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Annual Surveillance Report

2011

edited by

Ann McDonald

The Kirby Institute

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, viral hepatitis and sexually transmissible infections

The Kirby Institute (formerly 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 Surveillance and Evaluation Program for Public Health at the Kirby Institute is a research associate of the Australian Institute of Health and Welfare.

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Preface

This report is the fifteenth annual review of available surveillance data pertaining to the occurrence of HIV, 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.kirby.unsw.edu.au. The Australian HIV Public Access Dataset, holding records of cases of HIV infection, diagnosed in Australia by 31 December 2010 and reported by 31 March 2011, is also available through the website http://www.kirby.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.

The accompanying report *Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander people: Surveillance and Evaluation Report 2011* presents a detailed analysis of the occurrence of bloodborne viral and sexually transmitted infections in a format designed to be accessible for Aboriginal and Torres Strait Islander health services and communities. The report is available at Internet address http://www.kirby.unsw.edu.au

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 2011*, edited by the National Centre in HIV Social Research. Specifically, data reported in Tables 5.1.1 and 7.1.2 of *HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2011* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2010, as reported by 31 March 2011. 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, viral hepatitis and sexually transmissible infections is gratefully acknowledged.

Acknowledgments

National organisations

- Association for Prevention and Harm Reduction Programs, VIC
- 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 Injecting and Illicit Drug Users' League
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Paediatric Surveillance Unit and its contributors, Westmead, NSW
- 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, Sydney, NSW
- 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

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- Microbiology Department, Canberra Hospital, Woden, ACT
- Department of Microbiology, SEALS, 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; Microbiology and Infectious Diseases Department, SA Pathology at Women's and Children's Hospital, North 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
- Royal Prince Alfred Hospital Sexual Health Clinic, 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

Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance

- Australian Government Department of Health and Ageing, Canberra, ACT
- National Aboriginal Community Controlled Health Organisation, ACT
- The Kirby Institute (formerly the National Centre in HIV Epidemiology and Clinical Research), The University of New South Wales, Sydney; Perinatal and Reproductive Epidemiology Research Unit, incorporating the National Perinatal Statistics Unit, The University of New South Wales, Sydney, NSW
- Centre for Population Health, Burnet Institute, Melbourne; National Serology Reference Laboratory, Australia, Fitzroy, VIC

Contributing organisations

- Coffs Harbour Sexual Health Service, Coffs Harbour; Grafton Sexual Health Clinic, Grafton; Greater Southern Area Health Service; Holden Street Clinic, Gosford; Hunter New England Sexual Health Service; Illawarra Sexual Health, Wollongong; Kirketon Road Centre, Darlinghurst; Lismore/ Tweed Heads Sexual Health & AIDS Services, Lismore; Northern Sydney Sexual Health Service, St Leonards; Orange Sexual Health Service, Orange; Royal Prince Alfred Hospital Sexual Health Clinic, Camperdown; Short Street Sexual Health Clinic; St George Hospital; Sydney Sexual Health Centre, Sydney; Sydney West Area Health Service – Clinical Sexual Health Services, NSW
- NT Sexual Health and BBV Unit, NT
- Cairns Sexual Health Services, Cairns Base Hospital, Cairns; Gold Coast Sexual Health Clinic, Miami; Princess Alexandra Sexual Health, Princess Alexandra Hospital, Woolloongabba; Townsville Sexual Health Service, Townsville, QLD
- Hobart, Devonport and Laustenceston Sexual Health Service, TAS
- Melbourne Sexual Health Centre, Carlton, VIC
- Fremantle Hospital, Fremantle, WA

Genital Warts Surveillance Network

Contributing organisations

- Northern Sydney Sexual Health Service, St Leonards; Royal Prince Alfred Hospital Sexual Health Clinic, NSW
- NT Sexual Health and BBV Unit, NT
- Cairns Sexual Health Services, Cairns Base Hospital, Cairns; Gold Coast Sexual Health Clinic, Miami, QLD
- Hobart, Devonport and Launceston Sexual Health Service, TAS
- Melbourne Sexual Health Centre, Carlton, VIC
- Fremantle Hospital, Fremantle, WA

Australian HIV Observational Database

- Tamworth Sexual Health Service, Tamworth Blue Mountains Sexual Health Clinic, Katoomba; Holdsworth House Medical Practice, Darlinghurst; Illawarra Sexual Health, Wollongong; Royal Prince Alfred Hospital Sexual Health Clinic, 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 Private Clinic, 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; Northside Clinic, Fitzroy North, VIC
- Department of Clinical Immunology, Royal Perth Hospital, Perth, WA

Collaboration of Australian Needle and Syringe Programs

- Directions ACT, Canberra;
- Albury Community Health Centre, Albury; Central Coast NSP Services, Gosford and Long Jetty; First Step Program, Port Kembla and Nowra; Health ConneXions Harm Reduction Program, Liverpool; Hunter Harm Reduction Services and Hunter ACON, Newcastle; Kirketon Road Centre and K2, Kings Cross; NSW Users and AIDS Association (NUAA), Surry Hills; Northern Coast Area Health Service, Ballina, Byron Bay, Coffs Harbour, Grafton, Lismore, Murwillumbah, Nimbin, and Tweed Heads; Resource and Education Program for IDUs, Redfern; ,Central Access Service, Kogarah and Sutherland; Sydney West Area Health Service HIV/Hepatitis C Prevention Service, Blacktown, Mt Druitt, Nepean and Parramatta;
- Northern Territory AIDS and Hepatitis C Council, Alice Springs, Darwin and Palmerston;
- Biala Community Alcohol and Drug Services, Brisbane; Cairns ATODS NSP, Cairns; Queensland Injectors Health Network (QuIHN), Brisbane, Gold Coast and Sunshine Coast; Kobi House, Toowoomba; West Moreton Sexual Health Service, Ipswich; Townsville ATODS NSP;
- 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; Salvation Army Launceston, Launceston; Tasmanian Council on AIDS, Hepatitis & Related Diseases (TasCAHRD), Hobart and Glenorchy;
- Barwon Health Drug and Alcohol Services, Geelong; Darebin Community Health Centre, Northcote; Health Information Exchange, St Kilda; Inner Space, Collingwood; North Richmond NSP, North Richmond; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Frankston;
- WA AIDS Council Mobile Exchange, Perth; Western Australia Substance Users Association (WASUA), Perth and South Coast;
- Centre for Applied Medical Research (AMR) and NSW State Reference Laboratory for HIV, St Vincent's Hospital, Sydney, NSW

Annual Surveillance Report 2011 Advisory Committee

- Dr Russell Waddell, Australasian Chapter of Sexual Health Medicine, Sydney, NSW
- Dr Benjamin Cowie, Australasian Society for HIV Medicine, NSW
- Phillip Keen, Australian Federation of AIDS Organisations, Sydney, NSW
- Kate Robinson, Australian Government Department of Health and Ageing, Canberra, ACT
- Helen Tyrrell, Hepatitis Australia, Canberra, ACT
- Tadgh McMahon, Multicultural HIV/AIDS and Hepatitis C Service, Sydney, NSW
- Jo Watson, National Association of People Living with HIV/AIDS, Sydney, NSW
- Dr Limin Mao, National Centre in HIV Social Research, The University of New South Wales, Sydney, NSW
- Associate Professor David Wilson (Chair), Professor Basil Donovan, Professor Andrew Grulich, Professor Lisa Maher, Ann McDonald, Melanie Middleton, Dr Libby Topp, Dr Handan Wand, James Ward, Kirby Institute

Summary

HIV infection

- By 31 December 2010, 30 486 cases of HIV infection had been diagnosed in Australia.
- An estimated 21 391 people were living with diagnosed HIV infection in Australia at the end of 2010.
- The number of new HIV diagnoses in Australia in 2010 was 1 043. The annual number of new HIV diagnoses has remained relatively stable at around 1 000 over the past five years.
- Trends in newly diagnosed HIV infection have differed across State and Territory health jurisdictions. New South Wales recorded a decline in the rate of diagnosis from 6.3 in 2003 to 4.9 per 100 000 population in 2010. Queensland and Western Australia recorded their highest rate of HIV diagnosis in 2010 of 5.3 and 4.2 per 100 000 population, respectively. The rate of HIV diagnosis in Victoria peaked in 2006 at 5.5 and declined to 4.9 per 100 000 population in 2010, similar to the rate in New South Wales.
- HIV continued to be transmitted primarily through sexual contact between men.
- Of 5 177 new diagnoses of HIV infection in 2006 – 2010, 1 481 (28.6%) had a negative or indeterminate HIV antibody result or a diagnosis of primary HIV infection in the 12 months prior to HIV diagnosis, indicating newly acquired infection. Use of a laboratory test for detecting incident HIV infection among cases without evidence of newly acquired infection resulted in an increase in cases with recent infection of 28%.
- The *per capita* rate of HIV diagnosis in the Aboriginal and Torres Strait Islander population was similar to that in the non-Indigenous population, excluding cases and populations from high HIV prevalence countries. Heterosexual contact was the reported source of exposure to HIV in 18.5% of Aboriginal and Torres Strait Islander cases and in 16% of non-Indigenous cases, other than those from a high HIV prevalence country. Aboriginal and Torres Strait Islander cases of HIV infection differed from non-Indigenous cases, other than those from a high HIV prevalence country, in that a higher proportion were attributed to injecting drug use (19.4% vs 2.5%) and a higher proportion of Aboriginal and Torres Strait Islander cases were among women (21.4% vs 8.0%).
- Of 1 297 cases of HIV infection newly diagnosed in 2006 – 2010, for which exposure to HIV was attributed to heterosexual contact, 60% were in people from high prevalence countries or their partners.

Viral hepatitis

- The *per capita* rate of diagnosis of hepatitis B infection in Australia in 2006 – 2010 was stable at around 31 per 100 000 population. The rate of diagnosis of newly acquired hepatitis B infection declined from 1.4 to 1.0 per 100 000 population between 2006 and 2010.
- An estimated 170 000 people were living in Australia in 2010 with hepatitis B infection. An estimated 335 deaths in 2010 were attributable to chronic hepatitis B infection.
- The *per capita* rate of diagnosis of hepatitis C infection declined from 58.6 per 100 000 in 2006 to 52 per 100 000 population in 2009.
- An estimated 221 000 people were living in Australia with chronic hepatitis C infection, including 48 000 with moderate to severe liver disease.
- The reported annual number of diagnoses of newly acquired hepatitis C infection ranged from 362 to 442 in 2006 – 2010 and accounted for 3.5% of new hepatitis C diagnoses.
- Based on reported cases, hepatitis B and hepatitis C transmission in Australia continued to occur predominantly among people with a recent history of injecting drug use.
- In 2010, chronic hepatitis B infection and chronic hepatitis C infection were the underlying causes of liver disease in 3.1% and 25% of liver transplants, respectively.
- An estimated 3 760 people with chronic hepatitis C infection were prescribed ribavirin and pegylated interferon combination treatment or pegylated interferon only in 2010.
- The proportion of people seen at needle and syringe programs who reported having injected drugs for five years or less was stable in 2006 – 2010 at around 10%. Within this group, hepatitis C prevalence ranged from 28% in 2007 and 2008 to 19% in 2010.

Sexually transmissible infections other than HIV

- Chlamydia was the most frequently reported notifiable condition in Australia in 2010 with 74 305 diagnoses. The population rate of diagnosis of chlamydia in 2010 was 319 per 100 000 population, a 17% increase over the rate in 2009, continuing the increase seen over the past ten years.
- The number of diagnoses of gonorrhoea increased by 25%, from 7 993 cases in 2009 to 10 015 in 2010. The rate of diagnosis of infectious syphilis increased by 60%, from 4.2 in 2006 to 6.7 in 2007 and declined to 4.9 in 2010. The increases in infectious syphilis have occurred largely among men who have sex with men.
- Substantially higher rates of diagnosis of chlamydia and gonorrhoea were recorded in the Aboriginal and Torres Strait Islander population compared with non-Indigenous population.
- In the past 5 years, more than 75% of men and women seen for the first time through a network of sexual health services were tested for chlamydia. In 2010, the chlamydia positivity rate was highest among Aboriginal and Torres Strait Islander men and women (20.7%) and among young heterosexual men and women (16.3% and 15.6%, respectively), and was lowest among female sex workers (5.6%).
- Following the introduction of vaccination against human papilloma virus, the proportion of young Australian resident women diagnosed with genital warts dropped from 10.9% in 2007 to 3.4% in 2010.

Main Findings

HIV infection

The annual number of new HIV diagnoses in Australia has remained relatively stable over the past five years, 2006 – 2010, at around 1 000, following a steady increase from 719 cases in 1999 (Figure 1).

Figure 1 Newly diagnosed HIV infection in Australia

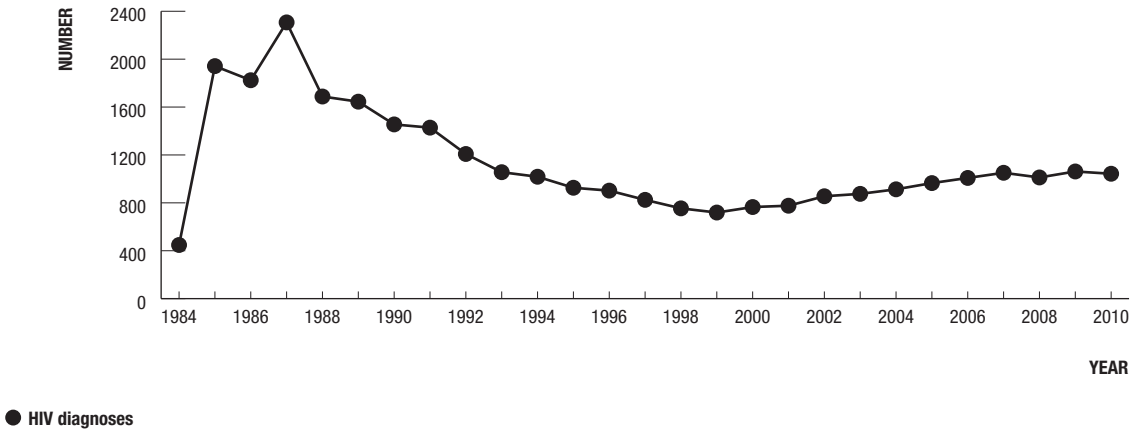
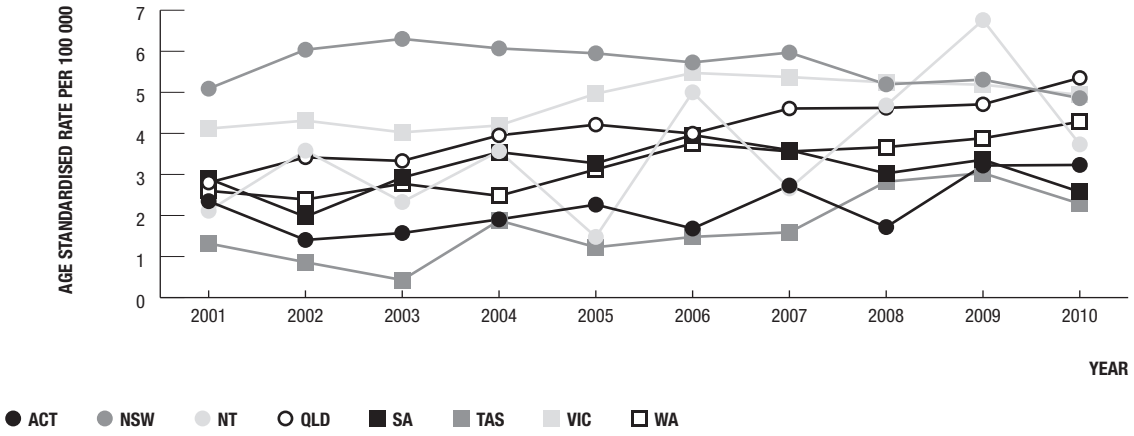


Figure 2 Newly diagnosed HIV infection, 2001 – 2010, by year and State/Territory



Recent trends in the population rate of newly diagnosed HIV infection have differed across Australia. In New South Wales, the rate of HIV diagnosis was relatively stable in 2001 – 2005 at around 6 per 100 000 population and has declined gradually from 5.7 in 2006 to 4.9 in 2010 (Figure 2). The rate of HIV diagnosis in Victoria increased from 4.1 in 2001 to 5.5 in 2006 and then declined to 4.9 in 2010, similar to the rate in New South Wales. The rate of new HIV diagnosis in South Australia showed a similar pattern to that in Victoria, with an increase, from 2.9 in 2001 to 4.0 in 2006, and then a decline to 2.6 in 2010. In Queensland and Western Australia, the rate of HIV diagnosis steadily increased from 2.8 and 2.6 per 100 000 population, respectively, in 2001, to 5.4 and 4.3 in 2010. Increases in the population rate of HIV diagnosis have also occurred in the Australian Capital Territory, the Northern Territory and in Tasmania over the past 10 years.

Of 1 043 cases of HIV infection newly diagnosed in Australia in 2010, 148 (14%) had been previously diagnosed overseas (Table 1.1.3). These cases have generally been included in past counts and are included in the count for 2010.

Figure 3 **Newly diagnosed HIV infection in Australia, 2001 – 2010, by newly acquired HIV status and year**

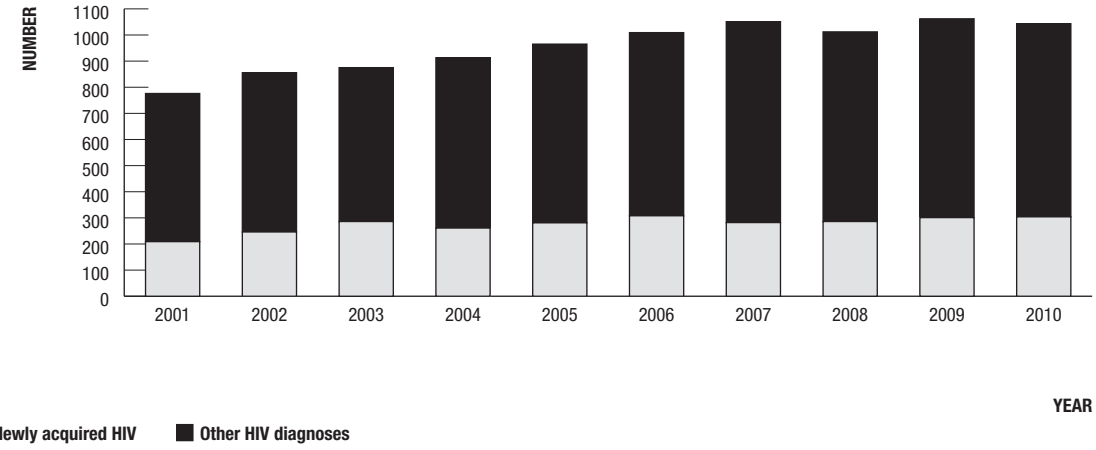
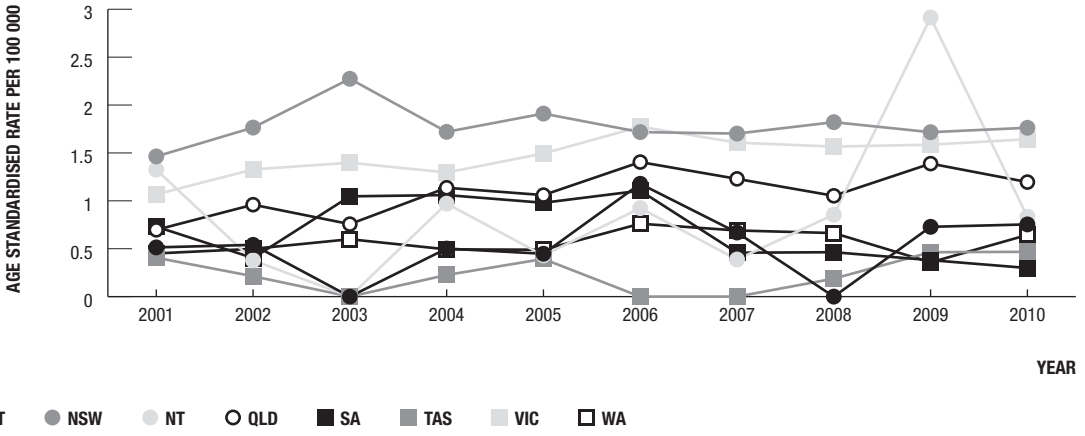


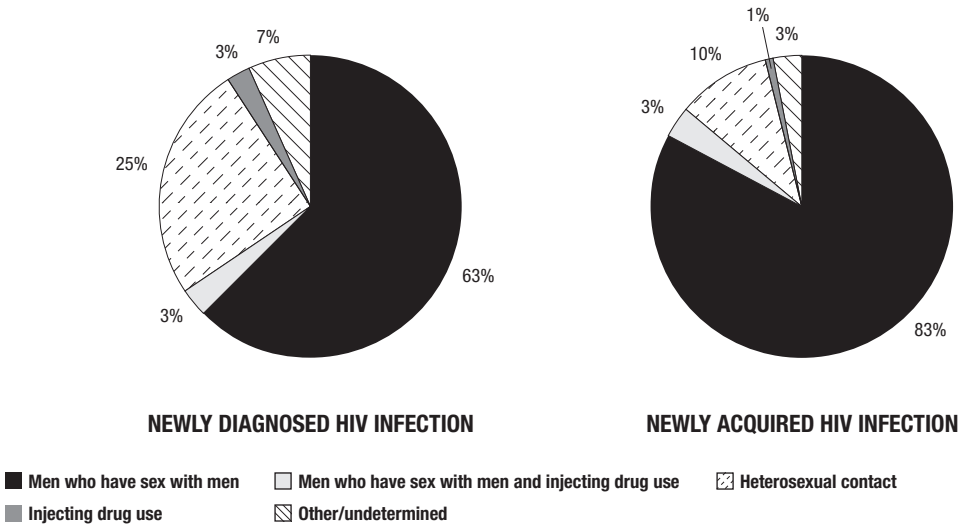
Figure 4 **Newly acquired HIV infection, 2001 – 2010, by year and State/Territory**



Among cases of newly diagnosed HIV infection, the proportion who acquired the infection in the 12 months prior to HIV diagnosis was relatively stable at 28% between 2006 and 2010 (Figure 3). The rate of diagnosis of newly acquired HIV infection in New South Wales was stable at around 1.7 per 100 000 population in 2001 – 2010. In Queensland and Victoria, the rate gradually increased from 0.7 and 1.1, respectively, in 2001 to 1.4 and 1.8 in 2006 and was stable at 1.2 and 1.6, respectively, in 2007 – 2010. The rate of diagnosis of newly acquired HIV infection in South Australia increased to 1.0 in 2006 and then declined to less than 0.5 in 2010 (Figure 4). These diagnoses of newly acquired HIV infection indicate the lower limit to the number of cases of recent HIV infection that have actually occurred in Australia over this time.

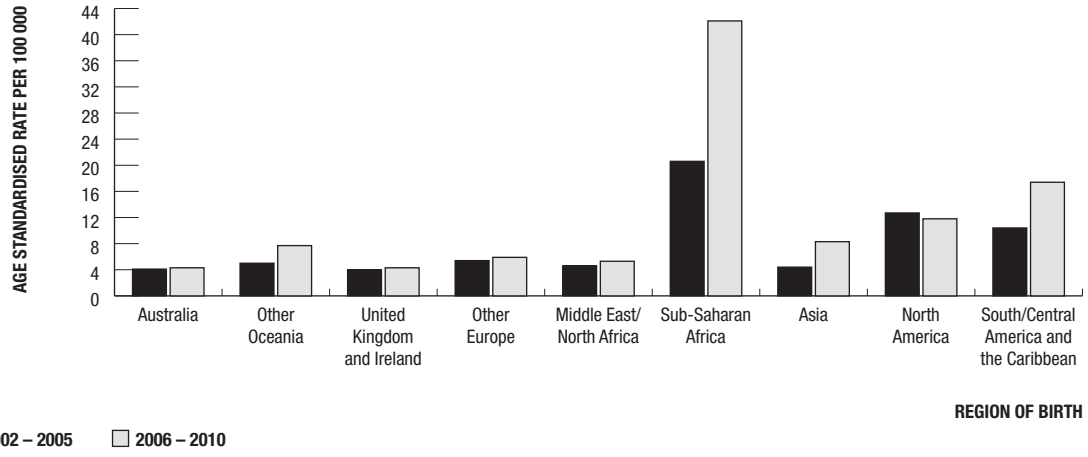
A new surveillance program for monitoring recent HIV infection has been established, which makes use of specialised laboratory tests for detecting whether or not HIV was acquired in the six months prior to HIV diagnosis. Testing cases of HIV infection that were newly diagnosed in 2010 with a specialised laboratory test identified 37 additional cases of recent infection, resulting in a 28% increase over the number of diagnoses of newly acquired HIV infection.

Figure 5 HIV diagnoses, 2006 – 2010, by HIV exposure category



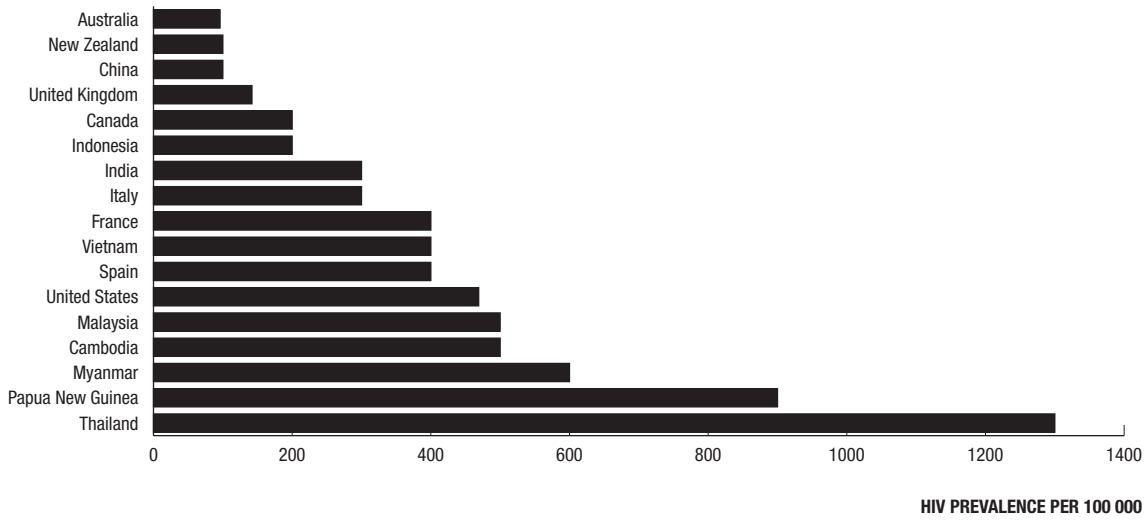
Transmission of HIV in Australia continues to occur primarily through sexual contact between men (Figure 5). In 2006 – 2010, 66% of new HIV diagnoses occurred among men who have sex with men, 25% were attributed to heterosexual contact, 3% to injecting drug use and exposure was undetermined in 7%. Men who have sex with men accounted for 86% of diagnoses of newly acquired HIV infection. Exposure to HIV was attributed to heterosexual contact and injecting drug use in 10% and 1%, respectively, of diagnoses of newly acquired HIV infection.

Figure 6 HIV diagnoses in Australia, 2002 – 2010, by year and region of birth



People born in Australia accounted for 58% of cases of HIV infection newly diagnosed in 2006 – 2010. Among Australian born cases, the rate of HIV diagnosis in 2006 – 2010 was stable at 4.2 per 100 000 population whereas the rate in the overseas born population increased from 5.8 in 2006 to 7.5 in 2010. The population rate of HIV diagnosis in the 5 years from 2006 to 2010 more than doubled in people from sub-Saharan Africa and increased by 88% and 67% in people from Asia and South/Central America and the Caribbean, respectively. Among cases of HIV infection newly diagnosed in the past five years, 10% were in people who reported speaking a language other than English at home.

Figure 7 **HIV prevalence in selected countries**



In 2010, the estimated number of people living in Australia with diagnosed HIV infection was 21 391. As a national prevalence (96 per 100 000), the estimate was lower than that for diagnosed and undiagnosed HIV infection in the United Kingdom in 2010 (142 per 100 000 population) and approximately four-fold lower than that for diagnosed and undiagnosed HIV infection in the United States in 2008 (470 per 100 000). Estimated HIV prevalence in several neighbouring countries is substantially higher than that in Australia (Figure 7).

Viral hepatitis

The population rate of reported diagnoses of acute hepatitis A infection in Australia remained low at 1.4 per 100 000 population or less in 2006 – 2010, except in 2009, when a large multi-jurisdictional outbreak of hepatitis A infection resulted in an increase in the rate to 2.5 per 100 000 population (Table 2.1.1).

The population rate of diagnosis of hepatitis B infection (Table 2.1.3) and diagnoses of newly acquired hepatitis B (Figure 8) were stable in Australia in 2006 – 2010 at 31 and 1.2 per 100 000 population, respectively. The rate of diagnosis of newly acquired hepatitis B infection declined substantially from 2001 among people aged 15 – 19 years and 20 – 29 years (Figure 9). Adolescent "catch up" vaccination programs may have played a role in this reduction through increased vaccine coverage. The rate of diagnosis of newly acquired hepatitis B infection remained relatively stable among those aged 30 years or older.

Figure 8 **Newly acquired hepatitis B infection, 2001 – 2010, by year and sex**

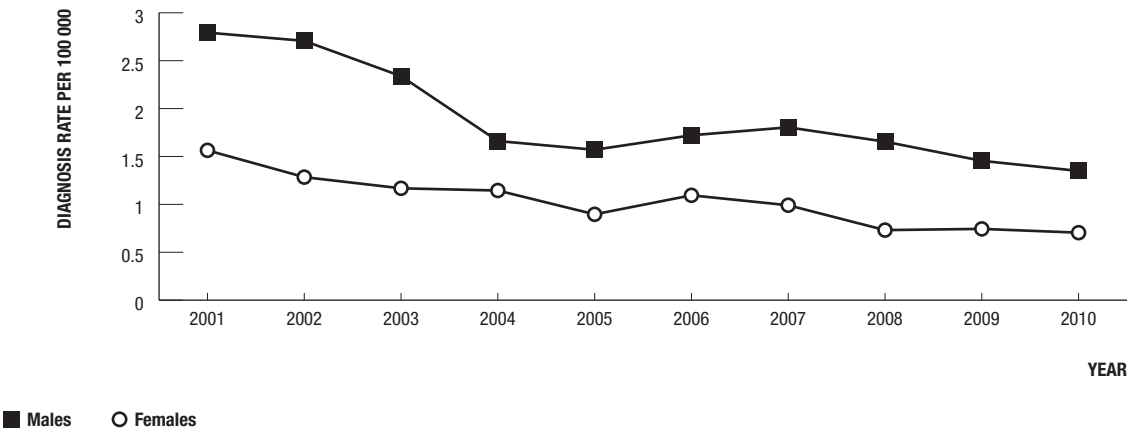
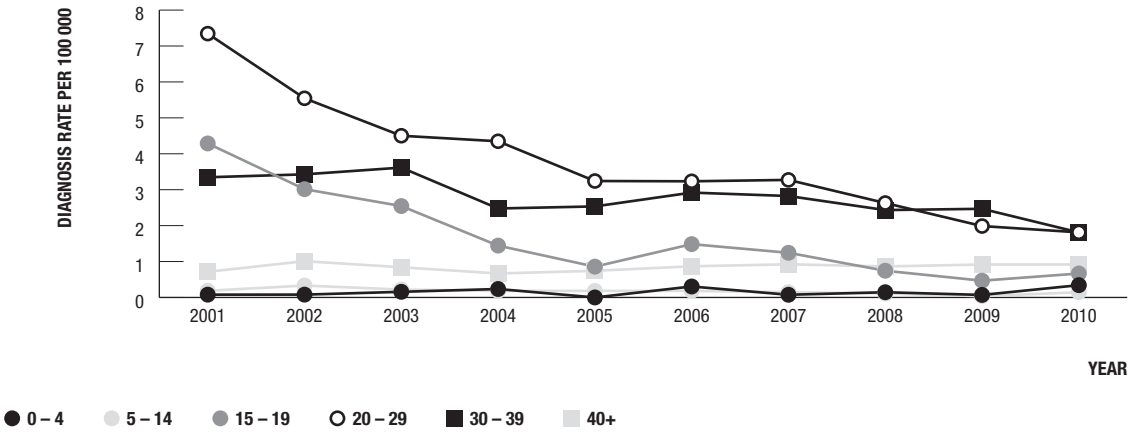
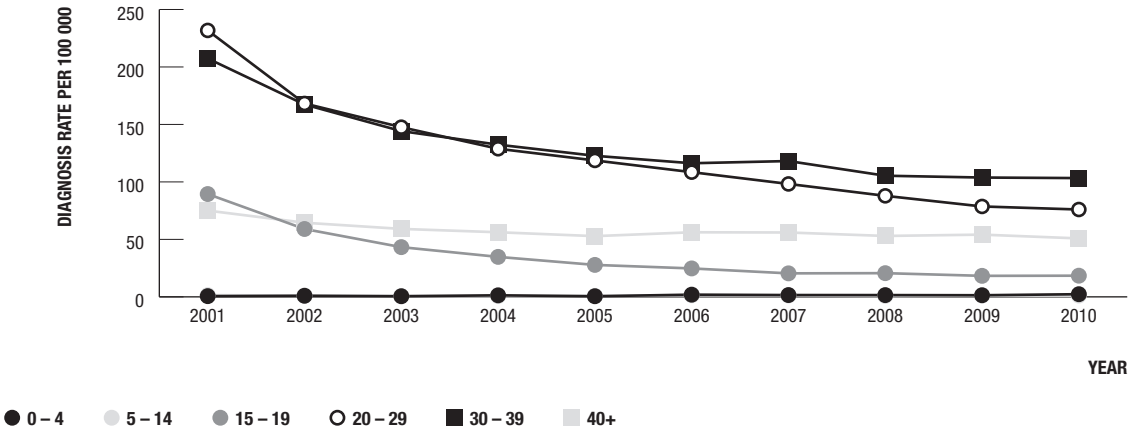


Figure 9 **Newly acquired hepatitis B infection, 2001 – 2010, by year and age group**



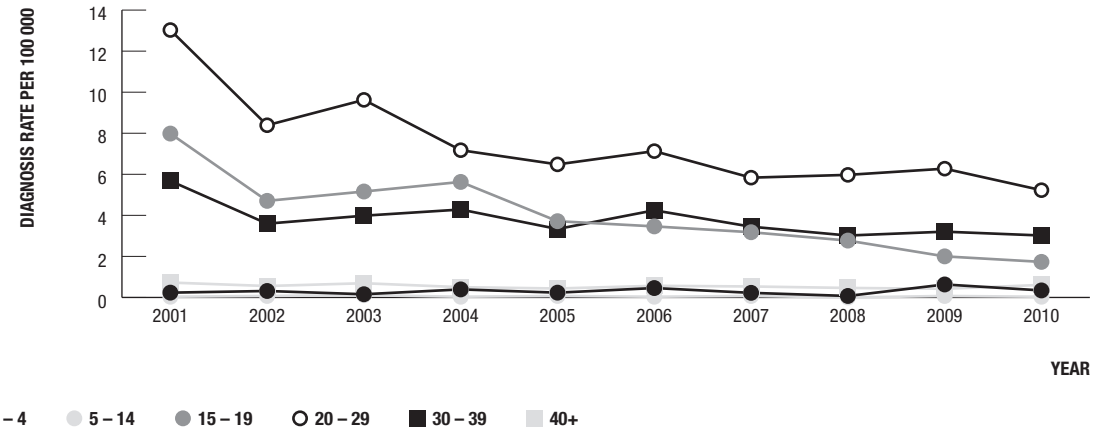
Information on the source to hepatitis B infection, reported through health authorities other than Queensland and Western Australia, indicated that injecting drug use was the most frequently reported source of exposure. The source of exposure to hepatitis B was undetermined in an increasing proportion of cases, with more than 50% undetermined in 2010 (Table 2.1.7).

Figure 10 **Hepatitis C infection, 2001 – 2010, by year and age group**



The rate of diagnosis of hepatitis C infection declined to about 52 per 100 000 population in 2009 (Table 2.1.9). It declined by 67% in the 20 – 29 year age group and by 50% in the 30 – 39 year age group (Figure 10). In the 15 – 19 year age group, the rate of new hepatitis C diagnoses declined by 81% between 2001 and 2010.

Figure 11 **Newly acquired hepatitis C, 2001 – 2010, by year and age group**



Around 3.5% of cases of hepatitis C infection diagnosed in 2006 – 2010 were documented as having been acquired within the previous two years. Reported hepatitis C transmission continued to occur at the highest rate among adults aged 20 – 29 years (Figure 11), primarily those with a history of injecting drug use (Table 2.1.13). Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence increased from 5.2 per 100 person years in 2006 to 13.5 per 100 person years in 2010 (Table 4.3.1). Hepatitis C incidence among hepatitis C negative people who inject drugs enrolled in the Hepatitis C Incidence and Transmision Study – community (HITS-c), in Sydney also increased from 5.0 in 2009 to 9.3 per 100 person years in 2010 (Table 4.3.2).

The 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 infection among overseas born people was similar (Europe, North and South America and the Caribbean) or higher (Oceania, Middle East, Africa and Asia) to their proportion of the Australian population (Table 2.1.8). By contrast, the proportion of diagnoses of newly acquired hepatitis C in overseas born people was substantially lower than their proportion in the Australian population (Table 2.1.14).

