

HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report

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in collaboration with

Australian Gonococcal Surveillance Programme

Communicable Diseases Network Australia

Centre in Social Research in Health

National Serology Reference Laboratory, Australia

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

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Preface

This report is the seventeenth 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 2012 and reported by 31 March 2013, 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 2013* 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 C and Sexually Transmissible Infections in Australia Annual Report of Trends in Behaviour 2013*, edited by the Centre for Social Research in Health. 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 2013* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2012, as reported by 31 March 2013. 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.

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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, ACT
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Paediatric Surveillance Unit and its contributors, Westmead, NSW
- Australian Red Cross Blood Service, Melbourne, VIC
- Centre for Social Research in Health, The University of New South Wales, NSW
- 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 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, Health Directorate, ACT Government, Canberra, ACT
- Centre for Health Protection, NSW Ministry of Health, North Sydney, NSW
- Sexual Health and Blood Borne Virus Unit, CDC, Department of Health and Families, Darwin, NT
- Queensland Health, Brisbane, QLD
- STI and BBV Section, Communicable Disease Control Branch, SA Health, Adelaide, SA
- Department of Health and Human Services, Hobart, TAS
- Communicable Disease Epidemiology and Surveillance, Health Protection Branch, Victorian Government Department of Health, Melbourne, VIC; The Macfarlane Burnet Institute for Medical Research and Public Health Limited, Prahran; Hepatitis B Program, Epidemiology Unit, Victorian Infectious Diseases Reference Laboratory, VIC
- Communicable Diseases Control Branch, Department of Health, Perth, WA

Australian Gonococcal Surveillance Programme

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- Queensland Health Scientific Services, Coopers Plains, QLD
- 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 (PHL), Department of Microbiology and Immunology, 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

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; Parramatta Sexual Health Clinic, Parramatta; Albion Street Centre, Sydney; Clinic 16, St Leonards, NSW
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- Department of Clinical Immunology, Royal Perth Hospital, Perth, WA

Collaboration of Australian Needle and Syringe Programs

- Directions, ACT.
- ACON Hunter; Central Coast NSP Services, Gosford, Long Jetty and Woy Woy; First Step Program, Port Kembla and Nowra; Health ConneXions, Liverpool; Hunter Harm Reduction Services, Newcastle; Kirketon Road Centre and Clinic 180, Kings Cross; Mid North Coast Harm Reduction, Coffs Harbour; Murrumbidgee Harm Reduction, Albury and Wagga Wagga; NSW Users and AIDS Association (NUAA), Surry Hills; Northern NSW Harm Reduction, Ballina, Byron Bay, Grafton, Lismore, Murwillumbah, Nimbin, and Tweed Heads; Resource and Education Program for IDUs, Redfern; Central Access Service, Kogarah and Sutherland; South Court Primary Care NSP, Nepean; Western Sydney HIV/Hepatitis C Prevention Service, Blacktown, Mt Druitt and Parramatta.
- Northern Territory AIDS and Hepatitis C Council, Alice Springs, Darwin and Palmerston, NT.
- Biala Community Alcohol and Drug Services, Brisbane; Cairns 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.
- Anglicare NSP Service, Hobart and Glenorchy; Clarence Community Health Centre, Clarence; Devonport Community Health Centre, Devonport; Salvation Army Launceston, Launceston.
- Barwon Health Drug and Alcohol Services, Geelong; Health Information Exchange, St Kilda; Health Works, Footscray; Inner Space, Collingwood; North Richmond NSP, North Richmond; Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS), Melbourne.
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Annual Surveillance Report 2013 Advisory Committee

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- Dr Benjamin Cowie, Australasian Society for HIV Medicine, NSW
- Ann Roberts, Australasian Society for HIV Medicine, NSW
- Simon Donohoe, Australian Federation of AIDS Organisations, Sydney, NSW
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- Helen Tyrrell, Hepatitis Australia, Canberra, ACT
- Jo Watson, National Association of People Living with HIV/AIDS, Sydney, NSW
- Associate Professor David Wilson (Chair), Professor Basil Donovan, Professor Lisa Maher, Associate Professor Rebecca Guy, Dr Iryna Zablotska-Manos, Ann McDonald, Melanie Middleton, Andrew Nakhla, The Kirby Institute

Summary

HIV infection

- A total of 1 253 cases of HIV infection was newly diagnosed in Australia in 2012, a 10% increase over the number in 2011. The annual number of new HIV diagnoses has gradually increased over the past 13 years, from 724 diagnoses in 1999.
- An estimated 25 708 people were living with diagnosed HIV infection in Australia at the end of 2012.
- Trends in newly diagnosed HIV infection have differed across State and Territory health jurisdictions. In New South Wales, the rate of HIV diagnosis per 100 000 population declined steadily from 6.3 in 2003 to 4.9 in 2010 and then increased to 6.2 in 2012. In Victoria, the rate increased from around 5.0 in 2003 – 2007 to 5.3 in 2008 – 2012. Population rates of HIV diagnosis increased over time in Queensland, from around 4.0 in 2003 – 2007 to 4.9 in 2008 – 2012, in Western Australia, from 3.1 to 4.0, and in Tasmania, from 1.4 to 2.8. Increasing HIV diagnosis rates were also reported in the Australian Capital Territory and in the Northern Territory but have remained relatively stable in South Australia.
- HIV continued to be transmitted primarily through sexual contact between men.
- The number of diagnoses of newly acquired HIV infection in Australia increased from 286 in 2008 to 397 in 2012. Diagnoses of newly acquired HIV infection indicate the lower bound to the number of cases of recent HIV transmission that have actually occurred in Australia. Use of a laboratory test for detecting recent HIV infection among cases newly diagnosed in 2012 resulted in an increase in cases with evidence of recent infection of 30%.
- 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. Aboriginal and Torres Strait Islander cases of HIV infection differed from non-Indigenous cases, in that a substantially greater proportion were attributed to injecting drug use (13% compared with 2%) in the five years 2008 – 2012.
- Of 1 364 cases of HIV infection newly diagnosed in 2008 – 2012, for which exposure to HIV was attributed to heterosexual contact, 58% 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 2008 – 2012 was stable at around 31 per 100 000 population. The rate of diagnosis of newly acquired hepatitis B infection steadily declined in Australia from 1.2 in 2008 to 0.8 per 100 000 population in 2012.
- An estimated 207 000 people were living in Australia in 2012 with hepatitis B infection. An estimated 383 deaths in 2012 were attributable to chronic hepatitis B infection. The estimated prevalence of chronic hepatitis B infection in the Australian population was 0.97%.
- The *per capita* rate of diagnosis of hepatitis C infection declined from 52.5 in 2008 to 44.2 per 100 000 population in 2012.
- An estimated 230 000 people were living in Australia with chronic hepatitis C infection, including 58 000 with moderate to severe liver disease.
- The reported annual number of diagnoses of newly acquired hepatitis C infection increased from 365 to 466 in 2008 – 2012 and accounted for 4.6% of new hepatitis C diagnoses in 2012.
- 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 2012, chronic hepatitis B infection and chronic hepatitis C infection were the underlying causes of liver disease in 5.6% and 22% of liver transplants, respectively.
- The proportion of people seen at needle and syringe programs who reported having injected drugs for five years or less was stable in 2008 – 2012 at around 10%. Within this group, hepatitis C prevalence declined from 28% in 2008 to 17% in 2012.

Sexually transmissible infections other than HIV

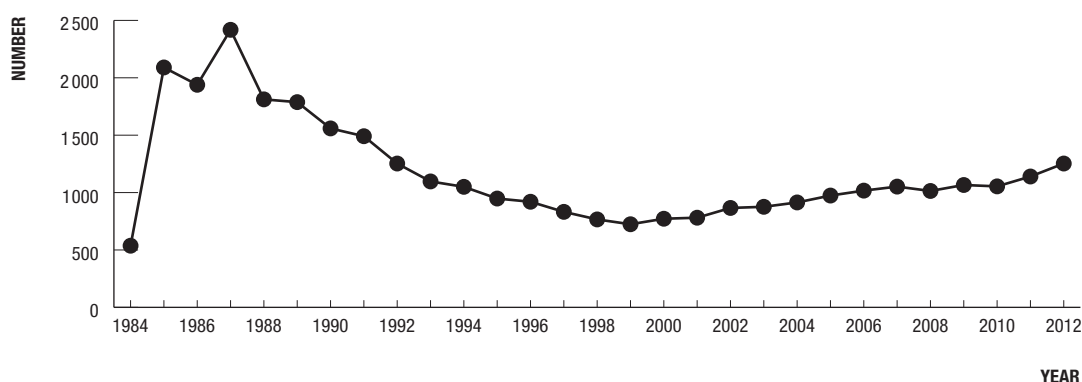
- Chlamydia was the most frequently reported notifiable condition in Australia in 2012 with 82 707 diagnoses. The population rate of diagnosis of chlamydia in 2012 was 355 per 100 000 population.
- The number of diagnoses of donovanosis declined from 2 in 2008 to 0 in 2011 and 1 in 2012, demonstrating the continuing success of efforts to eliminate donovanosis from the Australian population.
- The rate of diagnosis of gonorrhoea increased by 67%, from 35.1 per 100 000 population in 2008 to 58.9 in 2012. The rate of diagnosis of infectious syphilis increased among males from 6.1 in 2008 to 6.7 in 2012. Increased rates of infectious syphilis in 2012 occurred in Queensland, Victoria and New South Wales and declining rates were reported in Western Australia and the Northern Territory.
- Substantially higher rates of diagnosis of chlamydia and gonorrhoea were recorded in the Aboriginal and Torres Strait Islander population compared with non-Indigenous population.
- Following the introduction of vaccination against human papilloma virus, the proportion of young women aged 21 years or younger who were diagnosed with genital warts decreased from 12.1% in 2007 to 1.1% in 2012.

Main Findings

HIV infection

The annual number of new HIV diagnoses in Australia increased to 1 253 cases in 2012, a 10% increase over the numbers diagnosed in 2011. The number of new diagnoses has steadily increased over the past 13 years from 724 cases in 1999 (Figure 1). The rate of HIV diagnosis per 100 000 population has increased from 4.3 in 2003 to 5.4 in 2012, a 26% increase (Figure 2a and 2b).

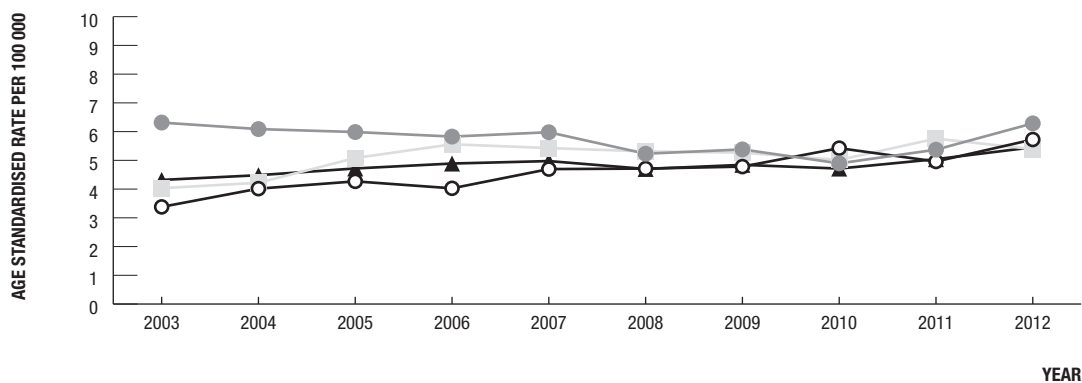
Figure 1 Newly diagnosed HIV infection in Australia by year



● New HIV diagnoses

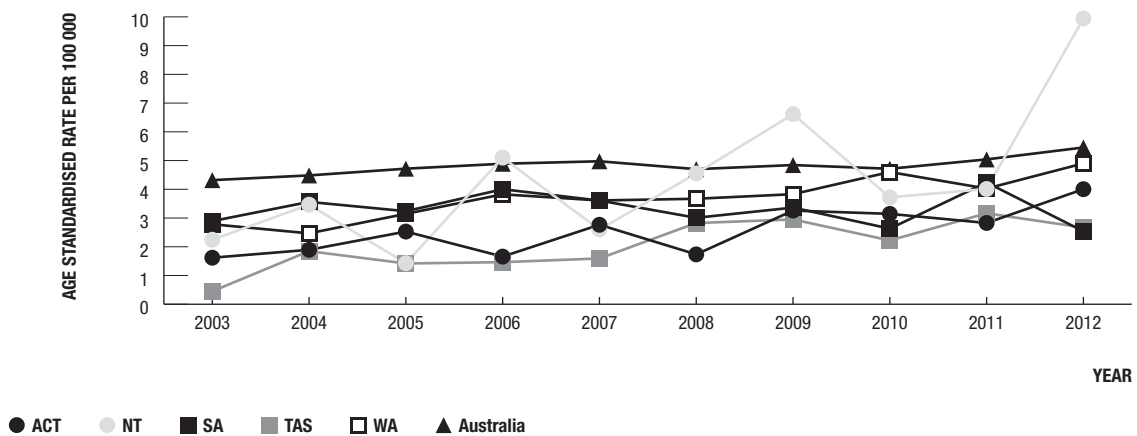
Recent trends in the population rate of newly diagnosed HIV infection have differed across Australia. In New South Wales, the rate of HIV diagnosis declined from 6.3 per 100 000 population in 2003 to 4.8 in 2010 and then increased to 6.2 in 2012 (Figure 2a). In Victoria, the rate of HIV diagnosis increased from around 5.0 in 2003 – 2007 to 5.3 in 2008 – 2012. Population rates of HIV diagnosis have increased over time in Queensland, from around 4.0 in 2003 – 2007 to 4.9 in 2008 – 2012, in Western Australia, from 3.1 to 4.0, and in Tasmania, from 1.4 to 2.8. Increases in the population rate of HIV diagnosis have also occurred in the Australian Capital Territory and in the Northern Territory but have remained relatively stable South Australia over the past 10 years. The median age at HIV diagnosis among males declined to 36 years in 2012 after having remained stable at 37 and 38 years from 2004 to 2011 (Table 1.1.1).

Figure 2 (a) Newly diagnosed HIV infection, 2003 – 2012, by year and State/Territory



● NSW ○ QLD ■ VIC ▲ Australia

Figure 2 (b) Newly diagnosed HIV infection, 2003 – 2012, by year and State/Territory



Of 1 253 cases of HIV infection newly diagnosed in Australia in 2012, 190 (15.2%) 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 2012.

Figure 3 Newly diagnosed HIV infection in Australia, 2003 – 2012, by newly acquired HIV status and year

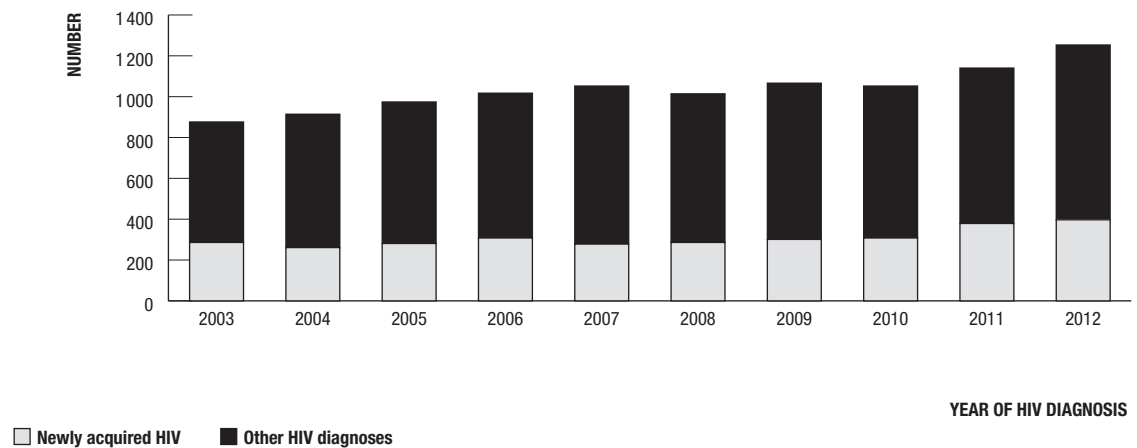
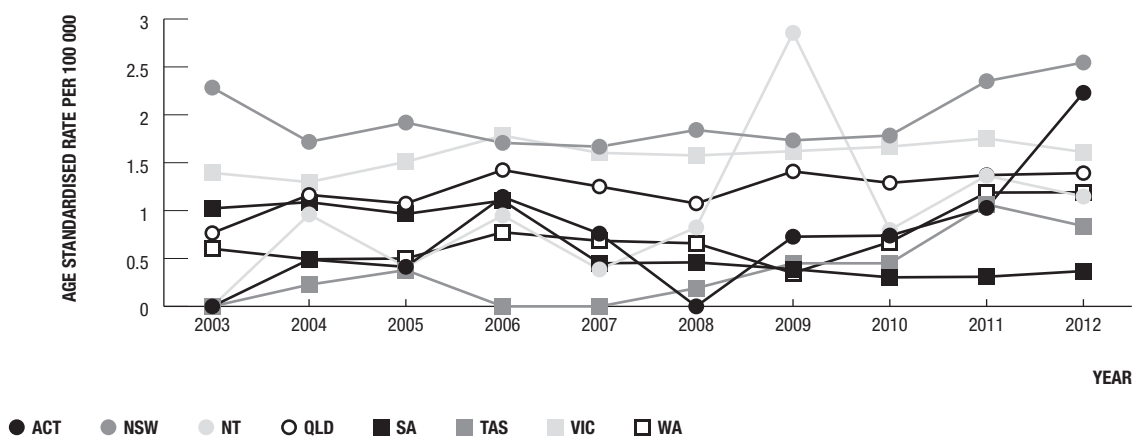
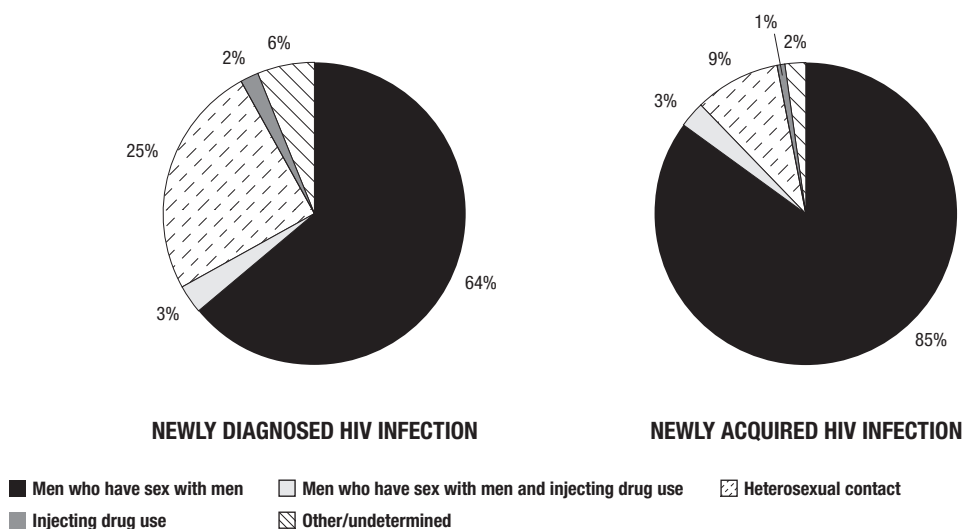


Figure 4 Newly acquired HIV infection, 2003 – 2012, by year and State/Territory



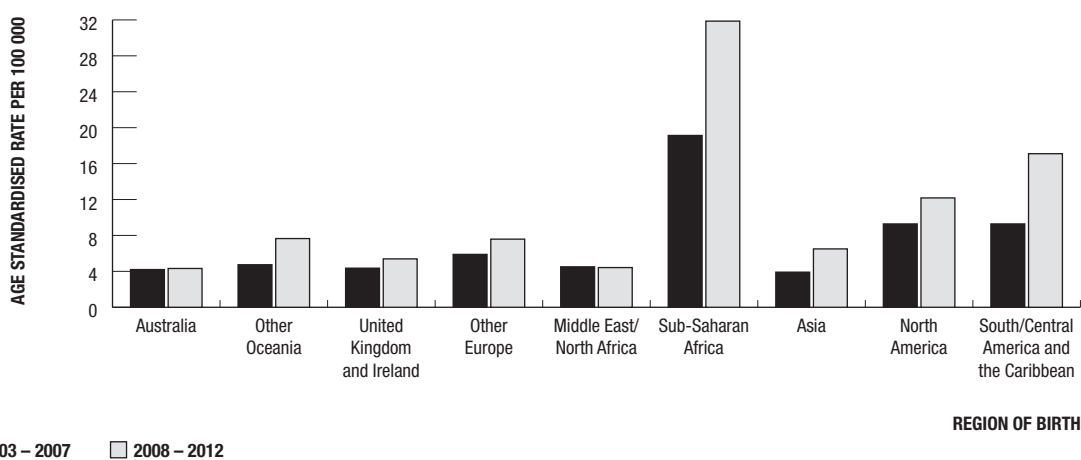
Among cases of newly diagnosed HIV infection, the proportion who acquired the infection in the 12 months prior to diagnosis gradually increased from 26% in 2007 to 32% in 2012 (Figure 3). The population rate of diagnosis of newly acquired HIV infection in New South Wales declined from 2.2 in 2003 to 1.6 in 2007 and increased to 2.3 and 2.5 in 2011 and 2012, respectively. The rate in Queensland increased from 1.1 in 2003 – 2007 to 1.3 in 2008 – 2012 whereas in Victoria, the rate was relatively stable over the past 10 years. In Western Australia, the rate in 2011 – 2012 was stable after substantial increases in 2010 and 2011 (Figure 4).

