, minus the number expected to have died for that age and sex among people without diagnosed HIV infection. The number of people living with HIV/AIDS in 2007 was estimated by State/Territory of HIV/AIDS diagnosis and not State/Territory of residence. No other causes of death from the National HIV Registry were used in these calculations, as deaths following HIV diagnosis only were not routinely reported in all years.

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

Estimates of the number of people living with hepatitis C virus were derived by the Hepatitis C Virus Projections Working Group, a collaborative group formed under the auspices of 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 2008, 27 participating clinical sites enrolled a total of 1 834 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 2007, 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 1998 – 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 2007).

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 Gay Community 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 entacavir 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. 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, and in 2007, 3 539 people were receiving 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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