An estimated 170 000 people were living with hepatitis B infection and 335 deaths were attributed to chronic hepatitis B infection in 2010 (Table 6.2.1).

An estimated 297 000 people living in Australia in 2010 had been exposed to hepatitis C virus. Of these, 76 000 people were estimated to have cleared their infection, 168 000 had chronic hepatitis C infection and early liver disease (stage F0/1), 48 000 had chronic hepatitis C infection and moderate liver disease (stage F2/3), and 6 100 were living with hepatitis C related cirrhosis.

Hepatitis C prevalence in 2010 was approximately 140 times lower among blood donors (0.01%) than the estimated prevalence of hepatitis C infection in the Australian population (1.4%) (Figure 35).

Sexually transmissible infections other than HIV

Chlamydia was the most frequently reported infection in Australia in 2010, with 74 305 newly diagnosed cases. The population rate of reported diagnoses more than tripled in both the male and female population over the past ten years, from 84.5 in 2001 and 278.8 per 100 000 males in 2010, and from 124.4 in 2001 to 384.5 per 100 000 females in 2010. The increase in the chlamydia diagnosis rate among females of 49.7 between 2009 and 2010 almost quadrupled the rate of increase of 13.2 from 2008 to 2009. The increase in the chlamydia diagnosis rate in the male population of 44.3 between 2009 and 2010 was more than 3 fold the rate of increase that occurred between 2008 and 2009 (Figure 12).

Figure 12 Chlamydia, 2001 – 2010, by year and sex

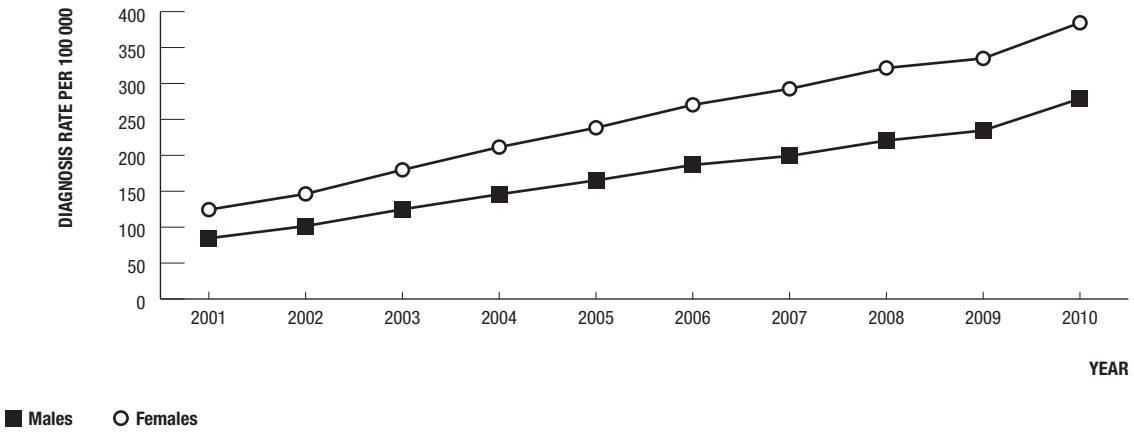
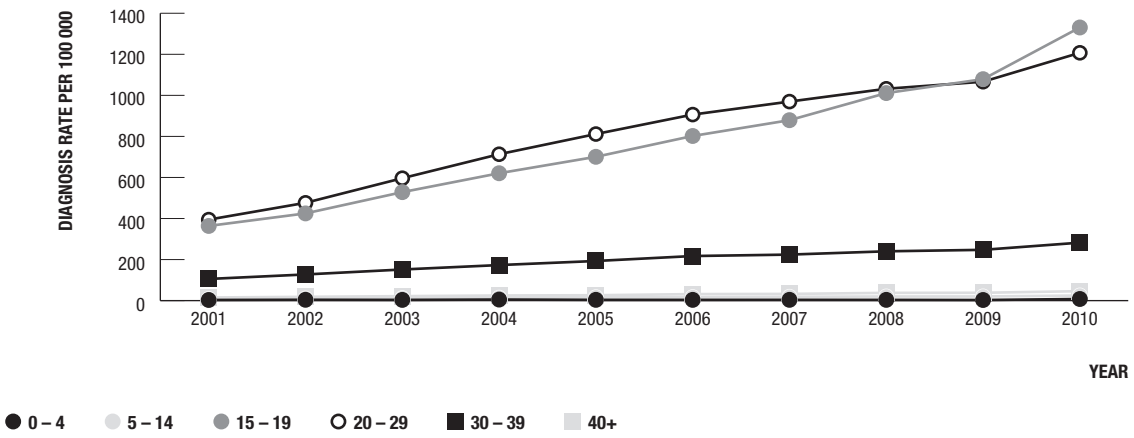


Figure 13 Chlamydia, 2001 – 2010, by year and age group



Increasing rates of diagnosis of chlamydia were reported in all States and Territories. The increases were greatest in the 20 – 29 and 15 – 19 year age groups, which accounted for 80% of the annual number (Figure 13). In 2006 – 2010, the female to male sex ratio in the 15 – 19 year age group was 3:1 whereas it was 1.4:1 in the 20 – 29 year age group. Age and sex specific patterns of diagnosis may have been influenced by differential testing rates.

Figure 14 **Gonorrhoea, 2001 – 2010, by year and sex**

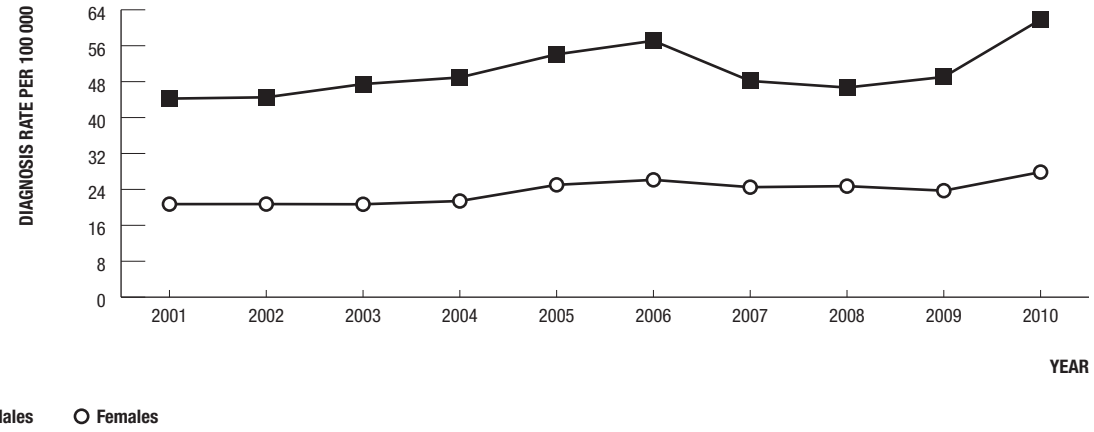
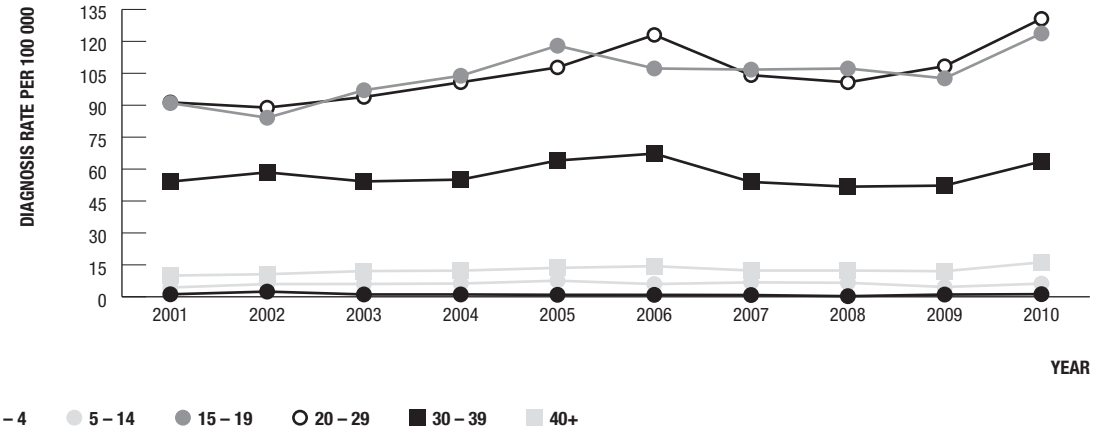


Figure 15 **Gonorrhoea, 2001 – 2010, by year and age group**



The population rate of diagnosis of gonorrhoea declined from 40.7 in 2006 to 34.8 in 2008 and then increased to 43.5 in 2010. The largest increase in gonorrhoea cases occurred in New South Wales (40%), Queensland (33%) and the Northern Territory (28%). The gonorrhoea diagnosis rate increased among males from 48.7 in 2008 to 61.8 in 2010 and among females from 23.7 in 2009 to 27.8 in 2010 (Figure 14). The rate was highest in 2010 among males in the age groups 20 – 29 years (130.6) and 15 – 19 years (123.7) (Figure 15).

Figure 16 **Infectious syphilis, 2004 – 2010, by year and sex**

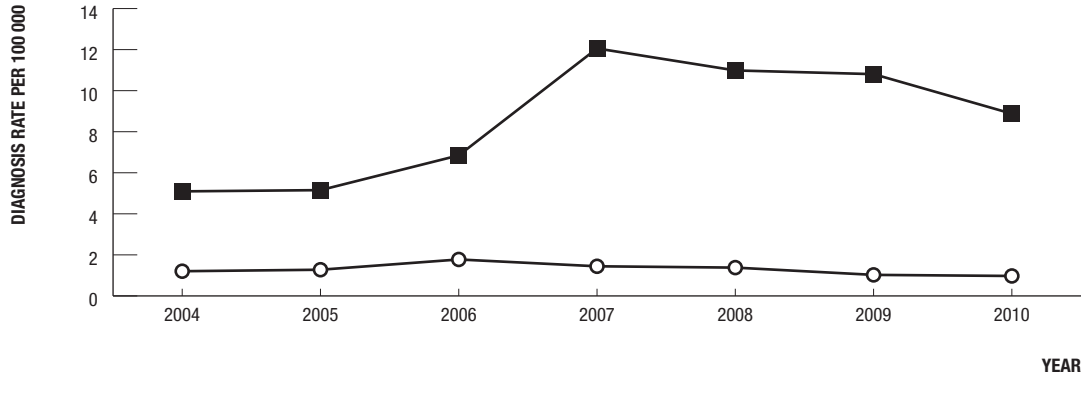
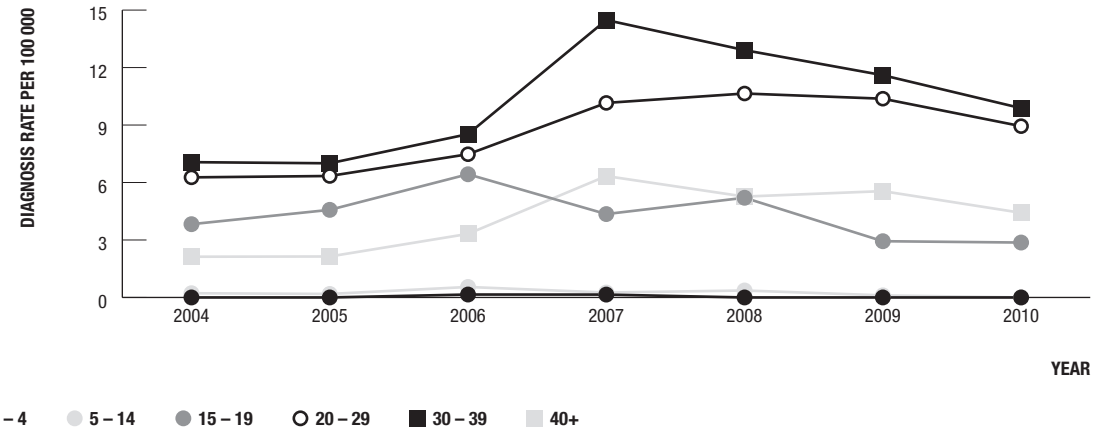


Figure 17 Infectious syphilis, 2004 – 2010, by year and age group



The rate of diagnosis of infectious syphilis increased sharply in the male population from 5.2 in 2005 to 12.1 per 100 000 population in 2007 and then slowly declined to 8.9 in 2010 (Figure 16). The increases occurred in all State and Territory jurisdictions other than the Northern Territory, and were almost completely confined to men who have sex with men. In the Northern Territory, the rate declined steadily, from 62.4 in 2006 to 16.9 in 2010. The decline in the rate of infectious syphilis occurred first in the age group 15 – 19 years, from 6.4 in 2006 to 2.9 in 2010 and second, in those aged 30 years and older (Figure 17).

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 6 in 2006 to 1 in both 2009 and 2010, may be a consequence of improved case ascertainment and treatment.

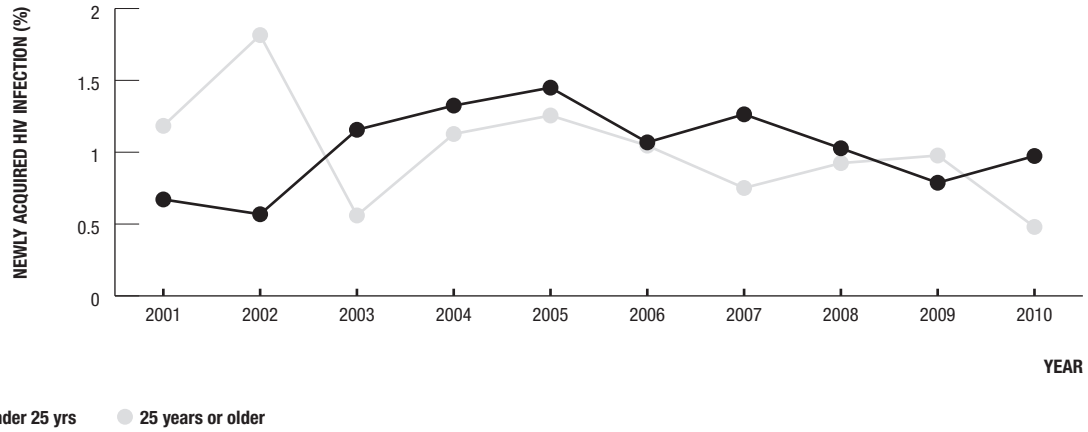
HIV, viral hepatitis and sexually transmissible infections in selected populations

Populations regarded as priorities for prevention and health promotion activities under the most recent national strategies for HIV, hepatitis B, hepatitis C, sexually transmissible infections (STI) and the third National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy, include people living with HIV infection, men who have sex with men, Aboriginal and Torres Strait Islander people, sex workers, prison entrants, people who have injected drugs and young people. They were identified as priority populations because they are recognised as either experiencing ongoing HIV, viral hepatitis or STI transmission or having the potential for increases in transmission.

Men who have sex with men

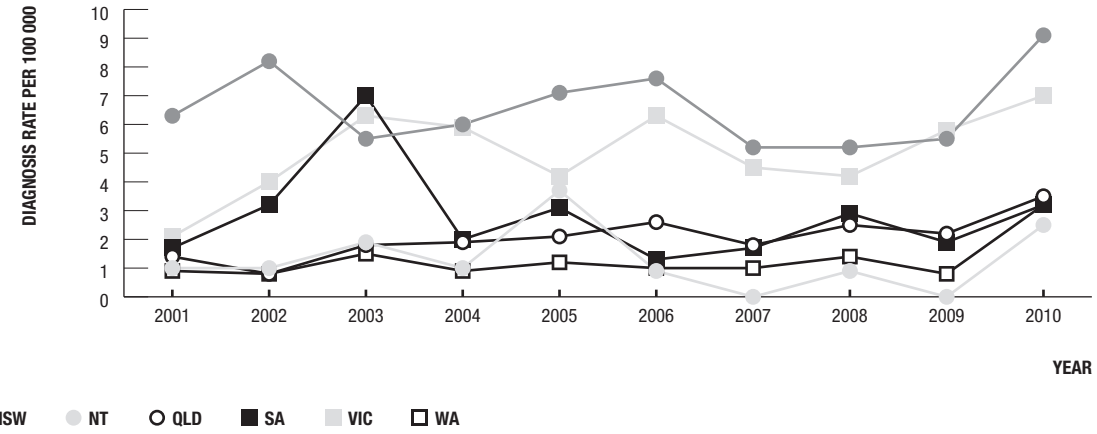
Men who have sex with men continue to make up the majority of people with diagnosed HIV infection in Australia. The overall number of new HIV diagnoses in this category in 2001 – 2005 and in 2006 – 2010 was 3 028 and 3 401, including 1 121 (37%) and 1 276 (37.5%) diagnoses of newly acquired HIV infection, respectively. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (86%) than total HIV diagnoses (76%) among men. This difference may partly reflect higher levels of HIV antibody testing among men who have sex with men.

Figure 18 **Newly acquired HIV infection, 2001 – 2010, among men who have sex with men seen at sexual health clinics**



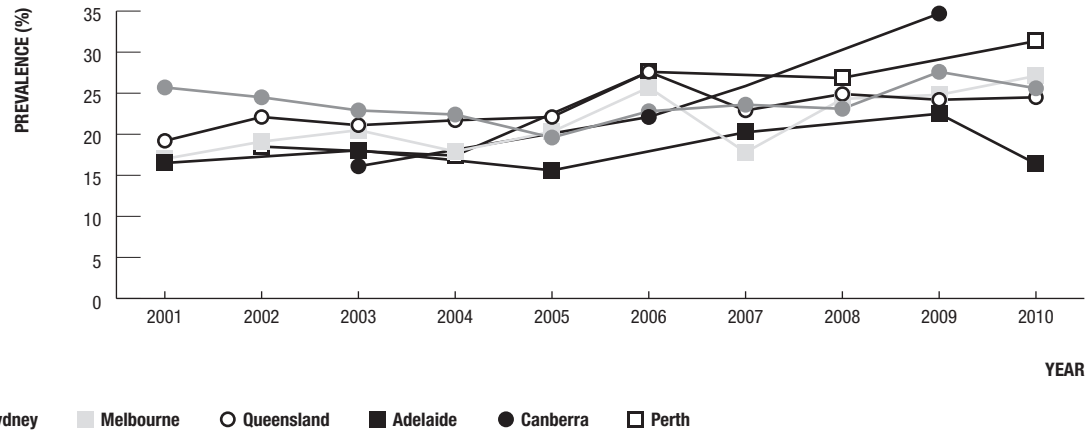
Among men who have sex with men seen at metropolitan sexual health clinics, the percentage with newly acquired HIV infection declined from around 1.2% in 2001 – 2005 to around 1.0% in 2006 – 2010 in both the less than 25 years and in the 25 years or older age group (Figure 18).

Figure 19 **Gonococcal rectal infection among men, 2001 – 2010, by State/Territory and year**



Surveillance data for gonorrhoea also provide an indication of unsafe sexual behaviour among men who have sex with men. Rectal gonococcal infection among men increased sharply in 2010, resulting in the highest population rate of diagnosis across jurisdictions over the past ten years (Figure 19). Among men who have sex with men, tested for chlamydia through the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS), chlamydia positivity increased from 6.0% in 2007 to 9.1% in 2010 (Figure 37).

Figure 20 **Prevalence of unprotected anal intercourse with casual partners, 2001 – 2010, reported by men in Gay Community Periodic Surveys**

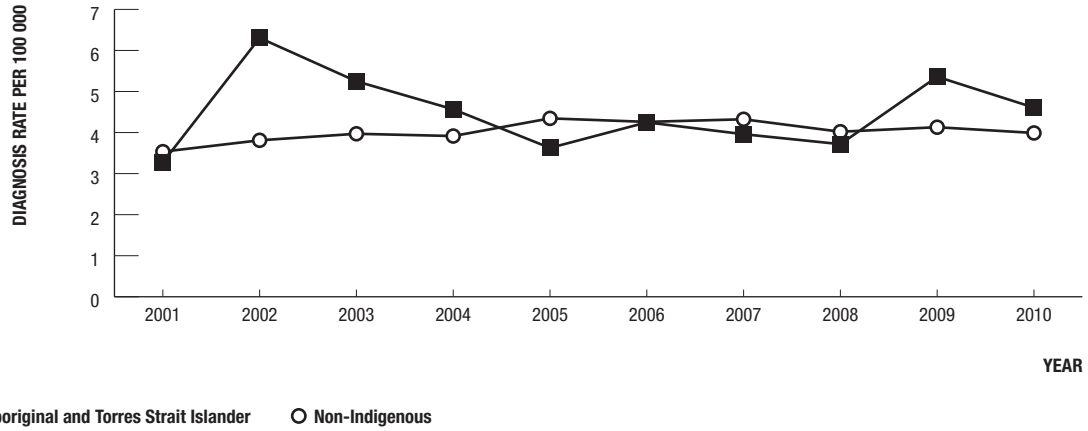


The Gay Community Periodic Survey indicated that the proportion of Sydney respondents who reported unprotected anal intercourse with casual partners declined from 26% in 2001 to 19% in 2005 and then increased to 26% in 2010 (Figure 20). The same survey carried out in Queensland indicates that the proportion of respondents reporting unsafe sexual behaviour increased from around 22% in the years from 2001 to 2005, to 25% in the years from 2006 to 2010. The respondents in Melbourne also indicated an increase in unsafe sexual behaviour, from 17% in 2001 to 27% in 2010. Increases in unsafe sexual behaviour were also reported in Canberra and Perth, while respondents in Adelaide reported a drop in unsafe sexual behaviour to 16% in 2010.

Aboriginal and Torres Strait Islander people

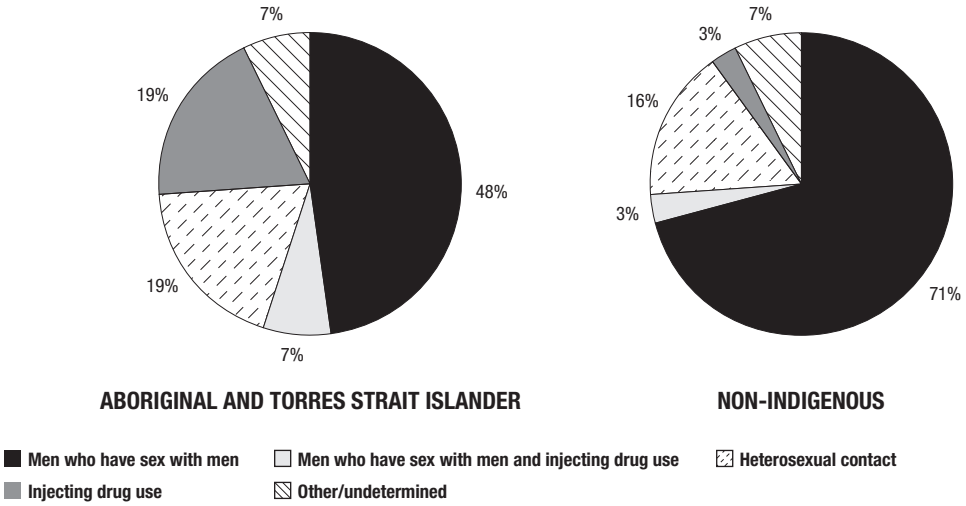
The rates of HIV diagnosis *per capita* in the Aboriginal and Torres Strait Islander and the non-Indigenous population, excluding cases and populations from high HIV prevalence countries in sub-Saharan Africa and South East Asia, differed little in 2001 – 2010 (Figure 21). In the Aboriginal and Torres Strait Islander population, the rate declined from around 4.6 in 2001 – 2005 to around 4.2 in 2006 – 2010. In the non-Indigenous, non-high HIV prevalence country of birth population, the rate of HIV diagnosis gradually increased, from around 3.9 in 2001 – 2005, to 4.1 in 2006 – 2010. The recent trends in the rates of HIV 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 – 1.3.2).

Figure 21 **HIV diagnoses, 2001 – 2010, by Aboriginal and Torres Strait Islander status[1] and year**



1 The non-Indigenous category excludes cases and populations from high prevalence countries.

Figure 22 HIV diagnoses, 2006 – 2010, by Aboriginal and Torres Strait Islander status[1] and HIV exposure category

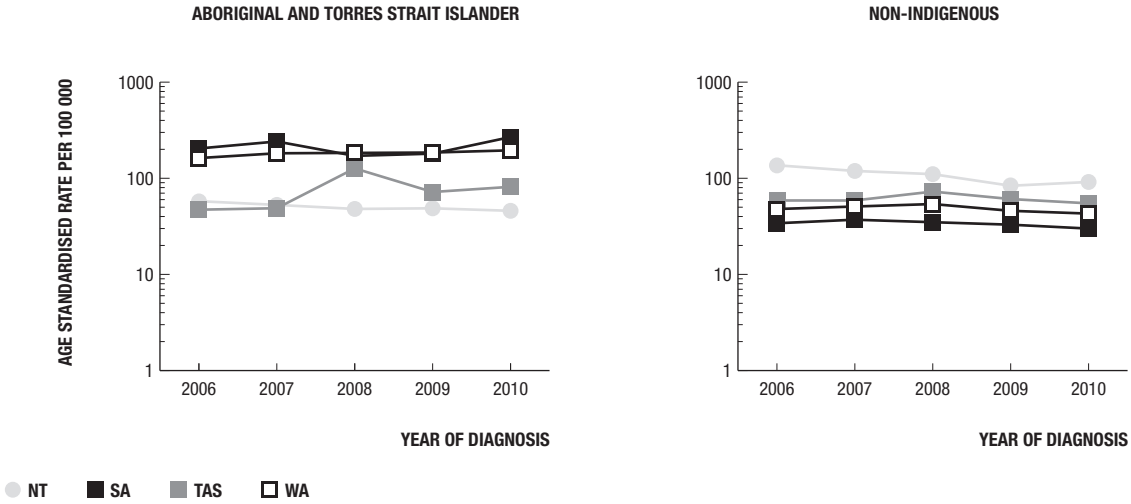


1 The non-Indigenous category excludes cases whose exposure was categorised as "Person from a high prevalence country".

In 2006 – 2010, the most frequently reported route of HIV transmission was sexual contact between men in both the non-Indigenous, non-high prevalence country of exposure cases (74.1% including 70.8% MSM and 3.3% MSM+IDU) and in the Aboriginal and Torres Strait Islander cases (55.3% including 48.5% MSM and 6.8% MSM+IDU). Heterosexual contact was the reported source of exposure to HIV in 18.5% of Aboriginal and Torres Strait Islander cases and in 16.0% of non-Indigenous, non-high prevalence country of exposure cases (Figure 22). Aboriginal and Torres Strait Islander cases also differed from non-Indigenous, non-high prevalence country of exposure cases in that a higher proportion of infections were attributed to injecting drug use (19.4% among Aboriginal and Torres Strait Islander cases vs 2.5% for non-Indigenous, non-high prevalence country of exposure cases), and a higher proportion of infections were among women (21.4% among Aboriginal and Torres Strait Islander cases vs 8.0% for non-Indigenous, non-high prevalence country of exposure cases in 2006 – 2010).

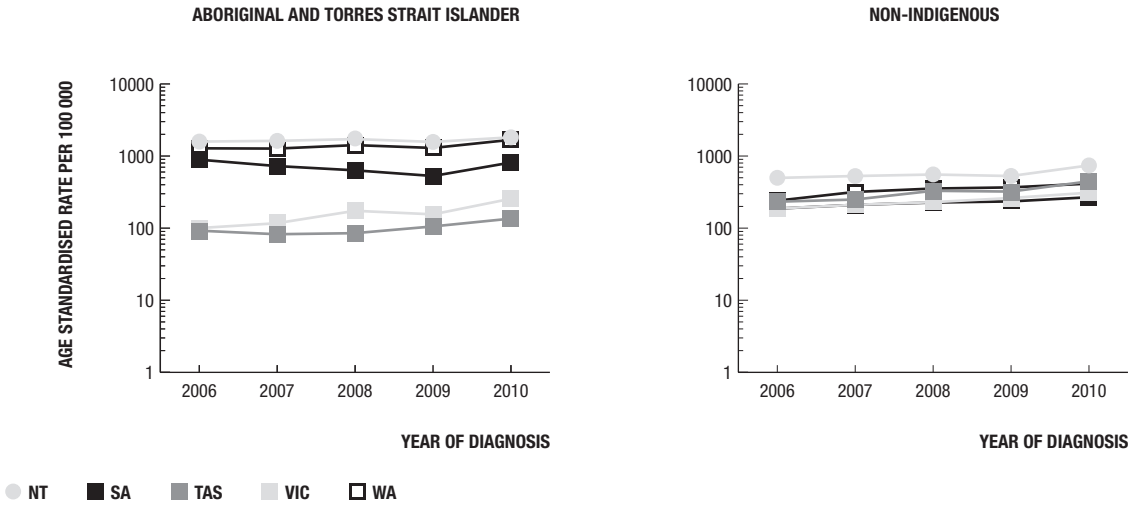
The number of diagnoses of newly acquired hepatitis B infection in the Aboriginal and Torres Strait Islander population resident in state/territory jurisdictions other than the Australian Capital Territory, was less than 30 in each year from 2006 to 2010, resulting in a rate of 5 or less per 100 000 population. The rate of diagnosis of newly acquired hepatitis B infection in the non-Indigenous population remained low at 1 per 100 000 in 2006 – 2010.

Figure 23 Hepatitis C, 2006 – 2010, by Aboriginal and Torres Strait Islander status, State/Territory and year



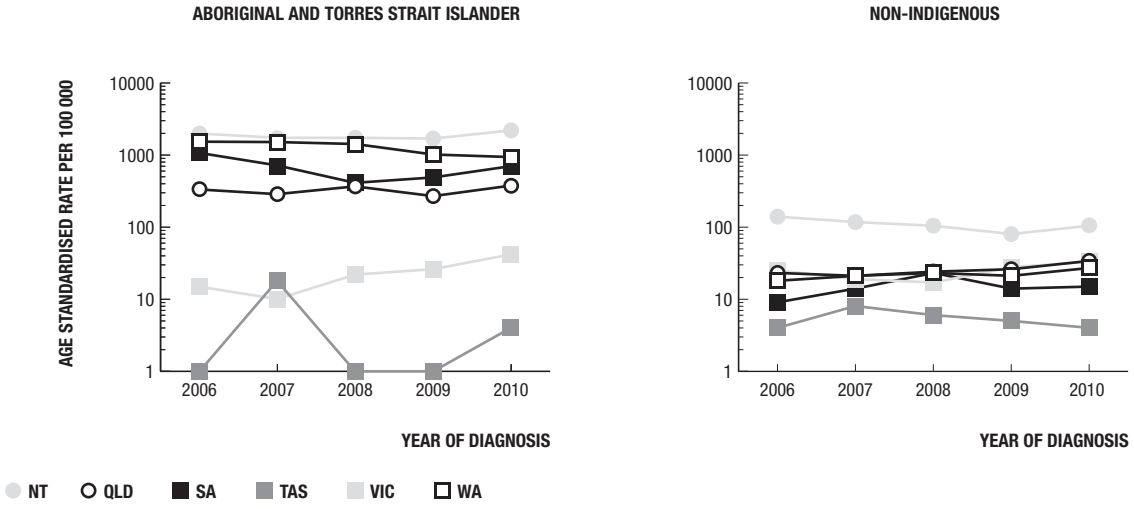
The rate of diagnosis of hepatitis C infection in the Aboriginal and Torres Strait Islander population resident in the Northern Territory, South Australia, Tasmania and Western Australia was relatively stable at around 125 from 2006 to 2009 and then increased to 141 in 2010. The hepatitis C diagnosis rate was relatively stable in the non-Indigenous population at around 48 in the years from 2006 to 2010 (Figure 23). In the Northern Territory, the rate of hepatitis C diagnosis in the Aboriginal and Torres Strait Islander population was stable at around 48 in 2006 – 2010 whereas the rate in the non-Indigenous population declined from 137 in 2006 to 92 in 2010. In South Australia and Western Australia, the rate of hepatitis C diagnosis was substantially higher in the Aboriginal and Torres Strait Islander population than in the non-Indigenous population.

Figure 24 Chlamydia, 2006 – 2010, by Aboriginal and Torres Strait Islander status, State/Territory and year



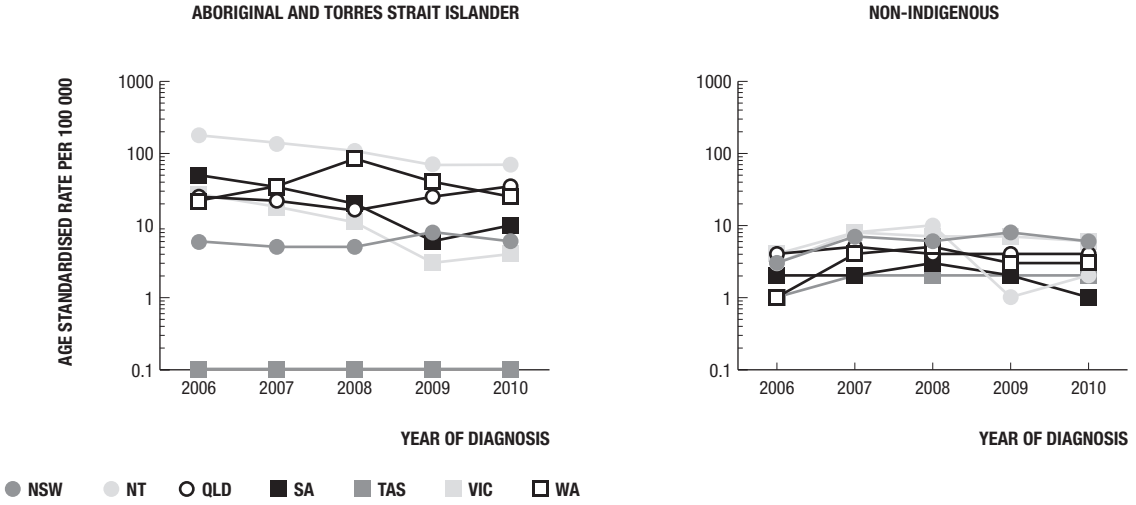
The rate of diagnosis of chlamydia in the Aboriginal and Torres Strait Islander was around 1 000 in 2006 – 2009 and then increased to 1 257 in 2010. In the non-Indigenous population resident in state/territory jurisdictions other than the Australian Capital Territory, New South Wales and Queensland, the rate of chlamydia diagnosis increased steadily from 206 in 2006 to 340 in 2010 (Figure 24).

Figure 25 Gonorrhoea, 2006 – 2010, by Aboriginal and Torres Strait Islander status, State/Territory and year



The rate of diagnosis of gonorrhoea in the Aboriginal and Torres Strait Islander population resident in state/territory jurisdictions other than the Australian Capital Territory and New South Wales declined steadily from 889 in 2006 to 665 in 2009 and then increased to 804 in 2010. In the non-Indigenous population, the gonorrhoea diagnosis rate increased from 22 in 2008 to 30 in 2010 (Figure 25).

Figure 26 Infectious syphilis, 2006 – 2010, by Aboriginal and Torres Strait Islander status, State/Territory and year



The rate of diagnosis of infectious syphilis in the Aboriginal and Torres Strait Islander population resident in state/territory jurisdictions other than the Australian Capital Territory declined from 40 in 2006 to 25 in 2010 (Figure 26). In the Aboriginal and Torres Strait Islander population resident in the Northern Territory, South Australia and Victoria, the rate of diagnosis of infectious syphilis declined substantially whereas the rate increased in Queensland, from 25 in 2006 to 35 in 2010. The rate of diagnosis of infectious syphilis in the non-Indigenous population was stable at below 6 per 100 000 population in 2006 – 2010.

People who inject drugs

In 2001 – 2010, approximately 7% 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 sex with men.