Figure 5 HIV diagnoses in Australia, 2008 – 2012, by HIV exposure category



Transmission of HIV in Australia continues to occur primarily through sexual contact between men (Figure 5). In 2008 – 2012, 67% of new HIV diagnoses occurred among men who have sex with men, 25% were attributed to heterosexual contact, 2% to injecting drug use and exposure was undetermined in 6%. Men who have sex with men accounted for 88% of diagnoses of newly acquired HIV infection. Exposure to HIV was attributed to heterosexual contact and injecting drug use in 9% and 1%, respectively, of diagnoses of newly acquired HIV infection.

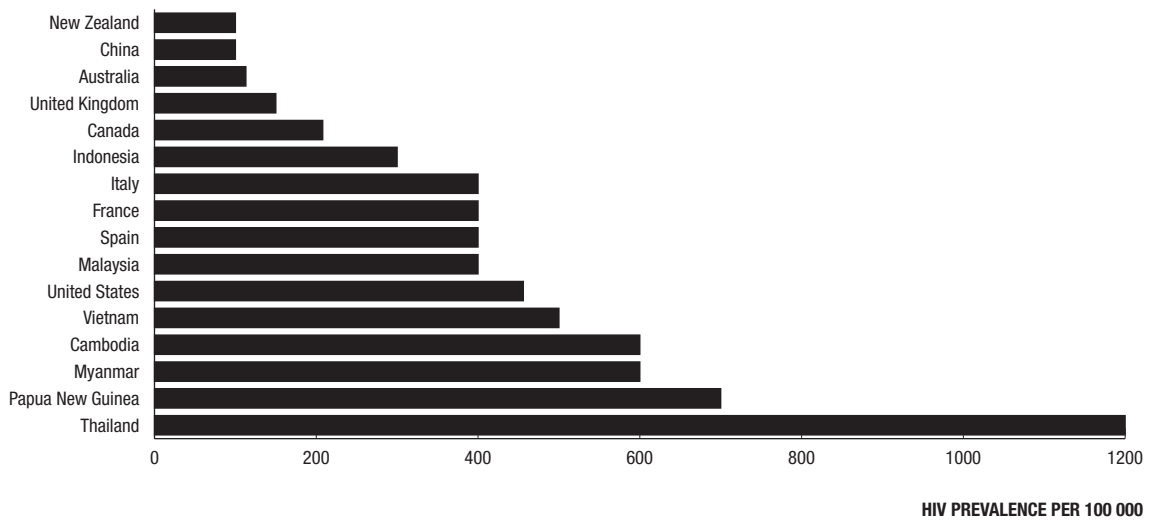
Figure 6 HIV diagnoses in Australia, 2003 – 2012, by year and region of birth



A new HIV surveillance program has been established to provide a more complete indication of recent HIV transmission than is available through diagnoses of newly acquired infection. Testing of cases of HIV infection newly diagnosed in Australia in 2012 with a specialised laboratory test identified 125 additional cases of recent infection, resulting in a 30% increase over the number of diagnoses of newly acquired HIV infection.

People born in Australia accounted for 54% of cases of HIV infection newly diagnosed in 2008 – 2012. Among Australian born cases, the rate of HIV diagnosis increased from 4.1 in 2008 and 2009 to 4.9 in 2012 (Figure 6). The rate of HIV diagnosis in the overseas born population increased from 7.1 in 2008 to 9.5 in 2012. The population rate of HIV diagnosis in the sub-Saharan African-born and Asian-born populations in the 5 years from 2008 to 2012 compared to the previous 5 years increased by 66% and the rate in the Oceania population other than Australia increased by 62%. 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



At the end of 2012, an estimated 28 000 – 34 000 people were living with HIV infection in Australia of whom approximately 25 700 were diagnosed with their infection. As an overall national prevalence (130 – 158 per 100 000), the level of HIV infection in Australia is slightly lower than in the United Kingdom in 2011 (150 per 100 000 population) and three to four-fold lower than in the United States in 2009 (456 per 100 000) (Figure 7).

Viral hepatitis

The population rate of reported diagnoses of hepatitis A infection in Australia remained below at 1.3 per 100 000 population in 2008 – 2012, except in 2009, when a large multi-jurisdictional outbreak of hepatitis A infection resulted in an increased rate of 2.6 (Table 2.1.1).

Figure 8 Hepatitis B notifications, 2003 – 2012, by year and sex

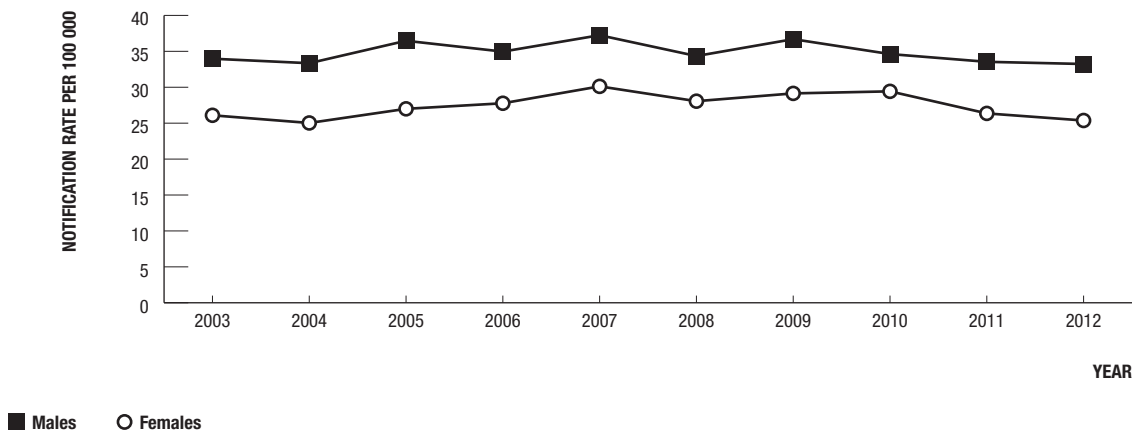
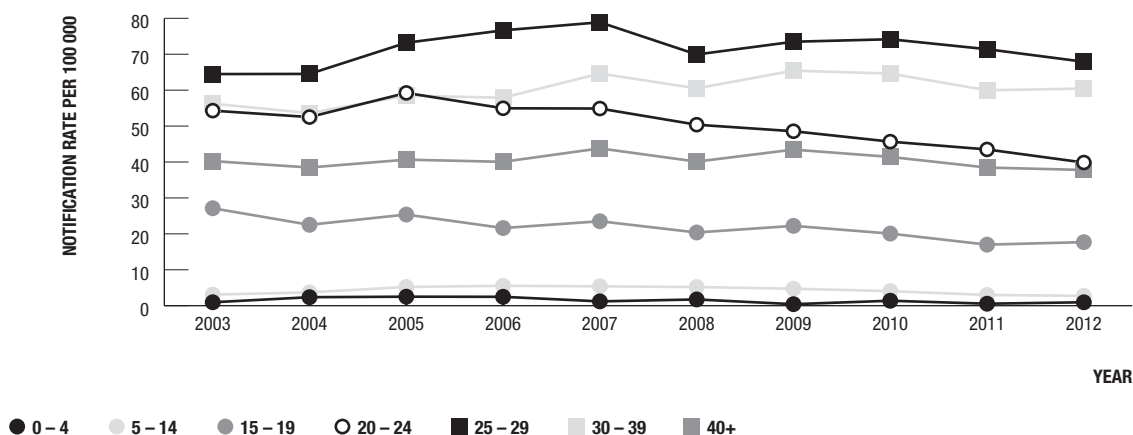


Figure 9 Hepatitis B notifications, 2003 – 2012, by year and age group



The population rate of diagnosis of hepatitis B infection in Australia declined from 31.0 in 2008 to 29.1 in 2012 (Figure 8). The decreases in the rate of hepatitis B diagnosis were among people aged 20 – 24 years, from 54.3 in 2003 to 39.8 in 2012 and among those aged 15 – 19 years, from 27.1 in 2003 to 17.6 in 2012 (Figure 9). The number and rate of diagnosis of newly acquired hepatitis B decreased from 262 and 1.2 in 2008 to 193 and 0.8 in 2012 (Figure 10). The rate of diagnosis of newly acquired hepatitis B infection declined substantially from 2003 among people aged 15 – 19 years, 20 – 24 years and 25 – 29 years (Figure 11). Adolescent “catch up” vaccination programs may have contributed in this reduction. However, the rate of diagnosis of newly acquired hepatitis B infection also declined among those aged 30 years or older.

Figure 10 Newly acquired hepatitis B notifications, 2003 – 2012, by year and sex

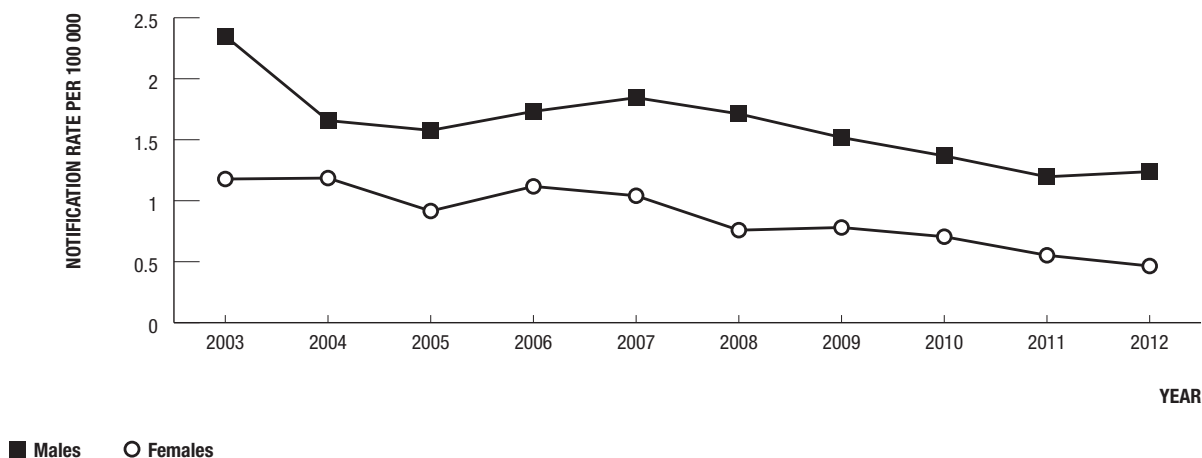
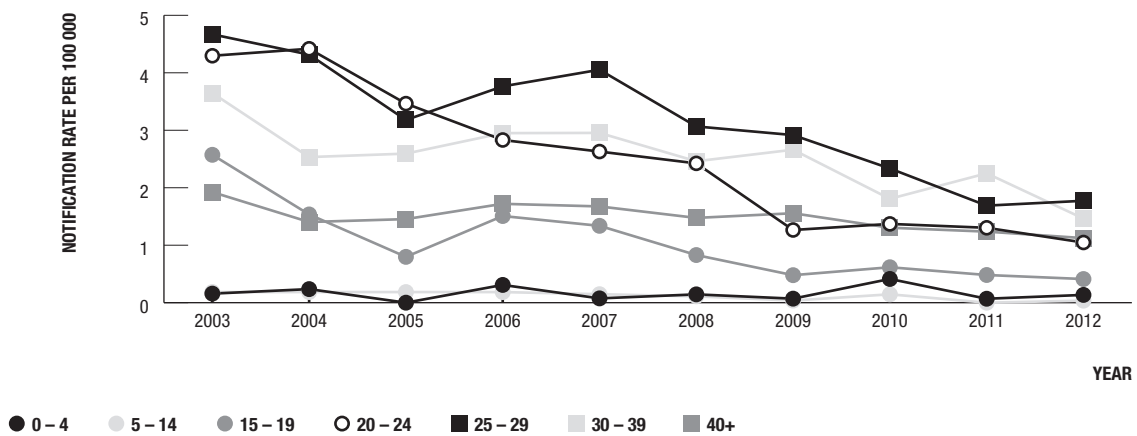
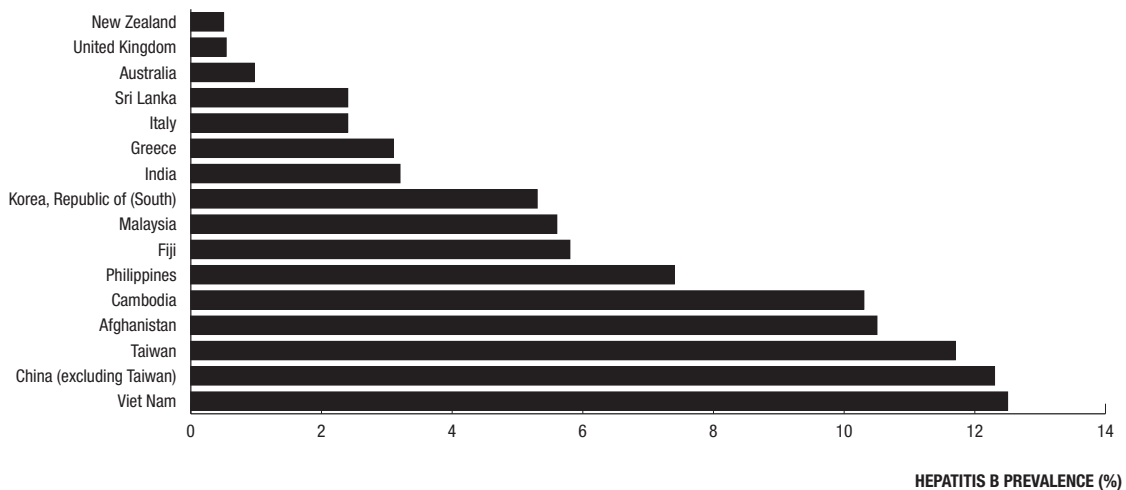


Figure 11 Newly acquired hepatitis B notifications, 2003 – 2012, by year and age group



In 2012, the estimated number of people living in Australia with chronic hepatitis B was 207 000. As a national prevalence (0.97%), the level of hepatitis B infection in Australia is greater than in New Zealand and the United Kingdom but substantially less than prevalence levels in many countries of birth of people living in Australia (Figure 12).

Figure 12 Estimated prevalence of chronic hepatitis B infection in Australia by country of birth



The number and rate of diagnosis of hepatitis C infection per 100 000 population declined from 11 308 and 52.5 in 2008 to 10 114 and 44.2 in 2012. Declines have been observed in all age groups. In the past ten years, the rate declined by 59% in the 15 – 19 year age group, by 56% in the 20 – 24 year age group and by 50% in the 25 – 29 year age group (Figure 13).

Figure 13 Hepatitis C notifications, 2003 – 2012, by year and age group

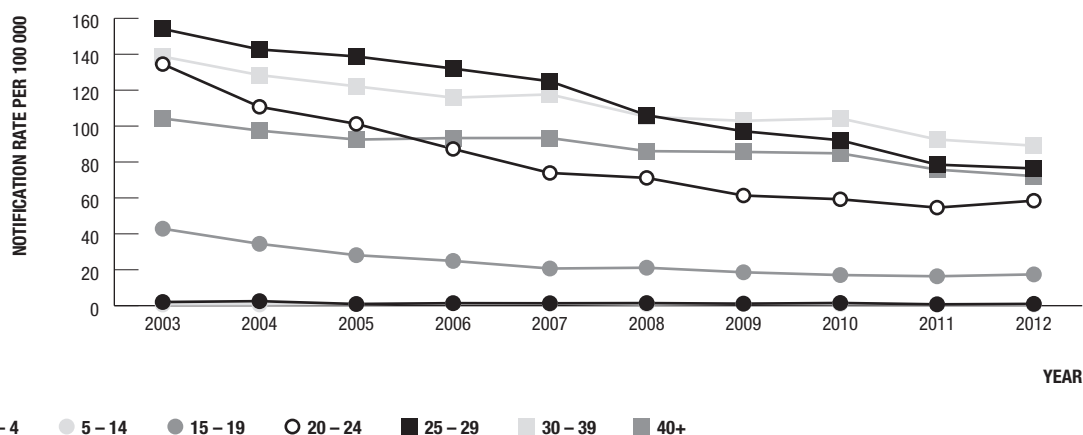
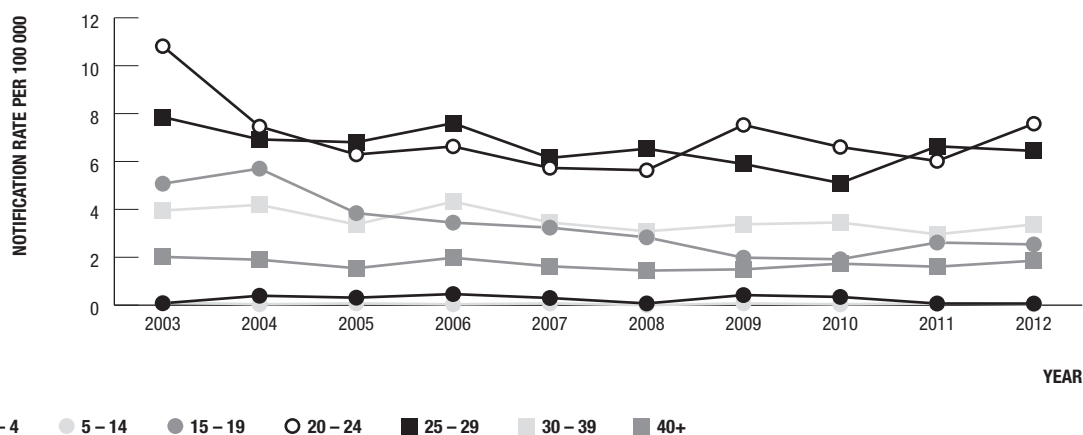


Figure 14 Newly acquired hepatitis C notifications, 2003 – 2012, by year and age group



Around 4.6% of cases of hepatitis C infection diagnosed in 2008 – 2012 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 – 24 and 25 – 29 years (Figure 14), 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 ranged 6.0 per 100 person years in 2009 to 14.8 in 2011 (Table 4.3.1). Hepatitis C incidence among hepatitis C negative people who inject drugs enrolled in the Hepatitis C Incidence and Transmission Study – community (HITS-c) in Sydney was 10.2 per 100 person years in 2009 and 8.5 in the years 2011 – 2012 (Table 4.3.2).