Figure 27 HIV and hepatitis C prevalence in needle and syringe programs, 2001 – 2010, by year and sex

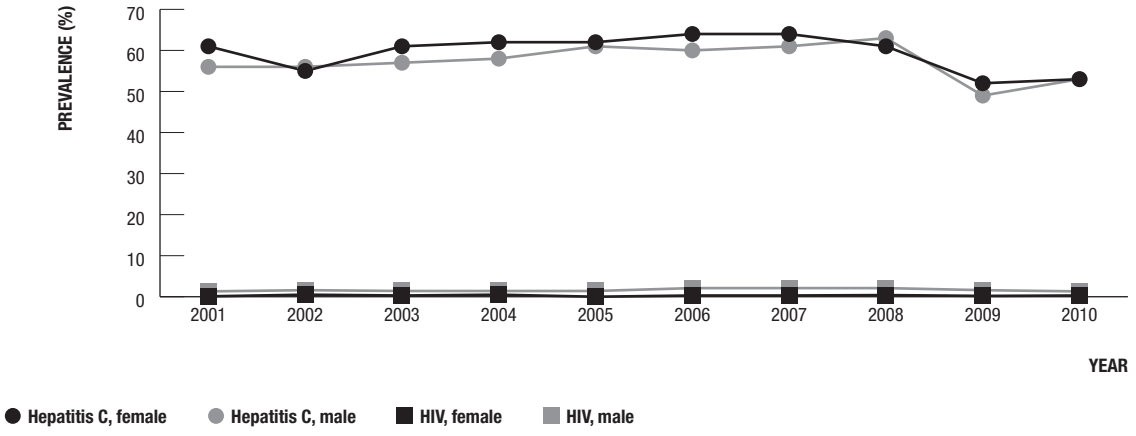
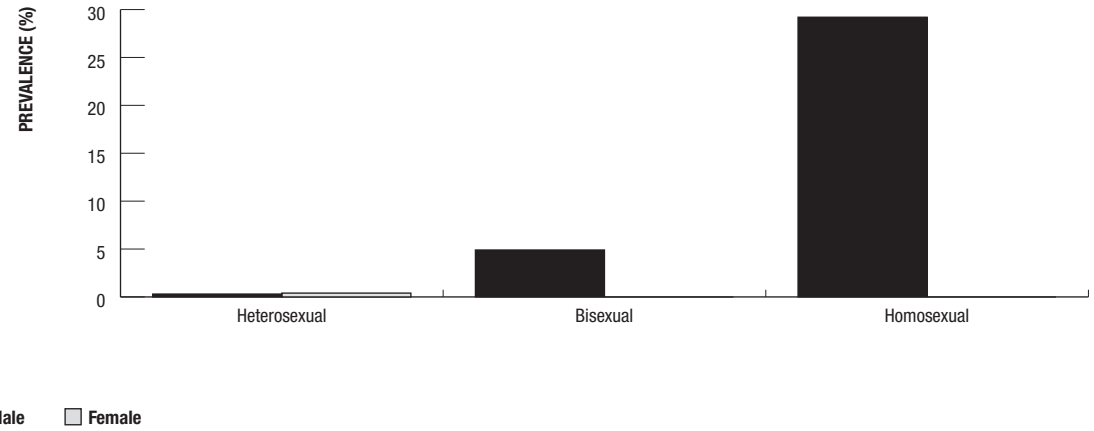


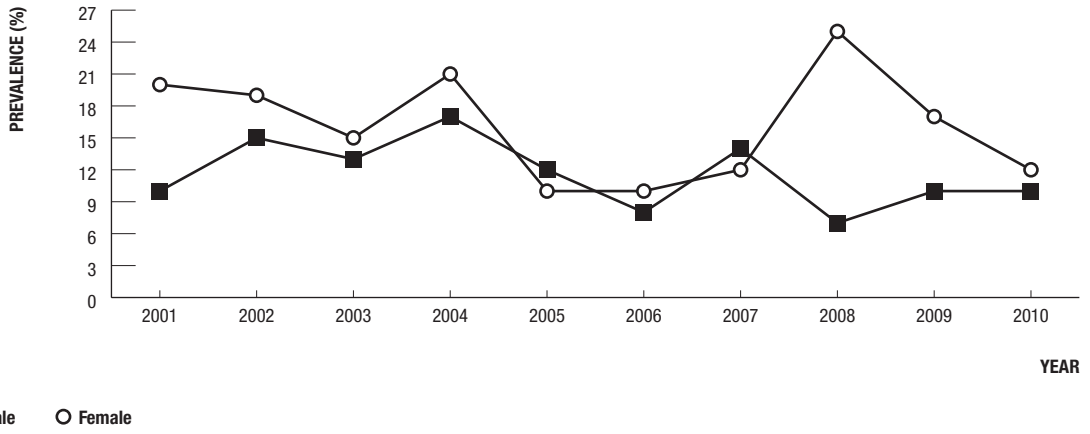
Figure 28 HIV prevalence at needle and syringe programs, 2010, by sexual identity



HIV prevalence among people attending needle and syringe programs has remained low (around 1% in 2001 – 2010) (Figure 27) but in the subgroup of men who have sex with men, it was 29% in 2010 (Figure 28). Of 3 666 men and 2 531 women with a history of injecting drug use who were tested for HIV antibody at metropolitan sexual health centres in 2001 – 2010, 8 males (0.2%) and 1 woman (0.04%) was diagnosed with HIV infection (Figures 33 and 34).

In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs remained at high levels in 2001 – 2010 (Figure 27). Hepatitis C prevalence dropped among males from 63% in 2008 to 53% in 2010, and among females from 61% in 2008 to 53% in 2010. The decline in hepatitis C prevalence was not explained by demographic or laboratory factors.

Figure 29 Prevalence of sharing among recent initiates to injecting[1] seen at needle and syringe programs, 2001 – 2010, by year and sex



1 With a history of injecting drug use of less than 5 years and who were tested for HIV or hepatitis C.

The percentage of people attending needle and syringe programs who reported having injected drugs for five years or less declined from 9.8% in 2006 to 8.7% in 2010; hepatitis C prevalence among these people was relatively stable at around 23%. The fluctuations in the prevalence of reported sharing of injecting equipment among women with a history of injecting drug use of less than five years may be attributable to the relatively small number of women with a short duration of injecting drug use (Figure 29). The low proportion of people in the survey who reported having injected drugs for five years or less (around 9%) and the low proportion of survey respondents aged less than 20 years (around 2%) suggests that there has been a fall in the prevalence of injecting drug use among young people.

Heterosexual transmission of HIV infection

The number of new HIV diagnoses for which exposure to HIV was attributed to heterosexual contact increased from 848 in 2001 – 2005 to 1 297 in 2006 – 2010, accounting for 19% and 25% of total HIV diagnoses in 2001 – 2005 and in 2006 – 2010, respectively.

Figure 30 **Newly diagnosed HIV among men who report an exposure other than sex with men, 2001 – 2010, by year and HIV exposure category**

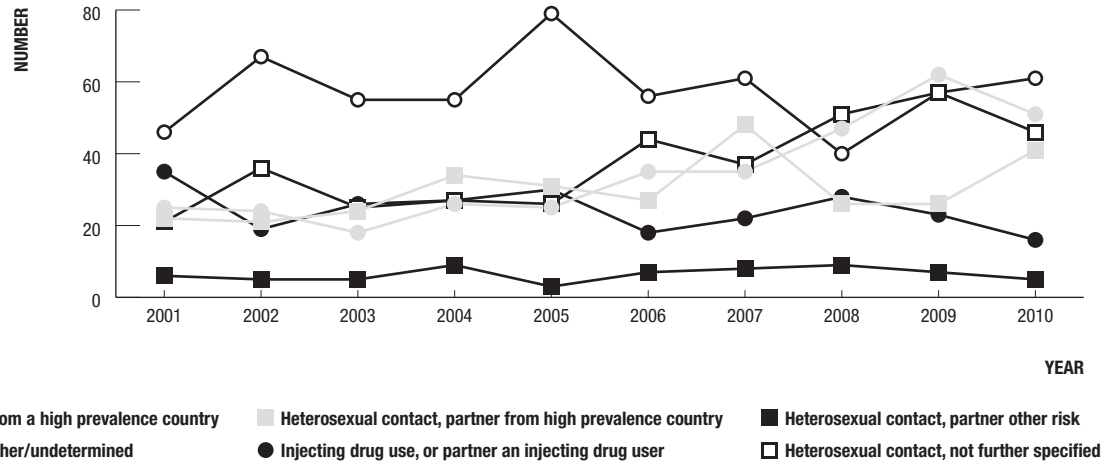
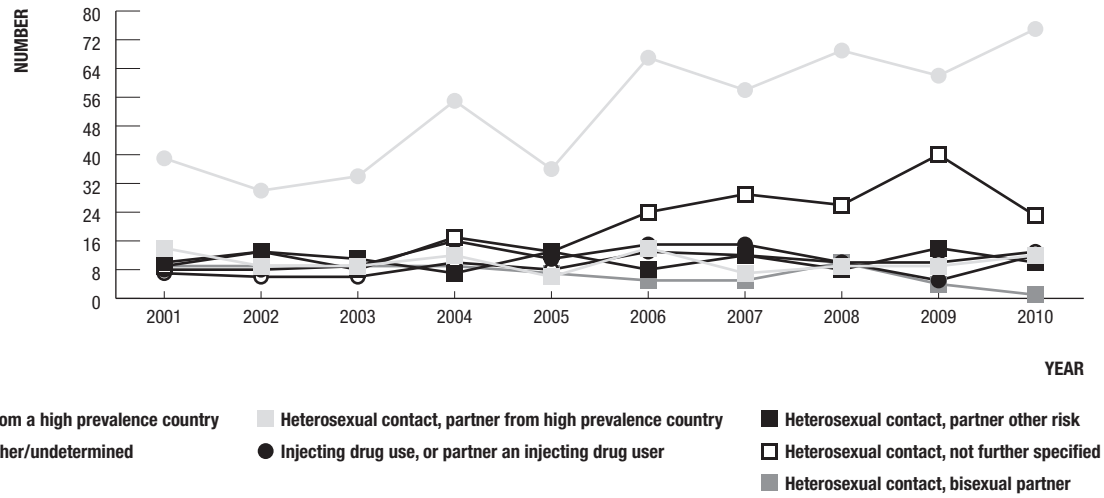
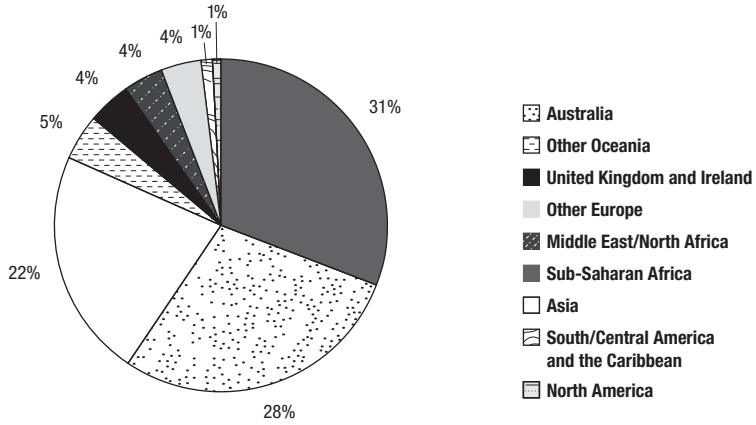


Figure 31 **Newly diagnosed HIV among women, 2001 – 2010, by year and HIV exposure category**



Men and women whose HIV infection was acquired in a high HIV prevalence accounted for 36.7% and 42.9% of HIV diagnoses attributed to heterosexual contact in 2001 – 2005 and 2006 – 2010, respectively. In both five year intervals, the majority of cases came from high HIV prevalence countries in sub-Saharan Africa (65% in 2001 – 2005 and 66.5% in 2006 – 2010) and South East Asia (28.6% in 2001 – 2005 and 23.2% in 2006 – 2010). Sixty two and 59% of cases from high prevalence countries in 2001 – 2005 and in 2006 – 2010 were among women.

Figure 32 HIV infection attributed to heterosexual contact, 2006 – 2010, by region of birth



Excluding cases from a high prevalence country, the number whose exposure to HIV was attributed to heterosexual contact increased by 38%, from 537 in 2001 – 2005 to 741 in 2006 – 2010. Men and women with HIV infection who reported a partner from a high prevalence country accounted for 34% and 29% of heterosexual cases newly diagnosed in 2001 – 2005, and in 2006 – 2010, respectively. Of new HIV diagnoses in 2006 – 2010 for which the country of birth of the heterosexual partner was reported (70.2%), 61% of partners were from South East Asia and 33% were from sub-Saharan Africa, respectively. Heterosexual contact, not further specified, was reported in 36% of cases attributed to heterosexual contact in 2001 – 2005 and 51% in 2006 – 2010. The source of exposure to HIV remained undetermined for substantial numbers of men in 2001 – 2010 (Figure 30).

Among 1 297 cases of HIV infection diagnosed in Australia in 2006 – 2010 for which exposure to HIV was attributed to heterosexual contact, the country of birth was reported as Australia in 28%, sub-Saharan Africa in 30.2% and South East Asia in 17.6% (Figure 32).

Figure 33 HIV prevalence among heterosexually active men seen at sexual health clinics, 2001 – 2010, by year and HIV exposure category

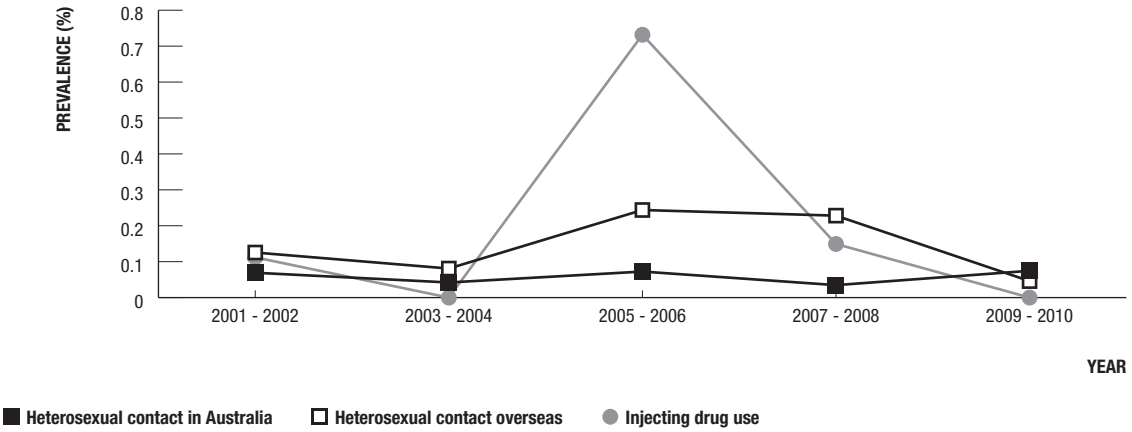
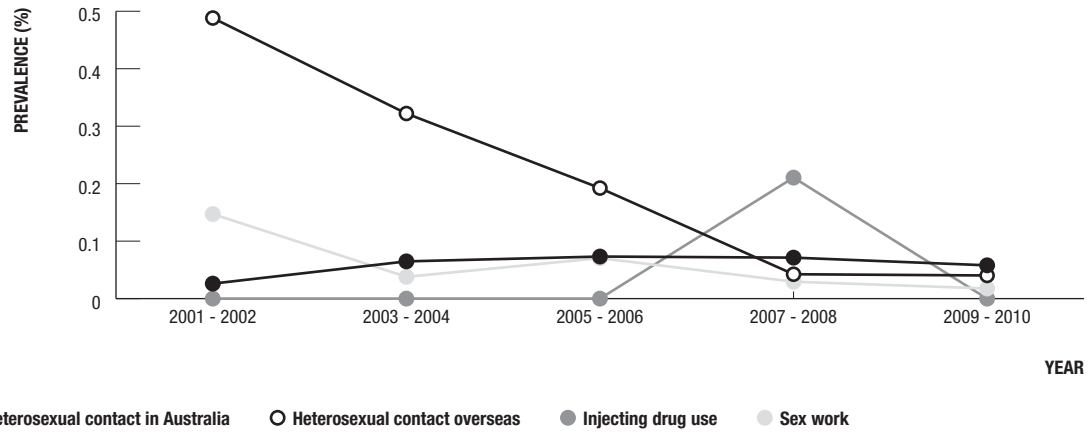
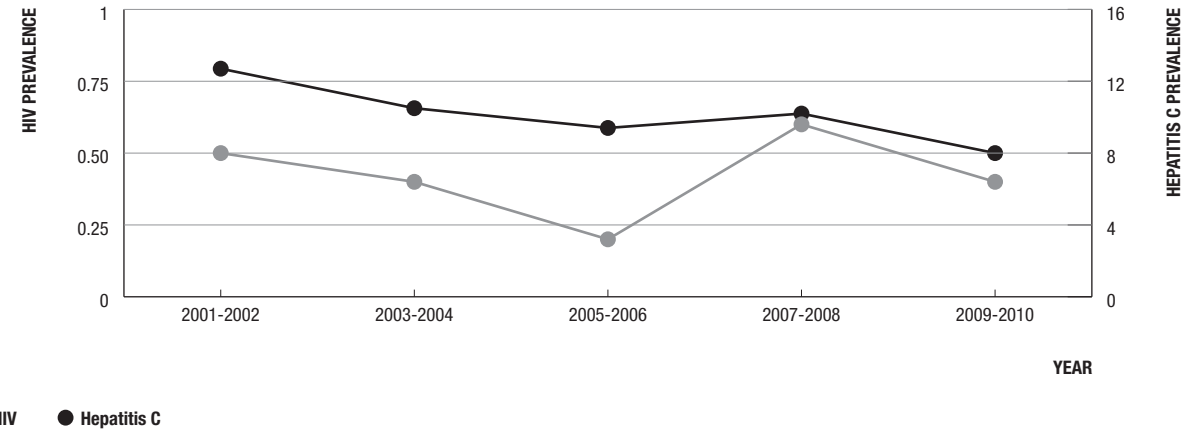


Figure 34 HIV prevalence among heterosexually active women seen at sexual health clinics, 2001 – 2010, by year and HIV exposure category



HIV prevalence has remained below 0.5% among heterosexually active men and women seen through metropolitan sexual health clinics. In 2001 – 2010, HIV prevalence was less than 0.2% among men and women who reported a history of heterosexual contact in Australia (Figures 33 and 34). HIV prevalence remained less than 0.3% among men who reported heterosexual contact overseas. HIV prevalence remained low among women self-identifying as sex workers, with or without a history of injecting drug use (Figure 34).

Figure 35 HIV and hepatitis C prevalence[1] in blood donors, 2001 – 2010, 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 (Figure 35).

Monitoring chlamydia positivity

ACCESS is a surveillance program for monitoring the uptake and outcome of chlamydia testing in Australia. Chlamydia testing and positivity is monitored through separate networks of sexual health services, family planning clinics, general practices, antenatal clinics, Aboriginal community controlled health services and a laboratory network. Young heterosexual men and women, men who have sex with men, female sex workers and Aboriginal and Torres Strait Islander men and women were identified as priority populations for monitoring chlamydia testing and positivity.

Figure 36 Chlamydia testing rate, 2007 – 2010, by year and chlamydia priority population

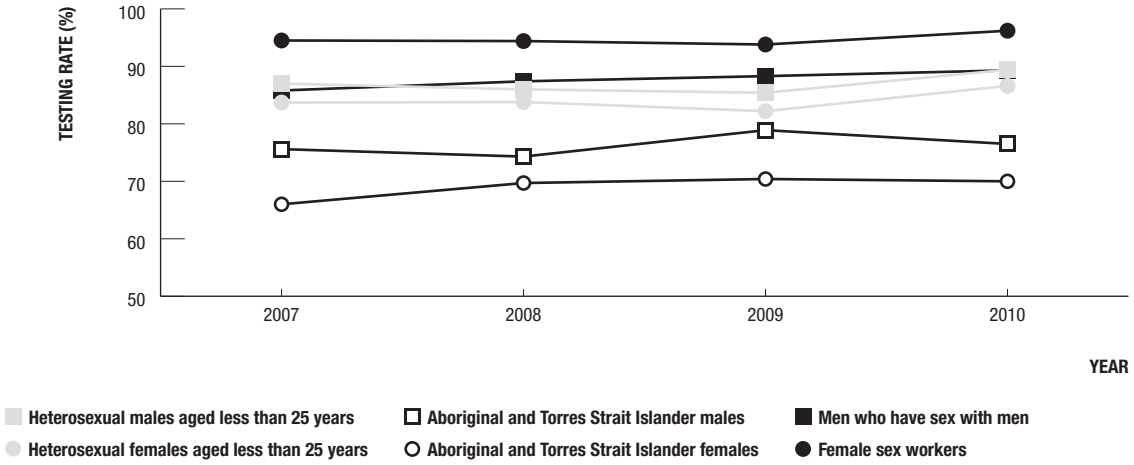
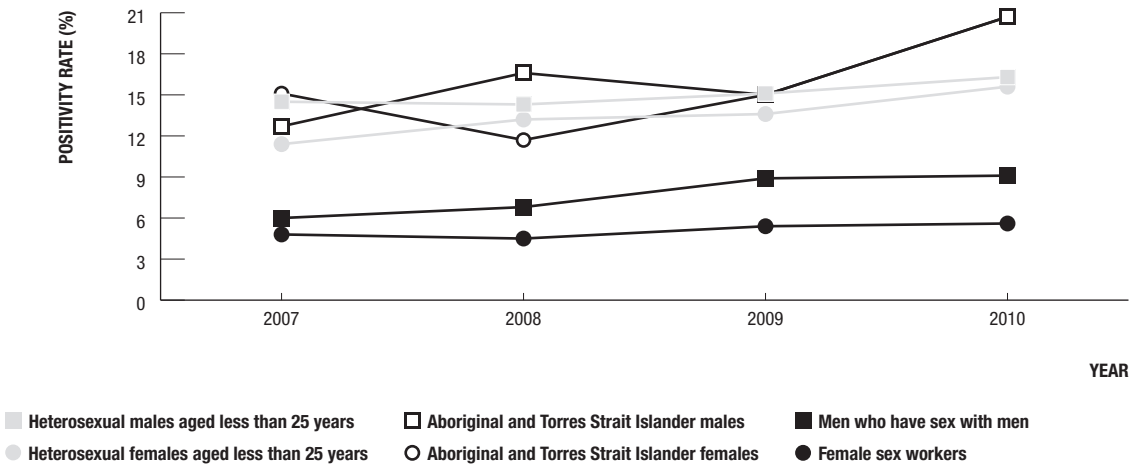


Figure 37 Chlamydia positivity rate, 2007 – 2010, by year and chlamydia priority population



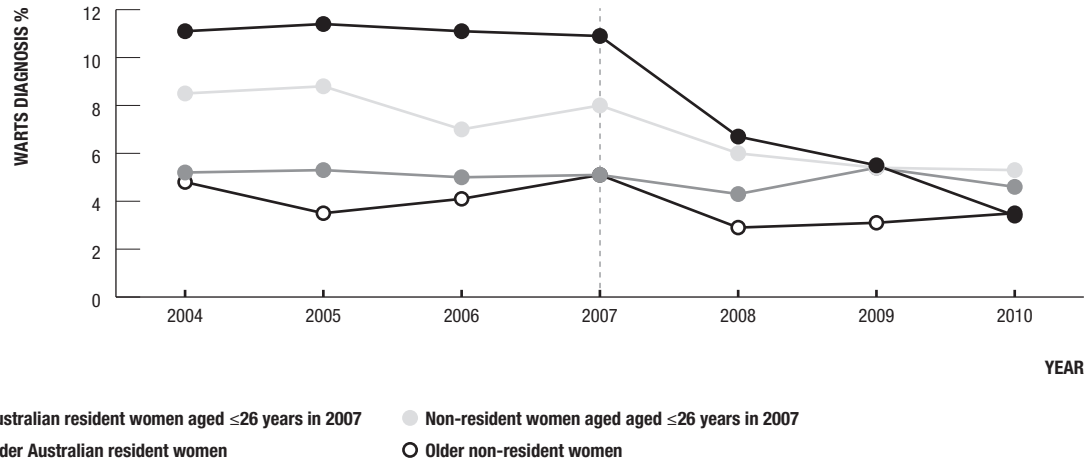
In the four years from 2007 to 2010, more than 75% of men and women seen for the first time through the network of sexual health services were tested for chlamydia. In 2010, 96% of female sex workers were tested at their first visit, 89% of heterosexual men and 87% of women aged less than 25 years, 89% of men who have sex with men and 73% of Aboriginal and Torres Strait Islander people were tested for chlamydia (Figure 36). The chlamydia positivity rate overall was 10.8% among males and 10.4% among females. Chlamydia positivity was highest in the 16 – 19 year age group across the networks of general practice, family planning clinics, Aboriginal community controlled health services and the sexual health services. In the sexual health services, the positivity rate was highest among Aboriginal and Torres Strait Islander men (20.7%) and women (20.7%) and among young heterosexual men (16.3%) and lowest among female sex workers (5.6%) (Figure 37). The chlamydia positivity rate steadily increased among young heterosexual men and women, from 14.0% and 12.4%, respectively, in 2006, to 16.3% and 15.6%, respectively, in 2010. Among men who have sex with men, chlamydia positivity increased from 7.1% in 2006 to 9.1% in 2010.

Monitoring genital warts

The Genital Warts Surveillance Network is a new surveillance program for monitoring diagnosis rates to assess the impact of a national human papillomavirus (HPV) vaccination program on the occurrence of genital warts.

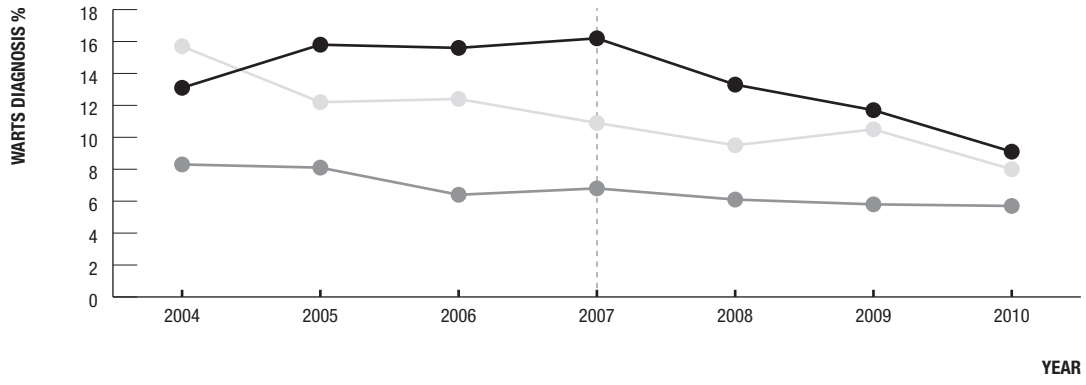
Information available through the Genital Warts Surveillance Network indicate that the genital warts diagnosis rate among Australian resident women, aged 26 years or younger in July 2007 who were eligible for free HPV vaccine, was around 11% in the years 2005 – 2007 and then declined to 3.4% in 2010 (Figure 38). Among Australian resident heterosexual men in the same age group as the eligible women, the genital warts diagnosis rate was around 16% in 2005 – 2007 and declined to 9.1% in 2010 (Figure 39). The genital warts diagnosis rate among older resident women, non-resident women and men who have sex with men who were not eligible for free HPV vaccine, did not change substantially over the seven year interval (Figures 38 and 39).

Figure 38 **Prevalence of genital warts among women seen for the first time at sexual health services[1], 2004 – 2010, by Australian resident status and age group**



1 The national human papillomavirus (HPV) vaccination program commenced in mid 2007.

Figure 39 **Prevalence of genital warts among men seen for the first time at sexual health services[1], 2004 – 2010, by Australian resident status and age group**

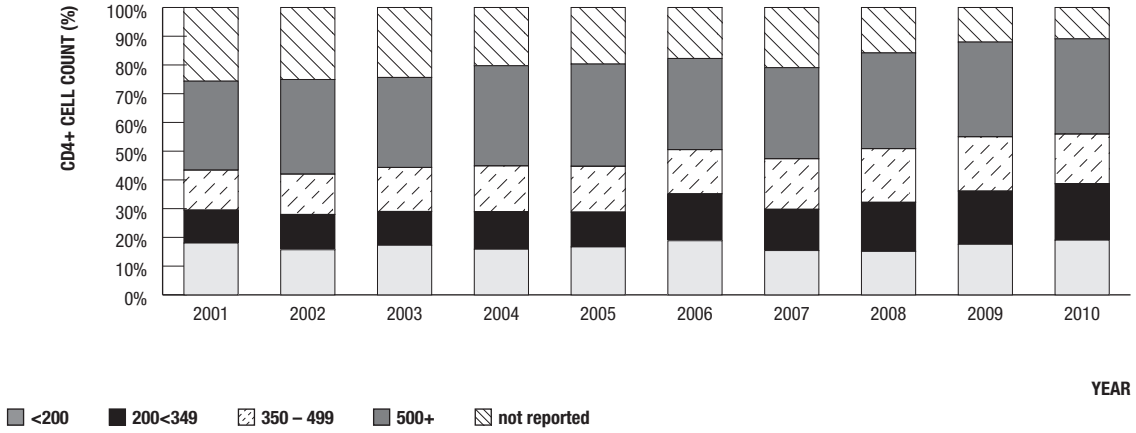


1 The national human papillomavirus (HPV) vaccination program commenced in mid 2007.

Illness and treatment in people with HIV infection and viral hepatitis

Late HIV diagnosis, measured by the CD4+ cell count of less than 200 cells/μl at HIV diagnosis, was 16.7% among cases diagnosed in 2001 – 2005 and 17.2% among cases diagnosed in 2006 – 2010 (Figure 40).

Figure 40 CD4+ cell count at HIV diagnosis, 2001 – 2010, by year



The extent of late HIV diagnosis was lowest at 13% and did not change over time among men who have sex with men. Men and women whose exposure to HIV was attributed to heterosexual contact experienced a substantially higher rate of late HIV diagnosis at 28% (Figure 41). Cases born in high HIV prevalence countries in sub-Saharan Africa and in South East Asia also had a comparatively high rate of late HIV diagnosis at 25% and 22%, respectively, in the years 2006 – 2010 (Figure 42).

Figure 41 Late HIV diagnosis, 2001 – 2010, by year and exposure category

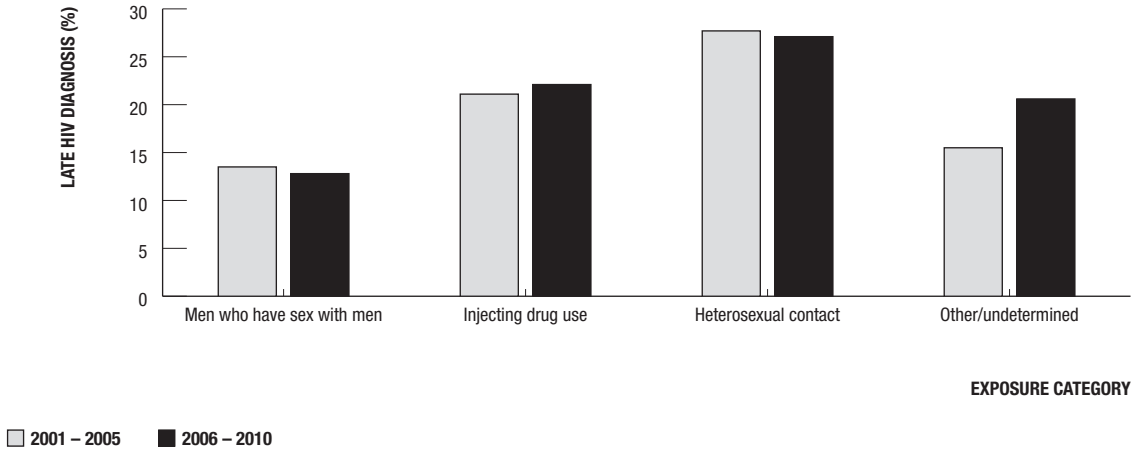
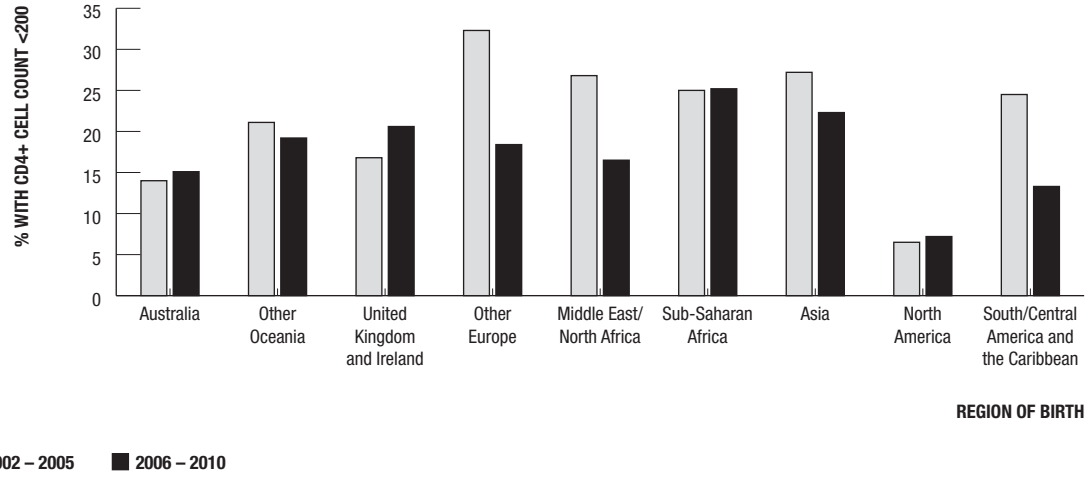


Figure 42 Late HIV diagnosis, 2002 – 2010, by year and region of birth



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 192 people who had a liver transplant in 2010, 48 (25%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 7 (3.1%) people having liver transplants (Table 2.3.1).

Figure 43 Treatment uptake among people enrolled on the Australian HIV Observational Database, 2001 – 2010, by year

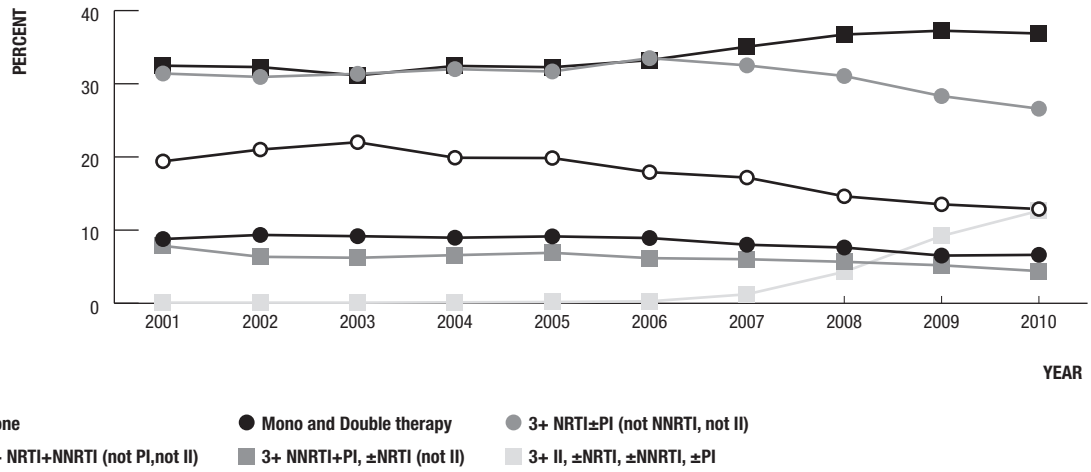
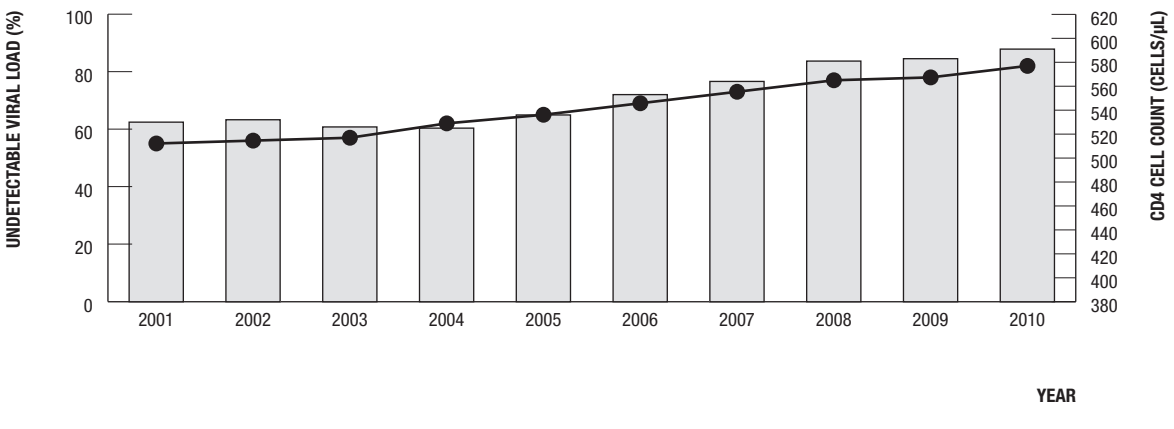


Figure 44 HIV viral load and CD4+cell count, 2001 – 2010, by year



The Australian HIV Observational Database indicated that 81% of 2 040 people under follow up in 2010 were receiving triple combination antiretroviral treatment for HIV infection (Figure 43). Viral load was undetectable for almost 80% of people being followed through the Australian HIV Observational Database in 2010 and CD4+ cell count was higher than 500 cells/µl from 2001 (Figure 44). Of people enrolled in the Australian HIV Observational Database in 2010, 9.9% had been diagnosed with both HIV and hepatitis C antibody.

Use of antiretroviral therapy, reported by men who have sex with men participating in the Gay Community Periodic Surveys in Sydney and Melbourne, increased from 54.7% and 55.3% in 2006 to 68.9% and 69.7%, respectively, in 2010.

Figure 45 People prescribed reverse transcriptase inhibitors, 2004 – 2010, through the Highly Specialised Drugs Program

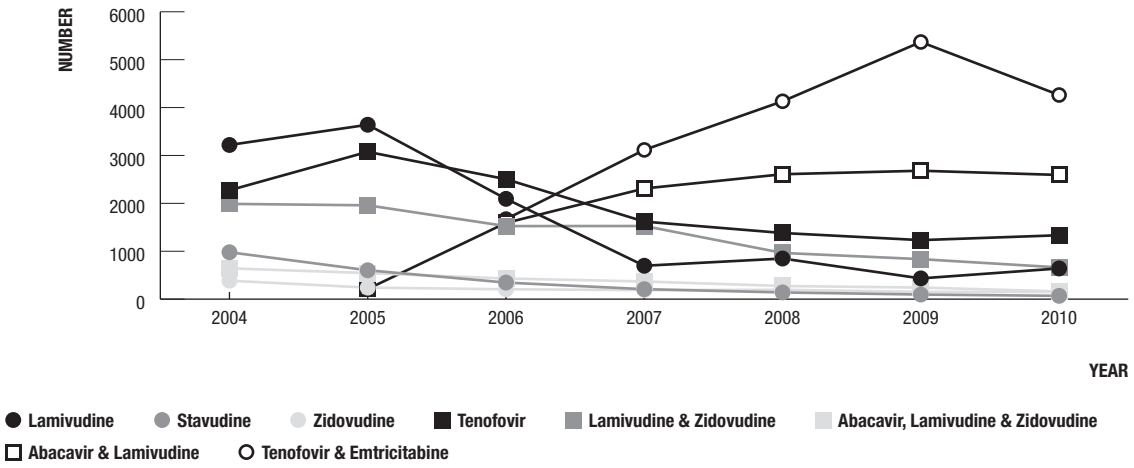
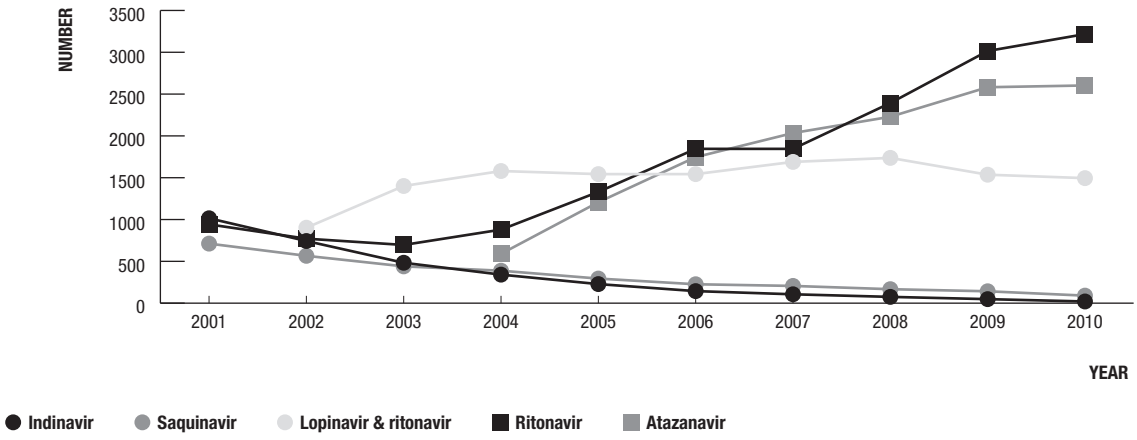
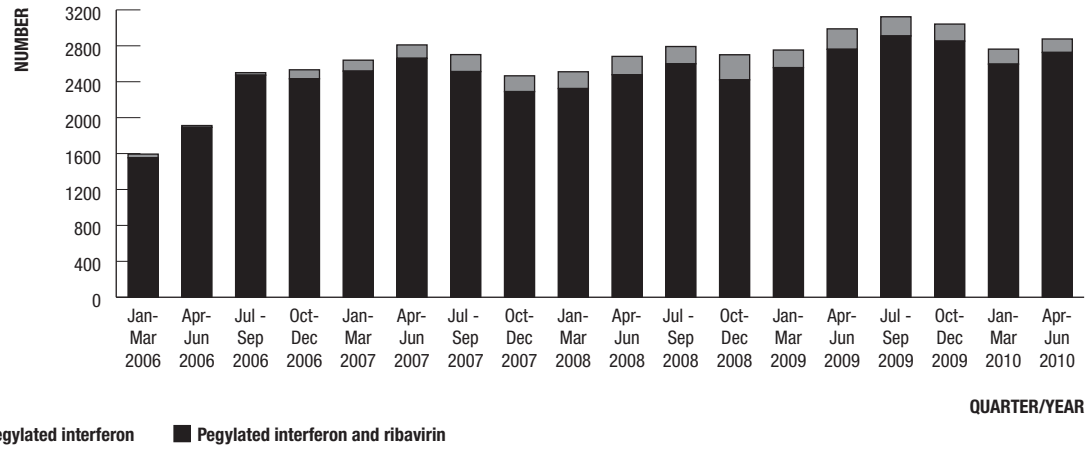


Figure 46 People prescribed protease inhibitors, 2001 – 2010, through the Highly Specialised Drugs Program



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 9 463 in 2006 to 11 523 during 2010. Tenofovir and emtricitabine was the most frequently prescribed reverse transcriptase inhibitor in 2010 (Figure 45). The most commonly prescribed protease inhibitors in 2010 were ritonavir (3 217 people), and atazanavir (2 603 people) (Figure 46).

Figure 47 **People prescribed drugs for treatment of hepatitis C infection, 2006 – 2010, through the Highly Specialised Drugs Program**



Treatment for hepatitis C infection has changed over time from ribavirin and interferon to pegylated interferon and ribavirin combination treatment in 2004 (Figure 47). Pegylated interferon became available for treatment of hepatitis C infection in 2006. An estimated 3 760 people were receiving treatment for hepatitis C infection in the first 6 months of 2010. 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 newly diagnosed HIV infection

1.1 National HIV Registry

1.2 Monitoring incident HIV infection

1.3 National surveillance for newly diagnosed HIV infection in Aboriginal and Torres Strait Islander people

1.4 National surveillance for perinatal exposure to HIV

1.5 Global comparisons

1 National surveillance for newly diagnosed HIV infection

1.1 National HIV Registry

Table 1.1.1 Characteristics of cases of newly diagnosed HIV infection by year. Number of cases, median age, language spoken at home, proportion with late HIV diagnosis, State/Territory and percent of total cases by sex and HIV exposure category

	Year of HIV diagnosis										
Characteristic	**≤ 01[1]**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**Total[1,2]**
Total cases	**21 701**	**855**	**875**	**913**	**965**	**1 009**	**1 051**	**1 012**	**1 062**	**1 043**	**30 486**
Males (%)	92.4	89.0	89.8	86.0	90.2	85.2	86.8	86.0	86.3	85.5	90.9
Median age (years)											
Male	33	35	36	37	37	38	38	37	37	37	34
Female	29	32	31	31	32	31	32	31	32	31	30
Language spoken at home[3]											
English	–	–	–	546	650	651	783	752	785	756	4 923
Other language	–	–	–	48	54	72	81	67	108	111	541
Not reported	–	–	–	319	261	286	187	193	170	177	1 593
Late HIV diagnosis (%)[4]											
CD4+ cell count <200	18.0	15.7	17.3	15.9	16.7	18.8	15.4	15.1	17.6	19.1	17.0
State/Territory (%)											
ACT	262	5	5	7	7	6	9	7	12	12	332
NSW	12 557	413	430	414	407	394	416	367	379	351	16 128
NT	120	8	5	8	3	11	6	11	16	6	194
QLD	2 259	130	128	156	170	165	195	200	209	242	3 854
SA	795	30	45	54	51	61	56	47	53	41	1 233
TAS	91	4	2	9	6	7	7	13	14	10	163
VIC	4 480	219	205	215	257	286	285	285	290	280	6 802
WA	1 137	46	55	50	64	79	77	82	89	101	1 780
HIV exposure category (%)[5]											
Men who have sex with men	77.8	71.4	73.2	67.4	72.1	67.5	68.2	65.7	64.6	67.0	74.1
Men who have sex with men and injecting drug use	4.5	4.2	4.7	4.1	4.5	3.9	2.8	3.3	3.5	2.3	4.2
Injecting drug use[6]	4.3	2.7	3.4	4.4	3.4	2.8	2.8	3.2	2.3	2.4	3.8
Heterosexual contact	10.1	21.3	18.4	23.8	19.3	25.2	25.1	27.0	28.4	27.7	14.5
Person from a high prevalence country	*2.4*	*6.9*	*6.4*	*9.5*	*6.9*	*10.8*	*9.4*	*12.0*	*12.3*	*13.0*	*4.7*
Partner with/at risk of HIV infection	*3.8*	*8.2*	*8.0*	*9.1*	*8.0*	*7.2*	*9.0*	*7.1*	*6.5*	*7.6*	*5.1*
Not further specified	*3.9*	*6.3*	*4.1*	*5.2*	*4.4*	*7.2*	*6.7*	*7.9*	*9.6*	*7.1*	*4.7*
Haemophilia/coagulation disorder	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Receipt of blood/tissue	1.3	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.9
Mother with/at risk of HIV infection	0.4	0.3	0.2	0.1	0.6	0.6	0.9	0.6	1.1	0.6	0.4
Health care setting	0.05	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.04
Other/undetermined	18.3	9.1	7.5	7.4	9.2	6.8	6.5	4.4	5.7	7.4	14.7

1 Late HIV diagnosis for diagnoses in 2001 only. Total percentage with late HIV diagnosis in 2001 – 2010 only.

2 Not adjusted for multiple reporting.

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

4 Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of <200 cells/μl.

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

6 Excludes men who have sex with men.

Source: State/Territory health authorities

Table 1.1.2 Number of new diagnoses of HIV infection[1], cumulative to 31 December 2010, by age group, sex and year

		Year of HIV diagnosis										
Age group (years)		**≤ 01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**Total[2]**
0 – 1	M	45	0	0	0	0	1	1	1	0	1	49
	F	22	0	0	1	1	3	1	1	2	0	31
2 – 12	M	89	1	0	0	2	2	4	4	3	3	108
	F	21	1	2	0	2	1	5	1	6	2	41
13 – 19	M	432	2	5	8	10	9	8	7	10	12	503
	F	86	5	4	6	3	6	2	6	3	3	124
20 – 29	M	6 786	182	165	161	182	170	196	220	222	208	8 492
	F	563	26	29	52	25	54	40	48	45	54	936
30 – 39	M	7 443	323	319	309	321	297	310	276	304	276	10 178
	F	374	40	30	30	43	47	55	56	52	58	785
40 – 49	M	3 527	157	164	191	215	242	250	234	232	246	5 458
	F	140	10	11	21	15	24	19	22	22	17	301
50 – 59	M	1 200	69	99	85	98	101	96	89	115	100	2 052
	F	52	3	5	12	4	9	12	6	10	9	122
60+	M	390	27	34	31	41	38	46	39	31	46	723
	F	60	4	5	4	1	2	4	2	3	2	87
Not reported	M	136	0	0	0	1	0	1	0	0	0	138
	F	32	0	0	0	0	0	0	0	0	0	32
Sub-total	M	20 048	761	786	785	870	860	912	870	917	892	27 701
	F	1 350	89	86	126	94	146	138	142	143	145	2 459
Total[2]		**21 701**	**855**	**875**	**913**	**965**	**1 009**	**1 051**	**1 012**	**1 062**	**1 043**	**30 486**

1 Not adjusted for multiple reporting.

2 Totals include 76 people whose sex was reported as transgender and 250 people whose sex was not reported.

Source: State/Territory health authorities

Table 1.1.3 Number of new diagnoses of HIV infection in Australia in 2010, by State/Territory and whether or not HIV infection was newly diagnosed in Australia

	Place of first diagnosis of HIV infection		
State/Territory	**Newly diagnosed in Australia**	**Newly diagnosed overseas**	**Total**
ACT	11	1	12
NSW	308	43	351
NT	5	1	6
QLD	209	33	242
SA	33	8	41
TAS	9	1	10
VIC	234	46	280
WA	86	15	101
Total	**895**	**148**	**1 043**

Source: State/Territory health authorities

Table 1.1.4 Number (percent) of new HIV diagnoses in Australia, 2006 – 2010, and age standardised rate per 100 000 population[1] by year of HIV diagnosis and region of birth

	2006			2007			2008			2009			2010		
Region/ Country of birth	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate	Number	%	Age standardised rate
Australia	578	57.3	4.3	601	57.2	4.5	569	56.2	4.2	551	51.9	4.1	548	52.5	4.1
Overseas born	352	34.9	5.8	382	36.3	6.4	395	39.0	6.6	469	44.2	7.8	458	43.9	7.5
Other Oceania	*46*	*4.6*	*6.9*	*34*	*3.2*	*5.2*	*58*	*5.7*	*10.9*	*48*	*4.6*	*8.2*	*42*	*4.0*	*7.1*
United Kingdom and Ireland	*36*	*3.6*	*3.6*	*39*	*3.7*	*4.1*	*43*	*4.2*	*4.7*	*52*	*4.9*	*5.4*	*34*	*3.3*	*3.9*
Other Europe	*47*	*4.7*	*5.4*	*42*	*4.0*	*5.9*	*40*	*4.0*	*4.7*	*52*	*5.0*	*6.7*	*60*	*5.8*	*6.6*
Middle East/North Africa	*20*	*2.0*	*7.1*	*18*	*1.7*	*5.8*	*6*	*0.6*	*2.2*	*21*	*2.0*	*7.1*	*13*	*1.2*	*4.3*
Sub-Saharan Africa	*67*	*6.6*	*29.6*	*73*	*6.9*	*37.1*	*98*	*9.7*	*42.7*	*113*	*10.6*	*50.3*	*116*	*11.3*	*50.7*
Asia	*119*	*11.8*	*7.6*	*133*	*12.7*	*8.3*	*114*	*11.3*	*6.7*	*147*	*13.8*	*8.9*	*156*	*14.9*	*9.7*
North America	*10*	*1.0*	*8.3*	*15*	*1.4*	*12.3*	*12*	*1.2*	*9.9*	*15*	*1.4*	*13.4*	*17*	*1.6*	*15.0*
South/Central America and the Caribbean	*7*	*0.7*	*5.8*	*28*	*2.7*	*24.8*	*24*	*2.4*	*20.0*	*21*	*2.0*	*19.0*	*18*	*1.7*	*17.3*
Total with a reported country of birth	**930**	**92.2**	**4.7**	**983**	**93.5**	**5.0**	**964**	**95.3**	**4.9**	**1 020**	**96.0**	**5.1**	**1 006**	**96.5**	**5.1**
Not reported	79	7.8		68	6.5		48	4.7		42	4.0		37	3.5	
Total	**1 009**	**100.0**		**1 051**	**100.0**		**1 012**	**100.0**		**1 062**	**100.0**		**1 043**	**100.0**	

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

Source: State/Territory health authorities

Table 1.1.5 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 2006 – 2010, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

		Year of HIV diagnosis				
Characteristic	**Sex**	**2006**	**2007**	**2008**	**2009**	**2010**
State/Territory						
ACT	M	570 (3)	355 (4)	272 (4)	275 (6)	640 (10)
	F	– (1)	– (1)	– (1)	315 (2)	465 (2)
NSW	M	441 (238)	443 (244)	440 (261)	408 (305)	410 (289)
	F	378 (39)	300 (23)	450 (37)	380 (40)	356 (27)
NT	M	419 (6)	552 (6)	407 (7)	433 (10)	418 (4)
	F	65 (5)	– (0)	– (1)	680 (5)	– (1)
QLD	M	410 (130)	450 (149)	410 (131)	425 (144)	370 (178)
	F	380 (25)	360 (25)	355 (28)	380 (24)	400 (39)
SA	M	362 (50)	435 (44)	418 (41)	379 (40)	357 (36)
	F	494 (8)	336 (10)	314 (5)	353 (9)	511 (5)
TAS	M	234 (5)	399 (4)	490 (8)	713 (10)	340 (9)
	F	– (0)	588 (3)	247 (5)	216 (3)	– (1)
VIC	M	397 (229)	441 (214)	428 (212)	442 (229)	421 (208)
	F	490 (23)	363 (31)	300 (30)	322 (25)	358 (29)
WA	M	406 (48)	444 (58)	390 (61)	344 (56)	369 (66)
	F	456 (18)	408 (15)	321 (20)	299 (24)	384 (25)
Exposure category						
Men who have sex with men[1]	M	450 (573)	465 (574)	460 (565)	448 (621)	436 (616)
Injecting drug use[2]	M	255 (14)	390 (15)	483 (19)	312 (17)	385 (16)
	F	730 (5)	355 (7)	480 (6)	– (1)	511 (7)
Heterosexual contact	M	237 (92)	332 (108)	300 (115)	284 (126)	254 (126)
	F	380 (107)	360 (93)	330 (113)	330 (122)	350 (111)
Other/undetermined	M	217 (30)	450 (26)	348 (26)	300 (36)	309 (42)
	F	280 (7)	523 (8)	430 (8)	654 (10)	440 (11)
Newly acquired HIV infection status						
Diagnoses of newly	M	530 (254)	565 (215)	535 (225)	548 (258)	524 (271)
acquired HIV infection[3]	F	617 (15)	510 (9)	675 (12)	630 (13)	516 (12)
Other HIV diagnoses	M	320 (455)	390 (508)	385 (500)	360 (542)	325 (529)
	F	354 (104)	355 (99)	320 (115)	310 (119)	356 (117)
Total[4]		**410 (830)**	**424 (831)**	**420 (852)**	**406 (934)**	**399 (931)**

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

2 Excludes men who have sex with men.

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 11 people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.6 Number of cases of newly diagnosed HIV infection for which exposure to HIV was attributed to heterosexual contact, by exposure category of the heterosexual partner, year and sex

	Year of HIV diagnosis												
	2006		2007		2008		2009		2010		2006 – 2010		
HIV exposure category	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**
Person from a high prevalence country	35	66	34	57	46	69	62	60	51	76	228	328	556
Sub-Saharan Africa	*20*	*29*	*25*	*29*	*39*	*43*	*54*	*36*	*44*	*51*	*182*	*188*	*370*
South East Asia	*8*	*27*	*4*	*22*	*4*	*21*	*3*	*17*	*4*	*19*	*23*	*106*	*129*
North Africa/Middle East	*4*	*4*	*4*	*4*	*0*	*1*	*1*	*2*	*2*	*2*	*11*	*13*	*24*
Other Oceania	*1*	*3*	*0*	*1*	*3*	*4*	*3*	*5*	*1*	*4*	*8*	*17*	*25*
Not reported	*2*	*3*	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*4*	*4*	*8*
Partner from a high prevalence country	27	14	48	7	26	9	26	9	41	11	168	50	218
Sub-Saharan Africa	*5*	*6*	*6*	*5*	*3*	*2*	*7*	*8*	*2*	*6*	*23*	*27*	*50*
South East Asia	*10*	*2*	*25*	*2*	*15*	*1*	*15*	*0*	*24*	*0*	*89*	*5*	*94*
Other Oceania	*2*	*0*	*2*	*0*	*0*	*0*	*1*	*0*	*2*	*0*	*7*	*0*	*7*
Other/not reported	*10*	*6*	*15*	*0*	*8*	*6*	*3*	*1*	*13*	*5*	*49*	*18*	*67*
Heterosexual contact with partner at risk	51	44	47	53	64	47	65	62	51	39	278	245	523
Injecting drug use	*0*	*7*	*2*	*7*	*4*	*3*	*1*	*4*	*0*	*5*	*7*	*26*	*33*
Bisexual man	*–*	*5*	*–*	*5*	*–*	*10*	*–*	*4*	*–*	*1*	*–*	*25*	*25*
Partner with medically acquired HIV	*1*	*2*	*0*	*0*	*0*	*1*	*0*	*1*	*0*	*1*	*1*	*5*	*6*
Partner with HIV infected person whose exposure was not specified	*6*	*6*	*8*	*12*	*9*	*7*	*7*	*13*	*5*	*9*	*35*	*47*	*82*
Not further specified	*44*	*24*	*37*	*29*	*51*	*26*	*57*	*40*	*46*	*23*	*235*	*142*	*377*
Total	**113**	**124**	**129**	**117**	**136**	**125**	**153**	**131**	**143**	**126**	**674**	**623**	**1 297**

Source: State/Territory health authorities

Table 1.1.7 Number of specimens tested for HIV antibody in public health laboratories, 2001 – 2010, by State/Territory and year of test

	Year of HIV antibody test									
State/Territory	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008[1]**	**2009[1]**	**2010[1]**
ACT[2]	5 446	5 712	7 978	14 388	15 551	16 565	17 602	19 443	20 173	–
NSW	328 295	357 526	358 063	347 064	356 046	322 569	251 724	191 873	114 041	151 320
NT	15 158	15 710	16 407	15 323	15 217	7 247	6 686	7 782	6 360	6 924
QLD	185 028	184 994	188 403	206 322	222 558	238 509	251 430	253 778	210 315	135 198
SA	77 219	75 360	79 409	83 970	88 158	88 552	80 664	95 696	62 560	61 252
TAS	12 714	12 574	12 967	12 754	13 041	12 573	12 248	13 346	4 126	4 447
VIC	177 949	202 682	204 561	152 284	165 461	183 508	253 145	231 844	224 300	148 623
WA	100 225	93 271	100 483	102 694	114 203	101 277	104 540	124 688	167 695	134 241
Total	**902 034**	**947 829**	**968 271**	**934 799**	**990 235**	**970 800**	**978 039**	**938 450**	**809 570**	**642 005**

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

2 Data for ACT reported with NSW data from 2010.

Source: National Serology Reference Laboratory, Australia

1.2 Monitoring incident HIV infection

Table 1.2.1 Characteristics of diagnoses of newly acquired HIV infection[1], 2001 – 2010, 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**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**	**Total[2]**
Total cases		**209**	**246**	**286**	**261**	**281**	**308**	**282**	**286**	**301**	**304**	**2 764**
Males (%)	M	92.3	94.7	96.2	94.3	96.8	93.5	95.7	95.1	94.7	95.4	94.9
Median age (years)	M	34	34	33	35	35	36	35	35	36	35	35
	F	34	37	34	23	27	35	35	31	29	38	31
State/Territory												
ACT	M	2	2	0	2	1	3	2	0	3	3	18
	F	0	0	0	0	0	1	0	0	0	0	1
NSW	M	95	118	153	113	128	110	115	123	114	125	1 194
	F	7	2	4	5	3	7	4	6	8	2	48
NT	M	3	1	0	2	1	2	1	2	4	2	18
	F	0	0	0	0	0	0	0	0	3	0	3
QLD	M	23	34	26	42	42	57	48	44	60	51	427
	F	3	3	3	3	1	1	4	2	2	4	26
SA	M	10	6	15	15	15	17	7	6	6	4	101
	F	1	0	1	1	0	0	0	1	0	1	5
TAS	M	2	1	0	1	2	0	0	1	2	2	11
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	51	67	69	62	74	85	83	81	88	89	749
	F	3	0	3	4	4	8	3	5	2	5	37
WA	M	7	4	12	9	9	14	14	15	8	14	106
	F	2	6	0	1	1	2	1	0	0	1	14
HIV exposure category												
Men who have sex with men	M	166	212	243	209	234	247	235	240	246	261	2 293
Male who have sex with men, and injecting drug use	M	10	9	12	11	15	13	5	11	11	7	104
Injecting drug use[3]	M	5	0	5	2	2	2	2	0	2	1	21
	F	2	0	2	4	1	2	1	2	0	1	15
Heterosexual contact	M	8	8	13	16	9	16	20	18	20	12	140
	F	13	10	9	10	8	16	10	12	14	11	113
Health care setting[4]	M	0	0	0	2	0	0	0	0	0	0	2
	F	0	1	0	0	0	0	0	0	0	0	1
Other/undetermined	M	4	4	2	6	12	10	8	3	6	9	64
	F	1	0	0	0	0	1	1	0	1	1	5
Evidence of newly acquired infection												
Testing history only	M	91	98	139	105	128	150	126	123	136	132	1 228
	F	9	1	5	10	5	7	5	7	5	7	61
Primary HIV infection only	M	46	51	44	46	49	44	61	60	52	77	530
	F	1	2	0	3	2	9	5	5	6	1	34
Testing history and primary HIV infection	M	56	84	92	95	95	94	83	89	97	81	866
	F	6	8	6	1	2	3	2	2	4	5	39

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 men who have sex with men.

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

Source: State/Territory health authorities

Table 1.2.2 Number of cases of HIV infection newly diagnosed in 2010[1], number with newly acquired infection[2], number without newly acquired infection that were tested for incident HIV infection using the BED capture enzyme immunoassay (BED-CEIA)[3], number with BED-CEIA evidence only of incident infection[4], and total number (%) of diagnoses of recent infection[5], by State/Territory[6]

State/Territory	Number with newly diagnosed infection[1]	Number (%) with newly acquired infection[2]	Number without newly acquired infection, tested for incident infection[3]	Number with incident HIV infection only[4]	Total number (%) with recent HIV infection[5]
NSW[6]	95	60 (63.2%)	35	8	68 (71.6%)
QLD	209	54 (25.8%)	103	19	73 (46.5%)
WA	86	15 (17.4%)	44	10	25 (42.4%)
Total	**390**	**129 (33.1%)**	**182**	**37**	**166 (53.4%)**

1 Number of cases of newly diagnosed HIV infection in 2010, excluding cases previously diagnosed overseas.

2 Newly acquired HIV infection was defined as newly diagnosed infection with a negative or indeterminate HIV antibody test result, or a diagnosis of primary HIV infection, within 12 months of HIV diagnosis.

3 Number of cases of newly diagnosed HIV infection, excluding cases with newly acquired infection, tested for incident infection using the BED capture enzyme immunoassay (BED-CEIA).

4 Number of cases with incident HIV infection only, detected by the BED-CEIA.

5 Total number of cases of newly acquired infection plus cases with incident infection only, detected by the BED-CEIA.

6 Cases of HIV infection newly diagnosed in NSW at one site (NSW State Reference Laboratory for HIV, St Vincent's Hospital) only.

Source: State and Territory health authorities

Table 1.2.3 Number and percentage 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 (%)
2006	46	2.2	3 (6.5)	4 (8.7)	3 (6.5)
2007	81	8.6	0 (0.0)	3 (3.7)	5 (6.2)
2008	90	6.7	1 (1.1)	3 (3.3)	5 (5.6)
2009	108	6.5	1 (0.9)	6 (5.5)	8 (7.4)
2010	88	13.6	1 (1.1)	7 (7.9)	4 (4.5)

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

Source: NSW State Reference Laboratory for HIV/AIDS; Victorian Infectious Diseases Reference Laboratory (from 2007-2008)

1.3 National surveillance for newly diagnosed HIV infection 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], 2001 – 2010, by year. Number of cases, median age and percent (number) of total cases by sex, newly acquired infection, late HIV diagnosis, State/Territory and HIV exposure category

	Year of HIV diagnosis										
Characteristic	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Total cases	**14**	**27**	**23**	**22**	**18**	**21**	**19**	**18**	**23**	**22**	**207**
Males (%)	57.1	55.6	73.9	72.7	83.3	76.2	84.2	77.8	82.6	68.2	73.0
Median age (years)	29	36	34	29	33	31	33	35	37	35	34
Newly acquired infection (%)	14.3 (2)	22.2 (6)	17.4 (4)	31.8 (7)	16.7 (3)	33.3 (7)	26.3 (5)	33.3 (6)	30.4 (7)	22.7 (5)	25.1 (52)
Late HIV diagnosis (%)[2]											
CD4+ cell count<200 cells/µl	14.3	18.5	26.1	31.8	11.1	9.5	10.5	16.7	34.8	9.1	18.8
State/Territory (%)											
ACT	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
NSW	28.6 (4)	29.6 (8)	17.4 (4)	18.2 (4)	11.1 (2)	38.1 (8)	42.1 (8)	38.9 (7)	39.1 (9)	31.8 (7)	29.5 (61)
NT	7.1 (1)	7.4 (2)	4.3 (1)	4.5 (1)	0.0 (0)	0.0 (0)	0.0 (0)	5.6 (1)	0.0 (0)	4.5 (1)	3.4 (7)
QLD	21.4 (3)	18.5 (5)	26.1 (6)	22.7 (5)	44.4 (8)	23.8 (5)	26.3 (5)	11.1 (2)	30.4 (7)	36.4 (8)	26.1 (54)
SA	7.1 (1)	7.4 (2)	8.7 (2)	9.1 (2)	0.0 (0)	0.0 (0)	5.3 (1)	22.2 (4)	8.7 (2)	4.5 (1)	7.2 (15)
TAS	0.0 (0)	0.0 (0)	0.0 (0)	4.5 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	4.4 (1)	0.0 (0)	1.0 (2)
VIC	14.3 (2)	3.7 (1)	21.7 (5)	18.2 (4)	11.1 (2)	9.5 (2)	15.8 (3)	0.0 (0)	4.4 (1)	13.6 (3)	11.1 (23)
WA	21.4 (3)	33.3 (9)	21.7 (5)	22.7 (5)	33.3 (6)	28.6 (6)	10.5 (2)	22.2 (4)	13.0 (3)	9.1 (2)	21.7 (45)
HIV exposure category (%)											
Men who have sex with men	42.9 (6)	25.9 (7)	31.8 (7)	52.4 (11)	27.8 (5)	47.6 (10)	47.4 (9)	50.0 (9)	55.6 (10)	60.0 (12)	43.4 (86)
Men who have sex with men, and injecting drug use	0.0 (0)	3.7 (1)	13.6 (3)	0.0 (0)	27.8 (5)	4.8 (1)	15.8 (3)	0.0 (0)	11.1 (2)	5.0 (1)	8.1 (16)
Injecting drug use[3]	28.6 (4)	14.8 (4)	13.6 (3)	19.0 (4)	16.7 (3)	23.8 (5)	15.8 (3)	33.3 (6)	11.1 (2)	20.0 (4)	19.2 (38)
Heterosexual contact	21.4 (3)	55.6 (15)	40.9 (9)	28.6 (6)	27.8 (5)	23.8 (5)	21.1 (4)	16.7 (3)	22.2 (4)	15.0 (3)	28.8 (57)
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	7.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.5 (1)
Other/undetermined[4]	0.0 (0)	0.0 (0)	4.3 (1)	4.5 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	21.7 (5)	9.1 (2)	3.6 (9)

1 Indigenous status at HIV diagnosis was available for cases diagnosed in the ACT from 1 January 2005.

2 Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of <200 cells/µl.

3 Excludes men who have sex with men.

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, 2006 – 2010, by year, Aboriginal and Torres Strait Islander status and area of residence

		Year of diagnosis				
Area of residence	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
Major cities	Aboriginal and Torres Strait Islander	8	10	8	12	8
	Non-Indigenous	6	6	6	6	7
Inner regional	Aboriginal and Torres Strait Islander	2	2	2	2	4
	Non-Indigenous	2	2	2	2	2
Outer regional	Aboriginal and Torres Strait Islander	2	2	1	1	4
	Non-Indigenous	2	3	4	3	2
Remote	Aboriginal and Torres Strait Islander	5	0	3	3	0
	Non-Indigenous	4	4	1	2	1
Very remote	Aboriginal and Torres Strait Islander	3	0	0	1	1
	Non-Indigenous	4	0	0	2	1
Total	**Aboriginal and Torres Strait Islander**	**5**	**4**	**4**	**5**	**5**
	Non-Indigenous	**5**	**5**	**5**	**5**	**5**

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

1.4 National surveillance for perinatal exposure to HIV

Table 1.4.1 Number and population rate[1] of perinatal exposure to HIV among children born in Australia, 2001 – 2010, by State/Territory and year of birth

State/ Territory	2001 – 2002		2003 – 2004		2005 – 2006		2007 – 2008		2009 – 2010	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number[2]	Rate
ACT	0	0.0	1	12.0	0	0.0	0	0.0	1	10.3
NSW	23	13.4	23	13.4	17	9.8	29	15.7	31	16.7
NT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
QLD	9	9.4	13	13.2	9	8.6	9	7.2	19	14.4
SA	3	8.6	0	0.0	3	8.3	5	12.5	1	2.5
TAS	0	0.0	0	0.0	0	0.0	1	7.4	3	22.6
VIC	5	4.2	8	6.5	9	7.0	24	17.0	33	23.3
WA	16	33.6	5	10.1	2	3.7	0	0.0	2	3.2
Total	**56**	**11.3**	**50**	**9.9**	**40**	**7.6**	**68**	**11.7**	**91**	**15.4**

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

2 Includes 1 child born in 2009 – 2010 whose State/Territory of birth was not reported.

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

Table 1.4.2 Number of women whose perinatally HIV exposed children were born in Australia, 2001 – 2010, 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 or at the birth (years)				After the birth	Total
	< 1	1-2	>2	Total		
2001 – 2002[1]	17	2	30	49	2	52
2003 – 2004[1]	16	2	23	41	0	42
2005 – 2006	13	4	9	26	4	30
2007 – 2008	19	9	18	46	3	49
2009 – 2010[1]	31	7	28	66	0	70
Total[1]	**96**	**24**	**108**	**228**	**9**	**243**

1 Total includes 1 woman whose first exposed child was born in 2001 – 2002, 1 woman who first exposed child was born in 2003 – 2004 and 4 women whose first exposed child was born in 2009 – 2010, whose date of HIV diagnosis was not reported.

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

Table 1.4.3 Number of women whose perinatally HIV exposed children were born in Australia, 2001– 2010, 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	2001 – 2005 Number of women	2001 – 2005 Number of exposed children	2006 – 2010 Number of women	2006 – 2010 Number of exposed children	2001 – 2010 Number of women	2001 – 2010 Number of exposed children
Injecting drug use	9	14	9	11	18	25
Heterosexual contact	96	130	117	137	213	267
Sex with injecting drug user	*14*	*21*	*7*	*7*	*21*	*28*
Sex with bisexual male	*5*	*6*	*7*	*7*	*12*	*13*
From high prevalence country	*31*	*39*	*63*	*75*	*94*	*114*
Sex with person from a high prevalence country	*19*	*29*	*13*	*16*	*32*	*45*
Sex with person with medically acquired HIV	*1*	*1*	*1*	*1*	*2*	*2*
Sex with person with HIV infection, other exposure	*7*	*10*	*10*	*12*	*17*	*22*
Not further specified	*19*	*24*	*16*	*19*	*35*	*43*
Receipt of blood/tissue	1	1	0	0	1	1
Other/undetermined	4	5	7	7	11	12
Total	**110**	**150**	**133**	**155**	**243**	**305**

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

Table 1.4.4 Number of perinatally exposed children born in Australia, 2001 – 2010, 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

	Interval of the woman's HIV diagnosis					
	Before or at the birth		After the birth		Total	
Child's year of birth	Number exposed	Number with HIV	Number exposed	Number with HIV	Number exposed[1]	Number with HIV[2]
2001 – 2002[1]	53	1	2	1	56	2
2003 – 2004[1]	49	2	0	0	50	2
2005 – 2006	36	3	4	2	40	5
2007 – 2008	65	0	3	3	68	3
2009 – 2010[1,2]	87	1	0	0	91	2
Total[1]	**290**	**7**	**9**	**6**	**305**	**14**

1 Totals include 1 exposed child born in 2001 – 2002, 1 exposed child born in 2003 – 2004 and 4 exposed children born in 2009 – 2010, for whom the date of the woman's HIV diagnosis was not reported.