The vast majority of diagnoses of newly acquired hepatitis B infection and newly acquired hepatitis C infection occurred among Australian born people. The proportion of diagnoses of newly acquired hepatitis B infection among overseas born people was lower (Europe, North and South America and the Caribbean) or higher (Oceania, Middle East, Africa and Asia) than the proportion of people in Australia from these countries (Table 2.1.8). By contrast, the proportion of diagnoses of newly acquired hepatitis C was substantially lower than the proportion of people in Australia who were born overseas (Table 2.1.14).

An estimated 207 000 people were living with hepatitis B infection and 383 deaths were attributed to chronic hepatitis B infection in 2012 (Table 6.2.1). This is a significant increase compared with previous years and is the result of revised estimates of net overseas migration since the last Census in 2006. The prevalence of chronic hepatitis B infection in the Australian population was 0.97% and was greater than 10% among people born in Vietnam, China, Taiwan, Afghanistan and Cambodia (Table 2.4.1)

An estimated 310 000 people living in Australia in 2012 had been exposed to hepatitis C virus. Of these, 80 000 people were estimated to have cleared their infection, 173 500 had chronic hepatitis C infection and early liver disease (stage F0/1), 51 500 had chronic hepatitis C infection and moderate liver disease (stage F2/3), and 6 500 were living with hepatitis C related cirrhosis.

Hepatitis C prevalence in 2012 was approximately 140 times lower among blood donors (0.01%) than the estimated prevalence of hepatitis C infection in the Australian population as a whole (1.4%) (Figure 38).

Sexually transmissible infections other than HIV

Chlamydia was the most frequently reported infection in Australia in 2012, with 82 707 newly diagnosed cases. The population rate of reported diagnoses more than doubled in both the male and female populations, from 125 in 2003 to 307 per 100 000 male population in 2012, and from 181 in 2003 to 419 per 100 000 female population in 2012 (Figure 15).

Figure 15 Chlamydia notifications, 2003 – 2012, by year and sex

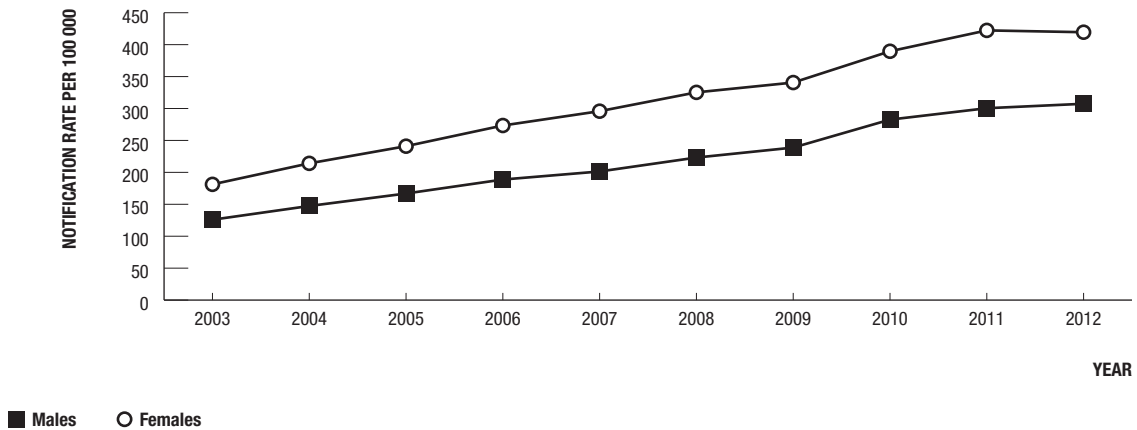
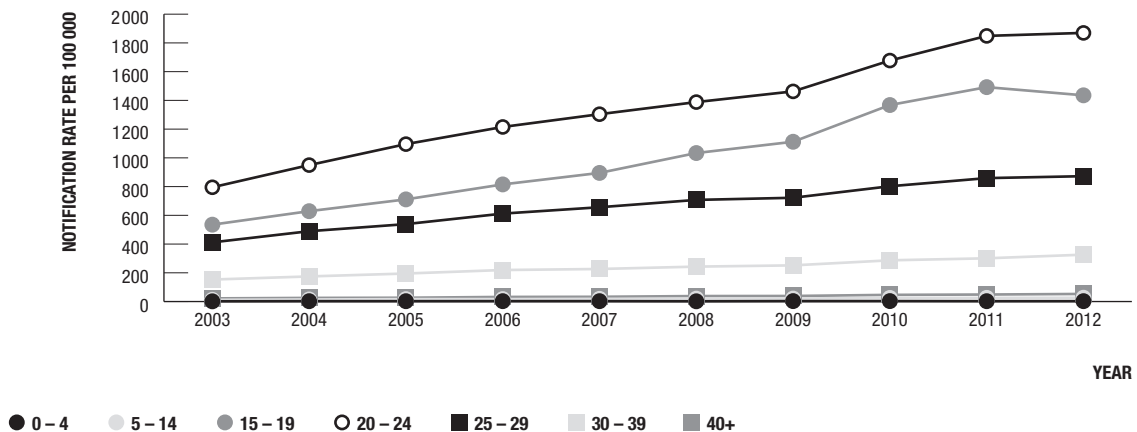


Figure 16 Chlamydia notifications, 2003 – 2012, by year and age group



Increasing rates of diagnosis of chlamydia were reported in the majority of states and territories. Diagnoses in the 15 – 24 year age group accounted for 81% of the annual number (Figure 16). In 2008 – 2012, the female-to-male sex ratio in the 15 – 19 year age group was 3:1 whereas it was 1.3:1 in the 20 – 29 year age group. Age and sex specific patterns of diagnosis may have been influenced by differential testing rates. In the Northern Territory, Queensland and Tasmania, the rates of chlamydia diagnosis declined in 2012 compared with 2011 and these declines are the first to have occurred in the past 10 years.

Figure 17 Gonorrhoea notifications, 2003 – 2012, by year and sex

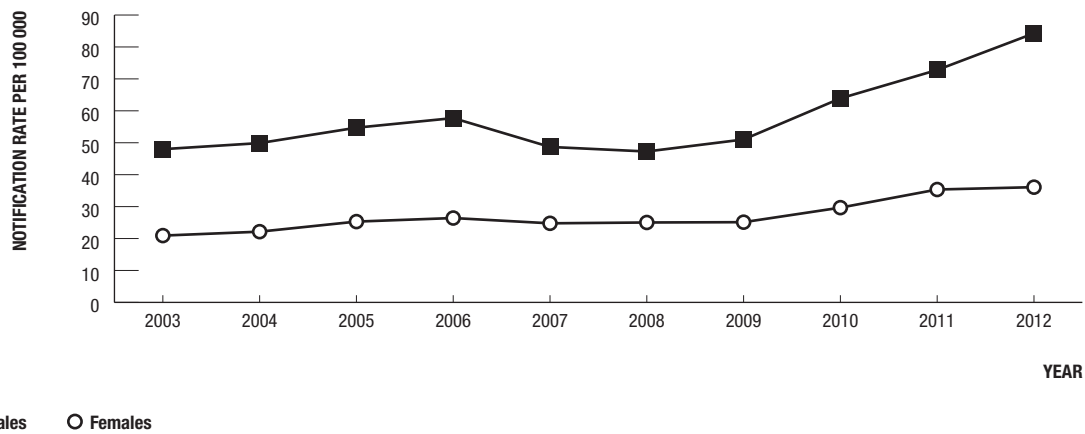
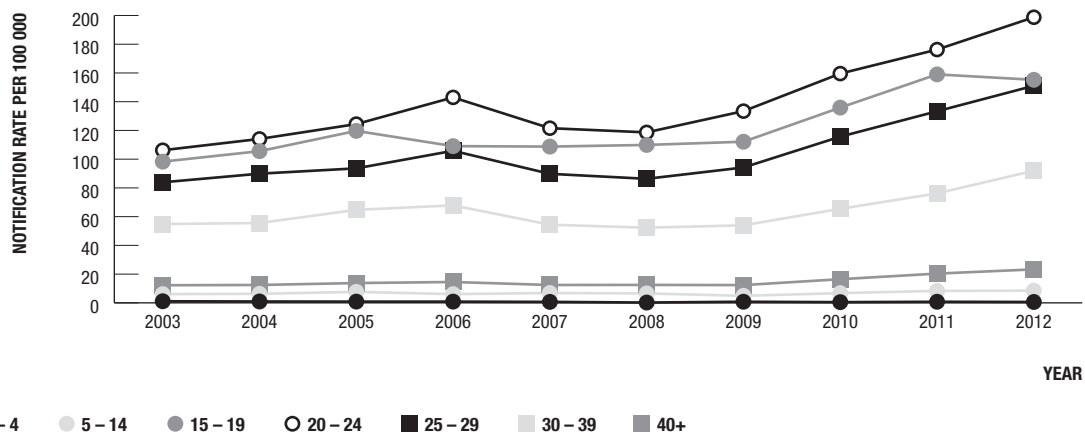


Figure 18 Gonorrhoea notifications, 2003 – 2012, by year and age group



Following a stable population rate of gonorrhoea diagnosis in both males and females in the years from 2003 to 2007, the rate increased to 84.3 and 36.1 among males and females, respectively, in 2012 (Figure 17). The rates of diagnosis of gonorrhoea increased almost 3 fold in New South Wales, 2.5 times in Victoria and by 53% in Queensland and 12% in Western Australia. In the past ten years, the rate of gonorrhoea diagnosis was highest among people aged 20 – 24 years and 15 – 19 years (Figure 18).

Figure 19 Infectious syphilis notifications, 2004 – 2012, by year and sex

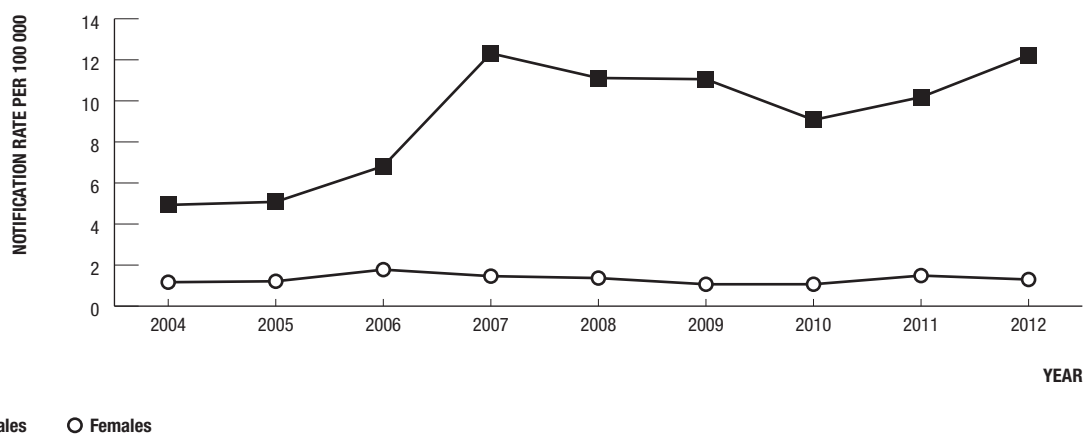
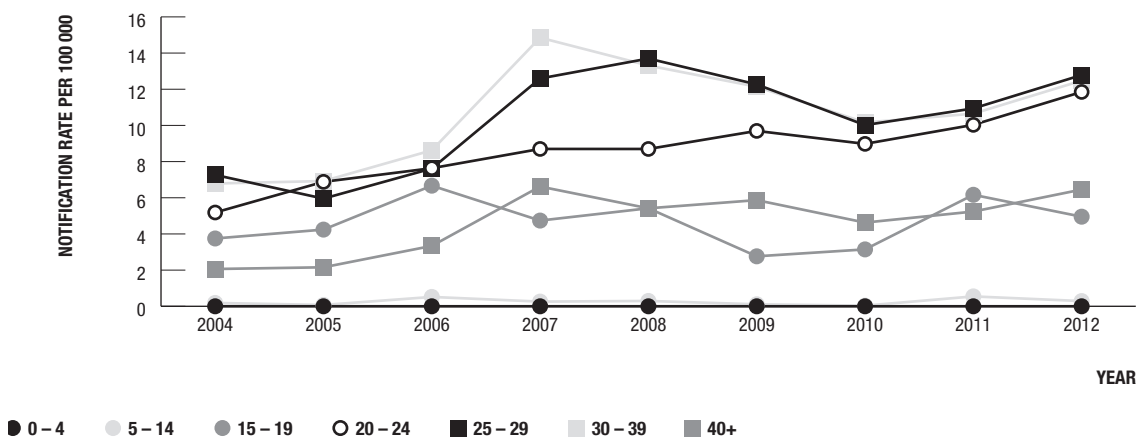


Figure 20 Infectious syphilis notifications, 2004 – 2012, by year and age group



The rate of diagnosis of infectious syphilis among men has remained above 9.0 over the past six years whereas the rate among women remained low at less than 2.0 per 100 000 population (Figure 19). Diagnoses of infectious syphilis were almost completely confined to men who have sex with men. Over the past five years, rates of diagnosis of infectious syphilis were stable in New South Wales and Victoria, increasing in Queensland and declining in the Northern Territory and Western Australia. The rate of diagnosis of infectious syphilis was highest in the 30 – 39, 25 – 29 and in the 20 – 24 year age groups (Figure 20).

The rates of notification of chlamydia, gonorrhoea and infectious syphilis in the Northern Territory continue to be substantially higher than those in other states and territories. The continuing decline in the number of diagnoses of donovanosis, from 2 in 2008 to 0 in 2011 and 1 in 2012, may be a consequence of improved case ascertainment and treatment.

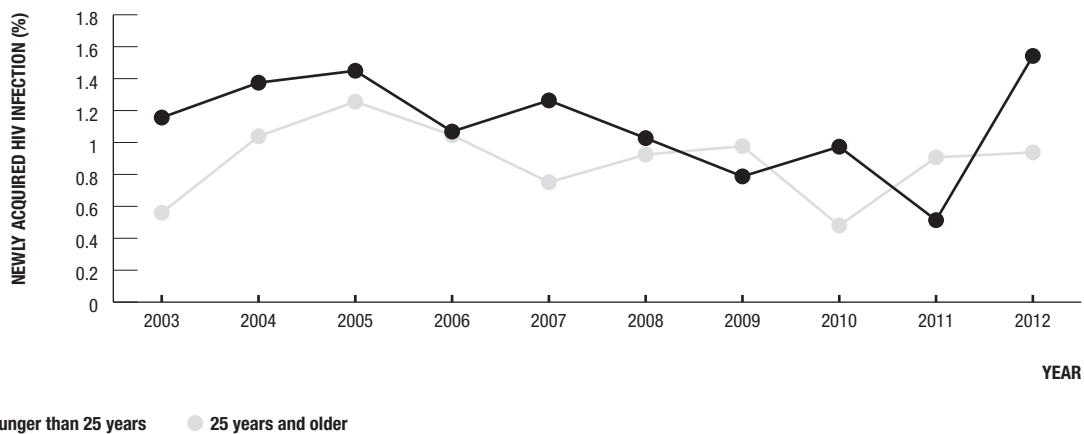
HIV, viral hepatitis and sexually transmissible infections in selected populations

Population groups regarded as priorities for prevention and health promotion activities under the most recent national strategies for HIV, hepatitis B, hepatitis C, sexually transmissible infections (STI) and the 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. These population groups were identified as priority groups because they are recognised as either experiencing ongoing HIV, hepatitis B, hepatitis C or STI transmission, burdens of these infections or having the potential for increases in transmission.

Men who have sex with men

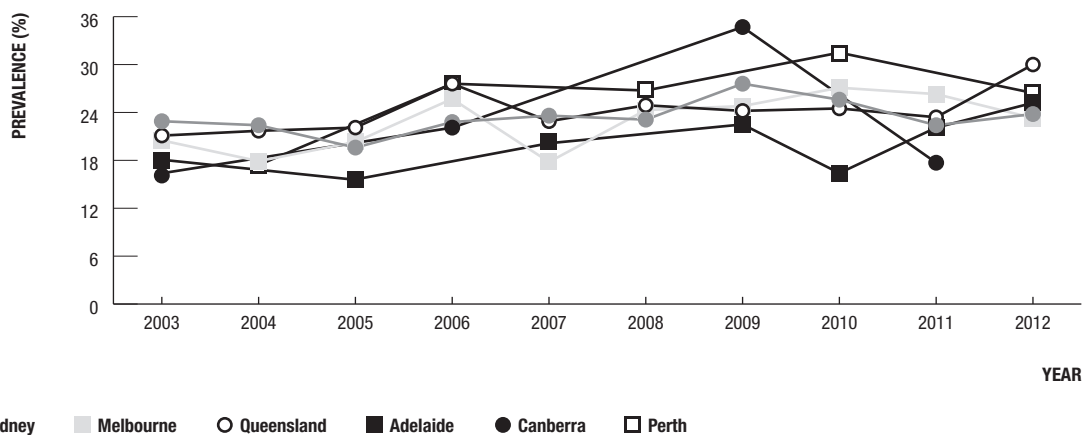
Men who have sex with men continue to make up the majority of people with diagnosed HIV infection in Australia. The overall number of new HIV diagnoses in this category in 2003 – 2007 and in 2008 – 2012 was 3 302 and 3 703, including 1 208 (37%) and 1 472 (39%) diagnoses of newly acquired HIV infection, respectively. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (88%) than total HIV diagnoses (67%) among men. This difference is likely to reflect higher frequency of HIV antibody testing among men who have sex with men than among other groups at risk of HIV infection.

Figure 21 Newly acquired HIV infection among men who have sex with men seen at sexual health clinics, 2003 – 2012, by year and age group



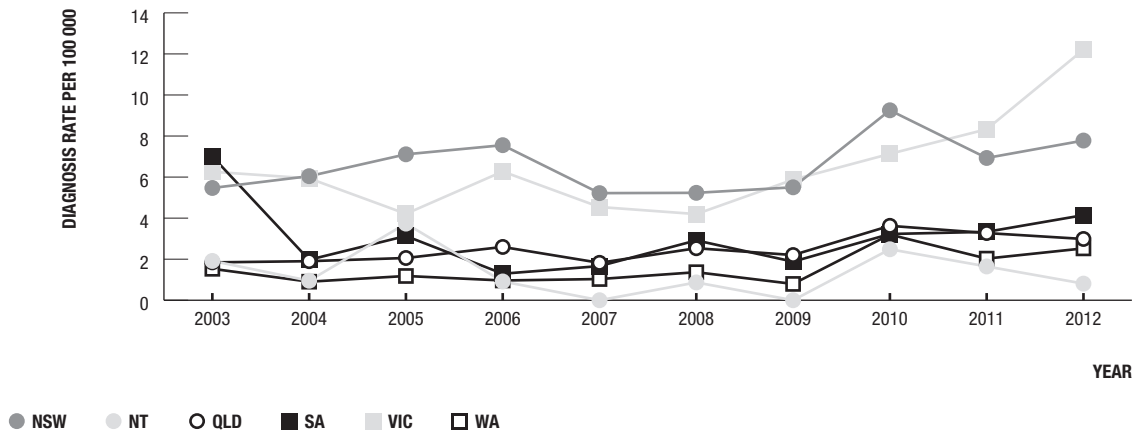
Among men who have sex with men seen at metropolitan sexual health clinics, the percentage diagnosed with newly acquired HIV infection at younger than 25 years of age declined from 1.4% in 2005 to 0.5% in 2011 and then increased to 1.5% in 2012. Among men aged 25 years and older, the percentage with newly acquired infection declined from 1.3% in 2005 to 0.5% in 2010 and increased to 0.9% in 2011 – 2012 (Figure 21).