2 Total includes 1 exposed child with HIV infection.

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

Table 1.4.5 Number of perinatally exposed children, born in 2001 – 2010 to women whose HIV infection was diagnosed antenatally, and number with diagnosed HIV infection by year of the child's birth and the proportion of women reporting use of interventions to reduce the risk of mother-to-child transmission

Child's year of birth/ Reported use of interventions	Proportion of women reporting use of interventions	Number of children with HIV infection
2001 – 2002	53	1
No reported use of interventions	*5.7*	*0*
Use of 1 intervention	*17.0*	*1*
Use of 2 interventions	*41.5*	*0*
Use of 3 interventions	*35.8*	*0*
2003 – 2004	49	2
No reported use of interventions	*2.0*	*1*
Use of 1 intervention	*4.1*	*0*
Use of 2 interventions	*34.7*	*0*
Use of 3 interventions	*59.2*	*1*
2005 – 2006	36	3
No reported use of interventions	*8.3*	*2*
Use of 1 intervention	*2.8*	*0*
Use of 2 interventions	*38.9*	*0*
Use of 3 interventions	*50.0*	*1*
2007 – 2008	65	0
No reported use of interventions	*3.1*	*0*
Use of 1 intervention	*3.1*	*0*
Use of 2 interventions	*43.1*	*0*
Use of 3 interventions	*50.8*	*0*
2009 – 2010	87	1
No reported use of interventions	*6.9*	*0*
Use of 1 intervention	*3.4*	*0*
Use of 2 interventions	*51.7*	*1*
Use of 3 interventions	*37.9*	*0*
Total	**290**	**7**

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

1.5 Global comparisons

Table 1.5.1 Estimated HIV prevalence in selected countries

	HIV prevalence	
Country	**2010[1]**	**Rate[2]**
Africa		
Mauritius[3]	8 800	1 000
Somalia[3]	34 000	700
South Africa[3]	5 600 000	17 800
Sudan[3]	260 000	1 100
Zambia[3]	980 000	13 500
Zimbabwe[3]	1 200 000	14 300
Asia Pacific		
Australia	21 391	96
Cambodia[3]	63 000	500
China[3]	740 000	100
India[3]	2 400 000	300
Indonesia[3]	310 000	200
Japan[3]	8 100	<100
Malaysia[3]	100 000	500
Myanmar[3]	240 000	600
New Zealand[3]	2 500	100
Papua New Guinea[3]	34 000	900
Philippines[3]	8 700	<100
Republic of Korea[3]	9 600	<100
Thailand[3]	530 000	1 300
Vietnam[3]	280 000	400
Europe		
France[3]	150 000	400
Germany[3]	67 000	100
Italy[3]	140 000	300
Spain[3]	130 000	400
United Kingdom[3]	86 500	142
North America		
Canada[3]	67 000	200
United States[4]	1 178 350	469

1 Estimated number of people living with HIV/AIDS.

2 Rate per 100 000 population aged 15 – 49 years.

3 Estimated HIV prevalence in 2009.

4 Estimated HIV prevalence for people aged ≥13 in 2008.

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 diagnosis of hepatitis A infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	1	0.3	2	0.5	5	1.6	6	1.4	5	1.2
NSW	95	1.4	65	0.9	69	1.0	98	1.4	83	1.2
NT	30	11.9	5	1.9	3	2.1	1	0.4	3	1.5
QLD	31	0.7	28	0.7	72	1.6	56	1.2	41	0.9
SA	8	0.5	5	0.3	20	1.3	59	3.7	4	0.3
TAS	4	0.9	3	0.6	1	0.2	5	1.1	4	0.8
VIC	44	0.9	36	0.7	85	1.6	303	5.5	91	1.7
WA	68	3.3	21	1.0	22	1.0	35	1.5	32	1.4
Total	**281**	**1.4**	**165**	**0.8**	**277**	**1.3**	**563**	**2.5**	**263**	**1.2**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.2 Number of diagnoses of hepatitis A infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T[1]
0 – 4	15	10	25	5	8	13	9	6	15	13	6	19	12	13	26
5 – 14	35	33	68	10	19	29	35	25	60	29	21	50	35	23	58
15 – 19	9	10	19	4	4	8	12	7	19	22	23	45	9	15	24
20 – 29	32	20	52	23	18	41	41	34	75	73	62	135	23	25	48
30 – 39	16	20	36	15	9	24	22	10	32	56	63	119	21	16	37
40 – 49	21	15	36	14	8	22	15	15	30	35	43	78	11	15	26
50 – 59	14	9	23	6	4	10	15	8	23	26	38	64	13	7	20
60 +	13	9	22	8	10	18	10	13	23	25	28	53	9	15	24
Total	**155**	**126**	**281**	**85**	**80**	**165**	**159**	**118**	**277**	**279**	**284**	**563**	**133**	**129**	**263**

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 diagnosis of hepatitis B infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	77	20.8	68	19.1	59	16.0	106	28.0	96	25.7
NSW[2]	2 490	36.2	2 608	37.4	2 546	35.9	2 691	37.4	–	–
NT	242	118.5	247	118.2	200	93.0	156	68.9	160	68.0
QLD	999	24.1	1 030	24.2	880	20.2	1 063	23.8	1 129	24.9
SA	319	20.7	520	33.2	431	27.2	458	28.5	430	26.5
TAS	55	11.8	47	10.2	70	15.1	85	18.4	57	12.2
VIC	1 679	32.0	1 950	36.5	1 918	35.2	2 031	36.3	1 960	34.3
WA	638	30.4	667	31.0	661	29.8	745	32.3	808	34.4
Total	**6 499**	**31.0**	**7 137**	**33.5**	**6 765**	**31.1**	**7 335**	**33.0**	**4 640**	**30.3**

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

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.4 Number of diagnoses of hepatitis B infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010[2]		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	18	17	35	11	8	21	15	10	27	5	7	14	9	8	19
5 – 14	95	54	150	78	68	147	81	61	144	78	51	130	52	34	87
15 – 19	141	155	302	192	139	334	169	126	298	186	140	327	113	76	191
20 – 29	908	938	1 861	916	1 026	1 953	840	966	1 828	944	980	1 952	555	655	1 229
30 – 39	950	779	1 741	1 082	870	1 975	992	861	1 872	1 067	962	2 059	696	619	1 329
40 – 49	786	479	1 272	850	543	1 406	818	473	1 298	872	529	1 409	496	324	827
50 – 59	428	293	722	473	323	800	448	302	752	539	348	891	327	251	580
60 +	246	164	414	293	200	499	310	230	541	31	225	548	218	155	378
Not reported	2	0	2	1	0	2	1	2	5	5	0	5	0	0	0
Total	**3 574**	**2 879**	**6 499**	**3 896**	**3 177**	**7 137**	**3 674**	**3 031**	**6 765**	**4 012**	**3 242**	**7 335**	**2 466**	**2 122**	**4 640**

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

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number and rate[1] of diagnosis of newly acquired hepatitis B infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	7	1.9	13	3.3	1	0.3	5	1.4	3	0.6
NSW	52	0.8	56	0.8	45	0.6	37	0.5	35	0.5
NT	11	4.9	10	4.0	8	4.1	4	1.5	3	1.2
QLD	51	1.2	68	1.6	45	1.0	49	1.1	59	1.3
SA	7	0.5	12	0.8	11	0.7	10	0.6	21	1.3
TAS	9	1.9	9	2.0	11	2.6	9	2.1	6	1.3
VIC	105	2.0	84	1.6	87	1.6	89	1.6	69	1.2
WA	50	2.4	42	1.9	48	2.1	38	1.7	33	1.4
Total	**292**	**1.4**	**294**	**1.4**	**256**	**1.2**	**241**	**1.1**	**229**	**1.0**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.6 Number of diagnoses of newly acquired hepatitis B infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T[1]	M	F	T	M	F	T	M	F	T	M	F	T
0 – 4	3	1	4	0	1	1	1	1	2	1	0	1	0	5	5
5 – 14	2	3	5	2	2	4	1	2	3	1	0	1	3	1	4
15 – 19	8	13	21	9	9	18	6	5	11	3	4	7	6	4	10
20 – 29	61	32	93	57	40	97	50	31	81	44	20	64	35	25	60
30 – 39	51	36	88	58	28	86	49	26	75	46	31	77	38	19	57
40 – 49	30	19	49	28	14	42	39	8	47	36	11	47	35	11	46
50 – 59	16	6	22	20	7	27	15	3	18	14	9	23	22	8	30
60 +	6	4	10	15	4	19	16	3	19	14	7	21	11	6	17
Total	**177**	**114**	**292**	**189**	**105**	**294**	**177**	**79**	**256**	**159**	**82**	**241**	**150**	**79**	**229**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of newly acquired hepatitis B infection[1], 2006 – 2010, by exposure category, year and sex

	Year of diagnosis														
	2006			2007			2008			2009			2010		
Exposure category	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T[2]**	**M**	**F**	**T**
Injecting drug use	43	25	68	32	18	50	33	9	42	33	19	53	28	18	46
Sexual contact	10	9	19	9	11	20	16	8	24	25	10	35	7	4	11
Men who have sex with men	*3*	*–*	*3*	*3*	*–*	*3*	*1*	*–*	*1*	*7*	*–*	*7*	*1*	*–*	*1*
Heterosexual contact	*6*	*9*	*15*	*6*	*11*	*17*	*13*	*7*	*20*	*8*	*6*	*14*	*3*	*3*	*6*
Not further specified	*1*	*0*	*1*	*0*	*0*	*0*	*2*	*1*	*3*	*10*	*4*	*14*	*3*	*1*	*4*
Blood/tissue recipient	0	0	0	0	0	0	2	0	2	2	1	3	0	0	0
Skin penetration procedure	1	0	1	4	0	4	6	4	10	2	1	3	0	0	0
Healthcare exposure	0	0	0	1	0	1	4	1	5	2	4	6	3	0	3
Household contact	4	0	4	4	3	7	3	2	5	3	0	3	0	0	0
Other	3	2	5	15	5	20	3	1	4	4	1	5	1	1	2
Undetermined	23	12	35	1	3	4	15	5	20	27	15	42	44	22	66
Total	**84**	**48**	**132**	**66**	**40**	**106**	**82**	**30**	**112**	**98**	**51**	**150**	**83**	**45**	**128**

1 Includes diagnoses in South Australia and Victoria in 2006 – 2010, diagnoses in Tasmania in 2006 – 2009, diagnoses in the Australian Capital Territory in 2006 and 2009, and diagnoses in New South Wales and the Northern Territory in 2009 – 2010.

2 Total includes diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number and percentage of diagnoses of newly acquired hepatitis B infection[1], 2006 – 2010, and the Australian population, by year and country/region of birth

Country/ Region of birth	Year of diagnosis 2006 Number	2006 Percent	2007 Number	2007 Percent	2008 Number	2008 Percent	2009 Number	2009 Percent	2010 Number	2010 Percent	Australian population[2]
Total with a reported country of birth	**155**	**88.6**	**162**	**82.2**	**139**	**86.9**	**175**	**92.6**	**152**	**92.7**	**19 855 288**
Australia	123	70.3	133	67.5	96	60.0	113	59.8	90	54.9	70.9
Overseas born	32	18.3	29	14.7	43	26.9	62	32.8	62	37.8	22.2
Other Oceania	*9*	*5.1*	*4*	*2.0*	*5*	*3.1*	*11*	*5.8*	*2*	*1.2*	*2.5*
United Kingdom and Ireland	*5*	*2.9*	*6*	*3.0*	*5*	*3.1*	*12*	*6.3*	*4*	*2.4*	*5.5*
Other Europe	*5*	*2.9*	*8*	*4.1*	*6*	*3.8*	*10*	*5.3*	*8*	*4.9*	*5.0*
Middle East/North Africa	*0*	*0.0*	*2*	*1.0*	*3*	*1.9*	*7*	*3.7*	*22*	*13.4*	*1.3*
Sub-Saharan Africa	*5*	*2.9*	*1*	*0.5*	*2*	*1.2*	*3*	*1.6*	*7*	*4.3*	*1.0*
Asia	*8*	*4.6*	*7*	*3.6*	*19*	*11.9*	*19*	*10.1*	*17*	*10.4*	*6.1*
North America	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*0*	*0.0*	*1*	*0.6*	*0.5*
South/Central America and the Caribbean	*0*	*0.0*	*1*	*0.5*	*3*	*1.9*	*0*	*0.0*	*1*	*0.6*	*0.4*
Not reported	20	11.4	35	17.8	21	13.1	14	7.4	12	7.3	6.9
Total	**175**	**100.0**	**197**	**100.0**	**160**	**100.0**	**189**	**100.0**	**164**	**100.0**	

1 Includes diagnoses in South Australia and Victoria in 2006 – 2010, diagnoses in Tasmania in 2006 – 2009, diagnoses in the Australian Capital Territory in 2006 and 2009, and diagnoses in New South Wales and the Northern Territory in 2009 – 2010.

2 Total includes diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number and rate[1] of diagnosis of hepatitis C infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	191	52.8	202	54.8	200	54.6	165	43.8	223	58.5
NSW[2]	4 330	63.1	4 169	60.0	3 757	53.4	3 955	55.5	–	–
NT	266	118.8	224	101.2	212	92.8	166	71.6	172	74.2
QLD	2 805	67.9	2 700	63.9	2 617	60.2	2 696	60.7	2 742	60.8
SA	573	37.1	626	40.2	584	37.0	553	34.9	531	33.1
TAS	269	58.1	274	59.3	348	75.5	282	60.8	263	55.4
VIC	2 743	52.3	2 756	51.8	2 412	44.6	2 513	45.5	2 603	46.2
WA	1 108	52.6	1 251	58.1	1 328	59.8	1 144	49.8	1 074	46.0
Total	**12 285**	**58.6**	**12 202**	**57.4**	**11 458**	**52.9**	**11 474**	**52.0**	**7 608**	**50.1**

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

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.10 Number of diagnoses of hepatitis C infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010[2]		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	14	11	25	8	10	21	8	12	21	5	12	20	13	9	23
5 – 14	22	16	38	16	16	32	13	9	22	14	16	31	12	8	21
15 – 19	148	200	350	119	176	296	130	174	305	127	146	274	82	104	188
20 – 29	1 880	1 223	3 120	1 732	1 170	2 912	1 585	1 112	2 708	1 406	1 110	2 532	996	661	1 710
30 – 39	2 189	1 300	3 504	2 294	1 290	3 598	2 067	1 173	3 249	2 116	1 098	3 239	1 341	815	2 194
40 – 49	2 237	1 079	3 329	2 152	1 082	3 241	1 942	968	2 916	1 975	952	2 937	1 244	645	1 896
50 – 59	953	419	1 375	1 061	510	1 575	1 193	539	1 736	1 339	577	1 921	849	406	1 259
60 +	280	263	544	289	230	522	268	229	500	260	256	517	184	130	316
Not reported	0	0	0	3	1	5	0	0	1	0	1	3	1	0	1
Total	**7 723**	**4 511**	**12 285**	**7 674**	**4 485**	**12 202**	**7 206**	**4 216**	**11 458**	**7 242**	**4 168**	**11 474**	**4 722**	**2 778**	**7 608**

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

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.11 Number of diagnoses of newly acquired hepatitis C infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis[1]				
State/Territory	2006	2007	2008	2009	2010
ACT	14	12	5	8	12
NSW	56	65	26	41	40
NT	3	4	6	5	0
QLD	–	–	–	–	–
SA	54	48	43	35	46
TAS	10	20	21	22	22
VIC	201	152	163	184	162
WA	104	79	100	90	80
Total	**442**	**380**	**364**	**385**	**362**

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.12 Number of diagnoses of newly acquired hepatitis C infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T	M	F	T	M	F	T	M	F	T[1]	M	F	T
0 – 4	4	2	6	2	1	3	0	1	1	1	5	9	2	3	5
5 – 14	0	1	1	0	2	2	0	0	0	0	2	2	1	0	1
15 – 19	25	24	49	22	24	46	22	19	41	18	12	30	7	19	26
20 – 29	130	75	205	115	58	173	116	68	184	123	79	202	105	68	173
30 – 39	87	41	128	68	37	105	52	41	93	67	33	100	60	35	95
40 – 49	28	14	42	24	15	39	22	11	33	18	14	32	34	11	45
50 – 59	3	1	4	5	3	8	3	4	7	5	4	9	12	3	15
60 +	4	3	7	0	4	4	3	2	5	1	0	1	0	2	2
Total	**281**	**161**	**442**	**236**	**144**	**380**	**218**	**146**	**364**	**233**	**149**	**385**	**221**	**141**	**362**

Source: National Notifiable Diseases Surveillance System

Table 2.1.13 Number of diagnoses of newly acquired hepatitis C infection[1], 2006 – 2010, by exposure category, year and sex

	Year of diagnosis														
	2006			2007			2008			2009			2010		
Exposure category	M	F	T	M	F	T[2]	M	F	T[2]	M	F	T	M	F	T
Injecting drug use[2]	187	108	295	135	71	207	81	48	129	179	103	282	153	103	256
Sexual contact	11	15	26	4	3	7	10	14	24	6	8	14	9	2	11
Blood/tissue recipient	1	1	2	1	2	3	0	0	0	0	0	0	0	1	1
Skin penetration procedure	26	11	37	2	2	4	21	16	37	3	5	8	4	6	10
Healthcare exposure	5	7	12	1	1	2	3	0	3	1	7	8	0	5	5
Household contact	1	1	2	0	0	0	2	2	4	0	1	1	2	1	3
Other[3]	22	8	30	9	5	14	27	5	32	9	7	16	10	3	13
Undetermined[2]	42	28	70	17	13	30	84	69	154	44	26	70	43	20	63
Total	**295**	**179**	**474**	**169**	**97**	**267**	**228**	**154**	**383**	**242**	**157**	**399**	**221**	**141**	**362**

1 Includes diagnoses in NSW, SA, TAS, VIC and WA in 2006 – 2010, diagnoses in ACT in 2006 and 2010 only, and NT in 2008 – 2010 only.

2 Totals include diagnoses in people whose sex was reported as transgender, or was not reported.

3 Includes 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 2.1.14 Number and percentage of diagnoses[1] of newly acquired hepatitis C infection, 2006 – 2010, and the Australian population, by region/country of birth and year

	Year of diagnosis										
	2006		2007		2008		2009		2010		Australian
Region/Country of birth	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	population[2]
Total with a reported country of birth	**394**	**86.4**	**317**	**82.8**	**312**	**88.1**	**320**	**80.2**	**156**	**43.1**	**19 855 288**
Australia	361	79.2	285	74.4	280	79.1	282	70.7	134	37.0	70.9
Overseas born	33	7.2	32	8.4	32	9.0	38	9.5	22	6.1	22.2
Other Oceania	*5*	*1.1*	*4*	*1.0*	*3*	*0.8*	*8*	*2.0*	*5*	*1.4*	*2.5*
United Kingdom and Ireland	*5*	*1.1*	*6*	*1.6*	*10*	*2.8*	*5*	*1.3*	*7*	*1.9*	*5.5*
Other Europe	*6*	*1.3*	*6*	*1.6*	*2*	*0.6*	*4*	*1.0*	*4*	*1.1*	*5.0*
Middle East/North Africa	*2*	*0.4*	*3*	*0.8*	*2*	*0.6*	*4*	*1.0*	*1*	*0.3*	*1.3*
Sub-Saharan Africa	*1*	*0.2*	*2*	*0.5*	*1*	*0.3*	*0*	*0.0*	*1*	*0.3*	*1.0*
Asia	*12*	*2.6*	*10*	*2.6*	*13*	*3.7*	*13*	*3.3*	*2*	*0.6*	*6.1*
North America	*0*	*0.0*	*0*	*0.0*	*1*	*0.3*	*2*	*0.5*	*1*	*0.3*	*0.5*
South/Central America and the Caribbean	*2*	*0.4*	*1*	*0.3*	*0*	*0.0*	*2*	*0.5*	*1*	*0.3*	*0.4*
Not reported	62	13.6	66	17.2	42	11.9	79	19.8	206	56.9	6.9
Total	**456**	**100.0**	**383**	**100.0**	**354**	**100.0**	**399**	**100.0**	**362**	**100.0**	**100.00**

1 Includes diagnoses in SA, TAS, VIC and WA only in 2006 – 2010, diagnoses in NSW in 2006 – 2007and 2009 – 2010 only, diagnoses in NT in 2008 and 2010 only, and diagnoses in ACT in 2009 – 2010 only.

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

Source: State/Territory health authorities

Table 2.1.15 Number of diagnoses of hepatitis D infection, 2006 – 2010, by State/Territory and year

	Year of diagnosis				
State/Territory	**2006**	**2007**	**2008**	**2009**	**2010**
ACT	0	0	0	0	0
NSW	15	11	14	9	9
NT	0	0	1	0	0
QLD	7	9	7	13	20
SA	0	0	0	0	0
TAS	0	0	0	0	0
VIC	7	9	14	13	6
WA	1	4	6	0	0
Total	**30**	**33**	**42**	**35**	**35**

Source: National Notifiable Diseases Surveillance System

Table 2.1.16 Number of diagnoses of hepatitis D infection, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	**2006**			**2007**			**2008**			**2009**			**2010**		
(years)	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
0 – 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 – 14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
15 – 19	0	0	0	1	0	1	3	1	4	3	1	4	1	0	1
20 – 29	5	3	8	6	2	8	6	0	6	8	5	13	6	1	7
30 – 39	6	3	9	6	4	10	11	1	12	3	1	4	1	4	5
40 – 49	5	0	5	9	3	12	7	4	11	7	0	7	11	2	13
50 – 59	5	2	7	2	0	2	4	1	5	3	2	5	7	1	8
60 +	0	1	1	0	0	0	3	1	4	0	1	1	0	0	0
Not reported	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Total	**21**	**9**	**30**	**24**	**9**	**33**	**34**	**8**	**42**	**24**	**11**	**35**	**27**	**8**	**35**

Source: National Notifiable Diseases Surveillance System

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, 2010, 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	0 (0.0)	5 (100.0)	0 (0.0)	5
NSW	0 (0.0)	81 (97.6)	2 (2.4)	83
NT	0 (0.0)	3 (100.0)	0 (0.0)	3
QLD	0 (0.0)	34 (82.9)	7 (17.1)	41
SA	0 (0.0)	4 (100.0)	0 (0.0)	4
TAS	0 (0.0)	4 (100.0)	0 (0.0)	4
VIC	0 (0.0)	77 (84.6)	14 (15.4)	91
WA	0 (0.0)	32 (100.0)	0 (0.0)	32
Total	**0 (0.0)**	**240 (91.3)**	**23 (8.7)**	**263**

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number and rate[1] of diagnosis of hepatitis B infection, 2006 – 2010, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

State/	Aboriginal and Torres Strait	2006		2007		2008		2009		2010	
Territory	Islander status	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NT	Aboriginal and Torres Strait Islander	184	431	158	375	115	264	75	181	75	171
	Non-Indigenous[3]	58	35	89	53	85	56	81	50	85	53
SA	Aboriginal and Torres Strait Islander	41	227	34	154	26	165	19	89	23	127
	Non-Indigenous[3]	278	18	486	32	405	27	439	29	407	27
TAS	Aboriginal and Torres Strait Islander	1	4	1	6	0	0	2	12	1	10
	Non-Indigenous[3]	54	12	46	10	70	16	83	19	56	13
WA	Aboriginal and Torres Strait Islander	63	113	46	84	61	127	40	104	45	109
	Non-Indigenous[3]	575	28	621	31	600	30	705	34	763	38
Total	**Aboriginal and Torres Strait Islander**	**289**	**231**	**239**	**187**	**202**	**169**	**136**	**118**	**144**	**123**
	Non-Indigenous[3]	**965**	**23**	**1 242**	**30**	**1 160**	**28**	**1 308**	**31**	**1 311**	**31**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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 2.2.3 Number (percent) of diagnoses of hepatitis B infection, 2010, by State/Territory[1,2] 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	3	(3.1)	93	(96.9)	0	(0.0)	96
NSW	–		–		–		–
NT	75	(46.9)	62	(38.8)	23	(14.4)	160
QLD	–		–		760	(67.3)	1 129
SA	23	(5.3)	399	(92.8)	8	(1.9)	430
TAS	1	(1.8)	35	(61.4)	21	(36.8)	57
VIC	–		–		1 309	(66.8)	1 960
WA	45	(5.6)	690	(85.4)	73	(9.0)	808
Total	**217**	**(4.7)**	**2 229**	**(48.0)**	**2 194**	**(47.3)**	**4 640**

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

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.2.4 Number and rate[1] of diagnosis of newly acquired hepatitis B infection, 2006 – 2010, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

		Year of diagnosis									
State/	**Aboriginal and Torres Strait**	**2006**		**2007**		**2008**		**2009**		**2010**	
Territory	**Islander status**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
NSW	Aboriginal and Torres Strait Islander	6	4	1	1	5	3	4	3	2	1
	Non-Indigenous[3]	46	1	55	1	40	1	33	0	33	0
NT	Aboriginal and Torres Strait Islander	6	11	4	5	4	12	0	0	1	2
	Non-Indigenous[3]	5	3	6	3	4	3	4	2	2	1
QLD	Aboriginal and Torres Strait Islander	3	2	8	5	8	5	4	2	10	8
	Non-Indigenous[3]	48	1	60	1	37	1	45	1	49	1
SA	Aboriginal and Torres Strait Islander	2	5	1	3	0	0	0	0	0	0
	Non-Indigenous[3]	5	0	11	1	11	1	10	1	21	1
TAS	Aboriginal and Torres Strait Islander	1	4	1	6	0	0	2	12	0	0
	Non-Indigenous[3]	8	2	8	2	11	3	7	2	6	1
VIC	Aboriginal and Torres Strait Islander	3	11	1	3	1	3	3	10	4	13
	Non-Indigenous[3]	102	2	83	2	86	2	86	2	65	1
WA	Aboriginal and Torres Strait Islander	6	10	3	4	2	4	0	0	2	2
	Non-Indigenous[3]	44	2	39	2	46	2	38	2	31	2
Total	**Aboriginal and Torres Strait Islander**	**27**	**5**	**19**	**3**	**20**	**5**	**13**	**3**	**19**	**4**
	Non-Indigenous[3]	**258**	**1**	**262**	**1**	**235**	**1**	**223**	**1**	**207**	**1**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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 2.2.5 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2010, 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	0 (0.0)	3 (100.0)	0 (0.0)	3
NSW	2 (5.7)	27 (77.1)	6 (17.1)	35
NT	1 (33.3)	1 (33.3)	1 (33.3)	3
QLD	10 (16.9)	24 (40.7)	25 (42.4)	59
SA	0 (0.0)	21 (100.0)	0 (0.0)	21
TAS	0 (0.0)	3 (50.0)	3 (50.0)	6
VIC	4 (5.8)	55 (79.7)	10 (14.5)	69
WA	2 (6.1)	30 (90.9)	1 (3.0)	33
Total	**19 (8.3)**	**164 (71.6)**	**46 (20.1)**	**229**

Source: National Notifiable Diseases Surveillance System

Table 2.2.6 Number and rate[1] of diagnosis of hepatitis C infection, 2006 – 2010, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

		Year of diagnosis									
State/	**Aboriginal and Torres Strait**	**2006**		**2007**		**2008**		**2009**		**2010**	
Territory	**Islander status**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
NT	Aboriginal and Torres Strait Islander	34	58	27	53	26	48	27	49	25	46
	Non-Indigenous[3]	232	137	197	120	186	111	139	84	147	92
SA	Aboriginal and Torres Strait Islander	56	206	63	244	48	172	47	182	69	270
	Non-Indigenous[3]	517	34	563	37	536	35	506	33	462	30
TAS	Aboriginal and Torres Strait Islander	8	47	8	49	21	127	10	72	14	82
	Non-Indigenous[3]	261	59	266	59	327	73	272	61	249	55
WA	Aboriginal and Torres Strait Islander	118	163	131	183	129	185	137	186	134	196
	Non-Indigenous[3]	990	49	1 120	55	1 199	59	1 007	49	940	46
Total	**Aboriginal and Torres Strait Islander**	**216**	**120**	**229**	**131**	**224**	**127**	**221**	**124**	**242**	**141**
	Non-Indigenous[3]	**2 000**	**48**	**2 146**	**51**	**2 248**	**54**	**1 924**	**46**	**1 798**	**43**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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 2.2.7 Number (percent) of diagnoses of hepatitis C infection, 2010, by State/Territory[1,2] 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	–	–	168 (75.3)	223
NSW	–	–	–	–
NT	25 (14.5)	131 (76.2)	16 (9.3)	172
QLD	–	–	1 664 (60.7)	2 742
SA	69 (13.0)	432 (81.4)	30 (5.6)	531
TAS	14 (5.3)	172 (65.4)	77 (29.3)	263
VIC	–	–	1 835 (70.5)	2 603
WA	134 (12.5)	877 (81.7)	63 (5.9)	1 074
Total	**458 (6.0)**	**3 297 (43.3)**	**3 853 (50.6)**	**7 608**

1 Data are not shown for State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for less than 50% of diagnoses in 2010.

2 New diagnoses in NSW in 2010 are not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.2.8 Number (percent) of diagnoses of hepatitis D infection, 2010, 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	0	0	0	0
NSW	0 (0.0)	5 (55.6)	4 (44.4)	9
NT	0	0	0	0
QLD	–	–	12 (60.0)	20
SA	0	0	0	0
TAS	0	0	0	0
VIC	0 (0.0)	4 (66.7)	2 (33.3)	6
WA	0	0	0	0
Total	**0 (0.0)**	**17 (48.6)**	**18 (51.4)**	**35**

1 Data are not shown for State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for less than 50% of diagnoses in 2010.

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 – 2010, by year and primary cause of liver disease, and hepatitis status for cases where the primary diagnosis was hepatocellular carcinoma

	Year											
Diagnosis	**1985 – 2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
Hepatitis B	93 (7.7)	9 (9.7)	7 (5.8)	6 (5.4)	8 (5.4)	8 (6.1)	3 (2.3)	3 (2.5)	3 (2.3)	7 (4.8)	6 (3.1)	153
Hepatitis C	174 (14.4)	16 (17.2)	30 (24.8)	30 (26.8)	43 (29.3)	45 (34.1)	31 (23.8)	30 (25.2)	43 (23.8)	41 (28.1)	48 (25.0)	531
Hepatitis B/C/D	8 (0.7)	1 (1.1)	3 (2.5)	3 (2.7)	0 (0.0)	2 (1.5)	2 (1.5)	2 (1.7)	5 (1.5)	1 (0.7)	3 (1.6)	30
Hepatocellular carcinoma	33 (2.7)	5 (5.4)	6 (4.9)	6 (5.4)	11 (7.5)	10 (7.6)	10 (7.7)	19 (16.0)	21 (7.7)	24 (16.4)	26 (13.5)	171
Hepatitis B	*11 (0.9)*	*3 (3.2)*	*1 (0.8)*	*1 (0.9)*	*2 (1.4)*	*4 (3.0)*	*3 (2.3)*	*6 (5.0)*	*6 (2.3)*	*5 (3.4)*	*5 (2.6)*	*47*
Hepatitis C	*11 (0.9)*	*2 (2.2)*	*5 (4.1)*	*4 (3.6)*	*6 (4.1)*	*3 (2.3)*	*5 (3.8)*	*11 (9.2)*	*9 (3.8)*	*8 (5.5)*	*13 (6.8)*	*77*
Hepatitis B/C/D	*1 (0.1)*	*0 (0.0)*	*0 (0.0)*	*0 (0.0)*	*1 (0.7)*	*0 (0.0)*	*0 (0.0)*	*0 (0.0)*	*1 (0.0)*	*0 (0.0)*	*0 (0.0)*	*3*
Hepatitis negative	*10 (0.8)*	*0 (0.0)*	*0 (0.0)*	*1 (0.9)*	*2 (1.4)*	*3 (2.3)*	*2 (1.5)*	*2 (1.7)*	*5 (1.5)*	*11 (7.5)*	*8 (4.2)*	*44*
Other[1]	903 (74.5)	62 (66.7)	75 (62.0)	67 (59.8)	85 (57.8)	67 (50.8)	84 (64.6)	65 (54.6)	83 (64.6)	73 (50.0)	109 (56.8)	1 673
Total	**1 211 (100.0)**	**93 (100.0)**	**121 (100.0)**	**112 (100.0)**	**147 (100.0)**	**132 (100.0)**	**130 (100.0)**	**119 (100.0)**	**155 (100.0)**	**146 (100.0)**	**192 (100.0)**	**2 558**

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

2 Data available to 31 December 2010.

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 diagnosis of chlamydia, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	822	207.5	905	223.8	987	243.5	941	228.9	1 157	276.6
NSW	12 015	173.4	12 431	176.3	13 988	193.9	14 952	202.8	18 278	244.7
NT	2 057	845.5	2 178	871.5	2 289	888.5	2 116	798.5	2 662	989.2
QLD	12 241	289.0	12 971	297.3	15 188	337.4	16 695	358.4	19 216	405.4
SA	3 129	202.3	3 462	220.6	3 656	229.7	3 757	231.8	4 330	264.3
TAS	1 048	225.2	1 129	242.1	1 480	313.5	1 462	307.6	2 008	418.4
VIC	9 973	186.9	11 149	204.0	12 201	217.1	13 872	238.9	16 474	279.3
WA	6 149	285.4	7 746	349.1	8 646	375.6	8 837	368.8	10 180	417.1
Total	**47 434**	**222.8**	**51 971**	**238.8**	**58 435**	**261.6**	**62 632**	**272.5**	**74 305**	**318.6**

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 3.1.2 Number of diagnoses of chlamydia, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	26	20	48	22	23	52	21	25	51	18	18	43	44	57	116
5 – 14	64	396	461	70	439	509	50	498	549	67	489	557	87	599	687
15 – 19	2 589	8 739	11 351	2 984	9 716	12 724	3 701	11 228	14 961	4 072	12 077	16 171	5 302	14 612	19 965
20 – 29	10 808	15 200	26 064	11 975	16 713	28 742	13 289	18 464	31 798	14 648	19 641	34 334	17 386	22 479	39 970
30 – 39	3 615	2 914	6 548	3 673	3 139	6 827	3 993	3 403	7 406	4 178	3 535	7 720	4 874	3 991	8 888
40 – 49	1 383	683	2 071	1 409	750	2 169	1 735	861	2 604	1 780	857	2 639	2 162	1 065	3 234
50 – 59	548	156	705	541	189	731	594	218	814	649	233	883	839	250	1 090
60 +	149	35	184	182	32	215	207	42	249	218	48	267	297	46	344
Not reported	1	1	2	1	1	2	2	0	3	5	5	18	4	7	11
Total	**19 183**	**28 144**	**47 434**	**20 857**	**31 002**	**51 971**	**23 592**	**34 739**	**58 435**	**25 635**	**36 903**	**62 632**	**30 995**	**43 106**	**74 305**

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, 2006 – 2010, by State/Territory[1] and year

	Year of diagnosis				
State/ Territory	2006	2007	2008	2009	2010
NT	2	1	1	0	0
QLD	4	2	1	1	1
WA	0	0	0	0	0
Total	**6**	**3**	**2**	**1**	**1**

1 State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 – 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 – 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 – 29	1	1	2	0	1	1	1	0	1	0	0	0	0	0	0
30 – 39	2	1	3	0	0	0	0	0	0	0	0	0	1	0	1
40 – 49	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
50 +	1	0	1	1	0	1	1	0	1	1	0	1	0	0	0
Total	**4**	**2**	**6**	**2**	**1**	**3**	**2**	**0**	**2**	**1**	**0**	**1**	**1**	**0**	**1**

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate[1] of diagnosis of gonorrhoea, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/ Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	33	8.3	45	11.7	21	5.5	55	13.3	56	13.8
NSW	1 738	25.1	1 385	19.8	1 332	18.6	1 658	22.7	2 322	31.3
NT	1 776	732.6	1 600	643.2	1 550	609.4	1 503	569.5	1 932	727.6
QLD	1 567	37.3	1 369	31.7	1 633	36.6	1 558	33.7	2 072	44.2
SA	499	32.4	460	29.6	491	31.3	372	23.4	468	28.7
TAS	18	3.8	38	8.3	25	5.4	21	4.6	21	4.4
VIC	1 298	24.5	990	18.3	929	16.8	1 487	26.1	1 748	30.1
WA	1 674	78.2	1 761	80.1	1 693	74.7	1 339	56.7	1 396	58.3
Total	**8 603**	**40.7**	**7 648**	**35.5**	**7 674**	**34.8**	**7 993**	**35.2**	**10 015**	**43.5**

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.6 Number of diagnoses of gonorrhoea, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
0 – 4	2	10	12	3	7	11	1	3	4	6	5	15	9	9	18
5 – 14	24	140	164	48	138	186	29	152	181	26	100	127	31	139	171
15 – 19	692	826	1 518	749	796	1 545	745	841	1 587	749	783	1 538	883	972	1 856
20 – 29	2 426	1 107	3 538	1 980	1 105	3 086	2 054	1 045	3 104	2 313	1 171	3 488	2 947	1 365	4 324
30 – 39	1 573	453	2 028	1 242	396	1 643	1 178	415	1 595	1 248	379	1 630	1 568	432	2 002
40 – 49	783	143	930	674	119	794	638	149	788	637	118	755	929	142	1 074
50 – 59	290	31	321	265	28	293	265	46	311	282	43	325	367	46	413
60 +	81	11	92	82	7	89	82	18	101	99	14	113	138	18	156
Not reported	0	0	0	1	0	1	1	2	3	1	1	2	1	0	1
Total	**5 871**	**2 721**	**8 603**	**5 044**	**2 596**	**7 648**	**4 993**	**2 671**	**7 674**	**5 361**	**2 614**	**7 993**	**6 873**	**3 123**	**10 015**

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 diagnosis of infectious syphilis, 2006 – 2010, by State/Territory and year

	Year of diagnosis									
	2006		2007		2008		2009		2010	
State/ Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	2	0.5	9	2.3	4	1.0	11	2.8	14	3.8
NSW	230	3.3	458	6.6	429	6.1	532	7.5	416	5.8
NT	150	62.4	119	48.4	83	34.2	38	15.2	43	16.9
QLD	176	4.3	243	5.7	196	4.5	196	4.4	221	4.8
SA	47	3.1	47	3.0	49	3.1	37	2.3	20	1.2
TAS	5	1.1	8	1.5	8	1.6	10	2.2	7	1.5
VIC	230	4.4	429	8.1	381	7.0	382	6.8	291	5.1
WA	50	2.4	105	4.9	175	7.8	88	3.8	86	3.6
Total	**890**	**4.2**	**1 418**	**6.7**	**1 325**	**6.1**	**1 294**	**5.8**	**1 098**	**4.9**

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.8 Number of diagnoses of infectious syphilis, 2006 – 2010, by age group, year and sex

	Year of diagnosis														
Age group	2006			2007			2008			2009			2010		
(years)	M	F	T	M	F	T[1]	M	F	T[1]	M	F	T	M	F	T[1]
0 – 4	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
5 – 14	2	13	15	3	4	7	1	9	10	0	3	3	0	0	0
15 – 19	36	55	91	34	29	63	42	35	77	30	14	44	32	11	43
20 – 29	154	61	215	248	53	301	276	52	328	288	46	334	256	40	296
30 – 39	226	30	257	406	35	441	369	29	398	330	32	362	279	30	311
40 – 49	192	16	208	355	20	375	331	10	342	356	9	365	261	19	280
50 – 59	68	8	76	153	8	161	114	11	125	132	7	139	110	8	118
60 +	24	2	26	64	4	68	42	3	45	45	2	47	49	1	50
Not reported	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Total	**704**	**185**	**890**	**1 263**	**153**	**1 418**	**1 175**	**149**	**1 325**	**1 181**	**113**	**1 294**	**987**	**109**	**1 098**

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 – 2010, by sexual exposure, history of sex work, place of diagnosis, year and sex