Figure 22 Prevalence of unprotected anal intercourse with casual partners, 2003 – 2012, 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 remained relatively stable at around 24% in 2003 – 2012 (Figure 22). The same survey carried out in Queensland indicates that the proportion of respondents reporting unsafe sexual behaviour increased from around 22% in 2003 – 2007 to around 24% in 2008 – 2012. The respondents in Melbourne also indicated an increase in unsafe sexual behaviour, from around 20% in 2003 – 2007, to 25% in 2008 – 2012. Recent declines in unsafe sexual behaviour were reported in Canberra and Perth.

Figure 23 Gonococcal rectal infection among men, 2003 – 2012, by State/Territory and year

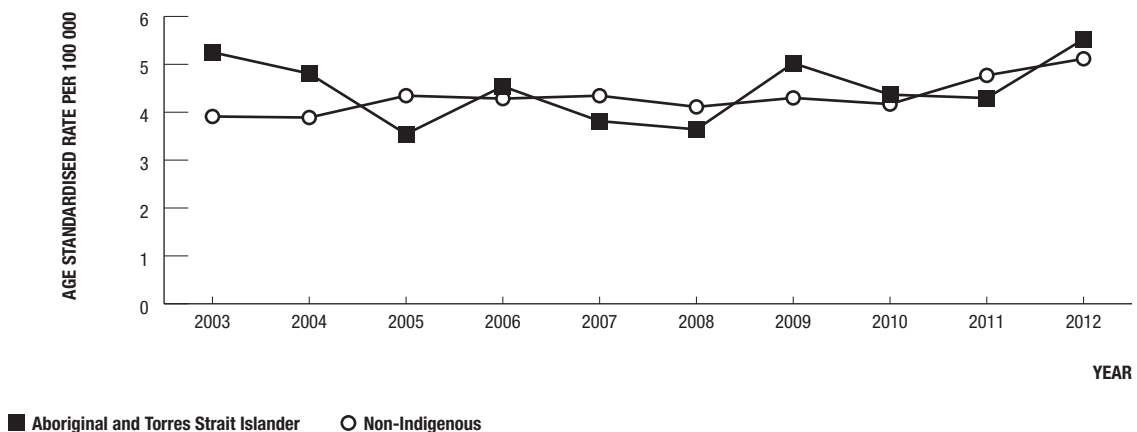


Surveillance data for gonorrhoea also provide an indication of unsafe sexual behaviour among men who have sex with men in Australia. The rate of rectal gonococcal isolates among men in New South Wales increased from around 6.0 in 2003 – 2007 to 6.9 in 2008 – 2012. In Victoria, the rate of rectal gonorrhoea isolates increased steadily from 4.1 in 2008 to 12.2 in 2012 (Figure 23).

Aboriginal and Torres Strait Islander people

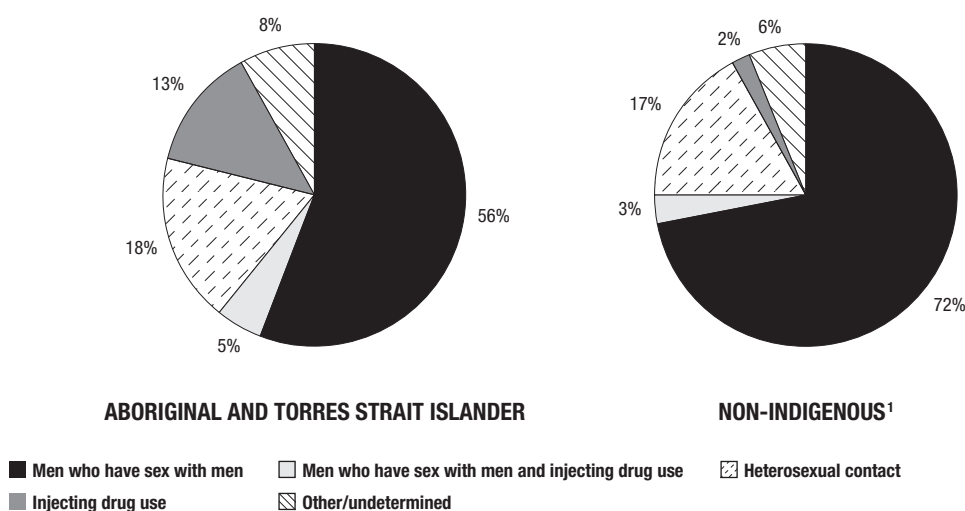
The rates of HIV diagnosis *per capita* in the Aboriginal and Torres Strait Islander and the non-Indigenous population, excluding cases and populations from high HIV prevalence countries in sub-Saharan Africa and South East Asia, differed little in 2003 – 2012 (Figure 24). In the Aboriginal and Torres Strait Islander population, the rate of HIV diagnosis was relatively stable in 2003 – 2010 at around 4.5 and increased to 5.5 per 100 000 population in 2012. In the non-Indigenous, non-high HIV prevalence country of birth population, the rate of HIV diagnosis was also relatively stable at around 4.2 in 2003 – 2010 and then increased to 5.1 in 2012. 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 24 HIV diagnoses, 2003 – 2012, by Aboriginal and Torres Strait Islander status¹ and year



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

Figure 25 HIV diagnoses, 2008 – 2012, by Aboriginal and Torres Strait Islander status and HIV exposure category

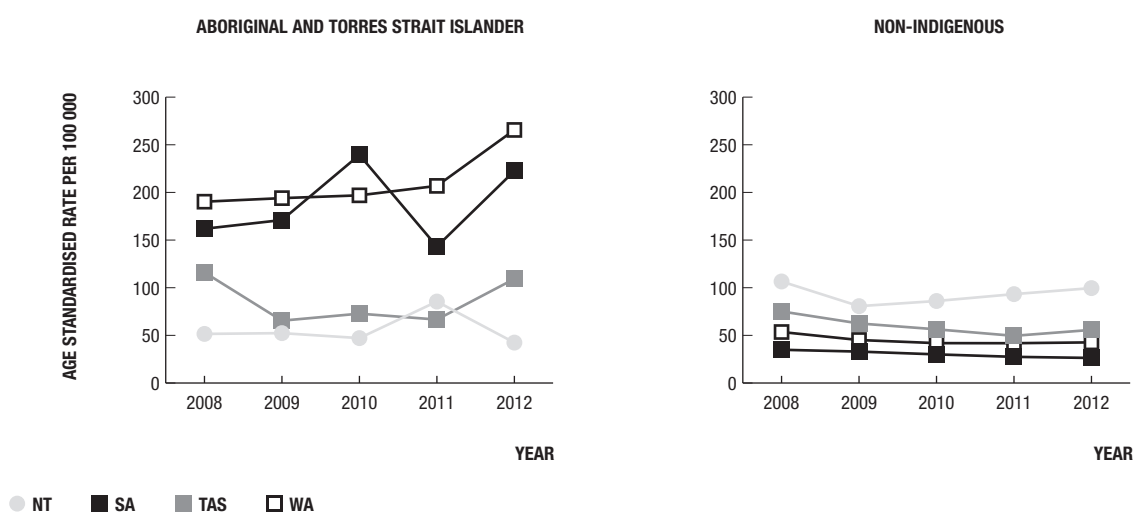


¹ The non-Indigenous category excludes cases from high prevalence countries.

In 2008 – 2012, the most frequently reported route of HIV transmission was sexual contact between men in both the non-Indigenous cases (75%) and in the Aboriginal and Torres Strait Islander cases (61%). Heterosexual contact was the reported source of exposure to HIV in 18% of Aboriginal and Torres Strait Islander cases and in 17% of non-Indigenous, non-high prevalence country of exposure cases (Figure 25). Aboriginal and Torres Strait Islander cases differed from non-Indigenous cases in that a higher proportion of infections were attributed to injecting drug use (13% among Aboriginal and Torres Strait Islander cases vs 2% for non-Indigenous cases), and a higher proportion of infections were among women (22% among Aboriginal and Torres Strait Islander cases vs 8% for non-Indigenous non-high prevalence country of exposure cases in 2008 - 2012).

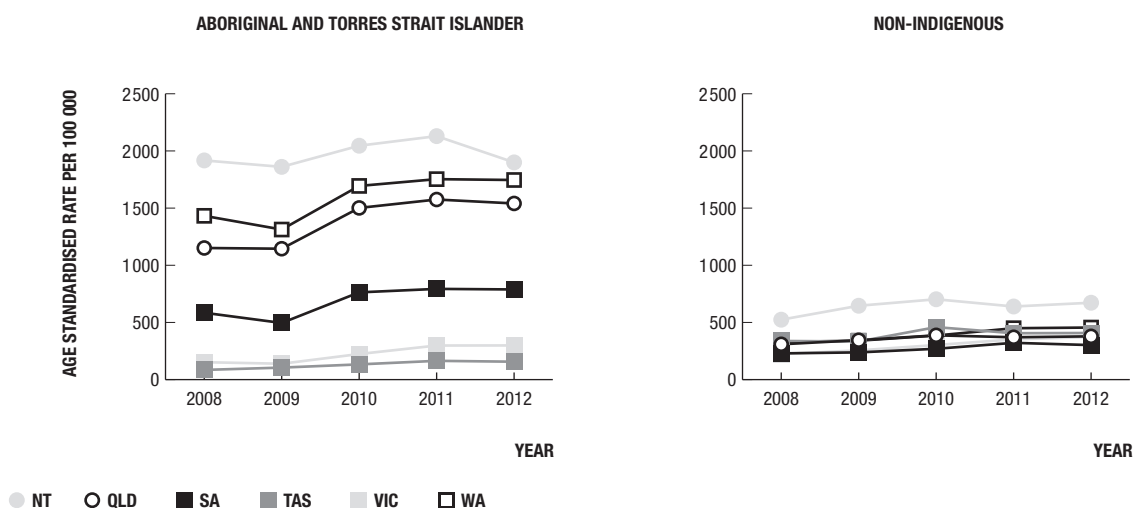
The rate of diagnosis of hepatitis B infection in the Aboriginal and Torres Strait Islander population resident in the Northern Territory, South Australia, Tasmania and Western Australia declined from 156.1 in 2008 to 85.6 in 2012, and the rate of diagnosis of newly acquired hepatitis B infection was 5 or less in 2008 – 2012. In the non-Indigenous population, the rate of diagnosis of hepatitis B increased from 26.3 in 2008 to 31.5 in 2012. The population rate of diagnosis of newly acquired hepatitis B infection was around 1 per 100 000 population in 2008 – 2012.

Figure 26 Hepatitis C notifications, 2008 – 2012, by Aboriginal and Torres Strait Islander status, State/Territory and year



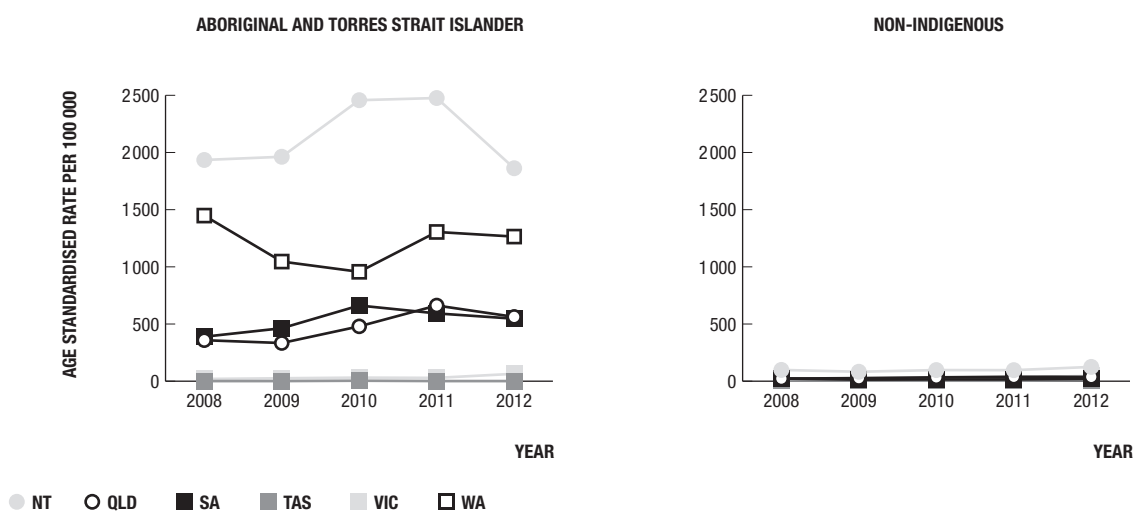
The population rate of diagnosis of hepatitis C infection in the Aboriginal and Torres Strait Islander population resident in the Northern Territory, South Australia, Tasmania and Western Australia increased from 130.2 in 2008 to 166.2 per 100 000 population in 2012 and decreased in the non-Indigenous population from 51.1 in 2008 to 40.3 in 2012. In the Northern Territory, the rate of hepatitis C diagnosis in the Aboriginal and Torres Strait Islander population declined from 51.1 in 2008 to 42.4 in 2012 and in the non-Indigenous population, from 106.5 in 2008 to 99.6 in 2012. In South Australia, Tasmania 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 27 Chlamydia notifications, 2008 – 2012, by Aboriginal and Torres Strait Islander status, State/Territory and year



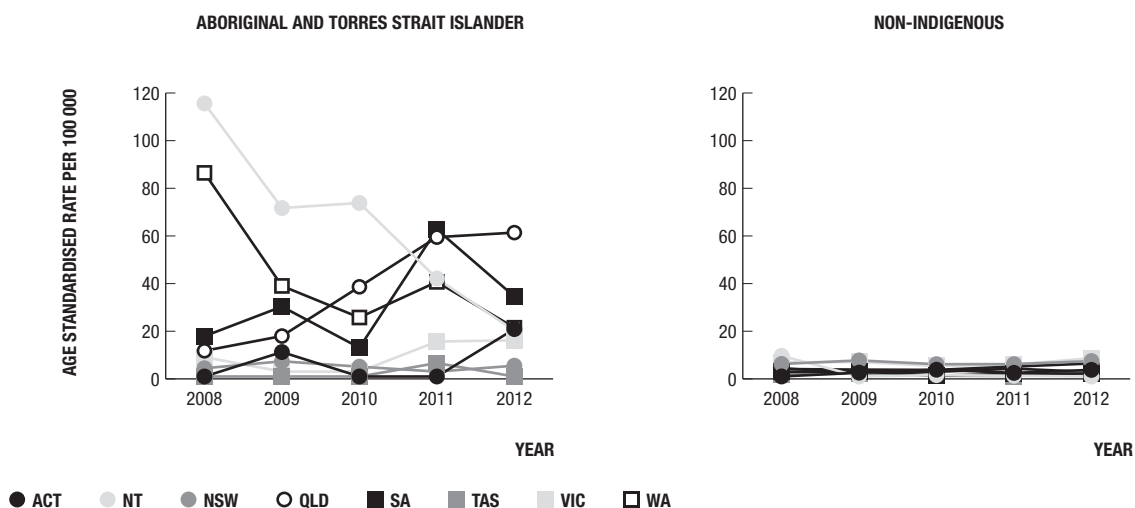
The rate of diagnosis of chlamydia in the Aboriginal and Torres Strait Islander population was around 1 300 in 2008 – 2012. In the non-Indigenous population resident in State/Territory jurisdictions other than the Australian Capital Territory and New South Wales, the rate of chlamydia diagnosis increased steadily from 274 in 2008 to 384 in 2012 (Figure 27).

Figure 28 Gonorrhoea notifications, 2008 – 2012, 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 increased from 772.4 in 2008 to 828.5 in 2012. In the non-Indigenous population, the rate of gonorrhoea diagnosis increased from 20.7 in 2008 to 40.3 in 2012 (Figure 28).

Figure 29 Infectious syphilis notifications, 2008 – 2012, 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 30 in 2008 to 27.2 in 2012 (Figure 29). The rate of infectious syphilis diagnosis in the Aboriginal and Torres Strait Islander population resident in the Northern Territory declined substantially whereas the rate increased in Queensland, from 11.8 in 2008 to 61.4 in 2012. The rate of diagnosis of infectious syphilis in the non-Indigenous population was stable at around 5.4 per 100 000 population in 2008 – 2012.

People who inject drugs

In 2003 – 2012, approximately 6% 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 30 HIV and hepatitis C prevalence in needle and syringe programs, 2003 – 2012, by year and sex

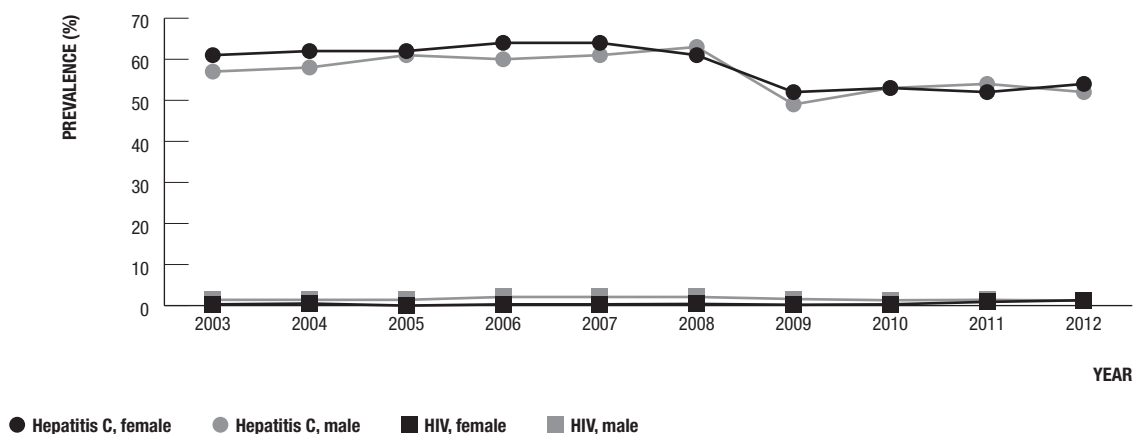
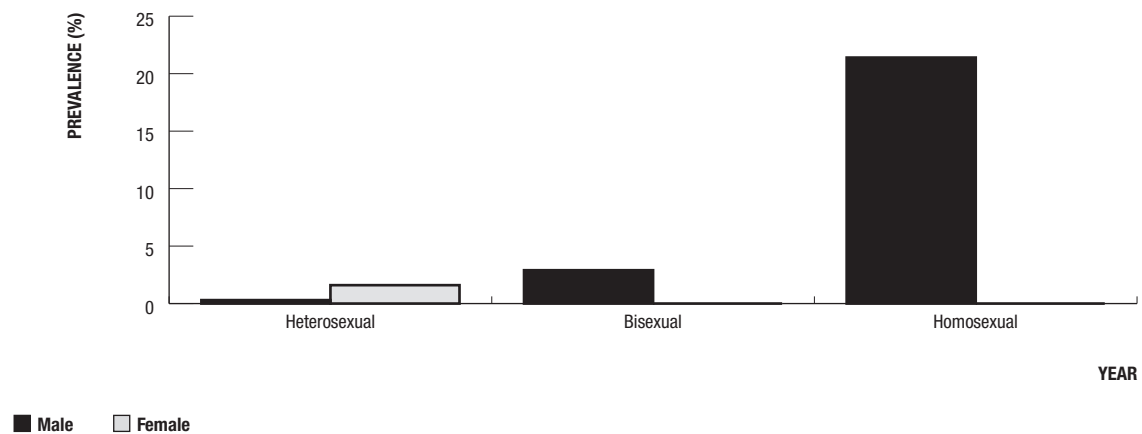


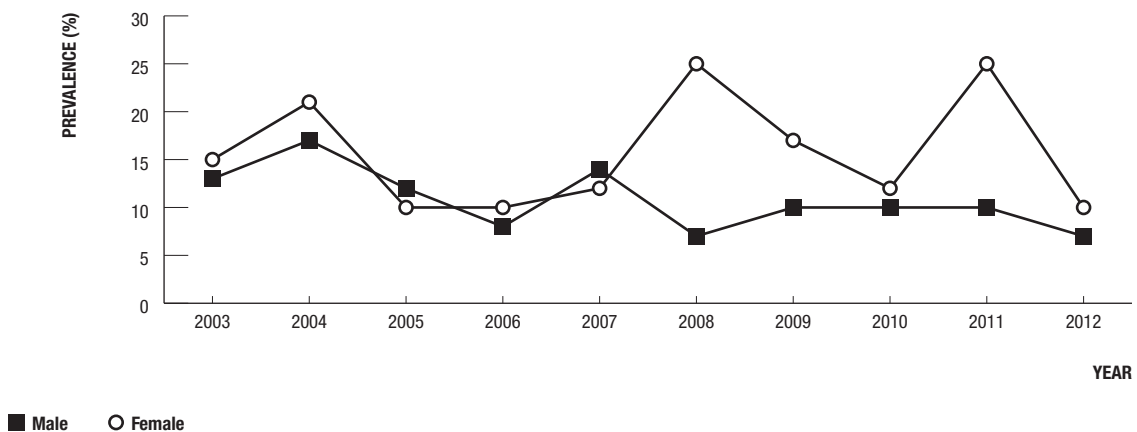
Figure 31 HIV prevalence at needle and syringe programs, 2012, by sexual identity



HIV prevalence among people attending needle and syringe programs has remained low (around 1% in 2003 – 2012) (Figure 30) but in the subgroup of men who have sex with men, it was 21.4% in 2012 (Figure 31). Of 3 293 men and 2 251 women with a history of injecting drug use who were tested for HIV antibody at metropolitan sexual health centres in 2003 – 2012, 8 males (0.2%) and 1 woman (0.04%) were diagnosed with HIV infection (Figures 36 and 37).

In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs remained at high levels in 2003 – 2012 (Figure 30). Hepatitis C prevalence dropped among males from 63% in 2008 to 52% in 2012, and among females from 61% in 2008 to 54% in 2012. The decline in hepatitis C prevalence was not explained by demographic or laboratory factors. Hepatitis C prevalence among people who inject drugs has remained stable from 2009.

Figure 32 Prevalence of sharing among recent initiates to injecting¹ seen at needle and syringe programs, 2003 – 2012, by year and sex



¹ With a history of injecting drug use less than five years 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 remained stable at approximately 10% between 2008 and 2012; hepatitis C prevalence among these people declined from 28% in 2008 to 17% in 2012. The fluctuations in the prevalence of reported sharing of injecting equipment among women may be attributable to the relatively small number of women with a short duration of injecting drug use (Figure 32). 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 decrease 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 1 016 in 2003 – 2007 to 1 364 in 2008 – 2012, accounting for 21% and 24.7% of total HIV diagnoses in 2003 – 2007 and in 2008 – 2012, respectively.

Figure 33 Newly diagnosed HIV among men who report an exposure other than sex with men, 2003 – 2012, by year and HIV exposure category

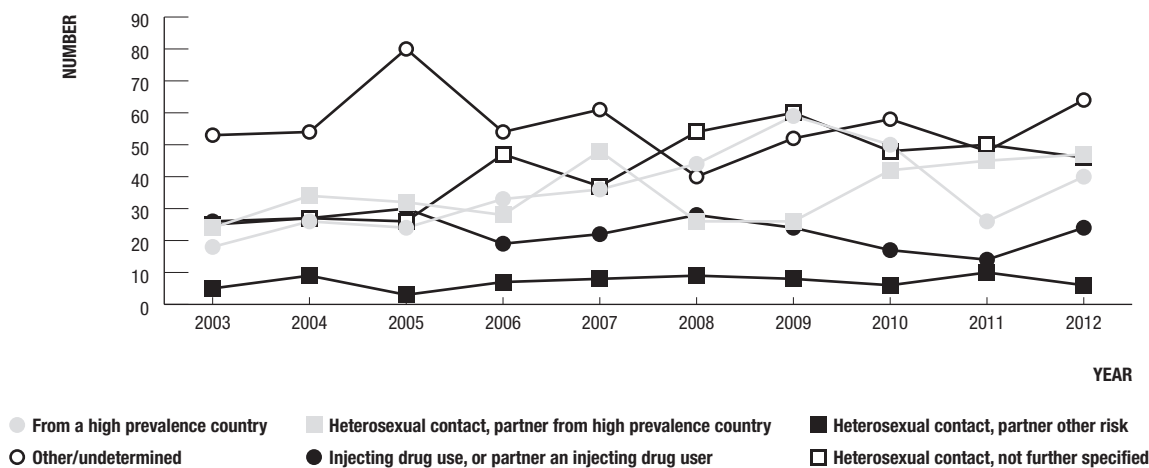
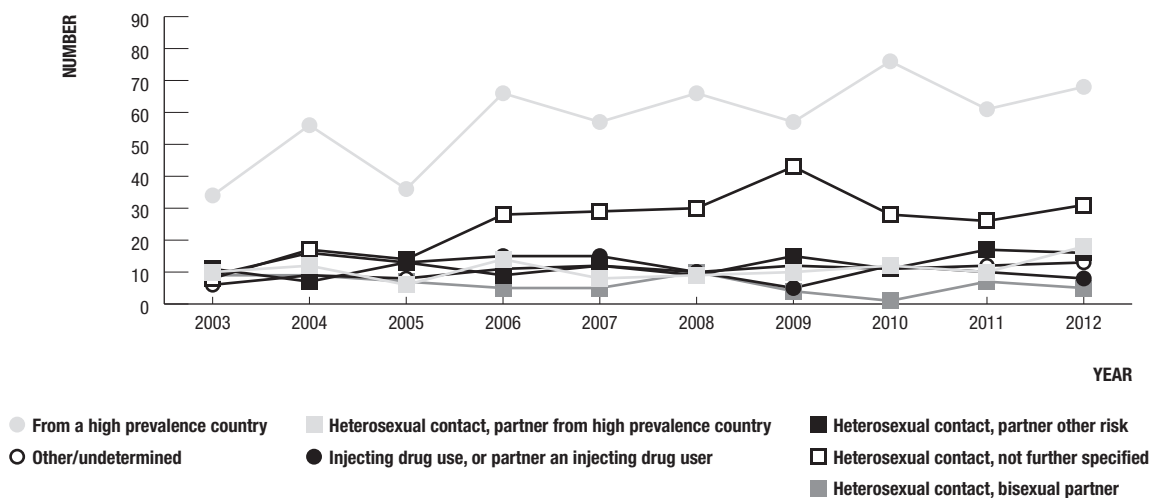


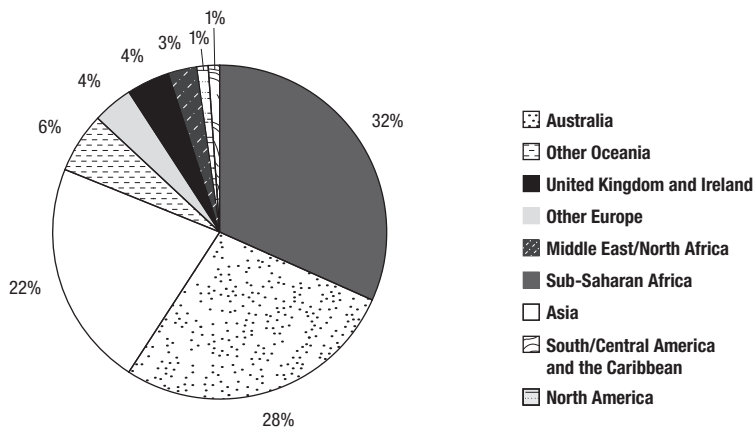
Figure 34 Newly diagnosed HIV among women, 2003 – 2012, by year and HIV exposure category



Men and women whose HIV infection was acquired in a high HIV prevalence country accounted for 37.6% and 40% of HIV diagnoses attributed to heterosexual contact in 2003 – 2007 and 2008 – 2012, respectively. In both five year intervals, the majority of cases came from high HIV prevalence countries in sub-Saharan Africa (58% in 2003 – 2007 and 75% in 2008 – 2012), South East Asia (32% in 2003 – 2007 and 22% in 2008 – 2012) and North Africa/Middle East (8% in 2003 – 2007 and 2% in 2008 – 2012). Women accounted for 65% and 60% of cases from high prevalence countries in 2003 – 2007 and in 2008 – 2012, respectively.

Excluding cases from a high prevalence country, the number whose exposure to HIV was attributed to heterosexual contact increased by 29%, from 634 in 2003 – 2007 to 819 in 2008 – 2012. Men and women with HIV infection who reported a partner from a high prevalence country accounted for 34% and 30% of heterosexual cases newly diagnosed in 2003 – 2007, and in 2008 – 2012, respectively. Of new HIV diagnoses in 2008 – 2012 for which the country of birth of the heterosexual partner was reported (73.5%), 27% of partners were from a high prevalence country in sub-Saharan Africa, 71% were from a high prevalence country in South East Asia and 2% were from high prevalence countries in North Africa/Middle East. Cases with partners with other risks for HIV infection accounted for 25% and 19% of diagnoses in 2003 – 2007 and in 2008 – 2012, respectively. Heterosexual contact, not further specified, was reported in 41% of cases attributed to heterosexual contact in 2003 – 2007 and 51% in 2008 – 2012. The source of exposure to HIV remained undetermined for substantial numbers of men in 2003 – 2012 (Figure 33).

Figure 35 HIV infection attributed to heterosexual contact, 2008 – 2012, by region of birth



Among 1 364 cases of HIV infection diagnosed in Australia in 2008 – 2012 for which exposure to HIV was attributed to heterosexual contact, the country of birth was reported as Australia in 28%, sub-Saharan Africa in 32% and Asia in 22% (Figure 35).

Figure 36 HIV prevalence among heterosexually active men seen at sexual health clinics, 2003 – 2012, by year and HIV exposure category

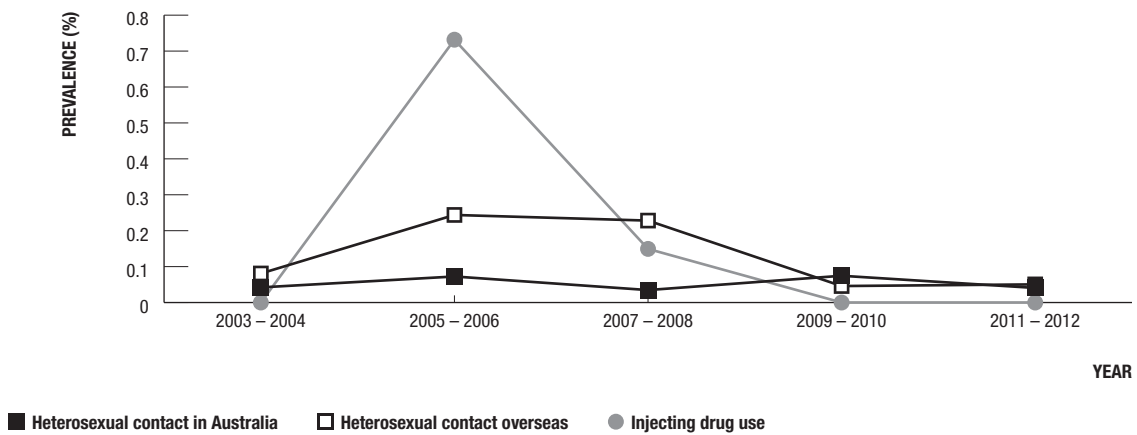
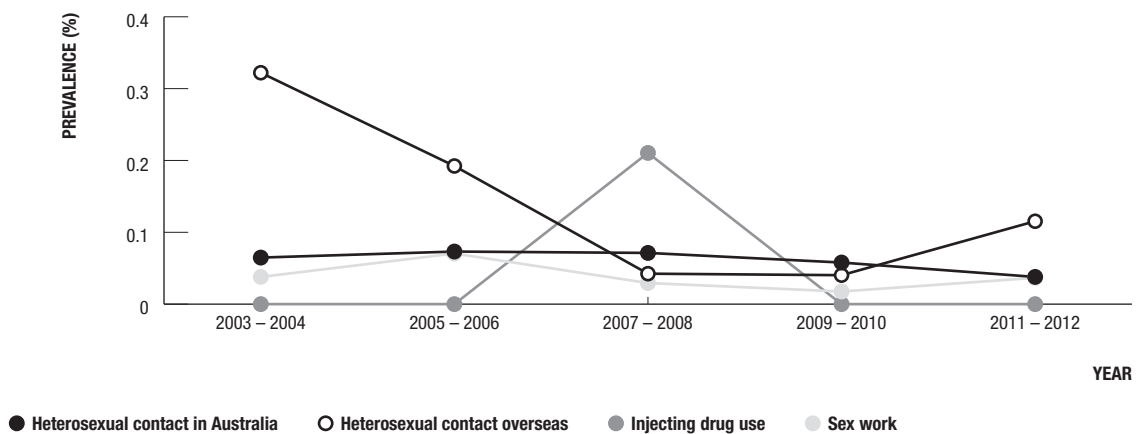
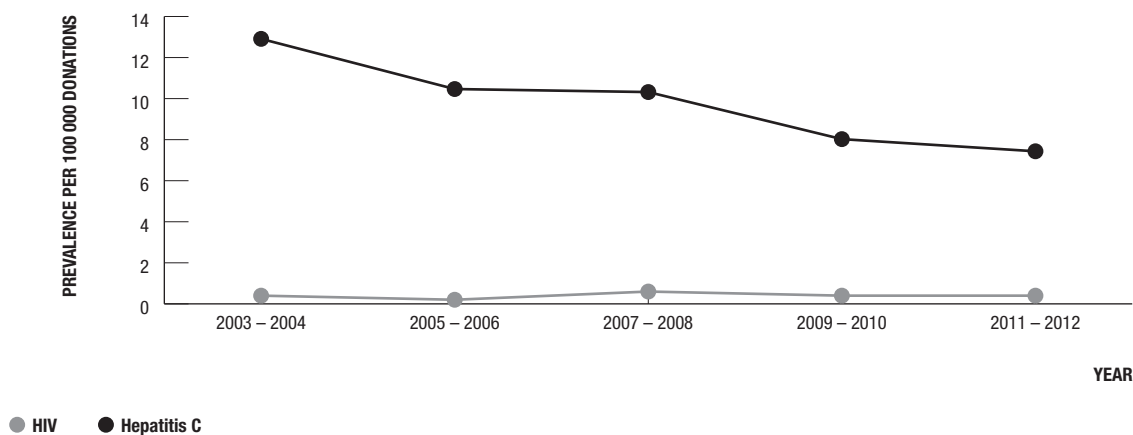


Figure 37 HIV prevalence among heterosexually active women seen at sexual health clinics, 2003 – 2012, by year and HIV exposure category



HIV prevalence has remained below 0.5% among heterosexually active men and women seen through metropolitan sexual health clinics. In 2003 – 2012, HIV prevalence was less than 0.2% among men and women who reported a history of heterosexual contact in Australia (Figures 36 and 37). 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 37).

Figure 38 HIV and hepatitis C prevalence per 100 000 donations in blood donors, 2003 – 2012, by year

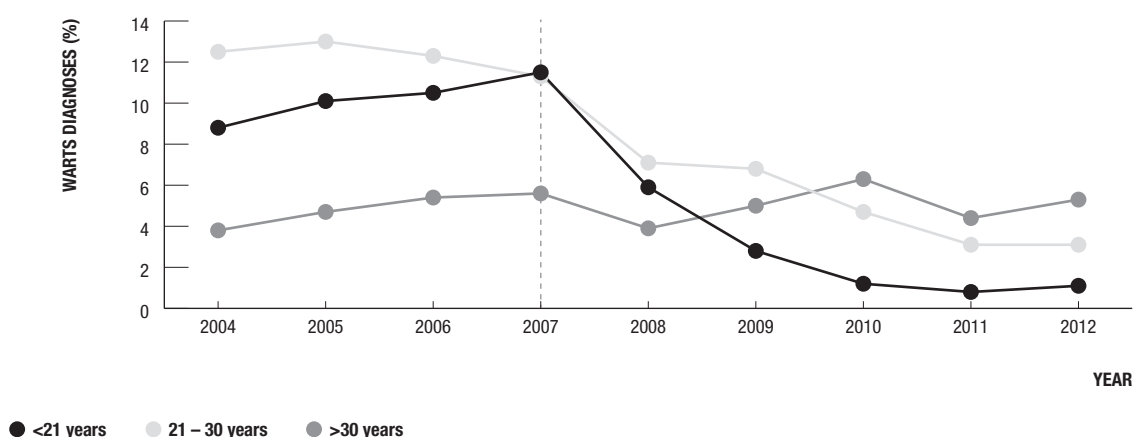


Levels of HIV infection in blood donors, who undergo a screening interview to exclude those with recognised risk factors for HIV infection, have been below 1 per 100 000 donations since 1985 (Figure 38).

Monitoring genital warts

The Genital Warts Surveillance Network aims 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.

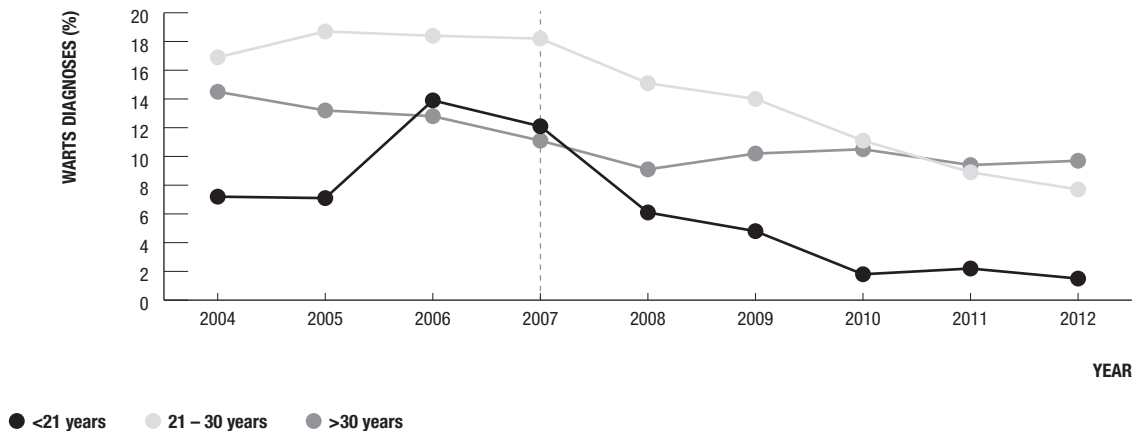
Figure 39 Proportion of Australian born women diagnosed with genital warts at first visit, by age group, 2004 – 2012



The dotted line represents the start of the national HPV vaccination program in mid-2007.

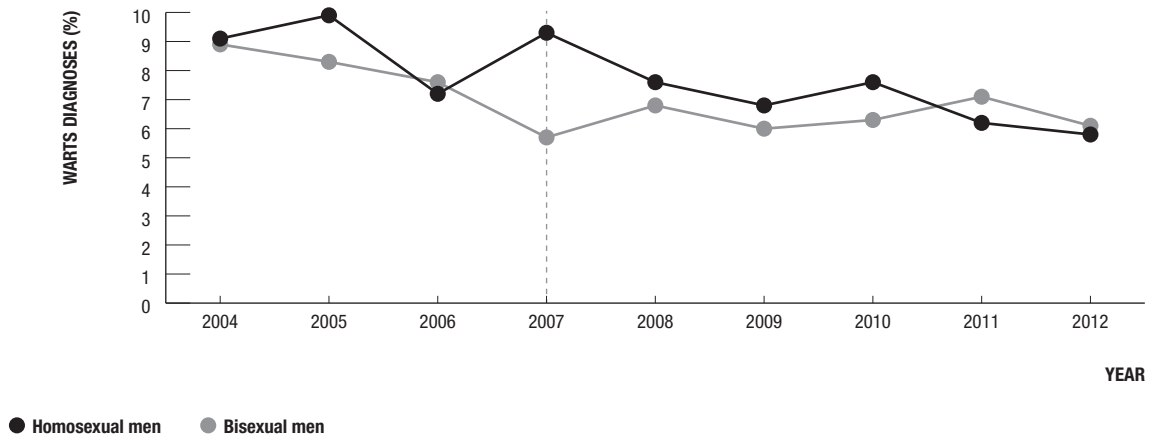
Information available through the Genital Warts Surveillance Network indicates that the genital warts diagnosis rate among Australian born women, aged 21 years or younger in July 2007 and thus eligible for free HPV vaccine, was above 10% in 2007 and then declined to less than 2% in 2012 (Figure 39). Among Australian born heterosexual men in the same age group, the genital warts diagnosis rate was above 12% in 2007 and declined to less than 2% in 2012 (Figure 40). The genital warts diagnosis rate among homosexual and bisexual men has not followed a declining trend to the extent observed in the heterosexual population (Figure 41).