	Year of diagnosis											
	2007			2008			2009			2010		
Characteristic	**Male**	**Female**	**Total[1]**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total[1]**
Sexual exposure												
Heterosexual contact	75	56	131	84	73	157	39	13	52	41	32	73
Men who have sex with men	583	–	583	470	–	470	179	–	179	179	–	179
Other/undetermined[2]	521	49	572	568	40	609	819	49	868	635	46	683
Not reported[2]	85	48	132	54	36	89	144	51	195	133	31	163
Sex work in the past 12 months												
Current sex work	10	9	19	8	5	13	7	2	9	2	1	3
No sex work	117	11	128	167	41	208	37	3	40	36	5	41
Undetermined[2]	1 052	85	1 139	947	67	1 015	993	57	1 050	817	72	891
Not reported[2]	85	48	132	54	36	89	144	51	195	133	31	163
Place of diagnosis												
Public hospital	22	7	29	37	17	54	23	9	32	51	14	65
Sexual health clinic	93	4	97	90	5	95	46	4	50	144	15	159
Family planning clinic	1	0	1	0	0	0	0	0	0	1	0	1
General practice	30	4	34	60	3	63	31	2	33	147	4	151
Other	50	23	73	46	30	76	29	1	30	55	2	57
Undetermined[2]	983	67	1 052	889	58	948	908	46	954	457	43	502
Not reported[2]	85	48	132	54	36	89	144	51	195	133	31	163
Total	**1 264**	**153**	**1 419**	**1 176**	**149**	**1 326**	**1 181**	**113**	**1 294**	**988**	**109**	**1 099**

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

2 A characteristic was recorded as "undetermined" when the information was sought in the State/Territory health jurisdiction but not reported, 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, 2006 – 2010, by State/Territory[2], Aboriginal and Torres Strait Islander status and year

		Year of diagnosis									
State/ Territory	Aboriginal and Torres Strait Islander status	2006		2007		2008		2009		2010	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
NT	Aboriginal and Torres Strait Islander	1 262	1 582	1 320	1 614	1 397	1 705	1 273	1 553	1 474	1 818
	Non-Indigenous[3]	795	498	858	532	892	553	843	528	1 188	743
SA	Aboriginal and Torres Strait Islander	310	890	271	720	220	630	190	527	286	808
	Non-Indigenous[3]	2 819	186	3 191	211	3 436	227	3 567	236	4 044	268
TAS	Aboriginal and Torres Strait Islander	22	92	22	82	24	85	30	106	34	135
	Non-Indigenous[3]	1 026	233	1 107	251	1 456	329	1 432	324	1 974	446
VIC	Aboriginal and Torres Strait Islander	45	100	52	116	74	174	65	154	111	256
	Non-Indigenous[3]	9 928	187	11 097	210	12 127	229	13 807	261	16 363	310
WA	Aboriginal and Torres Strait Islander	1 202	1 270	1 174	1 263	1 297	1 413	1 229	1 290	1 570	1 669
	Non-Indigenous[3]	4 947	239	6 572	318	7 349	356	7 608	368	8 610	417
Total	**Aboriginal and Torres Strait Islander**	**2 841**	**1 039**	**2 839**	**1 027**	**3 012**	**1 099**	**2 787**	**999**	**3 475**	**1 257**
	Non-Indigenous[3]	**19 515**	**206**	**22 825**	**241**	**25 260**	**267**	**27 257**	**288**	**32 179**	**340**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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], 2006 – 2010, by age group, Aboriginal and Torres Strait Islander status and year

		Year of diagnosis				
Age group (years)	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
0 – 4	Aboriginal and Torres Strait Islander	3	1	5	3	5
	Non-Indigenous[2]	26	35	44	29	61
5 – 14	Aboriginal and Torres Strait Islander	134	137	140	112	168
	Non-Indigenous[2]	90	111	118	152	197
15 – 19	Aboriginal and Torres Strait Islander	1 027	1 081	1 125	1 059	1 297
	Non-Indigenous[2]	4 224	4 992	5 930	6 300	7 904
20 – 29	Aboriginal and Torres Strait Islander	1 179	1 151	1 232	1 219	1 468
	Non-Indigenous[2]	11 203	13 250	14 356	15 756	17 996
30 – 39	Aboriginal and Torres Strait Islander	369	363	359	298	401
	Non-Indigenous[2]	2 745	3 026	3 193	3 341	3 883
40 – 49	Aboriginal and Torres Strait Islander	96	75	118	73	99
	Non-Indigenous[2]	868	985	1 154	1 152	1 459
50 – 59	Aboriginal and Torres Strait Islander	27	24	25	19	28
	Non-Indigenous[2]	282	332	351	409	524
60 +	Aboriginal and Torres Strait Islander	6	7	8	4	9
	Non-Indigenous[2]	77	94	114	118	155
Total[3]	**Aboriginal and Torres Strait Islander**	**2 841**	**2 839**	**3 012**	**2 787**	**3 475**
	Non-Indigenous[2]	**19 515**	**22 825**	**25 260**	**27 257**	**32 179**

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], 2010, 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	0	29	440	603	191	44	15	2	1 324
Torres Strait Islander	Female	5	139	856	864	210	55	13	7	2 149
	Total[3]	**5**	**168**	**1 297**	**1 468**	**401**	**99**	**28**	**9**	**3 475**
Non-Indigenous[2]	Male	24	20	1 997	7 915	2 178	973	392	138	13 637
	Female	31	177	5 883	10 024	1 694	484	131	17	18 441
	Total[3]	**61**	**197**	**7 904**	**17 996**	**3 883**	**1 459**	**524**	**155**	**32 179**
Total[3]	Male	24	49	2 437	8 518	2 369	1 017	407	140	14 961
	Female	36	316	6 739	10 888	1 904	539	144	24	20 590
	Total[3]	**66**	**365**	**9 201**	**19 464**	**4 284**	**1 558**	**552**	**164**	**35 654**

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, 2010, 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	–		–		1 136 (98.2)	1 157
NSW	–		–		17 537 (95.9)	18 278
NT	1 474	(55.4)	984	(37.0)	204 (7.7)	2 662
QLD	3 045	(15.8)	7 569	(39.4)	8 602 (44.8)	19 216
SA	286	(6.6)	3 635	(83.9)	409 (9.4)	4 330
TAS	34	(1.7)	1 440	(71.7)	534 (26.6)	2 008
VIC	111	(0.7)	9 172	(55.7)	7 191 (43.7)	16 474
WA	1 570	(15.4)	7 365	(72.3)	1 245 (12.2)	10 180
Total	**6 681**	**(9.0)**	**30 766**	**(41.4)**	**36 858 (49.6)**	**74 305**

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, 2006 – 2010, by area of residence, Aboriginal and Torres Strait Islander status and year

		Year of diagnosis				
Area of residence	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
Major cities	Aboriginal and Torres Strait Islander	801	787	847	820	1 199
	Non-Indigenous[2]	221	258	282	307	356
Inner regional	Aboriginal and Torres Strait Islander	210	210	292	337	446
	Non-Indigenous[2]	181	212	251	286	354
Outer regional	Aboriginal and Torres Strait Islander	859	883	929	956	1 132
	Non-Indigenous[2]	207	254	274	278	346
Remote	Aboriginal and Torres Strait Islander	2 987	2 519	2 843	2 493	3 490
	Non-Indigenous[2]	296	350	369	351	399
Very remote	Aboriginal and Torres Strait Islander	2 797	2 983	3 049	2 747	3 071
	Non-Indigenous[2]	336	355	403	308	442
Total	**Aboriginal and Torres Strait Islander**	**1 537**	**1 536**	**1 630**	**1 508**	**1 880**
	Non-Indigenous[2]	**220**	**257**	**284**	**307**	**362**

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, 2006 – 2010, by State/Territory[2], Aboriginal and Torres Strait Islander status and year

		Year of diagnosis									
State/	**Aboriginal and Torres Strait**	**2006**		**2007**		**2008**		**2009**		**2010**	
Territory	**Islander status**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
NT	Aboriginal and Torres Strait Islander	1 547	1 979	1 413	1 743	1 382	1 726	1 374	1 694	1 768	2 197
	Non-Indigenous[3]	229	139	187	117	168	104	129	80	164	104
QLD	Aboriginal and Torres Strait Islander	623	333	540	288	660	366	501	268	716	379
	Non-Indigenous[3]	944	23	829	21	973	24	1 057	26	1 356	34
SA	Aboriginal and Torres Strait Islander	360	1 066	243	719	141	412	164	489	234	701
	Non-Indigenous[3]	139	9	217	14	350	23	208	14	234	15
TAS	Aboriginal and Torres Strait Islander	0	0	3	18	0	0	0	0	1	4
	Non-Indigenous[3]	18	4	35	8	25	6	21	5	20	4
VIC	Aboriginal and Torres Strait Islander	6	15	4	10	10	22	10	26	14	42
	Non-Indigenous[3]	1 292	25	986	19	919	17	1 477	28	1 734	33
WA	Aboriginal and Torres Strait Islander	1 312	1 526	1 330	1 521	1 224	1 425	915	1 022	840	937
	Non-Indigenous[3]	362	18	431	21	469	23	424	21	556	27
Total	**Aboriginal and Torres Strait Islander**	**3 848**	**889**	**3 533**	**799**	**3 417**	**781**	**2 964**	**665**	**3 573**	**804**
	Non-Indigenous[3]	**2 984**	**22**	**2 685**	**20**	**2 904**	**22**	**3 316**	**25**	**4 064**	**30**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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], 2006 – 2010, by age group, Aboriginal and Torres Strait Islander status and year

		Year of diagnosis				
Age group (years)	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
0 – 4	Aboriginal and Torres Strait Islander	8	7	3	4	1
	Non-Indigenous[2]	2	4	1	8	8
5 – 14	Aboriginal and Torres Strait Islander	148	162	170	109	141
	Non-Indigenous[2]	13	20	10	16	25
15 – 19	Aboriginal and Torres Strait Islander	1 118	1 131	1 131	974	1 183
	Non-Indigenous[2]	283	313	362	431	512
20 – 29	Aboriginal and Torres Strait Islander	1 688	1 458	1 372	1 301	1 543
	Non-Indigenous[2]	1 157	1 107	1 189	1 460	1 752
30 – 39	Aboriginal and Torres Strait Islander	656	584	517	450	540
	Non-Indigenous[2]	815	632	688	741	861
40 – 49	Aboriginal and Torres Strait Islander	182	159	169	103	136
	Non-Indigenous[2]	470	382	417	386	562
50 – 59	Aboriginal and Torres Strait Islander	36	27	43	17	23
	Non-Indigenous[2]	185	172	181	202	236
60 +	Aboriginal and Torres Strait Islander	12	5	12	6	6
	Non-Indigenous[2]	59	54	54	70	107
Total[3]	**Aboriginal and Torres Strait Islander**	**3 848**	**3 533**	**3 417**	**2 964**	**3 573**
	Non-Indigenous[2]	**2 984**	**2 685**	**2 904**	**3 316**	**4 064**

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], 2010, 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	0	25	491	769	300	81	16	3	1 685
Torres Strait Islander	Female	1	116	692	774	240	55	7	3	1 888
	Total	**1**	**141**	**1 183**	**1 543**	**540**	**136**	**23**	**6**	**3 573**
Non-Indigenous[2]	Male	3	5	292	1 357	731	495	209	95	3 188
	Female	5	19	219	387	130	65	27	12	864
	Total	**8**	**25**	**512**	**1 752**	**861**	**562**	**236**	**107**	**4 064**
Total[3]	Male	3	30	783	2 126	1 031	576	225	98	4 873
	Female	6	135	911	1 161	370	120	34	15	2 752
	Total	**9**	**166**	**1 695**	**3 295**	**1 401**	**698**	**259**	**113**	**7 637**

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, 2010, 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	0	(0.0)	56	(100.0)	0	(0.0)	56
NSW	–		–		1 968	(84.8)	2 322
NT	1 768	(91.5)	130	(6.7)	34	(1.8)	1 932
QLD	716	(34.6)	476	(23.0)	880	(42.5)	2 072
SA	234	(50.0)	212	(45.3)	22	(4.7)	468
TAS	1	(4.8)	13	(61.9)	7	(33.3)	21
VIC	14	(0.8)	1 143	(65.4)	591	(33.8)	1 748
WA	840	(60.2)	552	(39.5)	4	(0.3)	1 396
Total	**3 604**	**(36.0)**	**2 905**	**(29.0)**	**3 506**	**(35.0)**	**10 015**

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, 2006 – 2010, by area of residence, Aboriginal and Torres Strait Islander status and year

		Year of diagnosis				
Area of residence	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
Major cities	Aboriginal and Torres Strait Islander	236	236	184	129	150
	Non-Indigenous[2]	24	22	25	30	36
Inner regional	Aboriginal and Torres Strait Islander	74	38	43	57	83
	Non-Indigenous[2]	7	6	7	10	10
Outer regional	Aboriginal and Torres Strait Islander	798	728	846	644	876
	Non-Indigenous[2]	28	23	26	23	28
Remote	Aboriginal and Torres Strait Islander	2 718	2 252	2 312	1 984	2 563
	Non-Indigenous[2]	32	46	33	34	41
Very remote	Aboriginal and Torres Strait Islander	3 114	2 990	2 716	2 493	2 801
	Non-Indigenous[2]	99	82	69	53	100
Total	**Aboriginal and Torres Strait Islander**	**1 232**	**1 131**	**1 094**	**949**	**1 144**
	Non-Indigenous[2]	**24**	**21**	**23**	**26**	**32**

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, 2006 – 2010, by year, State/Territory[2] and Aboriginal and Torres Strait Islander status

State/ Territory	Aboriginal and Torres Strait Islander status	Year of diagnosis 2006 Number	2006 Rate	2007 Number	2007 Rate	2008 Number	2008 Rate	2009 Number	2009 Rate	2010 Number	2010 Rate
NSW	Aboriginal and Torres Strait Islander	9	6	7	5	7	5	11	8	9	6
	Non-Indigenous[3]	221	3	451	7	422	6	521	8	407	6
NT	Aboriginal and Torres Strait Islander	145	179	106	140	66	108	37	69	40	70
	Non-Indigenous[3]	5	3	13	8	17	10	1	1	3	2
QLD	Aboriginal and Torres Strait Islander	35	25	33	22	28	16	39	25	58	35
	Non-Indigenous[3]	141	4	210	5	168	4	157	4	163	4
SA	Aboriginal and Torres Strait Islander	15	50	12	34	5	20	2	6	3	10
	Non-Indigenous[3]	32	2	35	2	44	3	35	2	17	1
TAS	Aboriginal and Torres Strait Islander	0	0	0	0	0	0	0	0	0	0
	Non-Indigenous[3]	5	1	8	2	8	2	10	2	7	2
VIC	Aboriginal and Torres Strait Islander	9	27	6	18	3	11	1	3	1	4
	Non-Indigenous[3]	221	4	423	8	378	7	381	7	290	6
WA	Aboriginal and Torres Strait Islander	21	22	28	35	76	84	34	40	19	25
	Non-Indigenous[3]	29	1	77	4	99	5	54	3	67	3
Total	**Aboriginal and Torres Strait Islander**	**234**	**40**	**192**	**34**	**185**	**33**	**124**	**24**	**130**	**25**
	Non-Indigenous[3]	**654**	**3**	**1 217**	**6**	**1 136**	**6**	**1 159**	**6**	**954**	**5**

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, 2006* (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], 2006 – 2010, by age group, Aboriginal and Torres Strait Islander status and year

		Year of diagnosis				
Age group (years)	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
0 – 4	Aboriginal and Torres Strait Islander	0	0	0	0	0
	Non-Indigenous[2]	2	2	0	0	0
5 – 14	Aboriginal and Torres Strait Islander	12	6	10	2	0
	Non-Indigenous[2]	3	1	0	0	0
15 – 19	Aboriginal and Torres Strait Islander	69	49	53	21	22
	Non-Indigenous[2]	21	14	24	23	20
20 – 29	Aboriginal and Torres Strait Islander	86	75	59	44	49
	Non-Indigenous[2]	129	222	267	286	244
30 – 39	Aboriginal and Torres Strait Islander	39	38	30	34	33
	Non-Indigenous[2]	217	400	368	326	277
40 – 49	Aboriginal and Torres Strait Islander	21	17	24	14	18
	Non-Indigenous[2]	187	357	317	350	258
50 – 59	Aboriginal and Torres Strait Islander	7	6	8	9	8
	Non-Indigenous[2]	69	154	116	128	106
60 +	Aboriginal and Torres Strait Islander	0	1	1	0	0
	Non-Indigenous[2]	26	67	44	46	49
Total[3]	**Aboriginal and Torres Strait Islander**	**234**	**192**	**185**	**124**	**130**
	Non-Indigenous[2]	**654**	**1 217**	**1 136**	**1 159**	**954**

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], 2010, 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	Male	0	0	12	32	20	12	3	0	79
Torres Strait Islander	Female	0	0	10	17	13	6	5	0	51
	Total	0	0	22	49	33	18	8	0	130
Non-Indigenous[2]	Male	0	0	19	221	258	246	103	48	895
	Female	0	0	1	23	17	12	3	1	57
	Total[3]	0	0	20	244	277	258	106	49	954
Total	Male	0	0	31	253	278	258	106	48	974
	Female	0	0	11	40	30	18	8	1	108
	Total[3]	**0**	**0**	**42**	**293**	**310**	**276**	**114**	**49**	**1 084**

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.

Source: National Notifiable Diseases Surveillance System

Table 3.2.14 Number (percent) of diagnoses of infectious syphilis, 2010, 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	0	(0.0)	14	(100.0)	0	(0.0)	14
NSW	9	(2.2)	369	(88.7)	38	(9.1)	416
NT	40	(93.0)	3	(7.0)	0	(0.0)	43
QLD	58	(26.2)	159	(71.9)	4	(1.8)	221
SA	3	(15.0)	17	(85.0)	0	(0.0)	20
TAS	0	(0.0)	5	(71.4)	2	(28.6)	7
VIC	1	(0.3)	277	(95.2)	13	(4.5)	291
WA	19	(22.1)	67	(77.9)	0	(0.0)	86
Total	**130**	**(11.8)**	**911**	**(83.0)**	**57**	**(5.2)**	**1 098**

Source: National Notifiable Diseases Surveillance System

Table 3.2.15 Rate[1] of diagnosis of infectious syphilis, 2006 – 2010, by year, Aboriginal and Torres Strait Islander status and area of residence

		Year of diagnosis				
Area of residence	**Aboriginal and Torres Strait Islander status**	**2006**	**2007**	**2008**	**2009**	**2010**
Major cities	Aboriginal and Torres Strait Islander	14	15	10	10	6
	Non-Indigenous[2]	4	8	7	8	6
Inner regional	Aboriginal and Torres Strait Islander	7	8	8	4	2
	Non-Indigenous[2]	1	2	1	2	1
Outer regional	Aboriginal and Torres Strait Islander	22	19	20	29	39
	Non-Indigenous[2]	1	1	3	2	3
Remote	Aboriginal and Torres Strait Islander	152	71	101	58	76
	Non-Indigenous[2]	2	0	1	0	2
Very remote	Aboriginal and Torres Strait Islander	180	167	148	77	73
	Non-Indigenous[2]	4	0	6	8	7
Total	**Aboriginal and Torres Strait Islander**	**52**	**43**	**41**	**27**	**29**
	Non-Indigenous[2]	**3**	**6**	**6**	**6**	**5**

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 2010 by State/Territory, sex and site and antibiotic sensitivity

	State/Territory						
Sex and Site	**NSW**	**NT**	**QLD**	**SA**	**VIC**	**WA**	**Total[1]**
Male							
Urethra	644	297	463	93	468	218	2 200
Rectal	328	3	80	26	193	37	674
Pharynx	184	0	37	20	137	23	407
Other/not specified	39	12	14	11	13	7	100
Total	**1 195**	**312**	**594**	**150**	**811**	**285**	**3 381**
Female							
Cervix	113	127	228	24	83	62	642
Other/not specified	20	9	18	4	19	5	77
Total	**133**	**136**	**246**	**28**	**102**	**67**	**719**
Antibiotic Sensitivity (%)							
PPNG	13.6	1.5	10.2	12.2	13.1	14.9	11.6
CMRP	17.3	2.2	12.3	22.0	29	16.8	17.5
LS	67.4	96.1	76.2	65.9	57.8	67.4	69.9
FS	1.7	0.2	1.3	0.0	0.1	0.9	1.1
Total[1]	**1 328**	**448**	**840**	**178**	**913**	**352**	**4 100**

1 Total includes gonococcal isolates from ACT (30) and TAS (11).

PPNG penicillinase producing *N. gonorrhoeae*, **CMRP** chromosomally mediated resistant to penicillin, **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, 2006 – 2010, by sex, site and year

	Year of diagnosis				
Sex and Site	**2006**	**2007**	**2008**	**2009**	**2010**
Males					
Urethra	698	572	457	523	644
Rectal	255	178	181	193	328
Pharynx	149	106	99	101	184
Other/not specified	8	17	3	8	39
Total	**1 110**	**873**	**740**	**825**	**1 195**
Females					
Cervix	79	82	102	100	113
Rectal	3	2	1	4	2
Pharynx	2	14	11	15	11
Other/not specified	4	2	3	5	7
Total	**88**	**100**	**117**	**124**	**133**
Total	**1 198**	**973**	**857**	**949**	**1 328**

Source: Australian Gonococcal Surveillance Programme

Tables

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

4.1 HIV seroprevalence among people seen at sexual health clinics

4.2 HIV and hepatitis C seroprevalence among people who inject drugs

4.3 Incidence of hepatitis C infection among people who inject drugs

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

4.5 Chlamydia positivity among people seen through the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS)

4.6 Genital Warts Surveillance Network

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

4.1 HIV seroprevalence among people seen at sexual health clinics

Table 4.1.1 Number of people seen at selected metropolitan sexual health clinics in Australia, 2006 – 2010, 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						
Men		Sydney Sexual Health Centre, NSW	RPA Sexual Health Clinic, NSW[1]	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Service, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC	Total
2006	Seen	4 509	–	3 043	1 539	4 026	5 902	20 121
	Tested	2 587	–	1 196	566	3 266	3 207	11 175
	Newly diagnosed (%)	22 (0.9)	–	5 (0.4)	10 (1.8)	10 (0.3)	32 (1.0)	82 (0.7)
	Previously negative (%)	16 (0.9)	–	5 (0.6)	4 (2.5)	10 (0.5)	29 (1.2)	64 (0.9)
2007	Seen	4 735	–	3 413	1 682	4 084	6 596	21 431
	Tested	2 458	–	2 124	750	3 350	3 842	12 987
	Newly diagnosed (%)	24 (1.0)	–	8 (0.4)	9 (1.2)	7 (0.2)	40 (1.0)	89 (0.7)
	Previously negative (%)	21 (1.1)	–	6 (0.7)	1 (0.5)	6 (0.3)	30 (1.1)	64 (0.8)
2008	Seen	4 615	–	3 795	1 799	4 086	8 335	22 630
	Tested	2 297	–	1 582	767	3 420	3 738	11 804
	Newly diagnosed (%)	25 (1.1)	–	7 (0.4)	7 (0.9)	9 (0.3)	47 (1.3)	95 (0.8)
	Previously negative (%)	20 (1.1)	–	5 (0.5)	0 (0.0)	7 (0.3)	42 (1.7)	74 (1.0)
2009	Seen	4 925	–	4 058	1 750	4 138	9 162	24 033
	Tested	2 551	–	1 469	537	3 546	5 546	13 649
	Newly diagnosed (%)	36 (1.4)	–	12 (0.8)	5 (0.9)	5 (0.1)	56 (1.0)	114 (0.8)
	Previously negative (%)	28 (1.4)	–	11 (1.2)	3 (1.4)	4 (0.2)	50 (1.2)	96 (1.0)
2010	Seen	5 382	1 420	3 800	2 102	4 436	10 423	27 563
	Tested	2 750	886	1 397	932	3 845	6 620	16 430
	Newly diagnosed (%)	25 (1.0)	10 (1.1)	5 (0.4)	1 (0.1)	8 (0.2)	45 (0.5)	94 (0.6)
	Previously negative (%)	21 (0.0)	2 (0.6)	4 (0.4)	1 (0.03)	6 (0.3)	40 (0.0)	74 (0.7)

		Sexual health clinic						
Women		Sydney Sexual Health Centre, NSW	RPA Sexual Health Clinic, NSW[1]	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Service, QLD	Clinic 275 Adelaide, SA	Melbourne Sexual Health Centre, VIC	Total
2006	Seen	2 447	–	2 410	1 252	2 517	4 491	13 830
	Tested	1 216	–	626	435	1 897	2 036	6 362
	Newly diagnosed (%)	0 (0.0)	–	0 (0.0)	2 (0.5)	0 (0.0)	1 (0.05)	4 (0.1)
	Previously negative (%)	0 (0.0)	–	0 (0.0)	1 (0.5)	0 (0.0)	1 (0.07)	2 (0.05)
2007	Seen	2 643	–	2 407	1 268	2 497	4 307	13 574
	Tested	1 232	–	1 228	533	1 964	2 161	7 255
	Newly diagnosed (%)	1 (0.1)	–	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)	1 (0.07)	2 (0.05)
2008	Seen	2 761	–	2 490	1 375	2 407	6 683	15 716
	Tested	1 193	–	669	496	1 947	2 187	6 492
	Newly diagnosed (%)	3 (0.3)	–	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	5 (0.08)
	Previously negative (%)	1 (0.1)	–	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.07)	2 (0.05)
2009	Seen	3 052	–	2 548	1 223	2 281	7 183	16 287
	Tested	1 297	–	712	313	1 893	2 553	6 768
	Newly diagnosed (%)	1 (0.1)	–	1 (0.1)	0 (0.0)	0 (0.0)	2 (0.1)	4 (0.06)
	Previously negative (%)	1 (0.1)	–	1 (0.2)	0 (0.0)	0 (0.0)	2 (0.01)	4 (0.08)
2010	Seen	3 084	608	2 203	1 549	2 383	8 617	18 444
	Tested	1 353	349	552	605	2 012	4 253	9 124
	Newly diagnosed (%)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.2)	1 (0.05)	0 (0.0)	2 (0.02)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

1 RPA Sexual Health Clinic, NSW, opened in 2009.

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.1.2 Number of people seen at selected metropolitan sexual health clinics in Australia, 2006 – 2010, 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						
Men		**Men who have sex with men[1]**	**Men who have sex with men[1] age < 25 years**	**Injecting drug use**	**Heterosexual contact overseas**	**Heterosexual contact in Australia**	**Other men**	**Total**
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)	0 (0.0)	4 (0.2)	0 (0.0)	64 (0.8)
2008	Seen	8 410	1 845	507	3 632	9 306	775	22 630
	Tested	5 153	1 228	314	1 981	4 259	97	11 804
	Newly diagnosed (%)	85 (1.6)	14 (1.2)	1 (0.3)	6 (0.3)	2 (0.05)	1 (1.0)	95 (0.8)
	Previously negative (%)	70 (1.8)	13 (1.4)	1 (0.4)	2 (0.2)	1 (0.04)	0 (0.0)	74 (1.0)
2009	Seen	9 305	2 122	461	3 694	9 706	867	24 033
	Tested	6 727	1 144	284	2 101	4 438	99	13 649
	Newly diagnosed (%)	108 (1.6)	15 (1.3)	0 (0.0)	2 (0.1)	4 (0.1)	0 (0.0)	114 (0.8)
	Previously negative (%)	91 (1.6)	12 (1.1)	0 (0.0)	2 (0.2)	3 (0.1)	0 (0.0)	96 (1.0)
2010	Seen	1 441	2 508	454	4 204	10 170	1 294	27 563
	Tested	8 482	1 968	278	2 571	4 953	146	16 430
	Newly diagnosed (%)	90 (1.1)	15 (0.8)	0 (0.0)	0 (0.0)	3 (0.06)	1 (0.7)	94 (0.6)
	Previously negative (%)	72 (1.0)	5 (0.4)	0 (0.0)	0 (0.0)	2 (0.08)	0 (0.0)	74 (0.7)

		HIV exposure category					
Women		**Sex worker[2]**	**Injecting drug use**	**Heterosexual contact overseas**	**Heterosexual contact in Australia**	**Other women**	**Total**
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)
2008	Seen	3 783	360	2 447	8 278	848	15 716
	Tested	1 656	207	1 125	3 274	230	6 492
	Newly diagnosed (%)	1 (0.06)	0 (0.0)	1 (0.09)	3 (0.09)	0 (0.0)	5 (0.08)
	Previously negative (%)	0 (0.0)	0 (0.0)	1 (0.2)	1 (0.06)	0 (0.0)	2 (0.05)
2009	Seen	4 245	338	2 571	8 168	965	16 287
	Tested	2 459	193	954	2 903	259	6 768
	Newly diagnosed (%)	1 (0.04)	0 (0.0)	0 (0.0)	3 (0.1)	0 (0.0)	4 (0.06)
	Previously negative (%)	1 (0.04)	0 (0.0)	0 (0.0)	3 (0.17)	0 (0.0)	4 (0.08)
2010	Seen	5 413	292	2 873	8 782	1 084	18 444
	Tested	3 225	192	1 511	3 949	247	9 124
	Newly diagnosed (%)	0 (0.0)	0 (0.0)	1 (0.07)	1 (0.03)	0 (0.0)	2 (0.02)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

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

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

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.1.3 Number of people seen at selected metropolitan sexual health clinics in Australia, 2006 – 2009, 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)						
Men		**13 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60+**	**Total**
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)
2008	Seen	846	10 483	6 130	3 054	1 394	723	22 630
	Tested	464	5 554	3 188	1 511	707	380	11 804
	Newly diagnosed (%)	0 (0.0)	31 (0.6)	35 (1.1)	20 (1.3)	4 (0.6)	5 (1.3)	95 (0.8)
	Previously negative (%)	0 (0.0)	27 (0.8)	25 (1.0)	16 (1.4)	3 (0.6)	3 (1.1)	74 (1.0)
2009	Seen	981	11 315	6 315	3 254	1 465	703	24 033
	Tested	515	6 574	3 635	1 777	783	365	13 649
	Newly diagnosed (%)	3 (0.6)	45 (0.7)	39 (1.1)	17 (1.0)	9 (1.1)	1 (0.3)	114 (0.8)
	Previously negative (%)	2 (1.1)	39 (0.9)	32 (1.1)	13 (0.9)	9 (1.5)	1 (0.4)	96 (1.0)
2010	Seen	1 153	12 761	7 078	3 974	1 715	882	27 563
	Tested	690	7 723	4 247	2 305	992	473	16 430
	Newly diagnosed (%)	0 (0.0)	34 (0.4)	30 (0.7)	21 (0.9)	7 (0.7)	2 (0.7)	94 (0.6)
	Previously negative (%)	0 (0.0)	25 (0.5)	24 (0.7)	17 (1.0)	6 (0.9)	2 (0.6)	74 (0.7)

		Age group (years)						
Women		**13 – 19**	**20 – 29**	**30 – 39**	**40 – 49**	**50 – 59**	**60+**	**Total**
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)
2008	Seen	1 520	8 379	3 804	1 507	415	91	15 716
	Tested	548	3 475	1 650	630	162	27	6 492
	Newly diagnosed (%)	0 (0.0)	2 (0.06)	1 (0.06)	1 (0.2)	0 (0.0)	1 (3.8)	5 (0.08)
	Previously negative (%)	0 (0.0)	1 (0.05)	1 (0.08)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.05)
2009	Seen	1 490	8 744	3 990	1 562	409	92	16 287
	Tested	515	3 390	1 910	772	149	32	6 768
	Newly diagnosed (%)	0 (0.0)	3 (0.09)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	4 (0.06)
	Previously negative (%)	0 (0.0)	3 (0.1)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	4 (0.08)
2010	Seen	1 557	9 795	4 739	1 735	491	127	18 444
	Tested	675	4 661	2 540	934	248	66	9 124
	Newly diagnosed (%)	0 (0.0)	1 (0.02)	1 (0.04)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.02)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Source: Collaborative group on sentinel surveillance in sexual health clinics

4.2 HIV and hepatitis C seroprevalence among people who inject drugs

Table 4.2.1 Number of participating needle and syringe programs (NSP), 2006 – 2010, number of people who inject drugs who were 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

2006

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)[1]			Number (%) with HIV antibody			Number (%) with hepatitis C antibody[3]		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
ACT[4]	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 (64)**	**1 162 (62)**

2007

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)[1]			Number (%) with HIV antibody			Number (%) with hepatitis C antibody[3]		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
ACT[4]	1	10	8	18 (–)	0 (0.0)	0 (0.0)	0 (0.0)	10 (100)	6 (75)	16 (89)
NSW	21	439	240	683 (40)	12 (2.7)	2 (0.8)	15 (2.2)	289 (68)	169 (73)	460 (69)
NT	3	20	9	29 (39)	0 (0.0)	0 (0.0)	0 (0.0)	13 (65)	5 (56)	18 (62)
QLD	7	279	130	413 (40)	10 (3.6)	0 (0.0)	10 (2.4)	158 (57)	85 (66)	247 (60)
SA	7	120	89	211 (72)	2 (1.7)	0 (0.0)	2 (1.0)	50 (42)	31 (35)	82 (39)
TAS	5	110	56	166 (57)	0 (0.0)	0 (0.0)	0 (0.0)	52 (57)	30 (70)	82 (61)
VIC[4]	7	163	76	240 (–)	0 (0.0)	0 (0.0)	0 (0.0)	100 (72)	48 (74)	149 (73)
WA	2	54	31	85 (39)	1 (1.9)	0 (0.0)	1 (1.2)	23 (43)	14 (45)	37 (44)
Total	**53**	**1 195**	**639**	**1 845 (51)**	**25 (2.1)**	**2 (0.3)**	**28 (1.5)**	**695 (61)**	**388 (64)**	**1 091 (62)**

2008

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)[1]			Number (%) with HIV antibody			Number (%) with hepatitis C antibody[3]		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
ACT[4]	1	18	8	26 (–)	0 (0.0)	0 (0.0)	0 (0.0)	12 (67)	6 (75)	18 (69)
NSW	22	563	297	867 (33)	15 (2.7)	3 (1.0)	19 (2.2)	379 (70)	208 (74)	591 (71)
NT	2	46	27	73 (40)	1 (2.2)	0 (0.0)	1 (1.4)	23 (50)	15 (58)	38 (53)
QLD	8	335	161	498 (35)	9 (2.7)	0 (0.0)	9 (1.8)	182 (55)	91 (57)	275 (56)
SA	7	96	92	189 (45)	0 (0.0)	0 (0.0)	0 (0.0)	30 (32)	24 (27)	54 (29)
TAS	4	33	24	57 (25)	0 (0.0)	0 (0.0)	0 (0.0)	26 (81)	19 (79)	45 (80)
VIC	6	199	93	292 (36)	2 (1.0)	0 (0.0)	2 (0.7)	141 (75)	58 (64)	199 (72)
WA	2	106	62	168 (73)	2 (1.9)	0 (0.0)	2 (1.2)	59 (58)	32 (54)	91 (57)
Total	**52**	**1 396**	**764**	**2 170 (36)**	**29 (2.1)**	**3 (0.4)**	**33 (1.5)**	**852 (63)**	**453 (61)**	**1 311 (62)**

2009

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)[1]			Number (%) with HIV antibody			Number (%) with hepatitis C antibody[3]		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
ACT	1	36	22	58 (67)	0 (0.0)	0 (0.0)	0 (0.0)	21 (58)	13 (59)	34 (59)
NSW	20	488	320	816 (39)	12 (2.5)	0 (0.0)	13 (1.6)	272 (56)	193(60)	468 (58)
NT	3	51	25	76 (29)	0 (0.0)	0 (0.0)	0 (0.0)	20 (40)	9 (36)	29 (39)
QLD	8	581	209	795 (59)	10 (1.7)	0 (0.0)	10 (1.3)	244 (42)	94 (45)	339 (43)
SA	7	155	91	246 (53)	2 (1.3)	1 (1.1)	3 (1.2)	65 (42)	36 (40)	101 (41)
TAS	4	73	47	121 (16)	0 (0.0)	0 (0.0)	0 (0.0)	38 (52)	24 (53)	63 (53)
VIC[4]	6	215	116	333 (–)	3 (1.4)	0 (0.0)	3 (0.9)	120 (57)	60 (52)	182 (55)
WA	2	126	85	212 (29)	1 (0.8)	1 (1.2)	2 (1.0)	60 (48)	42 (49)	102 (48)
Total	**51**	**1 725**	**915**	**2 657 (45)**	**28 (1.6)**	**2 (0.2)**	**31 (1.2)**	**840 (49)**	**471 (52)**	**1 318 (50)**

2010

State/ Territory	Number of NSP	Number of clients tested (% of clients seen)[1]			Number (%) with HIV antibody			Number (%) with hepatitis C antibody[3]		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
ACT	1	72	25	97 (82)	0 (0.0)	0 (0.0)	0 (0.0)	48 (69)	15 (60)	63 (66)
NSW	22	422	243	671 (38)	8 (1.9)	0 (0.0)	8 (1.2)	228 (54)	135 (56)	365 (54)
NT	3	55	23	78 (28)	0 (0.0)	0 (0.0)	0 (0.0)	29 (53)	8 (35)	37 (47)
QLD	8	408	123	536 (38)	11 (2.7)	0 (0.0)	11 (2.1)	180 (45)	58 (48)	241 (46)
SA	7	129	84	214 (41)	0 (0.0)	1 (1.2)	1 (0.5)	54 (43)	38 (45)	93 (44)
TAS	4	68	38	106 (58)	0 (0.0)	0 (0.0)	0 (0.0)	30 (44)	18 (47)	48 (45)
VIC	5	305	131	438 (56)	2 (0.7)	0 (0.0)	2 (0.5)	204 (67)	72 (55)	278 (64)
WA	3	121	92	213 (29)	0 (0.0)	1 (1.1)	1 (0.5)	65 (55)	54 (59)	119 (56)
Total	**53**	**1 580**	**759**	**2 353 (38)**	**21 (1.3)**	**2 (0.3)**	**23 (1.0)**	**838 (53)**	**398 (53)**	**1 244 (53)**

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 Number tested for hepatitis C antibody excludes cases with insufficient blood for testing.