Figure 40 Proportion of Australian born heterosexual men diagnosed with genital warts at first visit, by age group, 2004 – 2012



The dotted line represents the start of the national HPV vaccination program in mid-2007.

Figure 41 Proportion of Australian born homosexual and bisexual men diagnosed with genital warts at first visit, by exposure, 2004 – 2012



The dotted line represents the start of the national HPV vaccination program in mid-2007.

Illness and treatment in people with HIV infection and viral hepatitis

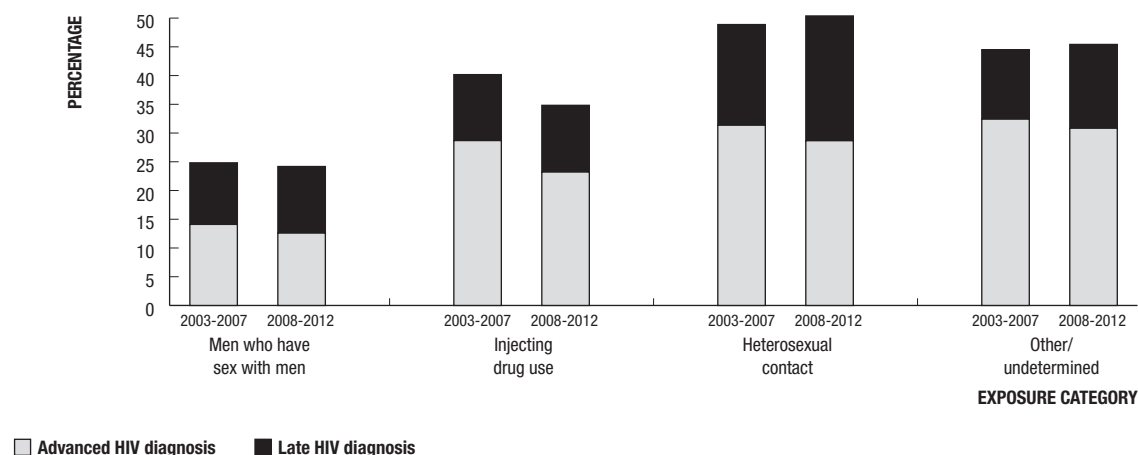
In the past 10 years, the proportion of cases diagnosed with advanced HIV infection, measured by a CD4+ cell count of less than 200 cells/μl at HIV diagnosis, has declined slightly from 23.1% among cases diagnosed in 2003 – 2007 to 15.1% among cases diagnosed in 2008 – 2012 (Figure 42). However, the proportion with a late diagnosis, defined by a CD4+ cell count of less than 350 cells/μl at HIV diagnosis, has increased slightly from 38.6% in 2003 – 2007 to 39.3% in 2008 – 2012 (Table 1.1.1).

Figure 42 Diagnoses of recent HIV infection and CD4+ cell count among other HIV diagnoses in Australia, 2010 – 2012, by year



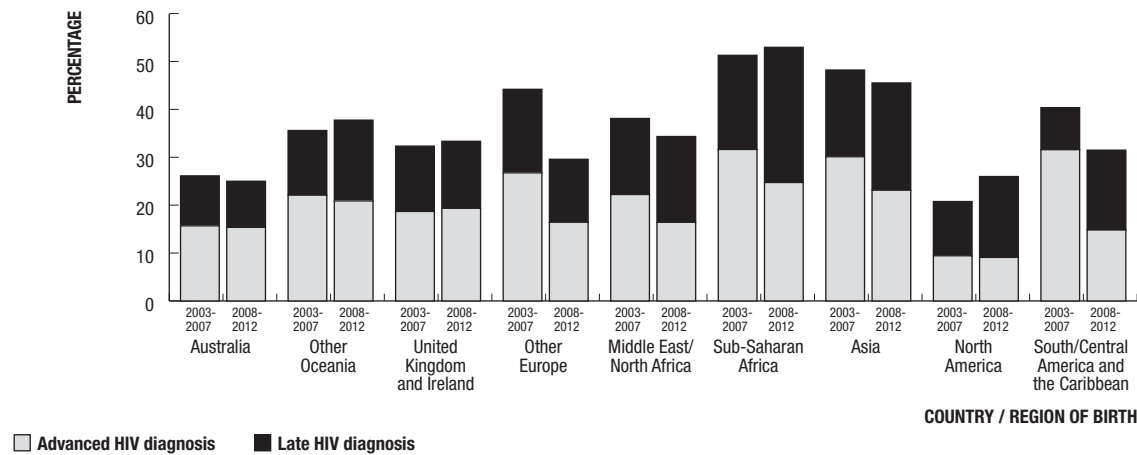
Advanced and late HIV diagnoses were least common among men who have sex with men (Figure 43). In 2008 – 2012, around 12% and 24% of HIV diagnoses among men who have sex with men were advanced and late HIV diagnoses, respectively, whereas advanced and late diagnoses accounted for 23% and 35% of diagnoses among people who injected drugs and for 28% and 50% of diagnoses among people with a history of heterosexual contact. Cases born in high HIV prevalence countries in sub-Saharan Africa and South East Asia had a relatively high rate of diagnosis with advanced HIV infection (Figure 44).

Figure 43 Late/advanced HIV diagnoses¹, 2003 – 2012, by year and exposure category



¹ A late diagnosis of HIV infection is defined as newly diagnosed HIV infection with a CD4 count of less than 350 cells/μl and advanced HIV infection as less than 200 cells/μl.

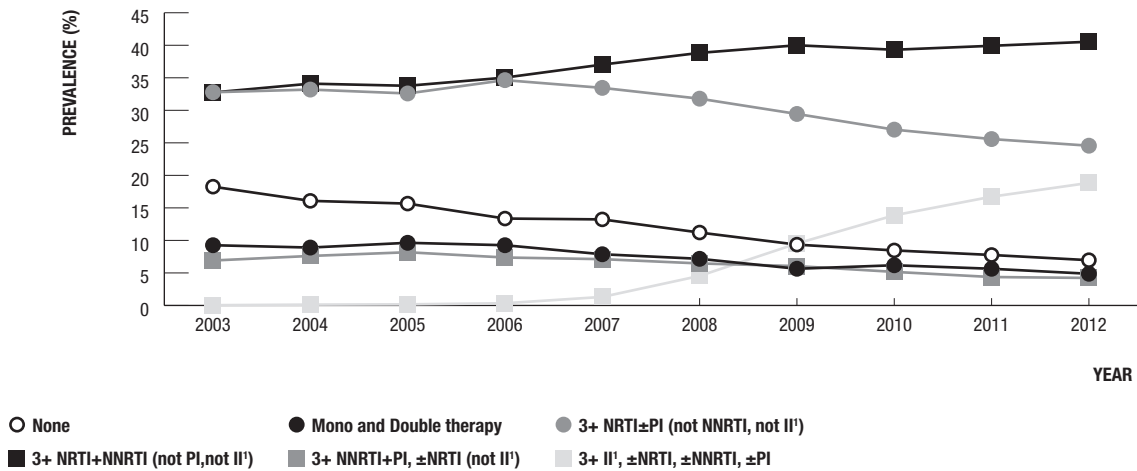
Figure 44 Late/advanced HIV diagnoses¹, 2003 – 2012, by year and region of birth



¹ A late diagnosis of HIV infection is defined as newly diagnosed HIV infection with a CD4 count of less than 350 cells/ μ l and advanced HIV infection as less than 200 cells/ μ l.

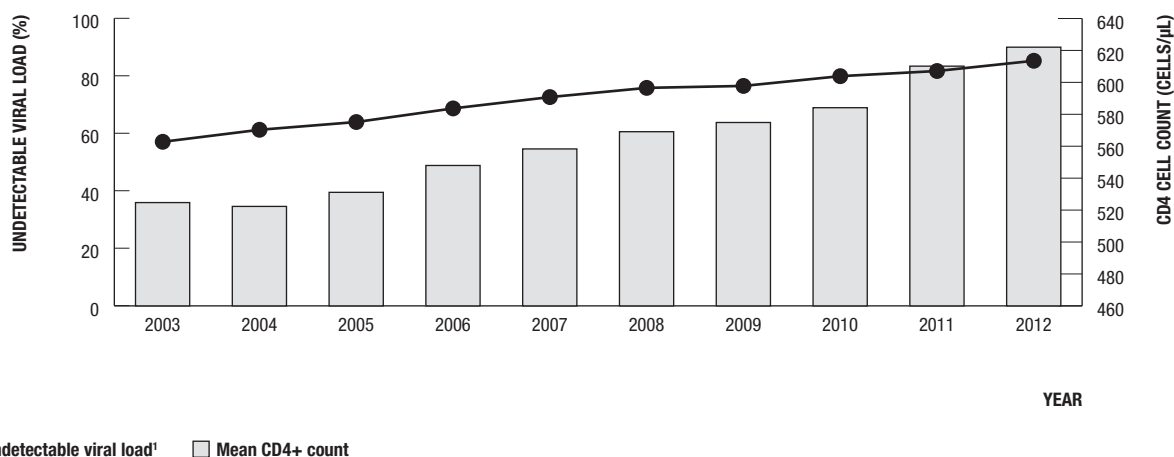
There is no comprehensive registry of advanced illness related to hepatitis B and C in Australia. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 202 people who had a liver transplant in 2012, 67 (33.2%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 2 (1.0%) people having liver transplants (Table 2.3.1).

Figure 45 Treatment uptake among people enrolled on the Australian HIV Observational Database, 2003 – 2012



¹ II = Integrase Inhibitor.

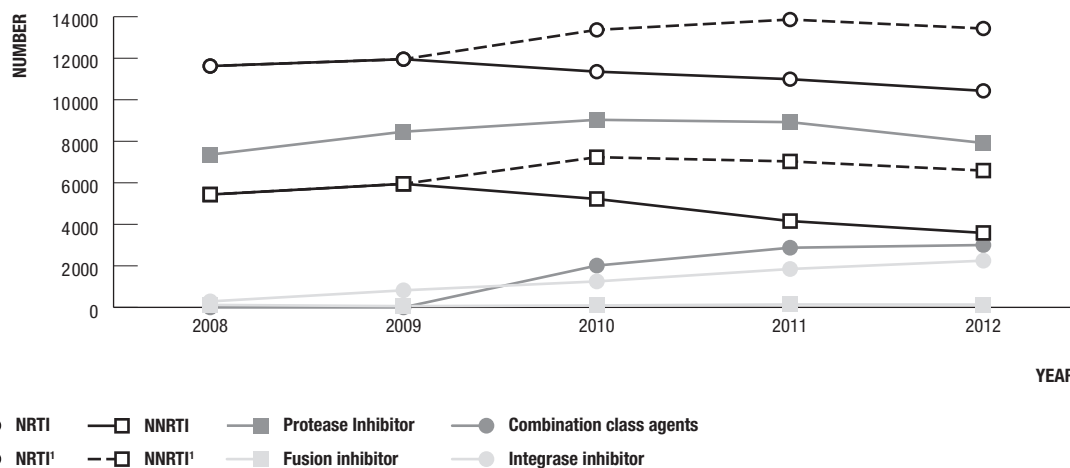
Figure 46 HIV viral load and CD4+ cell count, 2003 – 2012, by year



1 Undetectable viral load equals 50 copies/ml or less.

The Australian HIV Observational Database (AHOD) indicated that 88% of 2 342 people under follow up in 2012 were receiving triple combination antiretroviral treatment for HIV infection (Figure 45). Of people receiving antiretroviral therapy who were monitored through AHOD, the proportion with undetectable viral load (<50 copies/ml) has increased from 58% in 2003 to 88% in 2012. The mean CD4+ cell count also steadily increased to 620 cells/µl in 2012 (Figure 46). Of people enrolled in the Australian HIV Observational Database in 2012, 9% had been diagnosed with both HIV and hepatitis C antibody.

Figure 47 Number of people dispensed drugs for HIV infection through the Highly Specialised Drugs Program, 2003 – 2012, by class of drug and year

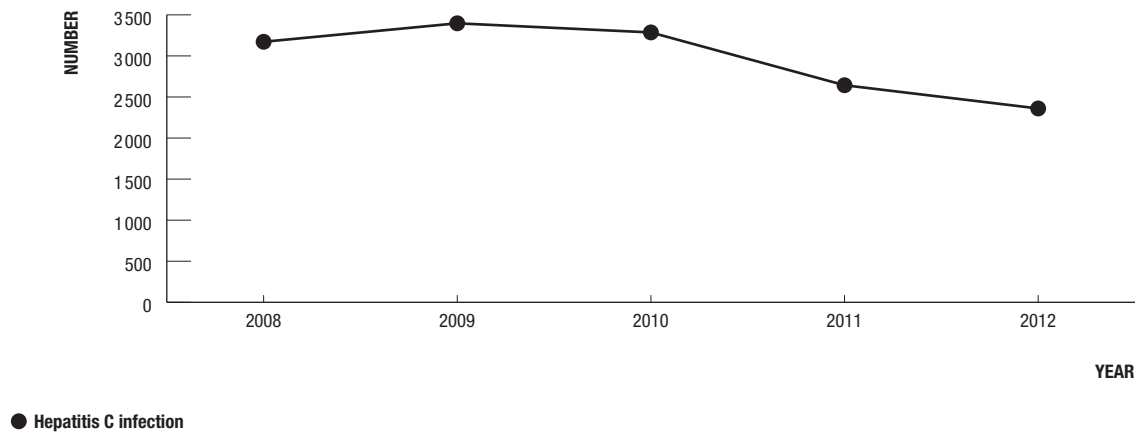


1 Includes NRTI/NNRTIs in fixed dose combinations with other classes.

The number of NRTI and NNRTI, prescribed in fixed dose combinations with other drug classes, shown with dashed lines in Figure 47, indicates that the total number of NRTI and NNRTI drugs dispensed has remained stable over the past five years.

Use of antiretroviral therapy by men who have sex with men participating in the Gay Community Periodic Surveys in Melbourne increased steadily from 69.7% in 2010 to 77.7% in 2012 whereas uptake in Queensland remained stable at close to 70% in 2010 – 2012. In Sydney, reported uptake of antiretroviral therapy increased from 70% in 2011 to 80% in 2012.

Figure 48 Number of people dispensed drugs for hepatitis C infection through the Highly Specialised Drugs Program, 2008 – 2012



The estimated number of people receiving treatment for hepatitis C infection through the Highly Specialised Drugs Program has declined from a peak of 3 397 in 2009 to 2 360 in 2012. The decline in the estimated number of people receiving treatment for hepatitis C infection may be due to delaying treatment uptake until new generation hepatitis C drugs become available or to treatment availability through participation in clinical trials.

Tables

| | | |
|----------|--|----|
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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, State/Territory of HIV diagnosis, and percent of total cases by late and advanced HIV infection status, sex and HIV exposure category

| Characteristic | Year of HIV diagnosis | | | | | | | | | | Total ^{1,2} |
|---|-----------------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|
| | ≤ 03 ¹ | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | |
| Total cases | 24 545 | 914 | 974 | 1 017 | 1 052 | 1 014 | 1 066 | 1 054 | 1 140 | 1 253 | 34 029 |
| Males (%) | 92.5 | 86.0 | 89.9 | 85.2 | 86.8 | 85.8 | 86.1 | 85.2 | 87.4 | 87.2 | 90.8 |
| Median age (years) | | | | | | | | | | | |
| Male | 33 | 37 | 37 | 38 | 38 | 37 | 37 | 37 | 37 | 36 | 34 |
| Female | 29 | 31 | 32 | 31 | 32 | 31 | 32 | 31 | 34 | 33 | 30 |
| Language spoken at home³ | | | | | | | | | | | |
| English | | 552 | 659 | 659 | 787 | 757 | 798 | 761 | 877 | 900 | 6 750 |
| Other language | | 49 | 55 | 74 | 82 | 68 | 112 | 110 | 111 | 121 | 782 |
| Not reported | | 313 | 260 | 284 | 183 | 189 | 156 | 183 | 152 | 232 | 1 952 |
| Late and advanced HIV infection status at HIV diagnosis(%)⁴ | | | | | | | | | | | |
| Late HIV diagnosis | 23.0 | 20.2 | 20.8 | 23.3 | 19.6 | 18.0 | 20.1 | 21.0 | 19.9 | 18.1 | 20.3 |
| Advanced HIV infection | 15.5 | 16.3 | 15.3 | 20.0 | 18.2 | 20.2 | 21.1 | 22.0 | 17.2 | 19.1 | 18.7 |
| State/Territory | | | | | | | | | | | |
| Australian Capital Territory | 283 | 7 | 8 | 6 | 9 | 7 | 12 | 14 | 11 | 17 | 374 |
| New South Wales | 14 238 | 414 | 408 | 399 | 415 | 367 | 382 | 351 | 389 | 459 | 17 822 |
| Northern Territory | 138 | 8 | 3 | 11 | 6 | 11 | 16 | 6 | 9 | 26 | 234 |
| Queensland | 2 551 | 156 | 171 | 164 | 195 | 201 | 209 | 241 | 223 | 261 | 4 372 |
| South Australia | 899 | 54 | 51 | 62 | 56 | 47 | 53 | 42 | 67 | 41 | 1 372 |
| Tasmania | 102 | 9 | 7 | 7 | 7 | 13 | 14 | 10 | 15 | 13 | 197 |
| Victoria | 5 075 | 216 | 262 | 288 | 287 | 286 | 291 | 281 | 328 | 314 | 7 628 |
| Western Australia | 1 259 | 50 | 64 | 80 | 77 | 82 | 89 | 109 | 98 | 122 | 2 030 |
| HIV exposure category (%)⁵ | | | | | | | | | | | |
| Men who have sex with men | 78.1 | 67.4 | 71.9 | 67.0 | 68.0 | 65.6 | 64.4 | 66.4 | 70.9 | 70.3 | 75.1 |
| Men who have sex with men and injecting drug use | 4.4 | 4.1 | 4.5 | 4.1 | 2.9 | 3.3 | 3.7 | 2.2 | 2.7 | 2.8 | 4.1 |
| Injecting drug use ⁶ | 4.1 | 4.3 | 3.5 | 2.7 | 2.8 | 3.3 | 2.4 | 2.4 | 1.9 | 2.3 | 3.7 |
| Heterosexual contact | 10.5 | 23.8 | 19.5 | 25.6 | 25.2 | 27.1 | 28.4 | 28.3 | 23.4 | 23.8 | 14.9 |
| <i>Person from a high prevalence country</i> | <i>24.9</i> | <i>40.4</i> | <i>34.7</i> | <i>40.6</i> | <i>37.3</i> | <i>41.8</i> | <i>40.4</i> | <i>45.2</i> | <i>34.1</i> | <i>38.3</i> | <i>32.2</i> |
| <i>Partner with/at risk of HIV infection</i> | <i>38.2</i> | <i>37.9</i> | <i>42.2</i> | <i>28.7</i> | <i>36.1</i> | <i>26.2</i> | <i>23.7</i> | <i>27.6</i> | <i>36.1</i> | <i>34.4</i> | <i>35.0</i> |
| <i>Not further specified</i> | <i>37.0</i> | <i>21.7</i> | <i>23.1</i> | <i>30.7</i> | <i>26.5</i> | <i>31.9</i> | <i>35.9</i> | <i>27.2</i> | <i>29.8</i> | <i>27.3</i> | <i>32.8</i> |
| Haemophilia/coagulation disorder | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| Receipt of blood/tissue | 1.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 | 0.9 |
| Mother with/at risk of HIV infection | 0.4 | 0.1 | 0.6 | 0.6 | 0.9 | 0.6 | 1.1 | 0.6 | 0.9 | 0.3 | 0.4 |
| Health care setting | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Other undermined exposure | 14.9 | 6.8 | 8.7 | 6.2 | 6.1 | 4.2 | 5.1 | 6.4 | 4.3 | 5.6 | 12.4 |

1 Late diagnosis and advanced infection for HIV diagnoses in 2003 only. Total percentage with late HIV diagnosis and advanced HIV infection in 2003 – 2012 only.

2 Not adjusted for multiple reporting.

3 Language spoken at home was sought among 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 or more to less than 350 cells/μl, and advanced HIV infection as newly diagnosed infection with a CD4+ cell count of less than 200 cells/μl.

5 The "Other/undetermined" exposure 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 infection¹, cumulative to 31 December 2012, by age group, year and sex

| Age group (years) | Sex | Year of HIV diagnosis | | | | | | | | | | Total |
|--------------------------|-----|-----------------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | | ≤ 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | |
| 0 – 1 | M | 45 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 50 |
| | F | 22 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 0 | 33 |
| 2 – 12 | M | 90 | 0 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 1 | 112 |
| | F | 24 | 0 | 2 | 1 | 5 | 1 | 8 | 2 | 5 | 0 | 48 |
| 13 – 19 | M | 441 | 8 | 10 | 9 | 8 | 7 | 10 | 12 | 12 | 17 | 534 |
| | F | 95 | 6 | 3 | 6 | 2 | 6 | 3 | 3 | 6 | 6 | 136 |
| 20 – 24 | M | 2 729 | 63 | 70 | 54 | 64 | 86 | 71 | 70 | 91 | 110 | 3 408 |
| | F | 258 | 23 | 13 | 18 | 11 | 23 | 12 | 20 | 8 | 20 | 406 |
| 25 – 29 | M | 4 580 | 98 | 113 | 118 | 129 | 134 | 151 | 140 | 172 | 205 | 5 840 |
| | F | 362 | 28 | 14 | 36 | 29 | 25 | 33 | 37 | 25 | 32 | 621 |
| 30 – 39 | M | 8 567 | 310 | 322 | 301 | 310 | 276 | 305 | 276 | 308 | 326 | 11 301 |
| | F | 443 | 31 | 43 | 48 | 55 | 57 | 53 | 60 | 55 | 65 | 910 |
| 40 – 49 | M | 4 163 | 191 | 218 | 242 | 253 | 234 | 232 | 244 | 238 | 241 | 6 256 |
| | F | 164 | 21 | 16 | 25 | 19 | 22 | 22 | 17 | 35 | 23 | 364 |
| 50 – 59 | M | 1 468 | 85 | 99 | 101 | 96 | 89 | 115 | 105 | 126 | 127 | 2 411 |
| | F | 60 | 12 | 4 | 9 | 12 | 7 | 10 | 9 | 6 | 10 | 139 |
| 60+ | M | 481 | 31 | 41 | 38 | 47 | 39 | 31 | 47 | 45 | 65 | 865 |
| | F | 69 | 4 | 1 | 2 | 4 | 2 | 3 | 2 | 2 | 3 | 92 |
| Not reported | M | 134 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 136 |
| | F | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| Sub-total | M | 22 698 | 786 | 876 | 866 | 913 | 870 | 918 | 898 | 996 | 1092 | 30 913 |
| | F | 1 529 | 126 | 97 | 148 | 138 | 144 | 146 | 151 | 143 | 159 | 2 781 |
| Total² | | 24 545 | 914 | 974 | 1 017 | 1 052 | 1 014 | 1 066 | 1 054 | 1 140 | 1 253 | 34 029 |

1 Not adjusted for multiple reporting.

2 Totals include 86 people whose sex was reported as transgender and 249 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 2012, by State/Territory and whether or not HIV infection was first diagnosed in Australia

| State/Territory | Place of first diagnosis of HIV infection | | Total diagnoses |
|------------------------------|---|--------------------------|-----------------|
| | Newly diagnosed in Australia | Newly diagnosed overseas | |
| Australian Capital Territory | 17 | 0 | 17 |
| New South Wales | 408 | 51 | 459 |
| Northern Territory | 20 | 6 | 26 |
| Queensland | 208 | 53 | 261 |
| South Australia | 31 | 10 | 41 |
| Tasmania | 13 | 0 | 13 |
| Victoria | 264 | 50 | 314 |
| Western Australia | 102 | 20 | 122 |
| Total | 1 063 | 190 | 1 253 |

Source: State/Territory health authorities

Table 1.1.4 Number (percent) of new HIV diagnoses in Australia, 2008 – 2012, and age standardised rate per 100 000¹ population by year of HIV diagnosis and region of birth

| Region/Country of birth | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
|--|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|
| | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate |
| Australia | 576 | 56.8 | 4.1 | 566 | 53.1 | 4.1 | 561 | 53.3 | 4.0 | 629 | 55.2 | 4.5 | 675 | 53.9 | 4.9 |
| Overseas born | 402 | 39.6 | 7.1 | 476 | 44.7 | 8.6 | 467 | 44.4 | 8.1 | 485 | 42.5 | 8.6 | 557 | 44.5 | 9.5 |
| <i>Other Oceania</i> | 60 | 5.9 | 8.9 | 49 | 4.6 | 6.7 | 43 | 4.1 | 6.2 | 62 | 5.4 | 8.0 | 65 | 5.2 | 8.4 |
| <i>United Kingdom and Ireland</i> | 49 | 4.8 | 4.8 | 59 | 5.5 | 6.3 | 43 | 4.1 | 4.3 | 57 | 5.0 | 5.0 | 58 | 4.6 | 6.6 |
| <i>Other Europe</i> | 35 | 3.5 | 5.2 | 46 | 4.3 | 7.5 | 54 | 5.1 | 7.9 | 51 | 4.5 | 8.5 | 52 | 4.2 | 8.9 |
| <i>Middle East/North Africa</i> | 6 | 0.6 | 1.9 | 21 | 2.0 | 5.9 | 13 | 1.2 | 3.3 | 16 | 1.4 | 5.7 | 19 | 1.5 | 5.3 |
| <i>Sub-Saharan Africa</i> | 99 | 9.8 | 31.0 | 115 | 10.8 | 36.3 | 121 | 11.5 | 37.1 | 86 | 7.5 | 27.3 | 93 | 7.4 | 27.5 |
| <i>Asia</i> | 115 | 11.3 | 4.3 | 149 | 14.0 | 6.3 | 158 | 15.0 | 6.3 | 166 | 14.6 | 7.0 | 214 | 17.1 | 8.6 |
| <i>North America</i> | 14 | 1.4 | 9.4 | 15 | 1.4 | 10.5 | 17 | 1.6 | 12.0 | 16 | 1.4 | 11.8 | 25 | 2.0 | 17.2 |
| <i>South/Central America and the Caribbean</i> | 24 | 2.4 | 15.8 | 22 | 2.1 | 15.5 | 18 | 1.7 | 13.9 | 31 | 2.7 | 20.7 | 31 | 2.5 | 19.6 |
| Total with a reported country of birth | 978 | 96.4 | 4.6 | 1 042 | 97.7 | 4.9 | 1 028 | 97.7 | 4.8 | 1 114 | 97.7 | 5.3 | 1 232 | 98.3 | 5.8 |
| Not reported | 36 | 3.6 | | 24 | 2.3 | | 24 | 2.3 | | 26 | 2.3 | | 21 | 1.7 | |
| Total | 1 014 | 100 | | 1 066 | 100 | | 1 052 | 100 | | 1 140 | 100 | | 1 253 | 100 | |

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 a CD4+ cell count), 2008 – 2012, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

| Characteristic | Sex | Year of HIV diagnosis | | | | | | | | | |
|--|-----|-----------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|---------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| State/Territory | | | | | | | | | | | |
| Australian Capital Territory | M | 272 | (4) | 275 | (6) | 640 | (10) | 460 | (10) | 515 | (14) |
| | F | 635 | (2) | 218 | (2) | 465 | (2) | – | (1) | 215 | (2) |
| New South Wales | M | 440 | (261) | 409 | (306) | 413 | (290) | 440 | (332) | 460 | (387) |
| | F | 450 | (37) | 340 | (42) | 356 | (29) | 255 | (29) | 470 | (43) |
| Northern Territory | M | 407 | (7) | 433 | (10) | 418 | (4) | 307 | (7) | 245 | (18) |
| | F | – | (1) | 680 | (5) | – | (1) | – | (1) | 372 | (8) |
| Queensland | M | 410 | (131) | 435 | (146) | 375 | (182) | 430 | (168) | 480 | (219) |
| | F | 360 | (29) | 380 | (24) | 400 | (39) | 420 | (22) | 350 | (30) |
| South Australia | M | 418 | (41) | 379 | (40) | 357 | (36) | 432 | (44) | 440 | (28) |
| | F | 314 | (5) | 353 | (9) | 582 | (6) | 313 | (16) | 440 | (9) |
| Tasmania | M | 490 | (8) | 713 | (10) | 340 | (9) | 363 | (11) | 336 | (13) |
| | F | 247 | (5) | 216 | (3) | – | (1) | 357 | (4) | – | (0) |
| Victoria | M | 428 | (212) | 442 | (229) | 419 | (207) | 433 | (192) | 413 | (128) |
| | F | 290 | (31) | 322 | (25) | 388 | (30) | 260 | (21) | 399 | (21) |
| Western Australia | M | 390 | (61) | 344 | (56) | 402 | (70) | 372 | (62) | 444 | (90) |
| | F | 321 | (20) | 299 | (24) | 364 | (28) | 380 | (27) | 420 | (25) |
| HIV exposure category | | | | | | | | | | | |
| Men who have sex with men ¹ | M | 460 | (565) | 447 | (624) | 437 | (621) | 451 | (664) | 470 | (718) |
| Injecting drug use ² | M | 483 | (19) | 352 | (18) | 400 | (17) | 345 | (14) | 559 | (16) |
| | F | 450 | (7) | – | (1) | 511 | (7) | 275 | (6) | 360 | (5) |
| Heterosexual contact | M | 300 | (115) | 284 | (126) | 254 | (130) | 317 | (116) | 338 | (118) |
| | F | 330 | (115) | 320 | (121) | 356 | (119) | 341 | (105) | 377 | (124) |
| Other/undetermined | M | 348 | (26) | 320 | (34) | 321 | (40) | 349 | (32) | 324 | (45) |
| | F | 430 | (8) | 465 | (12) | 440 | (9) | 457 | (11) | 620 | (9) |
| Newly acquired HIV infection status | | | | | | | | | | | |
| Diagnoses of newly acquired infection ³ | M | 535 | (225) | 550 | (259) | 524 | (275) | 510 | (319) | 550 | (322) |
| | F | 675 | (12) | 630 | (13) | 516 | (12) | 592 | (15) | 498 | (16) |
| Other HIV diagnoses ⁴ | M | 385 | (500) | 360 | (544) | 330 | (533) | 380 | (507) | 370 | (575) |
| | F | 320 | (118) | 307 | (121) | 357 | (124) | 305 | (106) | 384 | (122) |
| Total | | 420 | (855) | 406 | (939) | 400 | (945) | 429 | (947) | 435 | (1036) |

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 9 people whose sex was reported as transgender.

Source: State/Territory health authorities

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

| HIV exposure category | Year of HIV diagnosis | | | | | | | | | | | | Total |
|---|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|--------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2008 – 2012 | | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | |
| Person from a high prevalence country | 44 | 65 | 59 | 57 | 50 | 75 | 26 | 60 | 40 | 68 | 219 | 325 | 544 |
| <i>Sub-Saharan Africa</i> | 40 | 44 | 55 | 38 | 44 | 54 | 25 | 39 | 31 | 43 | 195 | 218 | 413 |
| <i>South East Asia</i> | 4 | 20 | 3 | 17 | 4 | 19 | 1 | 19 | 8 | 23 | 20 | 98 | 118 |
| <i>North Africa/Middle East</i> | 0 | 1 | 1 | 2 | 2 | 2 | 0 | 2 | 1 | 2 | 4 | 9 | 13 |
| Partner from a high prevalence country | 18 | 5 | 22 | 8 | 27 | 7 | 32 | 9 | 28 | 7 | 127 | 36 | 163 |
| <i>Sub-Saharan Africa</i> | 3 | 3 | 7 | 8 | 2 | 7 | 5 | 8 | 2 | 4 | 19 | 30 | 49 |
| <i>South East Asia</i> | 15 | 1 | 15 | 0 | 25 | 0 | 27 | 1 | 26 | 1 | 108 | 3 | 111 |
| <i>North Africa/Middle East</i> | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 3 |
| Heterosexual contact with partner at risk | 67 | 51 | 69 | 66 | 54 | 45 | 60 | 53 | 54 | 55 | 304 | 270 | 574 |
| <i>Injecting drug use</i> | 4 | 2 | 1 | 4 | 0 | 5 | 0 | 3 | 2 | 3 | 7 | 17 | 24 |
| <i>Bisexual man</i> | – | 10 | – | 4 | – | 1 | – | 7 | – | 5 | – | 27 | 27 |
| <i>Partner with medically acquired HIV</i> | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 4 |
| <i>Partner with HIV infection whose exposure was other than those above</i> | 9 | 8 | 8 | 14 | 6 | 10 | 10 | 17 | 6 | 15 | 39 | 64 | 103 |
| <i>Not further specified</i> | 54 | 30 | 60 | 43 | 48 | 28 | 50 | 26 | 46 | 31 | 258 | 158 | 416 |
| Total | 129 | 121 | 150 | 131 | 131 | 127 | 118 | 122 | 122 | 130 | 650 | 631 | 1 281 |

Source: State/Territory health authorities

Table 1.1.7 Number of specimens tested for HIV antibody in public health laboratories, 2003 – 2012, by State/Territory and year of test

| State/ Territory | Year of HIV antibody test | | | | | | | | | |
|------------------|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| ACT ¹ | 7 978 | 14 388 | 15 551 | 16 565 | 17 602 | 19 443 | 20 173 | – | 21 316 | 22 435 |
| NSW | 358 063 | 347 064 | 356 046 | 322 569 | 251 724 | 191 873 | 114 041 | 151 320 | 119 225 | 128 425 |
| NT | 16 407 | 15 323 | 15 217 | 7 247 | 6 686 | 7 782 | 6 360 | 6 924 | 8 466 | 10 065 |
| QLD | 188 403 | 206 322 | 222 558 | 238 509 | 251 430 | 253 778 | 210 315 | 135 198 | 144 908 | 148 677 |
| SA | 79 409 | 83 970 | 88 158 | 88 552 | 80 664 | 95 696 | 62 560 | 61 252 | 64 010 | 42 501 |
| TAS | 12 967 | 12 754 | 13 041 | 12 573 | 12 248 | 13 346 | 4 126 | 4 447 | 4 571 | 16 038 |
| VIC | 204 561 | 152 284 | 165 461 | 183 508 | 253 145 | 231 844 | 224 300 | 148 623 | 235 822 | 200 331 |
| WA | 100 483 | 102 694 | 114 203 | 101 277 | 104 540 | 124 688 | 167 695 | 134 241 | 133 468 | 173 890 |
| Total | 968 271 | 934 799 | 990 235 | 970 800 | 978 039 | 938 450 | 809 570 | 642 005 | 731 786 | 742 362 |

¹ The number of specimens tested for HIV antibody in the ACT in 2010 was not available.

Source: National Serology Reference Laboratory, Australia

1.2 Monitoring incident HIV infection

Table 1.2.1 Characteristics of diagnoses of newly acquired HIV infection¹, 2003 – 2012, by year. Total number of cases, median age and number of cases by State/Territory, HIV exposure category, evidence of newly acquired infection, sex and year

| Characteristic | Sex | Year of HIV diagnosis | | | | | | | | | | Total ² |
|--|-----|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------------|
| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | |
| Total cases | | 286 | 261 | 281 | 308 | 278 | 286 | 301 | 308 | 379 | 397 | 3 085 |
| Males (%) | M | 96.2 | 94.3 | 96.8 | 93.5 | 95.7 | 95.1 | 94.7 | 95.5 | 95.5 | 95.7 | 95.3 |
| Median age (years) | M | 33 | 35 | 35 | 36 | 35 | 35 | 36 | 35 | 35 | 33 | 35 |
| | F | 34 | 23 | 27 | 35 | 35 | 31 | 29 | 38 | 35 | 26 | 31 |
| State/Territory | | | | | | | | | | | | |
| Australian Capital Territory | M | 0 | 2 | 1 | 3 | 2 | 0 | 3 | 3 | 4 | 10 | 28 |
| | F | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| New South Wales | M | 153 | 113 | 128 | 110 | 112 | 123 | 114 | 125 | 166 | 177 | 1 321 |
| | F | 4 | 5 | 3 | 7 | 4 | 6 | 8 | 2 | 4 | 8 | 51 |
| Northern Territory | M | 0 | 2 | 1 | 2 | 1 | 2 | 4 | 2 | 2 | 2 | 18 |
| | F | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 5 |
| Queensland | M | 26 | 42 | 42 | 57 | 48 | 44 | 60 | 54 | 58 | 61 | 492 |
| | F | 3 | 3 | 1 | 1 | 4 | 2 | 2 | 4 | 4 | 3 | 27 |
| South Australia | M | 15 | 15 | 15 | 17 | 7 | 6 | 6 | 4 | 5 | 6 | 96 |
| | F | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| Tasmania | M | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 2 | 5 | 4 | 17 |
| | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Victoria | M | 69 | 62 | 74 | 85 | 82 | 81 | 88 | 89 | 97 | 92 | 819 |
| | F | 3 | 4 | 4 | 8 | 3 | 5 | 2 | 5 | 4 | 2 | 40 |
| Western Australia | M | 12 | 9 | 9 | 14 | 14 | 15 | 8 | 15 | 25 | 28 | 149 |
| | F | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 4 | 2 | 12 |
| HIV exposure category | | | | | | | | | | | | |
| Men who have sex with men | M | 243 | 209 | 234 | 247 | 231 | 240 | 246 | 265 | 327 | 344 | 2 586 |
| Men who have sex with men and injecting drug use | M | 12 | 12 | 15 | 14 | 5 | 11 | 11 | 7 | 7 | 14 | 108 |
| Injecting drug use ³ | M | 5 | 2 | 2 | 2 | 2 | 0 | 3 | 1 | 2 | 3 | 22 |
| | F | 2 | 4 | 1 | 2 | 1 | 3 | 0 | 1 | 1 | 1 | 16 |
| Heterosexual contact | M | 13 | 16 | 9 | 16 | 20 | 18 | 19 | 13 | 21 | 14 | 159 |
| | F | 9 | 10 | 8 | 16 | 10 | 11 | 14 | 12 | 15 | 15 | 120 |
| Health care setting | M | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other/undetermined | M | 2 | 5 | 12 | 9 | 8 | 3 | 6 | 8 | 5 | 5 | 63 |
| | F | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 4 |
| Evidence of newly acquired infection | | | | | | | | | | | | |
| Testing history only | M | 139 | 105 | 128 | 150 | 122 | 123 | 136 | 131 | 142 | 158 | 1 334 |
| | F | 5 | 10 | 5 | 7 | 5 | 7 | 5 | 7 | 4 | 2 | 57 |
| Primary HIV infection only | M | 44 | 46 | 49 | 44 | 61 | 60 | 52 | 80 | 98 | 91 | 625 |
| | F | 0 | 3 | 2 | 9 | 5 | 5 | 6 | 1 | 9 | 10 | 50 |
| Testing history and primary HIV infection | M | 92 | 95 | 95 | 94 | 83 | 89 | 97 | 83 | 122 | 131 | 981 |
| | F | 6 | 1 | 2 | 3 | 2 | 2 | 4 | 5 | 4 | 4 | 33 |

1 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 one year of HIV diagnosis.