4 The number of NSP clients seen was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.2 Number of people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2006 – 2010, and percent with HIV or hepatitis C antibody by year, age group, time since first injection, type of drug last injected among those reporting less than three years since first injection, and sex

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 34 years	492	265	764	1.0	0.4	0.9	51	59	54
35 to 44 years	402	195	600	3.0	0.5	2.2	68	73	69
45+ years	204	94	301	3.4	0.0	2.3	84	76	81
Not reported	5	2	7	0.0	0.0	0.0	80	100	86
Time since first injection									
Less than 5 years	106	79	186	2.8	0.0	1.6	22	24	23
5 to 9 years	218	156	378	0.9	0.6	1.1	44	57	49
10 to 14 years	254	159	415	2.0	0.0	1.2	56	66	60
15 to 19 years	224	98	325	4.5	0.0	3.1	65	73	68
20+ years	364	154	521	1.4	0.7	1.2	82	84	82
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**	**64**	**62**
Last drug injected among those reporting less than 3 years since first injection									
Amphetamines	33	21	54	3.0	0.0	1.9	9	5	8
Heroin	4	8	13	0.0	0.0	0.0	75	0	25
Other opiates	7	7	14	0.0	0.0	0.0	43	71	57
All other drugs	15	5	20	0.0	0.0	0.0	0	40	10
Not reported	0	1	1	0.0	0.0	0.0	0	100	100
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	16	34	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 34 years	453	236	693	1.3	0.0	0.9	55	59	56
35 to 44 years	434	219	654	2.5	0.5	2.0	65	69	67
45+ years	216	99	320	3.7	1.0	2.8	77	78	77
Not reported	2	0	2	0.0	0.0	0.0	100	0	67
Time since first injection									
Less than 5 years	100	74	175	3.0	0.0	1.7	20	38	28
5 to 9 years	185	116	304	1.1	0.0	0.7	39	57	45
10 to 14 years	259	155	416	1.2	0.0	1.0	61	63	62
15 to 19 years	217	113	333	2.3	0.9	1.8	64	67	65
20+ years	403	164	569	2.7	0.6	2.1	79	79	79
Not reported	31	17	48	3.2	0.0	2.0	71	76	73
Total	**1 195**	**639**	**1 845**	**2.1**	**0.3**	**1.5**	**61**	**64**	**62**
Last drug injected among those reporting less than 3 years since first injection									
Amphetamines	35	19	54	2.9	0.0	1.9	15	28	19
Heroin	10	11	21	0.0	0.0	0.0	10	45	29
Other opiates	7	5	12	0.0	0.0	0.0	33	20	27
All other drugs	8	3	11	0.0	0.0	0.0	0	0	0
Not reported	1	0	1	0.0	0.0	0.0	0	0	0
Total	**61**	**38**	**99**	**1.6**	**0.0**	**1.0**	**14**	**30**	**20**

2008

	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	21	16	37	0.0	0.0	0.0	29	44	35
20 to 24 years	86	73	159	0.0	0.0	0.0	30	47	38
25 to 34 years	468	297	767	1.5	1.0	1.4	55	59	57
35 to 44 years	529	241	773	2.7	0.0	1.8	67	64	66
45+ years	287	136	428	2.8	0.0	1.9	81	72	78
Not reported	5	1	6	0.0	0.0	0.0	60	0	50
Time since first injection									
Less than 5 years	141	84	225	5.7	0.0	3.6	22	37	28
5 to 9 years	175	126	302	0.6	0.0	0.3	41	50	45
10 to 14 years	265	189	455	1.1	1.1	1.3	61	57	59
15 to 19 years	241	130	372	3.3	0.0	2.2	60	70	64
20+ years	539	224	769	1.5	0.5	1.2	83	79	82
Not reported	35	11	47	2.9	0.0	2.1	58	30	52
Total	**1 396**	**764**	**2 170**	**2.1**	**0.4**	**1.5**	**63**	**61**	**62**
Last drug injected among those reporting less than 3 years since first injection									
Amphetamines	28	14	42	14.3	0.0	9.5	14	21	17
Heroin	8	15	23	12.5	0.0	4.4	25	50	41
Other opiates	10	10	20	0.0	0.0	0.0	30	30	30
All other drugs	19	4	23	0.0	0.0	0.0	16	75	26
Not reported	2	0	2	0.0	0.0	0.0	0	0	0
Total	**67**	**43**	**110**	**7.5**	**0.0**	**4.6**	**18**	**38**	**26**

2009

	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	39	30	70	0.0	0.0	0.0	8	17	11
20 to 24 years	118	88	207	0.9	0.0	0.5	24	43	32
25 to 34 years	577	349	930	1.2	0.0	0.8	43	53	47
35 to 44 years	624	310	939	2.1	0.0	1.5	55	55	55
45+ years	367	137	510	1.9	0.7	1.6	62	53	59
Not reported	0	1	1	0.0	0.0	0.0	0	0	0
Time since first injection									
Less than 5 years	145	113	260	1.4	0.0	0.8	17	25	20
5 to 9 years	195	145	342	1.6	0.0	0.9	30	43	36
10 to 14 years	346	234	583	1.7	0.0	1.0	46	56	50
15 to 19 years	378	171	551	2.1	0.0	1.7	51	60	54
20+ years	622	226	855	1.5	0.5	1.2	64	62	63
Not reported	39	26	66	0.0	3.9	1.5	33	38	36
Total	**1 725**	**915**	**2 657**	**1.6**	**0.2**	**1.2**	**49**	**52**	**50**
Last drug injected among those reporting less than 3 years since first injection									
Amphetamines	33	18	51	3.0	0.0	2.0	0	22	8
Heroin	12	21	33	0.0	0.0	0.0	25	30	28
Other opiates	14	24	39	0.0	0.0	0.0	7	17	13
All other drugs	30	2	32	3.3	0.0	3.1	7	50	9
Not reported	1	2	3	0.0	0.0	0.0	0	0	0
Total	**90**	**67**	**158**	**2.2**	**0.0**	**1.3**	**7**	**23**	**13**

2010

	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	15	34	0.0	0.0	0.0	11	40	24
20 to 24 years	86	75	163	1.2	0.0	0.6	18	36	26
25 to 34 years	502	263	766	0.6	0.0	0.4	46	50	47
35 to 44 years	571	248	825	1.4	0.4	1.1	58	55	57
45+ years	401	157	563	2.2	0.6	1.8	66	64	66
Not reported	1	1	2	0.0	0.0	0.0	0	0	0
Time since first injection									
Less than 5 years	132	71	204	1.5	0.0	1.0	14	27	19
5 to 9 years	158	122	281	0.0	0.0	0.0	35	43	38
10 to 14 years	298	170	472	2.0	0.0	1.3	47	52	49
15 to 19 years	323	154	480	2.2	0.0	1.5	57	55	56
20+ years	633	228	865	1.0	0.9	0.9	68	66	67
Not reported	36	14	51	0.0	0.0	0.0	50	36	47
Total	**1 580**	**759**	**2 353**	**1.3**	**0.3**	**1.0**	**53**	**53**	**53**
Last drug injected among those reporting less than 3 years since first injection									
Amphetamines	17	15	33	5.9	0.0	3.0	6	13	9
Heroin	18	11	29	5.6	0.0	3.5	22	45	31
Other opiates	19	7	26	0.0	0.0	0.0	21	0	15
All other drugs	33	4	37	0.0	0.0	0.0	7	75	8
Total	**87**	**37**	**125**	**2.3**	**0.0**	**1.6**	**10**	**27**	**15**

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

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.3 Number of people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2006 – 2010, 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

2006

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
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**	**64**	**62**

2007

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
Sexual identity									
Heterosexual	1 055	458	1 514	0.5	0.4	0.5	62	65	63
Bisexual	47	120	170	4.3	0.0	1.8	56	66	64
Homosexual	69	42	114	26.1	0.0	15.8	48	51	50
Not reported	24	19	47	0.0	0.0	0.0	57	71	63
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	1.3	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	2.1	0.0	1.4	64	68	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**	**61**	**64**	**62**

2008

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
Sexual identity									
Heterosexual	1 228	537	1 767	0.2	0.2	0.2	64	61	63
Bisexual	56	152	209	5.4	1.3	2.9	59	63	62
Homosexual	62	48	112	37.1	0.0	20.6	43	62	51
Not reported	50	27	82	0.0	0.0	0.0	73	54	67
Sex work last month									
No	1 264	633	1 905	2.1	0.5	1.6	63	60	62
Yes	39	91	131	5.1	0.0	2.3	73	66	67
Not reported	93	40	134	0.0	0.0	0.0	55	81	63
Country/region of birth									
Australia	1 181	650	1 836	2.0	0.5	1.5	63	60	62
Overseas born	194	102	300	2.6	0.0	2.0	63	65	63
Other Oceania	*34*	*27*	*63*	*8.8*	*0.0*	*6.4*	*41*	*50*	*44*
Asia	*21*	*7*	*28*	*4.8*	*0.0*	*3.6*	*89*	*50*	*80*
United Kingdom and Ireland	*68*	*43*	*113*	*0.0*	*0.0*	*0.0*	*61*	*72*	*65*
Other	*71*	*25*	*96*	*1.4*	*0.0*	*1.0*	*68*	*72*	*69*
Not reported	21	12	34	0.0	0.0	0.0	70	91	78
Main language spoken at home by parents									
English	1 299	728	2 037	2.2	0.4	1.6	62	62	62
Other language	73	28	101	1.4	0.0	1.0	75	54	69
Not reported	24	8	32	0.0	0.0	0.0	59	86	66
Total	**1 396**	**764**	**2 170**	**2.1**	**0.4**	**1.5**	**63**	**61**	**62**

2009

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
Sexual identity									
Heterosexual	1 517	684	2 207	0.5	0.3	0.4	50	49	50
Bisexual	80	146	229	2.5	0.0	1.3	46	66	58
Homosexual	48	37	87	39.1	0.0	21.2	27	41	32
Not reported	80	48	134	1.3	0.0	0.8	51	50	50
Sex work last month									
No	1 621	790	2 425	1.6	0.3	1.2	49	50	49
Yes	36	90	129	5.7	0.0	1.6	44	68	61
Not reported	68	35	103	0.0	0.0	0.0	53	40	49
Country/region of birth									
Australia	1 480	806	2 299	1.8	0.3	1.3	50	51	50
Overseas born	224	104	332	0.5	0.0	0.3	46	55	48
Other Oceania	*54*	*30*	*84*	*0.0*	*0.0*	*0.0*	*43*	*57*	*48*
Asia	*24*	*7*	*32*	*4.2*	*0.0*	*3.1*	*42*	*43*	*41*
United Kingdom and Ireland	*82*	*37*	*120*	*0.0*	*0.0*	*0.0*	*51*	*57*	*53*
Other	*64*	*30*	*96*	*0.0*	*0.0*	*0.0*	*42*	*53*	*46*
Not reported	21	5	26	0.0	0.0	0.0	48	60	50
Main language spoken at home by parents									
English	1 628	869	2 513	1.7	0.2	1.2	49	52	50
Other language	72	38	111	1.4	0.0	0.9	54	45	50
Not reported	25	8	33	0.0	1.0	0.0	44	63	48
Total	**1 725**	**915**	**2 657**	**1.6**	**0.2**	**1.2**	**49**	**52**	**50**

2010

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total[1]	Male	Female	Total[1]	Male	Female	Total[1]
Sexual identity									
Heterosexual	1 390	558	1 954	0.3	0.4	0.3	55	53	54
Bisexual	61	124	188	4.9	0.0	1.6	55	56	56
Homosexual	49	36	86	29.2	0.0	16.5	22	28	24
Not reported	80	41	125	0.0	0.0	0.0	49	63	54
Sex work last month									
No	1 428	619	2 058	1.3	0.3	1.0	53	52	53
Yes	42	84	127	4.8	0.0	1.6	26	54	45
Not reported	110	56	168	0.9	0.0	0.6	65	55	61
Country/region of birth									
Australia	1 367	673	2 051	1.4	0.3	1.0	53	51	53
Overseas born	187	78	266	1.1	0.0	0.8	55	62	56
Other Oceania	*47*	*28*	*76*	*2.1*	*0.0*	*1.3*	*52*	*68*	*57*
Asia	*23*	*6*	*29*	*0.0*	*0.0*	*0.0*	*57*	*83*	*62*
United Kingdom and Ireland	*64*	*29*	*93*	*0.0*	*0.0*	*0.0*	*64*	*48*	*59*
Other	*53*	*15*	*68*	*1.9*	*0.0*	*1.5*	*47*	*67*	*52*
Not reported	26	8	36	0.0	0.0	0.0	46	75	53
Main language spoken at home by parents									
English	1 486	736	2 235	1.4	0.3	1.0	53	52	53
Other language	75	15	90	0.0	0.0	0.0	49	57	51
Not reported	19	8	28	0.0	1.0	0.0	72	88	78
Total	**1 580**	**759**	**2 353**	**1.3**	**0.3**	**1.0**	**53**	**53**	**53**

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

Source: Collaboration of Australian Needle and Syringe Programs

4.3 Incidence of hepatitis C infection among people who inject drugs

Table 4.3.1 Incidence of hepatitis C infection among people who inject drugs seen at the Kirketon Road Centre, Sydney, 2006 – 2010

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
2006			
Less than 20 years	4.0	1	24.7
20-29 years	31.4	2	6.4
30+ years	41.9	1	2.4
Total	**77.3**	**4**	**5.2**
2007			
Less than 20 years	4.1	0	0.0
20-29 years	22.2	3	13.6
30+ years	40.3	3	7.4
Total	**66.6**	**6**	**9.0**
2008			
Less than 20 years	1.9	0	0.0
20-29 years	16.6	1	6.0
30+ years	35.8	4	11.2
Total	**54.3**	**5**	**9.2**
2009			
Less than 20 years	2.3	1	42.7
20-29 years	14.3	2	14.0
30+ years	32.4	1	3.1
Total	**49.0**	**4**	**8.2**
2010			
Less than 20 years	0.8	0	0.0
20-29 years	7.8	2	25.6
30+ years	21.0	2	9.5
Total	**29.6**	**4**	**13.5**

Source: Kirketon Road Centre

Table 4.3.2 Incidence of hepatitis C infection among people who inject drugs enrolled in the Hepatitis C Incidence and Transmission Study – community (HITS-c), Sydney, by year

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
2009			
less than 20 years	4.4	0	0.0
20-29 years	36.1	2	5.5
30+ years	20.0	1	5.0
Total	**60.5**	**3**	**5.0**
2010			
less than 20 years	2.5	1	40.0
20-29 years	46.1	6	13.0
30+ years	37.9	1	2.6
Total	**86.5**	**8**	**9.3**

Source: Kirketon Road Centre

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

Table 4.4.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody[1], 1985 – 2010, by State/Territory and years of donation

State/Territory	1985[2] – 2000			2001 – 2002			2003 – 2004		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT[3]	195 633	1	0.5	–	–	–	–	–	–
NSW	4 545 055	37	0.8	619 587	3	0.5	660 010	5	0.8
NT	138 625	1	0.7	14 966	0	0.0	20 039	0	0.0
QLD	2 726 978	28	1.0	395 241	3	0.8	462 505	3	0.6
SA	1 459 703	6	0.4	182 080	0	0.0	189 913	1	0.5
TAS	358 976	1	0.3	49 719	0	0.0	50 328	0	0.0
VIC	3 904 287	17	0.4	502 444	0	0.0	536 706	0	0.0
WA	1 286 216	10	0.8	200 276	3	1.5	233 840	0	0.0
Total	**14 615 473**	**101**	**0.7**	**1 964 313**	**9**	**0.5**	**2 153 341**	**9**	**0.4**

State/Territory	2005 – 2006			2007 – 2008			2009 – 2010			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT[3]	–	–	–	–	–	–	–	–	–	195 633	1	0.5
NSW	731 741	2	0.3	777 269	3	0.4	852 771	2	0.2	8 186 433	52	0.6
NT	19 322	0	0.0	22 954	0	0.0	23 392	0	0.0	239 298	1	0.4
QLD	476 755	1	0.2	494 355	5	1.0	542 824	6	1.1	5 098 658	46	0.9
SA	222 315	1	0.4	259 888	1	0.4	271 126	0	0.0	2 585 025	9	0.3
TAS	59 686	0	0.0	67 926	0	0.0	85 716	0	0.0	672 351	1	0.1
VIC	505 378	1	0.2	564 850	5	0.9	615 685	2	0.3	6 629 350	25	0.4
WA	220 642	0	0.0	245 298	1	0.4	262 509	0	0.0	2 448 781	14	0.6
Total	**2 235 839**	**5**	**0.2**	**2 432 540**	**15**	**0.6**	**2 654 023**	**10**	**0.4**	**26 055 529**	**149**	**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 4.4.2 Number of blood donors in Australia with HIV antibody, 1985 – 2010, 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

	1985 – 2000		2001 – 2002		2003 – 2004		2005 – 2006		2007 – 2008		2009 – 2010		All years		
HIV exposure category	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**Total**
Men who have sex with men[1]	20	–	0	–	4	–	1	–	5	–	2	–	32	–	32
Injecting drug use	3	0	1	0	1	0	0	0	1	0	0	0	6	0	6
Heterosexual contact	21	21	3	4	1	1	1	3	4	2	5	3	35	34	69
Person from a high prevalence country	0	1	0	0	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	5	0	0	0	0	0	0	0	0	0	0	0	5	5
Undetermined	25	3	1	0	2	0	0	0	3	0	0	0	31	3	34
Total	**70**	**31**	**5**	**4**	**8**	**1**	**2**	**3**	**13**	**2**	**7**	**3**	**105**	**44**	**149**
New HIV infection[2]	**27**	**15**	**3**	**1**	**5**	**2**	**1**	**2**	**4**	**0**	**3**	**2**	**43**	**22**	**65**

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 4.4.3 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	2006 Tests	2006 Positive	2006 Prevalence	2007 Tests	2007 Positive	2007 Prevalence	2008 Tests	2008 Positive	2008 Prevalence
NSW/ACT	377 749	37	9.8	389 600	40	10.3	387 669	46	11.9
NT	9 319	1	10.7	10 973	3	27.3	11 981	0	0.0
QLD	244 369	21	8.6	238 131	20	8.4	256 224	16	6.2
SA	119 391	5	4.2	125 504	9	7.2	134 384	9	6.7
TAS	31 625	0	0.0	30 669	0	0.0	37 257	1	2.7
VIC	260 700	30	11.5	275 512	43	15.6	289 338	44	15.2
WA	110 492	7	6.3	120 717	8	6.6	124 581	8	6.4
Australia	**1 153 645**	**101**	**8.8**	**1 191 106**	**123**	**10.3**	**1 241 434**	**124**	**10.0**

State/Territory	2009 Tests	2009 Positive	2009 Prevalence	2010 Tests	2010 Positive	2010 Prevalence
NSW/ACT	424 627	46	10.8	428 144	44	10.3
NT	12 123	2	16.5	11 269	1	8.9
QLD	270 890	13	4.8	271 934	22	8.1
SA	138 255	9	6.5	132 871	6	4.5
TAS	41 010	0	0.0	44 706	1	2.2
VIC	310 968	35	11.3	304 717	38	12.5
WA	130 714	20	15.3	131 795	11	8.3
Australia	**1 328 587**	**125**	**9.4**	**1 325 436**	**123**	**9.3**

1 Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

Table 4.4.4 Number of donations tested for hepatitis C antibody at blood services, number of donations positive for hepatitis C antibody and prevalence of hepatitis C antibody[1], by State/Territory and year of donation

State/Territory	2006 Tests	2006 Positive	2006 Prevalence	2007 Tests	2007 Positive	2007 Prevalence	2008 Tests	2008 Positive	2008 Prevalence
NSW/ACT	377 749	36	9.5	389 600	41	10.5	387 669	61	15.7
NT	9 319	3	32.2	10 973	0	0.0	11 981	0	0.0
QLD	244 369	27	11.0	238 131	34	14.3	256 224	31	12.1
SA	119 391	8	6.7	125 504	7	5.6	134 384	9	6.7
TAS	31 625	2	6.3	30 669	2	6.5	37 257	4	10.7
VIC	260 700	25	9.6	275 512	28	10.2	289 338	20	6.9
WA	110 492	6	5.4	120 717	9	7.5	124 581	5	4.0
Australia	**1 153 645**	**107**	**9.3**	**1 191 106**	**121**	**10.2**	**1 241 434**	**130**	**10.5**

State/Territory	2009 Tests	2009 Positive	2009 Prevalence	2010 Tests	2010 Positive	2010 Prevalence
NSW/ACT	424 627	52	12.2	428 144	40	9.3
NT	12 123	1	8.2	11 269	1	8.9
QLD	270 890	22	8.1	271 934	16	5.9
SA	138 255	14	10.1	132 871	7	5.3
TAS	41 010	5	12.2	44 706	1	2.2
VIC	310 968	24	7.7	304717	16	5.3
WA	130 714	10	7.7	131 795	4	3.0
Australia	**1 328 587**	**128**	**9.6**	**1 325 436**	**85**	**6.4**

1 Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

4.5 Chlamydia positivity among people seen through the Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance (ACCESS)

Table 4.5.1 Number of people seen for the first time at sexual health services participating in ACCESS, 2006 – 2010, number (percent) tested for chlamydia and number (percent) tested positive with chlamydia by State/Territory, sex and year

		State/Territory location of sexual health services						
Sex/Year		**NSW[1]**	**QLD[2]**	**VIC[3]**	**NT[4]**	**TAS[5]**	**WA[6]**	**Total[7]**
Males								
2006	Seen	6 191	1 927	4 126	788	–	474	13 506
	Tested (%)	4 482 (72.4)	1 576 (81.8)	3 330 (80.7)	467 (59.3)	–	372 (78.5)	10 227 (75.7)
	Positive (%)	357 (8.0)	212 (13.4)	287 (8.6)	73 (15.6)	–	26 (7.0)	955 (9.3)
2007	Seen	7 700	2 006	4 109	1 052	676	599	16 142
	Tested (%)	5 717 (74.2)	1 628 (81.2)	3 392 (82.6)	568 (54.0)	410 (60.7)	481 (80.3)	12 196 (75.6)
	Positive (%)	427 (7.5)	205 (12.6)	269 (7.9)	72 (12.7)	39 (9.5)	46 (9.6)	1 058 (8.7)
2008	Seen	7 308	2 070	4 573	1 129	663	609	16 352
	Tested (%)	5 223 (71.5)	1 725 (83.3)	4 044 (88.4)	862 (76.4)	392 (59.1)	487 (80.0)	12 733 (77.9)
	Positive (%)	411 (7.9)	229 (13.3)	343 (8.5)	86 (10.0)	45 (11.5)	57 (11.7)	1 171 (9.2)
2009	Seen	7 860	1 955	5 862	1 462	831	615	18 585
	Tested (%)	5 499 (70.0)	1 599 (81.8)	4 992 (85.2)	1 224 (83.7)	378 (45.5)	467 (75.9)	14 159 (76.2)
	Positive (%)	468 (8.5)	225 (14.1)	468 (9.4)	154 (12.6)	51 (13.5)	44 (9.4)	1 410 (10.0)
2010	Seen	8 071	2 293	5 569	1 618	682	630	18 863
	Tested (%)	6 493 (80.4)	1 908 (83.2)	4 867 (87.4)	1 349 (83.4)	424 (62.2)	491 (77.9)	15 532 (82.3)
	Positive (%)	586 (9.0)	286 (15.0)	487 (10.0)	200 (14.8)	58 (13.7)	54 (11.0)	1 671 (10.8)

		State/Territory location of sexual health services						
Sex/Year		**NSW[1]**	**QLD[2]**	**VIC[3]**	**NT[4]**	**TAS[5]**	**WA[6]**	**Total[7]**
Females								
2006	Seen	5 273	2 004	2 674	687	–	301	10 939
	Tested (%)	3 738 (70.8)	1 535 (76.6)	2 309 (86.3)	411 (59.8)	–	212 (70.4)	8 205 (75.0)
	Positive (%)	268 (7.2)	179 (11.7)	193 (8.3)	56 (13.6)	–	22 (10.4)	718 (8.7)
2007	Seen	6 814	2 154	2 854	1 157	932	325	14 236
	Tested (%)	4 917 (72.2)	1 714 (79.6)	2 471 (86.6)	625 (54.0)	561 (60.2)	241 (74.2)	10 529 (74.0)
	Positive (%)	354 (7.2)	170 (9.9)	186 (7.5)	71 (11.4)	30 (5.3)	31 (12.9)	842 (8.0)
2008	Seen	6 367	2 297	3 070	1 213	777	333	14 057
	Tested (%)	4 439 (69.7)	1 859 (80.9)	2 764 (90.0)	910 (75.0)	425 (54.7)	257 (77.2)	10 654 (75.8)
	Positive (%)	337 (7.6)	212 (11.4)	222 (8.0)	96 (10.5)	44 (10.4)	29 (11.3)	940 (8.8)
2009	Seen	6 507	2 231	3 649	1 533	700	384	15 004
	Tested (%)	4 478 (68.8)	1 771 (79.4)	3 253 (89.1)	1 216 (79.3)	315 (45.0)	280 (72.9)	11 313 (75.4)
	Positive (%)	336 (7.5)	212 (12.0)	263 (8.1)	145 (11.9)	29 (9.2)	24 (8.6)	1 009 (8.9)
2010	Seen	6 210	2 402	3 672	1 444	710	385	14 823
	Tested (%)	4 840 (77.9)	1 897 (79.0)	3 313 (90.2)	1 145 (79.3)	414 (58.3)	302 (78.4)	11 911 (80.4)
	Positive (%)	418 (8.6)	270 (14.2)	289 (8.7)	161 (14.1)	61 (14.7)	35 (11.6)	1 234 (10.4)

1 Data reported by 12 sexual health services and 9 services in 2006.

2 Data reported by 3 sexual health services.

3 Data reported by 1 sexual health service.

4 Data reported by 2 sexual health services for 2007 – 2010 and 1 for 2006.

5 Data reported by 1 sexual health service. Data not available for 2006.

6 Data reported by 1 sexual health service.

7 Data reported by 20 sexual health services for 2007 – 2010 and 16 for 2006.

Source: Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance – Sexual Health Services Network

Table 4.5.2 Number of people seen for the first time at sexual health services participating in ACCESS[1], 2006 – 2010, number (percent) tested for chlamydia and number (percent) tested positive with chlamydia, by priority population and year

Chlamydia priority Population[1]		Heterosexual[2] males < 25 years	Heterosexual[2] females < 25 years	Men who have[2] sex with men	Female sex[2] workers	Aboriginal & Torres[3] Strait Islander males	Aboriginal & Torres[3] Strait Islander females
2006	Seen	2 629	3 744	3 157	932	399	466
	Tested (%)	2 263 (86.1)	3 113 (83.1)	2 673 (84.7)	887 (95.2)	315 (78.9)	332 (71.2)
	Positive (%)	318 (14.0)	386 (12.4)	189 (7.1)	45 (5.1)	48 (15.2)	39 (11.7)
2007	Seen	3 014	4 567	3 517	1 322	541	783
	Tested (%)	2 621 (87.0)	3 821 (83.7)	3 016 (85.8)	1 249 (94.5)	409 (75.6)	517 (66.0)
	Positive (%)	381 (14.5)	436 (11.4)	180 (6.0)	60 (4.8)	52 (12.7)	78 (15.1)
2008	Seen	3 433	4 712	3 601	1 491	567	795
	Tested (%)	2 952 (86.0)	3 951 (83.8)	3 146 (87.4)	1 407 (94.4)	421 (74.3)	554 (69.7)
	Positive (%)	423 (14.3)	523 (13.2)	213 (6.8)	64 (4.5)	70 (16.6)	65 (11.7)
2009	Seen	4 028	5 092	4 180	1 785	531	842
	Tested (%)	3 441 (85.4)	4 185 (82.2)	3 692 (88.3)	1 674 (93.8)	419 (78.9)	593 (70.4)
	Positive (%)	520 (15.1)	570 (13.6)	328 (8.9)	91 (5.4)	63 (15.0)	89 (15.0)
2010	Seen	4 405	5 328	4 510	1 722	638	827
	Tested (%)	3 936 (89.4)	4 615 (86.6)	4 028 (89.3)	1 656 (96.2)	488 (76.5)	579 (70.0)
	Positive (%)	641 (16.3)	718 (15.6)	365 (9.1)	93 (5.6)	101 (20.7)	120 (20.7)

1 Data reported by 20 sexual health services in NSW, NT, QLD, VIC, TAS and WA in 2007 – 2010.

2 Data reported by 15 sexual health services in NSW, NT, QLD, VIC and WA.

3 Data reported by 14 sexual health services in NSW, NT, QLD and VIC.

Source: Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance – Sexual Health Services Network

Table 4.5.3 Number of people seen for the first time at sexual health services participating in ACCESS[1], 2006 – 2010, number (percent) tested for chlamydia and number (percent) tested positive with chlamydia, by sex, age group and year

		Age group (years)[1]					
Sex/Year		**< 20**	**20 – 29**	**30 – 39**	**40 – 49**	**50+**	**Total**
Males							
2006[2]	Seen	858	6 089	3 473	1 833	1 249	13 502
	Tested (%)	662 (77.2)	5 030 (82.6)	2 537 (73.1)	1 234 (67.3)	762 (61.0)	10 225 (75.7)
	Positive (%)	66 (10.1)	591 (11.7)	191 (7.5)	68 (5.5)	39 (5.1)	956 (9.3)
2007	Seen	1 154	7 187	3 944	2 212	1 631	16 128
	Tested (%)	948 (82.1)	5 870 (81.7)	2 912 (73.8)	1 472 (66.5)	991 (60.8)	12 193 (75.6)
	Positive (%)	108 (11.4)	642 (10.9)	190 (6.5)	79 (5.4)	38 (3.8)	1 057 (8.7)
2008	Seen	1 197	7 706	3 823	2 064	1 557	16 347
	Tested (%)	996 (83.2)	6 480 (84.1)	2 903 (75.9)	1 431 (69.3)	922 (59.2)	12 732 (77.9)
	Positive (%)	132 (13.3)	739 (11.4)	190 (6.5)	74 (5.2)	36 (3.9)	1 171 (9.2)
2009	Seen	1 416	8 623	4 355	2 411	1 778	18 583
	Tested (%)	1 176 (83.1)	7 184 (83.3)	3 192 (73.3)	1 606 (66.6)	1 001 (56.3)	14 159 (76.2)
	Positive (%)	153 (13.0)	889 (12.4)	215 (6.7)	100 (6.2)	53 (5.3)	1 410 (10.0)
2010	Seen	1 708	9 022	4 132	2 312	1 687	18 861
	Tested (%)	1 482 (86.8)	7 905 (87.6)	3 328 (80.5)	1 725 (74.6)	1 091 (64.7)	15 531 (82.3)
	Positive (%)	240 (16.2)	1 001 (12.7)	281 (8.4)	97 (5.6)	52 (4.8)	1 671 (10.8)

		Age group (years)[1]					
Sex/Year		**< 20**	**20 – 29**	**30 – 39**	**40 – 49**	**50+**	**Total**
Females							
2006[2]	Seen	1 833	5 554	2 108	972	467	10 934
	Tested (%)	1 407 (76.8)	4 440 (79.9)	1 546 (73.3)	619 (63.7)	192 (41.1)	8 204 (75.0)
	Positive (%)	173 (12.3)	435 (9.8)	75 (4.8)	25 (4.0)	10 (5.2)	718 (8.7)
2007	Seen	2 505	7 023	2 765	1 256	680	14 229
	Tested (%)	1 880 (75.0)	5 547 (79.0)	2 024 (73.2)	775 (61.7)	303 (44.6)	10 529 (74.0)
	Positive (%)	231 (12.3)	503 (9.1)	85 (4.2)	19 (2.5)	4 (1.3)	842 (8.0)
2008	Seen	2 525	6 972	2 695	1 191	665	14 048
	Tested (%)	2 012 (79.7)	5 609 (80.5)	1 980 (73.5)	758 (63.6)	292 (43.9)	10 651 (75.8)
	Positive (%)	272 (13.5)	548 (9.8)	83 (4.2)	31 (4.1)	6 (2.1)	940 (8.8)
2009	Seen	2 602	7 476	2 969	1 280	674	15 001
	Tested (%)	2 045 (78.6)	5 999 (80.2)	2 159 (72.7)	825 (64.5)	285 (42.3)	11 313 (75.4)
	Positive (%)	266 (13.0)	623 (10.4)	96 (4.4)	19 (2.3)	5 (1.8)	1 009 (8.9)
2010	Seen	2 773	7 538	2 769	1 147	595	14 822
	Tested (%)	2 251 (81.2)	6 410 (85.0)	2 134 (77.1)	804 (70.1)	311 (52.3)	11 910 (80.4)
	Positive (%)	380 (16.9)	704 (11.0)	118 (5.5)	26 (3.2)	5 (1.6)	1 233 (10.4)

1 Data reported by 20 sexual health services in NSW, NT, QLD, VIC, TAS and WA.

2 Data reported by 15 sexual health services in NSW, NT, QLD, VIC and WA.

Source: Australian Collaboration for Chlamydia Enhanced Sentinel Surveillance – Sexual Health Services Network

4.6 Genital Warts Surveillance Network

Table 4.6.1 Number of women seen for the first time at sexual health services participating in the Genital Wart Surveillance Network, 2006 – 2010, and number (percent) diagnosed with genital warts, by Australian resident status, age group, and year

Year of first visit[1]		Australian resident women aged ≤26 years in July 2007[2]	Non-resident women aged ≤26 years in July 2007[2]	Older Australian resident women	Older non-resident women
2006	Seen	3 601	1 083	2 183	319
	Positive (%)	400 (11.1)	76 (7.0)	110 (5.0)	13 (4.1)
2007	Seen	3 809	1 446	2 403	448
	Positive (%)	415 (10.9)	115 (8.0)	123 (5.1)	23 (5.1)
2008	Seen	3 542	1 901	2 147	618
	Positive (%)	237 (6.7)	115 (6.0)	92 (4.3)	18 (2.9)
2009	Seen	3 413	2 159	2 069	777
	Positive (%)	187 (5.5)	117 (5.4)	112 (5.4)	24 (3.1)
2010	Seen	2 833	2 151	2 647	1 054
	Positive (%)	97 (3.4)	113 (5.3)	122 (4.6)	37 (3.5)

1 Data reported by 8 sexual health services in NSW, NT, QLD, TAS, VIC, WA.

2 Australian resident women aged 26 years or younger in July 2007 were eligible for the free national Human papilloma virus (HPV) vaccination catch-up program.

Source: Genital Warts Surveillance Network

Table 4.6.2 Number of men seen for the first time at sexual health services participating in the Genital Wart Surveillance Network, 2006 – 2010, number (percent) diagnosed with genital warts, by Australian resident status, age group, gender of sexual partners, and year

Year of first visit[1]		Australian resident heterosexual men aged ≤ 26 years in July 2007[2]	Older Australian resident heterosexual men	Men who have sex with men
2006	Seen	2 170	2 458	2 652
	Positive (%)	339 (15.6)	306 (12.4)	170 (6.4)
2007	Seen	2 353	2 630	2 749
	Positive (%)	381 (16.2)	286 (10.9)	186 (6.8)
2008	Seen	2 503	2 545	2 829
	Positive (%)	334 (13.3)	241 (9.5)	173 (6.1)
2009	Seen	2 625	2 577	3 149
	Positive (%)	308 (11.7)	271 (10.5)	183 (5.8)
2010	Seen	2 201	3 400	3 477
	Positive (%)	201 (9.1)	271 (8.0)	197 (5.7)

1 Data reported by 8 sexual health services in NSW, NT, QLD, TAS, VIC and WA.

2 Men were not eligible for the free national Human papilloma virus (HPV) vaccination catch-up program.

Source: Genital Warts Surveillance Network

Tables

5 Risk behaviour

5.1 Sexual, injecting and HIV antibody testing behaviour among men who have sex with men

5.2 Sexual and injecting behaviour among people who inject drugs

5 Risk behaviour

5.1 Sexual, injecting and HIV antibody testing behaviour among men who have sex with men

Table 5.1.1 Number of men who have sex with men participating in the Gay Community Periodic Surveys, 2006 – 2010, 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[1,2]					Queensland[1]					Melbourne[1]				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Sample size	**2 565**	**2 296**	**2 186**	**2 240**	**2 707**	**1 253**	**1 399**	**1 223**	**1 257**	**1 641**	**1 969**	**2 017**	**2 002**	**2 061**	**2 425**
Unprotected anal intercourse with regular partners[1]	30.2	32.5	31.2	32.6	34.0	26.3	34.6	33.3	33.9	30.1	31.6	26.4	33.6	32.5	35.0
Unprotected anal intercourse with casual partners[1]	22.8	23.6	23.1	27.6	25.6	27.6	22.9	24.9	24.2	24.5	25.7	17.8	24.3	24.8	27.1
Injecting drug use[1,3]	6.5	8.4	8.1	7.8	6.9	8.0	2.9	5.1	6.1	5.3	8.0	4.9	6.2	6.7	4.5
Sample size	**2 229**	**2 009**	**1 888**	**1 973**	**2 421**	**1 183**	**1 309**	**1 138**	**1 183**	**1 518**	**1 812**	**1 863**	**1 850**	**1 916**	**2 211**
HIV antibody testing[4]	68.1	71.3	71.0	70.4	59.3	59.9	62.1	65.8	59.9	58.0	62.0	62.4	63.9	67.8	62.4

	Adelaide			Canberra		Perth		
	2007	2009	2010	2006	2009	2006	2008	2010
Sample size	**504**	**896**	**1 031**	**275**	**289**	**886**	**717**	**912**
Unprotected anal intercourse with regular partners[1]	31.9	27.5	30.9	33.6	38.9	32.3	34.6	34.8
Unprotected anal intercourse with casual partners[1]	20.3	22.5	16.4	22.1	34.7	27.6	26.9	31.4
Injecting drug use[5]	–	–	–	–	–	–	–	–
Sample size	**462**	**858**	**965**	**259**	**281**	**845**	**686**	**882**
HIV antibody testing[4]	64.3	66.3	50.5	56.1	67.1	52.8	57.3	62.9

1 Age standardised and venue adjusted prevalence.

2 The Gay Community Periodic Survey in Sydney includes February survey data only.

3 Injecting drug use in the previous 6 months.

4 HIV antibody testing in the previous 12 months excluding men with diagnosed HIV infection.

5 Age standardised and venue adjusted prevalence was not calculated due to the relatively small number of men in Adelaide, Canberra and Perth reporting injecting drug use.

Source: National Centre in HIV Social Research; The Kirby Institute; State AIDS Councils; State-based People living with HIV/AIDS organisations

5.2 Sexual and injecting behaviour among people who inject drugs

Table 5.2.1 Number of people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2006 – 2010, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting injecting drug use (IDU) in the last month, and percent reporting use of a needle and syringe after someone else in the last month by year, time since first injection, last drug injected and sex

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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Time since first injection															
Less than 5 years	106	79	186	50	67	57	55	66	59	90	68	159	8	10	9
5 to 9 years	218	156	378	57	65	61	59	66	62	199	144	346	11	15	13
10 to 14 years	254	159	415	55	68	60	57	65	60	235	144	381	17	14	16
15 to 19 years	224	98	325	57	55	57	60	59	60	208	88	298	15	14	15
20+ years	364	154	521	54	48	52	60	58	59	321	134	457	11	8	10
Not reported	57	15	72	60	47	57	58	53	57	50	13	63	21	33	25
Last drug injected															
Amphetamine	448	261	713	50	59	53	54	61	57	401	234	638	13	12	13
Heroin	303	187	495	58	52	56	61	59	60	267	160	431	12	15	13
Other opiates	331	165	499	60	67	62	63	65	64	315	155	473	12	12	12
All other drugs	103	37	141	48	73	55	51	73	57	88	32	120	14	14	13
Not reported	38	11	49	66	82	69	76	82	78	32	10	42	32	18	29
Total	**1 223**	**661**	**1 897**	**55**	**60**	**57**	**59**	**62**	**60**	**1 103**	**591**	**1 704**	**13**	**13**	**13**

2007

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Time since first injection															
Less than 5 years	100	74	175	43	59	50	47	66	55	94	64	159	14	12	13
5 to 9 years	185	116	304	55	66	59	64	70	66	171	106	279	15	15	15
10 to 14 years	259	155	416	62	62	62	62	63	62	240	144	386	17	15	17
15 to 19 years	217	113	333	56	64	59	58	65	61	193	103	299	12	12	12
20+ years	403	164	569	55	47	53	59	52	57	364	140	506	12	8	11
Not reported	31	17	48	48	50	49	55	67	59	23	11	34	13	17	14
Last drug injected															
Amphetamine	348	204	552	53	55	54	52	62	55	300	178	478	12	12	12
Heroin	348	222	574	56	64	59	61	59	60	319	196	518	17	14	16
Other opiates	372	161	538	58	53	57	64	67	65	356	151	512	12	12	12
All other drugs	103	45	150	49	67	54	56	67	59	86	36	124	10	4	9
Not reported	24	7	31	63	63	63	63	75	66	24	7	31	33	38	34
Total	**1 195**	**639**	**1 845**	**55**	**58**	**57**	**59**	**63**	**60**	**1 085**	**568**	**1 663**	**14**	**13**	**13**

2008

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Time since first injection															
Less than 5 years	141	84	225	48	55	50	57	62	59	117	73	190	7	25	14
5 to 9 years	175	126	302	57	50	54	65	57	62	160	113	274	14	17	16
10 to 14 years	265	189	455	52	52	52	58	52	56	244	161	406	17	15	16
15 to 19 years	241	130	372	50	46	49	59	48	55	223	121	345	16	18	17
20+ years	539	224	769	48	45	47	55	47	52	474	198	677	14	11	13
Not reported	35	11	47	54	9	43	51	36	49	30	6	37	6	18	9
Last drug injected															
Amphetamine	362	238	604	49	45	47	56	50	53	313	200	516	11	15	13
Heroin	494	253	749	51	52	52	58	54	57	438	230	670	16	15	16
Other opiates	401	218	621	51	46	49	60	50	57	381	201	584	14	17	15
All other drugs	113	43	158	48	51	49	51	53	52	95	32	129	16	19	17
Not reported	26	12	38	42	58	47	50	75	58	21	9	30	15	0	11
Total	**1 396**	**764**	**2 170**	**50**	**48**	**50**	**58**	**52**	**55**	**1 248**	**672**	**1 929**	**14**	**16**	**15**

2009

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Time since first injection															
Less than 5 years	145	113	260	43	53	48	44	60	52	122	103	227	10	17	13
5 to 9 years	195	145	342	53	53	53	58	57	58	172	124	298	12	17	14
10 to 14 years	346	234	583	53	57	55	58	65	61	310	208	521	15	16	15
15 to 19 years	378	171	551	52	50	51	58	63	59	346	154	502	12	16	14
20+ years	622	226	855	46	51	47	54	60	56	563	202	771	15	10	14
Not reported	39	26	66	46	46	46	54	62	56	28	14	43	18	12	15
Last drug injected															
Amphetamine	402	243	649	44	52	47	50	58	53	344	201	549	11	13	12
Heroin	591	311	907	52	58	54	59	65	61	531	284	820	16	16	16
Other opiates	544	265	814	49	50	49	57	59	58	506	244	754	14	12	13
All other drugs	148	74	225	51	49	51	52	66	57	127	63	193	11	22	15
Not reported	40	22	62	53	45	50	60	59	60	33	13	46	23	18	21
Total	**1 725**	**915**	**2 657**	**49**	**53**	**51**	**55**	**61**	**58**	**1 541**	**805**	**2 362**	**14**	**15**	**14**

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

2010

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Time since first injection															
Less than 5 years	132	71	204	42	45	43	43	55	48	106	63	170	10	12	11
5 to 9 years	158	122	281	41	58	48	45	60	51	140	111	252	12	17	14
10 to 14 years	298	170	472	45	56	49	51	61	55	267	152	421	11	18	13
15 to 19 years	323	154	480	49	55	51	56	59	57	292	130	424	14	7	12
20+ years	633	228	865	46	45	46	54	51	54	573	193	769	12	13	12
Not reported	36	14	51	50	29	45	50	29	43	25	11	37	14	9	13
Last drug injected															
Amphetamine	397	210	613	41	50	44	47	55	50	326	175	505	11	12	11
Heroin	522	272	797	51	52	51	57	57	57	471	242	715	13	16	14
Other opiates	478	207	687	43	49	45	51	52	52	456	184	641	11	11	11
All other drugs	175	66	244	49	61	52	52	73	57	145	56	204	12	16	13
Not reported	8	4	12	25	25	25	25	25	25	5	3	8	20	0	13
Total	**1 580**	**759**	**2 353**	**46**	**51**	**48**	**52**	**56**	**54**	**1 403**	**660**	**2 073**	**12**	**13**	**12**

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 people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2006 – 2010, percent reporting HIV and hepatitis C tests within the last 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

2006

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Age group															
Less than 20 years	19	24	43	47	71	60	53	75	65	14	20	34	71	40	53
20 to 24 years	101	81	182	58	70	64	59	73	65	69	72	141	46	32	39
25 to 34 years	492	265	764	57	65	60	60	65	62	319	194	520	36	29	34
35 to 44 years	402	195	600	55	56	55	56	56	56	230	124	355	33	27	31
45+ years	204	94	301	49	46	48	60	59	59	87	43	132	17	16	17
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	30	23	28
Bisexual	55	110	171	71	64	66	67	65	66	37	92	135	54	42	46
Homosexual	59	46	107	64	72	68	64	72	68	42	30	73	67	30	51
Not reported	39	21	62	49	57	52	54	62	56	24	12	37	42	67	51
Total	**1 223**	**661**	**1 897**	**55**	**60**	**57**	**59**	**62**	**60**	**722**	**454**	**1 186**	**34**	**28**	**32**

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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Age group															
Less than 20 years	18	16	34	56	56	56	56	69	62	12	12	24	42	25	33
20 to 24 years	72	69	142	57	67	61	63	81	71	55	51	107	45	39	42
25 to 34 years	453	236	693	60	66	62	64	64	64	283	185	471	36	30	34
35 to 44 years	434	219	654	56	57	56	56	60	58	240	134	375	25	23	25
45+ years	216	99	320	45	39	44	52	52	52	88	45	135	23	27	24
Not reported	2	0	2	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	29	24	28
Bisexual	47	119	170	66	69	68	68	70	70	29	88	121	34	49	46
Homosexual	69	42	114	61	67	63	61	67	63	40	23	63	53	22	41
Not reported	24	20	47	67	65	66	71	80	74	12	12	26	50	92	69
Total	**1 195**	**639**	**1 845**	**55**	**58**	**57**	**59**	**63**	**60**	**680**	**427**	**1 114**	**31**	**28**	**30**

2008

	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[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Age group															
Less than 20 years	21	16	37	48	63	54	57	75	65	13	14	27	46	57	52
20 to 24 years	86	73	159	50	48	49	63	64	64	64	58	122	56	38	48
25 to 34 years	468	297	767	56	54	55	64	52	60	312	218	531	38	36	38
35 to 44 years	529	241	773	50	48	49	55	51	53	279	153	433	27	27	27
45+ years	287	136	428	42	35	40	51	42	48	113	64	180	27	25	26
Not reported	5	1	6	40	0	33	60	0	50	2	0	2	50	0	50
Sexual identity															
Heterosexual	1 228	537	1 767	49	46	48	56	50	54	686	348	1 035	31	28	30
Bisexual	56	152	209	63	57	58	70	60	62	33	116	150	48	48	48
Homosexual	62	48	112	69	48	60	69	48	60	39	27	68	62	26	47
Not reported	50	27	82	44	44	44	56	52	55	25	16	42	44	31	38
Total	**1 396**	**764**	**2 170**	**50**	**48**	**50**	**58**	**52**	**55**	**783**	**507**	**1 295**	**34**	**33**	**34**

2009

	Number tested			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse[2]		
	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Age group															
Less than 20 years	39	30	70	33	67	49	31	63	46	27	29	57	74	41	58
20 to 24 years	118	88	207	48	52	50	54	65	59	77	64	142	44	36	41
25 to 34 years	577	349	930	56	58	57	59	67	62	350	253	606	34	28	32
35 to 44 years	624	310	939	46	49	47	56	57	56	325	196	521	30	26	28
45+ years	367	137	510	45	46	45	51	55	52	151	65	219	21	22	21
Not reported	0	1	1	0	0	0	0	0	0	0	1	1	0	1	100
Sexual identity															
Heterosexual	1 517	684	2 207	48	51	49	55	59	56	812	428	1 243	31	24	29
Bisexual	80	146	229	54	63	60	56	71	65	49	115	165	41	46	45
Homosexual	48	37	87	71	54	64	65	70	68	28	25	54	64	16	43
Not reported	80	48	134	51	46	51	51	63	57	41	40	84	29	30	30
Total	**1 725**	**915**	**2 657**	**49**	**53**	**51**	**55**	**61**	**58**	**930**	**608**	**1 546**	**32**	**28**	**31**

2010

	Number tested			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse[2]		
	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]	M	F	T[1]
Age group															
Less than 20 years	19	15	34	32	53	41	36	53	44	13	14	27	54	57	56
20 to 24 years	86	75	163	42	61	51	37	67	51	66	58	125	61	31	47
25 to 34 years	502	263	766	49	57	52	55	59	56	315	194	510	35	34	35
35 to 44 years	571	248	825	48	50	48	56	56	56	295	161	460	29	30	29
45+ years	401	157	563	40	39	40	47	48	48	163	59	223	18	19	18
Not reported	1	1	2	100	0	50	0	0	0	0	1	1	0	0	0
Sexual identity															
Heterosexual	1 390	558	1 954	45	49	46	51	55	52	715	355	1 110	30	28	30
Bisexual	61	124	188	54	63	61	59	65	63	30	88	118	43	40	41
Homosexual	49	36	86	63	50	58	69	58	65	31	24	56	39	33	38
Not reported	80	41	125	46	46	46	50	49	50	40	20	62	53	35	47
Total	**1 580**	**759**	**2 353**	**46**	**51**	**48**	**52**	**56**	**54**	**852**	**487**	**1 346**	**32**	**31**	**32**

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 viral hepatitis

6.1 Estimates of the number of people living with diagnosed HIV infection

6.2 Estimates of the number of people living with viral hepatitis

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

6.1 Estimates of the number of people living with diagnosed HIV infection

Table 6.1.1 Estimated number of people living with diagnosed HIV infection in 2010 by State/Territory of HIV diagnosis and sex

State/Territory	Male	Female	Total	%
ACT	240	29	269	1.3
NSW	9 323	757	10 080	47.1
NT	118	27	145	0.7
QLD	3 188	369	3 557	16.6
SA	855	106	961	4.5
TAS	161	21	182	0.9
VIC	4 424	421	4 845	22.6
WA	1 098	254	1 352	6.3
Total	**19 407**	**1 984**	**21 391**	**100.0**

Source: State/Territory health authorities; The Kirby Institute

6.2 Estimates of the number of people living with viral hepatitis

Table 6.2.1 Estimated number of people living with hepatitis B virus infection in 2010

Characteristic	Number	(plausible range)
Hepatitis B virus prevalence in 2010	170 000	(139 000 – 201 000)
During 2010		
Deaths attributable to chronic hepatitis B infection	335	(259 – 544)

Source: Victorian Infectious Diseases Reference Laboratory

Table 6.2.2 Estimated number of people living with hepatitis C virus infection in 2010 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2010	297 000	(227 000 – 367 000)
Exposed to hepatitis C virus but not chronically infected	*76 000*	*(58 000 – 93 000)*
Chronic hepatitis C infection with stage F0/1 liver disease	*168 000*	*(127 000 – 209 000)*
Chronic hepatitis C infection with stage F2/3 liver disease	*48 000*	*(37 000 – 57 000)*
Living with hepatitis C-related cirrhosis	*6 100*	*(4 300 – 7 700)*
During 2010		
Hepatitis C-related liver failure	245	(173 – 309)
Hepatitis C-related hepatocellular carcinoma	122	(87 – 155)

Source: Hepatitis C Virus Projections Working Group 2006

Tables

7 Uptake of treatment for HIV infection and viral hepatitis

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7.3 Monitoring prescriptions for viral hepatitis

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 2010

	Current antiretroviral treatment[1]						
	None	Mono and Double therapy	3+ NRTI±PI (not NNRTI, not II)	3+ NRTI +NNRTI (not PI, not II)	3+ NNRTI +PI,±NRTI (not II)	3+ II, ±NRTI, ±NNRTI, ±PI	Total
Sex							
Male	255 (92%)	132 (93%)	544 (95%)	757 (95%)	90 (95%)	262 (96%)	2 040
Female	23 (8%)	10 (7%)	30 (5%)	39 (5%)	5 (5%)	12 (4%)	119
Age at enrolment (years)							
Less than 30	36 (13%)	8 (6%)	47 (8%)	72 (9%)	3 (3%)	12 (4%)	178
30 – 39	103 (37%)	42 (30%)	212 (37%)	252 (32%)	25 (26%)	69 (25%)	703
40 – 49	80 (29%)	55 (39%)	195 (34%)	270 (34%)	46 (48%)	111 (41%)	757
50+	59 (21%)	37 (26%)	120 (21%)	202 (25%)	21 (22%)	82 (30%)	521
Exposure category							
Men who have sex with men	212 (76%)	117 (83%)	466 (81%)	589 (74%)	75 (79%)	214 (78%)	1 673
Other/not reported	66 (24%)	25 (17%)	108 (19%)	207 (26%)	20 (21%)	60 (22%)	486
Viral load at enrolment (copies/ml)							
Less than 400	99 (41%)	92 (68%)	346 (64%)	521 (73%)	51 (54%)	161 (63%)	1 270
400 – 10,000	77 (32%)	22 (16%)	91 (17%)	60 (8%)	25 (27%)	46 (18%)	321
10,000+	63 (26%)	21 (16%)	107 (20%)	136 (19%)	18 (19%)	48 (19%)	393
Not reported	39	7	30	79	1	19	175
CD4+ count at enrolment (cells/µl)							
Less than 200	18 (7%)	16 (12%)	45 (8%)	61 (8%)	9 (10%)	51 (20%)	200
200 – 500	81 (31%)	64 (46%)	269 (48%)	315 (41%)	39 (41%)	100 (38%)	868
500+	160 (62%)	58 (42%)	241 (43%)	391 (51%)	46 (49%)	109 (42%)	1 005
Not reported	19	4	19	29	1	14	86
AIDS prior to enrolment							
No	260 (94%)	101 (71%)	471 (82%)	671 (84%)	65 (68%)	195 (71%)	1 763
Yes	18 (6%)	41 (29%)	103 (18%)	125 (16%)	30 (32%)	79 (29%)	396
Hepatitis C antibody positive							
No	210 (76%)	120 (85%)	451 (79%)	637 (80%)	82 (86%)	219 (80%)	1 719
Yes	32 (11%)	9 (6%)	64 (11%)	56 (7%)	9 (9%)	31 (11%)	201
No test done	36 (13%)	13 (9%)	59 (10%)	103 (13%)	4 (4%)	24 (9%)	239
Regimen of longest duration in 2009							
None	256 (92%)	4 (3%)	44 (8%)	62 (8%)	1 (1%)	16 (6%)	383
Mono and Double therapy	2 (1%)	110 (77%)	3 (1%)	5 (1%)	0 (0%)	10 (4%)	130
3+ NRTI±PI (not NNRTI, not II)	7 (2%)	18 (13%)	509 (89%)	5 (1%)	1 (1%)	39 (14%)	579
3+ NRTI+NNRTI (not PI,not II)	9 (3%)	5 (4%)	14 (2%)	721 (91%)	4 (4%)	14 (5%)	767
3+ NNRTI+PI, ±NRTI (not II)	2 (1%)	1 (1%)	3 (1%)	0 (0%)	88 (93%)	11 (4%)	105
3+ II, ±NRTI, ±NNRTI, ±PI	2 (1%)	4 (3%)	1 (0%)	3 (0%)	1 (1%)	184 (67%)	195

1 **NRTI:** Nucleoside reverse transcriptase inhibitor; **NNRTI:** Non-nucleoside reverse transcriptase inhibitor; **PI:** protease inhibitor; **II:** Integrase inhibitor

Source: Australian HIV Observational Database

Table 7.1.2 Number of men with diagnosed HIV infection participating in the Gay Community Periodic Surveys, 2006 – 2010, and proportion[1] reporting use of antiretroviral treatment, by city and year

	Year of survey				
City	**2006**	**2007**	**2008**	**2009**	**2010**
Melbourne					
Sample size	157	154	152	145	214
Proportion reporting use of antiretroviral therapy	55.3	51.5	63.3	61.3	69.7
Queensland					
Sample size	70	90	85	74	123
Proportion reporting use of antiretroviral therapy	71.9	64.4	66.1	61.5	68.5
Sydney[2]					
Sample size	336	287	298	267	286
Proportion reporting use of antiretroviral therapy	54.7	53.2	70.6	73.5	68.9
Adelaide, Canberra & Perth (combined)[3]					
Sample size	57	42	31	46	96
Proportion reporting use of antiretroviral therapy	89.0	81.2	72.7	62.9	76.4

1 Age standardised and venue adjusted prevalence.

2 The Sydney Gay Community Periodic Survey includes February survey data only.

3 2006 data from Canberra and Perth, 2007 data from Adelaide, 2008 data from Perth, 2009 data from Adelaide and Canberra and 2010 data from Adelaide and Perth.

Source: National Centre in HIV Social Research; The Kirby Institute; 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	**2006**	**2007**	**2008**	**2009**	**2010[3]**
Nucleoside analogue reverse transcriptase inhibitors					
Abacavir	830	617	586	519	501
Didanosine	601	600	311	207	152
Emtricitabine	163	28	74	54	76
Lamivudine	2 094	697	848	433	641
Stavudine	346	208	140	96	69
Zalcitabine	4	0	0	0	0
Zidovudine	206	189	195	151	150
Lamivudine & Zidovudine	1 525	1 527	965	835	662
Abacavir & Lamivudine	1 592	2 310	2 608	2 681	2 593
Abacavir, Lamivudine & Zidovudine	431	368	275	241	162
Tenofovir	2 504	1 619	1 381	1 232	1 334
Tenofovir & Emtricitabine	1 671	3 116	4 131	5 369	4 262
Non-nucleoside analogue reverse transcriptase inhibitors					
Delavirdine	16	11	5	6	6
Efavirenz	2 208	2 413	2 704	2 971	2 079
Nevirapine	2 387	2 436	2 629	2 701	2 655
Protease inhibitors					
Amprenavir	17	7	0	0	0
Atazanavir	1 746	2 034	2 229	2 582	2 603
Darunavir	–	69	369	569	596
Fosamprenavir	194	188	226	217	155
Indinavir	144	106	75	48	20
Lopinavir & ritonavir	1 543	1 689	1 737	1 536	1 495
Nelfinavir	136	95	0	0	0
Ritonavir	1 845	2 071	2 393	3 015	3 217
Saquinavir	226	206	167	142	90
Tipranavir	–	36	30	28	19
Fusion inhibitors					
Enfuvirtide	197	191	112	55	32
Integrase inhibitor					
Raltegravir	–	–	304	931	1 090
Combination Class Agents					
Tenofovir, Emtricitabine & Efavirenz	–	–	–	–	1 548
Total patients[4]	**9 463**	**9 933**	**10 596**	**11 120**	**11 523**
Total cost[5] ($'000s)	**110 512**	**118 847**	**135 532**	**155 556**	**85 795[3]**

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. Number of person years for July – December 2009 onwards estimated from the HSD Program Public Hospital Dispensed National Pack Number Report because of changes to S100 data collection methodology.

2 Dashes (–) indicate that data were not available. Person years of Etravirine omitted because of insufficient data.

3 Estimated from part year data – 01 January 2010 to 30 June 2010.

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 + the estimated number of patients dispensed with combination class agents.

5 Public Hospital Expenditure.

Source: Highly Specialised Drugs (S100) Program

7.3 Monitoring prescriptions for 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]	Telbivudine[4]	Total cost ($'000s)[5]
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
2008					
January – March	1 482	754	956	–	3 010
April – June	1 430	781	1 086	–	3 598
July – September	1 367	779	1 376	2	3 611
October – December	1 271	792	1 599	9	4 155
2009[6]					
January – March	1 151	803	1 693	9	3 916
April – June	1 232	844	1 889	10	4 383
July – September	1 232	845	2 059	13	4 593
October – December	1 224	793	2 214	12	4 657
2010					
January – March	1 294	727	2 140	11	4 403
April – June	1 232	684	2 197	13	4 342

1 Number of person years 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 Telbivudine included in S100 program from September 2008.

5 Public hospital expenditure only. The cost of all doses of lamivudine is included in 2007, 2008 and 2009 data.

6 Number of person years estimated (2009 onwards) from the HSD Program Public Hospital Dispensed National Pack Number Report because of changes to S100 data collection methodology.

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	Pegylated Interferon and Ribavarin	Pegylated interferon	Total cost ($'000s)[2]
2006			
January – March	1 553	41	6 942
April – June	1 892	20	9 620
July – September	2 473	28	10 844
October – December	2 433	100	12 187
2007			
January – March	2 518	122	11 233
April – June	2 661	149	12 266
July – September	2 513	189	10 844
October – December	2 290	176	12 187
2008			
January – March	2 324	187	10 906
April – June	2 478	204	11 874
July – September	2 600	192	11 271
October – December	2 421	279	10 935
2009[3]			
January – March	2 557	196	10 683
April – June	2 761	228	12 113
July – September	2 910	213	12 689
October – December	2 852	190	12 399
2010			
January – March	2 596	167	11 251
April – June	2 726	150	11 683

1 An estimated 2 847, 3 539, 3 562, 3 969 and 3 760 people were receiving treatment throughout 2006 to 2010, 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 Public hospital expenditure only.

3 Number of person years from January 2009 estimated from the HSD Program Public Hospital Dispensed National Pack Number Report because of changes to S100 data collection methodology.

Source: Highly Specialised Drugs (S100) Program

Methodological notes

1 National surveillance for newly diagnosed HIV infection

1.1 National HIV Registry

Newly diagnosed HIV infection 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. 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 and by all jurisdictions from 2008. Reporting of a previous HIV diagnosis overseas was introduced for cases of HIV infection newly diagnosed in Australia from 1 January 2007 (Table 1.1.3). Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of less than 200 cells/μl.

In New South Wales, information on cases of newly diagnosed HIV infection was sought only from the diagnosing doctor prior to 2008. From 2008, information was also sought from the doctors to whom the person with HIV infection was referred, and follow up was carried out for cases for which the information sought at HIV notification was incomplete. These new procedures resulted in more complete information on new HIV diagnoses and reassignment of cases found to have been newly diagnosed in earlier years.

The surveillance systems for newly diagnosed HIV infection are described in Guy *et al* (2007) and McDonald *et al* (1994b). The National Serology Reference Laboratory, Australia (Dax and Vandenbelt 1993), carried out monitoring of HIV antibody testing.

1.2 Monitoring incident HIV infection

Information on the date of the last negative or indeterminate test or date of onset of primary HIV infection has been routinely sought through each State/Territory health jurisdiction for cases of HIV infection newly diagnosed in Australia from 1 January 1991. Newly acquired HIV infection was defined as newly diagnosed infection with evidence of a negative or indeterminate HIV antibody test or a diagnosis of primary HIV infection within 12 months of HIV diagnosis. The surveillance system for newly acquired HIV infection is described in McDonald *et al* (1994).

Monitoring incident HIV infection using specialised serological laboratory tests

Cases of HIV infection, newly diagnosed in Queensland, Western Australia and at the NSW State Reference Laboratory for HIV, were tested for incident HIV infection using the BED capture enzyme immunoassay (BED-EIA; Parekh *et al* 2002). Cases with a normalised optical density of less than 0.8 were classified as incident HIV infection and cases with a normalised optical density of 0.8 or higher were classified as established HIV infection. The cut-off of 0.8 corresponds to detection of incident HIV infection within 160 days of HIV acquisition. Cases of HIV infection with a BED-CEIA result were linked to cases notified to the National HIV Registry to retrieve the date of first HIV diagnosis in Australia, evidence of newly acquired HIV infection and self report of exposure to HIV.

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 Kirby Institute 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.

1.3 National surveillance for newly diagnosed HIV infection among Aboriginal and Torres Strait Islander people

Information on Aboriginal and Torres Strait Islander status was routinely sought at diagnosis of HIV infection in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia from 1985. Information on Aboriginal and Torres Strait Islander status was available for cases of HIV infection 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 diagnosis of HIV infection was sought prospectively from May 1995. For HIV diagnoses prior to 1995, Aboriginal and Torres Strait Islander status was obtained retrospectively through State/Territory health authorities. In 2001 – 2010, 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, in 99% of Australian born cases. Further information is available in Guthrie *et al* (2000).

Population rates of newly diagnosed HIV infection by Aboriginal and Torres Strait Islander status were calculated using *Experimental estimates of Aboriginal and Torres Strait Islander Australians June 2006* (ABS 2008). The area of residence by Aboriginal and Torres Strait Islander status was calculated using the 2006 census population distribution, based on the Australian Standard Geographical Classification. The rate of HIV diagnosis in the non-Indigenous population was calculated using cases other than those whose exposure to HIV occurred in a high HIV prevalence country and the Australian population other than populations from high HIV prevalence countries in sub-Saharan Africa and South East Asia.

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), McDonald *et al* (2001) and McDonald *et al* (2009).

1.5 Global comparisons

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

- Centers for Disease Control and Prevention. HIV Surveillance – United States, 1981 - 2008. *Morbidity and Mortality Weekly Report 60(21); 689-693.* Centers for Disease Control and Prevention, Atlanta, Georgia. 2010
- Health Protection Agency. HIV in the United Kingdom: 2010 Report: London: Health Protection Agency, Centre for Infections. November 2010
- Joint United Nations Programme on HIV/AIDS (UNAIDS). Report on the global AIDS epidemic 2010. UNAIDS, 2010. http://www.unaids.org

2 National surveillance for viral hepatitis

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

New diagnoses of hepatitis A, new diagnoses of hepatitis B, 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, prevalent and newly acquired hepatitis B, and prevalent and newly acquired hepatitis C 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 2005 – 2009) using *Experimental estimates of Aboriginal and Torres Strait Islander Australians June 2006* (ABS 2008).

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 Princess Alexandra Hospital in Brisbane.

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 *Experimental estimates of Aboriginal and Torres Strait Islander Australians June 2006* (ABS 2008), 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 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 2010).

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

4.1 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. The proportion of men who have sex with men with newly acquired HIV infection was 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).

4.2 HIV and hepatitis C seroprevalence among people who inject drugs

All clients attending needle and syringe program (NSP) sites during one week in 2006 (45 sites), 2007 (53 sites), 2008 (52 sites), 2009 (51 sites) and 2010 (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 inject 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.

The Hepatitis C Incidence and Transmission Study – community (HITS-c) is a prospective observational study of hepatitis C antibody negative people who inject drugs. Participants are tested for hepatitis C antibody and RNA every six months. Incidence of hepatitis C infection was calculated among people completing at least one follow-up visit since enrolment and date of infection was estimated as the mid-point between the last negative and the first positive test.

4.4 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 KIRBY INSTITUTE. Further details of the national data collection on HIV infection in blood donors are given in NCHECR (1996), and Kaldor *et al* (1991).

4.5 Chlamydia prevalence among people seen through the Australian Collaboration of Chlamydia Enhanced Sentinel Surveillance (ACCESS)

The Australian Collaboration of Chlamydia Enhanced Sentinel Surveillance system is a surveillance system for monitoring the uptake and outcome of chlamydia testing in Australia, and was funded through the Australian Government Department of Health and Ageing Chlamydia Pilot Testing Program till 2010. Currently, the system is in a maintenance mode till alternate funding is obtained.

The objectives of ACCESS are to provide enhanced data management systems at clinical sites with a view to routinely monitoring the extent of testing and positivity rates in a range of chlamydia priority populations (Guy R *et al*, 2010). The priority populations include young heterosexual men and women, men who have sex with men, Aboriginal and/or Torres Strait Islander people, and women currently involved in sex work.

ACCESS is a collaboration involving the Burnet Institute's Centre for Population Health (CPH), the National Serology Reference Laboratory (NRL), Australia, the National Perinatal Statistics Unit (NPSU) and the Kirby Institute. ACCESS includes six networks, with each network providing unique information on test uptake and chlamydia positivity rate. The six networks are (1) sexual health services (2) family planning clinics (3) antenatal clinics (4) Aboriginal community controlled health services (5) general practitioner clinics and (6) diagnostic laboratories. CPH has responsibility for managing the network of family planning clinics and the general practice clinics. The Kirby Institute has responsibility for managing the network of sexual health services. The antenatal clinic network is managed by NPSU and the diagnostic laboratory network is managed by NRL. The Aboriginal community controlled health services network is managed by CPH in partnership with the National Aboriginal Community Controlled Health Organisation (NACCHO) and the Kirby Institute.

For sexual health services network, routine chlamydia testing data were extracted directly from patient information management systems at each site and collated at the Kirby Institute. People seen for the first time ever at the clinic, defined as new patients, were included in analyses. Chlamydia testing rates were calculated by dividing the number of chlamydia tests by the number of new patients seen, multiplied by 100. Chlamydia positivity rates were calculated by dividing the number of positive results by the number of new patients tested, multiplied by 100.

4.6 Genital Warts Surveillance Network

The Genital Warts Surveillance Network is a surveillance system for monitoring diagnoses of genital warts in Australia and was funded by CSL Biotherapies. The aim of the network is to determine the population effects of the national human papillomavirus (HPV) vaccination program that began in mid-2007 by monitoring the diagnosis rates of genital warts in various populations, and determining HPV vaccination rates (Donovan B *et al*. 2011). The network comprises eight sexual health services in New South Wales, Northern Territory, Queensland, Tasmania, Victoria and Western Australia.

Routinely collected data at sexual health services includes data on demographics, sexual behavior, residency status, wart diagnosis and HPV vaccination status. These data are extracted directly from patient management information systems at each site and are collated at the Kirby Institute. For this analysis, only the patients seen for the first time at sexual health services were included. Genital warts diagnosis rates were calculated by dividing the the number of patients diagnosed with genital warts by the total number of patients seen at the clinics, multiplied by 100.

5 Risk behaviour

5.1 Sexual, injecting and HIV antibody testing behaviour among men who have sex with 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 gay community attached men in Sydney. In February of each year, men who have sex with 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, level of gay community attachment, sexual practices with regular and casual male partners, injecting drug use, patterns of testing for HIV antibody and other sexually transmissible infections, 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. Men who have sex with 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 inject 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 45 needle and syringe programs in 2006, 53 in 2007, 52 in 2008, 51 in 2009 and 53 in 2010. Further information is available in MacDonald *et al* (1997 and 2000).

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

6.1 Estimates of the number of people living with diagnosed HIV infection

The estimated number of people living with diagnosed HIV was based cases of newly diagnosed HIV infection notified to the National HIV Registry. For each case, information on the year of birth, postcode of usual place of residence at the time of diagnosis, sex, CD4 count and date of HIV diagnosis was used in a computer modelling algorithm. The computer model simulated progression of disease, including potential development of AIDS-defining conditions, using CD4 counts at HIV diagnosis and established rates of change in CD4 count (Mellors *et al* 1997). The model also simulated geographic movement in residence using national census data available at the Australian Bureau of Statistics. Probabilistically-defined mortality was simulated using the age, gender and State/Territory-stratified ABS general population mortality data, AIDS status and standardised mortality ratio for those living with HIV and AIDS in Australia (Nakhaee *et al* 2009).

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

Estimates of the number of people living with hepatitis B virus were developed by the Hepatitis B Program at the Victorian Infectious Diseases Reference Laboratory. The estimates were derived from a deterministic compartmental mathematical model of hepatits B virus infection in the Australian population in the years from 1951 to 2050. A wide range of data sources were used including Australian Bureau of Statistics data, existing mathematical models, notified cases, epidemiologic research and clinical studies. Factors such as migration, attributable and all-cause mortality, the ageing of the population, the variable natural history of chronic hepatitis B infection and the impact of vaccination were incorporated into the model.

Model development included sensitivity analyses of critical variables such as the force of infection and migration estimates. Both static and dynamic force of infection models were created, the latter using novel techniques for deriving the force of infection over time. Model outcomes were validated using a range of external data, particularly national and Victorian serosurvey results. These data were not used to parameterise the model, to allow independent comparison with modelled outcomes. Results from the second national serosurvey (Gidding *et al* 2007) were used to generate the plausible range around the model estimates of hepatitis B prevalence.

6.3 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 2009 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 viral hepatitis

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 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 Kirby Institute, where the data are collated and analysed. By March 2011, 27 participating clinical sites enrolled a total of 3 531 people into the AHOD.

Data from 26 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 2010 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 2011, 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.

A detailed summary of treatments data from the AHOD is published in the Australian HIV Observational Database Annual Report (NCHECR 2010).

Self-reported use of antiretroviral therapy for the treatment of HIV infection was monitored among men who have sex with 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 treatment

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 number of people dispensed each antiretroviral drug during a calendar year was estimated from the total number of packs dispensed for each drug during the corresponding financial year quarters. For most treatments, it is assumed that a single pack provides adequate treatment for 1 month. Some treatments have complex dispensing, where 1 pack provides more than 1 month of treatment (eg. Ritonavir). In this case, average number of packs per quarter was calculated based on standard dosing amounts (eg. Atazanavir 300mg once daily can be boosted with Ritonavir 100 mg once daily, etc). 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.

The number of people dispensed lamivudine per calendar year from 2004 – 2008 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 from the summation of two figures. The first number was calculated by summing 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 and the second number was simply the number of patients dispensed with combination class agents.

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 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. In 2007 and 2008, 3 539 and 3 562 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.

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