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

3 Excludes men who have sex with men.

Source: State/Territory health authorities

Table 1.2.2 Number of cases of HIV infection newly diagnosed in 2012, number with newly acquired HIV infection, number without newly acquired HIV infection with a matching BED capture enzyme immunoassay (BED-CEIA) record, number with BED-CEIA evidence only of incident infection and total number (%) of diagnoses of recent infection, by State/Territory

| State/Territory | Number of new HIV diagnoses | Number with newly acquired infection ² | Number without newly acquired infection tested for incident infection | Number with incidence assay evidence only of incident infection | Total number (%) with recent infection ³ |
|------------------------------|-----------------------------|---|---|---|---|
| Australian Capital Territory | 17 | 10 | 2 | 0 | 10 58.8% |
| New South Wales ¹ | 206 | 87 | 119 | 29 | 116 56.3% |
| Northern Territory | 26 | 3 | 8 | 0 | 3 11.5% |
| Queensland | 261 | 64 | 129 | 32 | 96 36.8% |
| South Australia | 41 | 6 | 25 | 7 | 13 31.7% |
| Tasmania | 13 | 4 | 0 | 0 | 4 30.8% |
| Victoria | 314 | 94 | 185 | 48 | 142 45.2% |
| Western Australia | 122 | 30 | 44 | 9 | 39 32.0% |
| Total | 1 000 | 298 | 512 | 125 | 423 42.3% |

1 Includes NSW cases newly diagnosed at St Vincent's Hospital, Sydney, only.

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 Recent infection includes cases with evidence of newly acquired HIV infection and cases with incidence assay evidence only of incident infection.

Source: State/Territory health authorities; NSW State Reference Laboratory for HIV/AIDS; Victorian Infectious Diseases Reference Laboratory

Table 1.2.3 Number of new diagnoses of HIV infection, 2010 – 2012, and proportion with recent infection by year of diagnosis and evidence of recent infection

| | 2010 | 2011 | 2012 | Total |
|--|-------------|-------------|-------------|-------------|
| Newly diagnosed infection ¹ | 820 | 869 | 1 000 | 2 689 |
| Recent HIV infection ² | 308 | 368 | 423 | 1 099 |
| Newly acquired infection ³ | 252 | 271 | 298 | 821 |
| Incidence assay evidence only of incident infection ⁴ | 56 | 97 | 125 | 278 |
| Proportion with recent infection (%) | 37.6 | 42.3 | 42.3 | 40.9 |

1 Includes NSW cases newly diagnosed at St Vincent's Hospital, Sydney, only.

2 Recent infection includes cases with newly acquired HIV infection plus cases with incident infection only, detected by the BED-CEIA.

3 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.

4 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).

Source: State/Territory health authorities; NSW State Reference Laboratory for HIV/AIDS; Victorian Infectious Diseases Reference Laboratory

Table 1.2.4 Number and percentage of isolates with resistance at one or more loci, by drug class against which resistance was detected and year

| Year of diagnosis | Drug class against which resistance was detected | | | | |
|-------------------|--|------------------|----------------------------|------------------------------|-------------------------------|
| | Total | % non-B subtypes | PI ¹ Number (%) | NRTI ¹ Number (%) | NNRTI ¹ Number (%) |
| 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) |
| 2011 | 94 | 10.6 | 2 (2.1) | 4 (4.3) | 1 (1.1) |
| 2012 | 91 | 25.3 | 0 (0.0) | 3 (3.3) | 7 (7.7) |

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

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 people¹, 2003 – 2012, 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

| Characteristic | Year of HIV diagnosis | | | | | | | | | | Total |
|---|-----------------------|-----------|----------|-----------|----------|----------|-----------|-----------|-----------|-----------|------------|
| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | |
| Total cases | 23 | 22 | 18 | 23 | 19 | 19 | 24 | 22 | 23 | 32 | 225 |
| Males (%) | 73.9 | 72.7 | 83.3 | 73.9 | 84.2 | 79.0 | 83.3 | 68.2 | 73.9 | 81.3 | 77.3 |
| Median age (years) | 34 | 29 | 33 | 31 | 33 | 36 | 37 | 35 | 33 | 27 | 33 |
| Newly acquired infection (%) | 17.4 (4) | 31.8 (7) | 16.7 (3) | 30.4 (7) | 26.3 (5) | 31.6 (6) | 29.2 (7) | 22.7 (5) | 21.7 (5) | 31.3 (10) | 26.2 (59) |
| HIV status at diagnosis (%)² | | | | | | | | | | | |
| Late HIV diagnosis | 4.3 | 4.5 | 5.6 | 13.0 | 21.1 | 21.1 | 12.5 | 18.2 | 4.3 | 9.4 | 11.6 |
| Advanced HIV infection | 26.1 | 31.8 | 11.1 | 8.7 | 10.5 | 15.8 | 33.3 | 9.1 | 34.8 | 18.7 | 20.4 |
| State/Territory (%) | | | | | | | | | | | |
| ACT | – | – | 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) |
| NSW | 17.4 (4) | 18.2 (4) | 11.1 (2) | 38.1 (9) | 42.1 (8) | 38.9 (8) | 39.1 (9) | 31.8 (7) | 21.7 (5) | 34.4 (11) | 29.8 (67) |
| NT | 4.3 (1) | 4.5 (1) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 5.6 (1) | 0.0 (0) | 4.5 (1) | 8.7 (2) | 6.2 (2) | 3.6 (8) |
| QLD | 26.1 (6) | 22.7 (5) | 44.4 (8) | 23.8 (6) | 26.3 (5) | 11.1 (2) | 30.4 (8) | 36.4 (8) | 34.8 (8) | 40.6 (13) | 30.7 (69) |
| SA | 8.7 (2) | 9.1 (2) | 0.0 (0) | 0.0 (0) | 5.3 (1) | 22.2 (4) | 8.7 (2) | 4.5 (1) | 4.3 (1) | 3.1 (1) | 6.2 (14) |
| TAS | 0.0 (0) | 4.5 (1) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 4.4 (1) | 0.0 (0) | 4.3 (1) | 0.0 (0) | 1.3 (3) |
| VIC | 21.7 (5) | 18.2 (4) | 11.1 (2) | 9.5 (2) | 15.8 (3) | 0.0 (0) | 4.4 (1) | 13.6 (3) | 4.3 (1) | 15.6 (5) | 11.6 (26) |
| WA | 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 (5) | 0.0 (0) | 16.9 (38) |
| HIV exposure category (%) | | | | | | | | | | | |
| Men who have sex with men | 31.8 (7) | 52.4 (11) | 27.8 (5) | 47.8 (11) | 47.4 (9) | 47.4 (9) | 52.6 (10) | 60.0 (12) | 63.6 (14) | 71.0 (22) | 51.4 (110) |
| Men who have sex with men, and injecting drug use | 13.6 (3) | 0.0 (0) | 27.8 (5) | 4.3 (1) | 15.8 (3) | 5.3 (1) | 15.8 (3) | 5.0 (1) | 0.0 (0) | 3.2 (1) | 8.4 (18) |
| Injecting drug use ³ | 13.6 (3) | 19.0 (4) | 16.7 (3) | 21.7 (5) | 15.8 (3) | 36.8 (7) | 10.5 (2) | 20.0 (4) | 4.5 (1) | 6.5 (2) | 15.9 (34) |
| Heterosexual contact | 40.9 (9) | 28.6 (6) | 27.8 (5) | 26.1 (6) | 21.1 (4) | 10.5 (2) | 21.1 (4) | 15.0 (3) | 27.3 (6) | 19.4 (6) | 23.8 (51) |
| Haemophilia/coagulation disorder | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) |
| Receipt of blood/tissue | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) |
| Mother with/at risk for HIV infection | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 4.5 (1) | 0.0 (0) | 0.5 (1) |
| Other/undetermined ⁴ | 4.3 (1) | 4.5 (1) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 20.8 (5) | 9.1 (2) | 4.3 (1) | 3.1 (1) | 4.9 (11) |

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

2 Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of 200 – 349 cells/μl and advanced HIV infection was defined as newly diagnosed HIV infection with a CD4+ cell count of less than 200 CD4+ 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 Rate¹ of diagnosis of HIV infection, 2008 – 2012, by year, Aboriginal and Torres Strait Islander status and area of residence

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|----------|----------|----------|----------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| Major cities | Aboriginal and Torres Strait Islander | 7 | 10 | 7 | 7 | 12 |
| | Non-Indigenous ² | 6 | 6 | 6 | 6 | 7 |
| Inner regional | Aboriginal and Torres Strait Islander | 1 | 1 | 3 | 2 | 3 |
| | Non-Indigenous ² | 2 | 2 | 2 | 2 | 2 |
| Outer regional | Aboriginal and Torres Strait Islander | 1 | 2 | 3 | 2 | 3 |
| | Non-Indigenous ² | 4 | 2 | 2 | 2 | 3 |
| Remote | Aboriginal and Torres Strait Islander | 0 | 3 | 0 | 0 | 0 |
| | Non-Indigenous ² | 1 | 1 | 1 | 1 | 3 |
| Very remote | Aboriginal and Torres Strait Islander | 0 | 1 | 1 | 5 | 0 |
| | Non-Indigenous ² | 0 | 3 | 2 | 1 | 3 |
| Total | Aboriginal and Torres Strait Islander | 3 | 4 | 4 | 4 | 6 |
| | Non-Indigenous² | 5 | 5 | 5 | 5 | 6 |

1 Rate per 100 000 population. Population estimates from *2006 Census of Population and Housing* (Australian Bureau of Statistics).

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

Source: State/Territory health authorities

1.4 National surveillance for perinatal exposure to HIV

Table 1.4.1 Number and population rate¹ of perinatal exposure to HIV among children born in Australia, 2003 – 2012, by State/Territory and year of birth

| State/ Territory | Year of birth | | | | | | | | | |
|------------------|---------------|------------|-------------|------------|-------------|-------------|--------------------------|-------------|-------------|-------------|
| | 2003 – 2004 | | 2005 – 2006 | | 2007 – 2008 | | 2009 – 2010 ² | | 2011 – 2012 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 1 | 12.0 | 0 | 0.0 | 0 | 0.0 | 3 | 30.0 | 6 | 58.6 |
| NSW | 23 | 13.4 | 17 | 9.8 | 30 | 16.3 | 32 | 17.0 | 33 | 16.7 |
| NT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| QLD | 13 | 13.2 | 9 | 8.6 | 9 | 7.2 | 20 | 15.3 | 8 | 6.3 |
| SA | 0 | 0.0 | 3 | 8.3 | 5 | 12.5 | 1 | 2.5 | 9 | 22.6 |
| TAS | 0 | 0.0 | 0 | 0.0 | 1 | 7.4 | 3 | 23.1 | 1 | 7.6 |
| VIC | 8 | 6.5 | 9 | 7.0 | 24 | 17.0 | 34 | 24.0 | 44 | 30.8 |
| WA | 5 | 10.1 | 3 | 5.6 | 0 | 0.0 | 2 | 3.2 | 9 | 13.9 |
| Total | 50 | 9.9 | 41 | 7.8 | 69 | 11.9 | 97 | 16.3 | 110 | 18.2 |

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 2 children 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, 2003 – 2012, by time of the woman's HIV diagnosis relative to the first exposed child's birth

| First exposed child's year of birth | Interval of the woman's HIV diagnosis | | | | | |
|-------------------------------------|---------------------------------------|-----------|------------|------------|-----------------|------------|
| | Before or at the birth (years) | | | Total | After the birth | Total |
| | <1 | 1 – 2 | >2 | | | |
| 2003 – 2004 ¹ | 16 | 3 | 28 | 47 | 1 | 49 |
| 2005 – 2006 | 13 | 4 | 13 | 30 | 0 | 34 |
| 2007 – 2008 ¹ | 19 | 9 | 20 | 48 | 1 | 52 |
| 2009 – 2010 ^{1,2} | 31 | 8 | 30 | 69 | 5 | 75 |
| 2011 – 2012 ¹ | 20 | 6 | 46 | 72 | 3 | 77 |
| Total | 99 | 30 | 137 | 266 | 10 | 287 |

1 Totals include 1 woman whose first exposed child born in 2003 – 2004, 1 woman whose first exposed child born in 2007 – 2008, 5 women whose first exposed children born in 2009 – 2010 and 3 women whose first exposed children born in 2011 – 2012, whose the date of HIV diagnosis was not reported.

2 Total includes 1 child with diagnosed HIV infection.

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, 2003 – 2012, 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 | 2003 – 2007 | | 2008 – 2012 | | 2003 – 2012 | |
|---|-----------------|----------------------------|-----------------|----------------------------|-----------------|----------------------------|
| | Number of women | Number of exposed children | Number of women | Number of exposed children | Number of women | Number of exposed children |
| Injecting drug use | 9 | 11 | 6 | 10 | 15 | 21 |
| Heterosexual contact | 96 | 111 | 160 | 218 | 256 | 329 |
| <i>Sex with injecting drug user</i> | <i>11</i> | <i>13</i> | <i>10</i> | <i>14</i> | <i>21</i> | <i>27</i> |
| <i>Sex with bisexual male</i> | <i>3</i> | <i>4</i> | <i>11</i> | <i>15</i> | <i>14</i> | <i>19</i> |
| <i>From a high prevalence country</i> | <i>43</i> | <i>46</i> | <i>75</i> | <i>104</i> | <i>118</i> | <i>150</i> |
| <i>Sex with person from a high prevalence country</i> | <i>16</i> | <i>21</i> | <i>21</i> | <i>30</i> | <i>37</i> | <i>51</i> |
| <i>Sex with person with medically acquired HIV</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>2</i> | <i>2</i> | <i>3</i> |
| <i>Sex with person with HIV infection, other exposure</i> | <i>1</i> | <i>1</i> | <i>5</i> | <i>7</i> | <i>6</i> | <i>8</i> |
| <i>Not further specified</i> | <i>21</i> | <i>25</i> | <i>37</i> | <i>46</i> | <i>58</i> | <i>71</i> |
| Receipt of blood/tissue | 0 | 0 | 0 | 0 | 0 | 0 |
| Other/undetermined | 4 | 4 | 12 | 13 | 16 | 17 |
| Total | 109 | 126 | 178 | 241 | 287 | 367 |

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

Table 1.4.4 Number of perinatally exposed children born in Australia, 2003 – 2012, and number with diagnosed HIV infection by year of the child's birth and time of the woman's HIV diagnosis relative to the child's birth

| Child's year of birth | Interval of the woman's HIV diagnosis | | | | | |
|----------------------------|---------------------------------------|-----------------|-----------------|-----------------|-----------------------------|------------------------------|
| | Before or at the birth | | After the birth | | Total | |
| | Number exposed | Number with HIV | Number exposed | Number with HIV | Number exposed ¹ | Number with HIV ² |
| 2003 – 2004 ¹ | 48 | 2 | 1 | 0 | 50 | 2 |
| 2005 – 2006 | 36 | 3 | 5 | 2 | 41 | 5 |
| 2007 – 2008 ¹ | 65 | 0 | 3 | 3 | 69 | 3 |
| 2009 – 2010 ^{1,2} | 91 | 1 | 1 | 0 | 97 | 2 |
| 2011 – 2012 ¹ | 105 | 1 | 2 | 1 | 110 | 2 |
| Total | 345 | 7 | 12 | 6 | 367 | 14 |

1 Totals include 1 exposed child born in 2003 – 2004, 1 exposed child born in 2007 – 2008, 5 exposed children born in 2009 – 2010 and 3 exposed children born in 2011 – 2012, 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 2003 – 2012 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 |
|---|---|--|
| 2003 – 2004 | 48 | 2 |
| <i>No reported use of interventions</i> | 2.1 | 1 |
| <i>Use of 1 intervention</i> | 4.2 | 0 |
| <i>Use of 2 interventions</i> | 35.4 | 0 |
| <i>Use of 3 interventions</i> | 58.3 | 1 |
| 2005 – 2006 | 36 | 3 |
| <i>No reported use of interventions</i> | 11.1 | 2 |
| <i>Use of 1 intervention</i> | 2.8 | 0 |
| <i>Use of 2 interventions</i> | 38.9 | 0 |
| <i>Use of 3 interventions</i> | 47.2 | 1 |
| 2007 – 2008 | 65 | 0 |
| <i>No reported use of interventions</i> | 3.1 | 0 |
| <i>Use of 1 intervention</i> | 1.5 | 0 |
| <i>Use of 2 interventions</i> | 46.2 | 0 |
| <i>Use of 3 interventions</i> | 49.2 | 0 |
| 2009 – 2010 | 91 | 1 |
| <i>No reported use of interventions</i> | 4.4 | 0 |
| <i>Use of 1 intervention</i> | 2.2 | 0 |
| <i>Use of 2 interventions</i> | 50.5 | 1 |
| <i>Use of 3 interventions</i> | 42.9 | 0 |
| 2011 – 2012 | 105 | 1 |
| <i>No reported use of interventions</i> | 0.0 | 0 |
| <i>Use of 1 intervention</i> | 7.6 | 0 |
| <i>Use of 2 interventions</i> | 59.0 | 1 |
| <i>Use of 3 interventions</i> | 33.3 | 0 |
| Total | 345 | 7 |

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

1.5 Global comparisons for HIV

Table 1.5.1 Estimated HIV prevalence in selected countries

| Country | HIV prevalence | |
|--------------------------------|-------------------|-------------------|
| | 2012 ¹ | Rate ² |
| Africa | | |
| Mauritius ³ | 7 400 | 1 000 |
| Somalia ³ | 30 000 | 700 |
| South Africa ³ | 5 100 000 | 17 300 |
| Sudan South ³ | 130 000 | 3 100 |
| Zambia ³ | 800 000 | 12 500 |
| Zimbabwe ³ | 1 000 000 | 14 900 |
| Asia Pacific | | |
| Australia | 25 708 | 120 |
| Cambodia ³ | 56 000 | 600 |
| China ³ | 771 000 | <100 |
| Indonesia ³ | 370 000 | 300 |
| Japan ³ | 7 900 | <100 |
| Malaysia ³ | 80 000 | 400 |
| Myanmar ³ | 210 000 | 600 |
| New Zealand ³ | 2 600 | 100 |
| Papua New Guinea ³ | 24 000 | 700 |
| Philippines ³ | 19 000 | <100 |
| Republic of Korea ³ | 15 000 | <100 |
| Thailand ³ | 480 000 | 1 200 |
| Vietnam ³ | 240 000 | 500 |
| Europe | | |
| France ³ | 160 000 | 400 |
| Germany ³ | 73 000 | 200 |
| Italy ³ | 150 000 | 400 |
| Spain ³ | 150 000 | 400 |
| United Kingdom ⁴ | 96 000 | 150 |
| North America | | |
| Canada ³ | 71 300 | 208 |
| United States ⁵ | 1 148 200 | 456 |

1 Estimated number of people living with HIV/AIDS.

2 Rate per 100 000 population.

3 Estimated HIV prevalence in people aged 15 – 49 years in 2011.

4 Estimated HIV prevalence in 2011.

5 Estimated HIV prevalence for people aged ≥13 in 2009.

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| | | |
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2 National surveillance for viral hepatitis

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

Table 2.1.1 Number and rate¹ of diagnosis of hepatitis A infection, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 5 | 1.6 | 6 | 1.4 | 5 | 1.3 | 3 | 0.8 | 1 | 0.3 |
| NSW | 69 | 1.0 | 98 | 1.4 | 83 | 1.2 | 57 | 0.8 | 42 | 0.6 |
| NT | 3 | 2.3 | 1 | 0.4 | 3 | 1.6 | 3 | 1.1 | 3 | 1.0 |
| QLD | 71 | 1.6 | 56 | 1.3 | 40 | 0.9 | 26 | 0.6 | 34 | 0.7 |
| SA | 20 | 1.3 | 59 | 3.7 | 4 | 0.3 | 6 | 0.4 | 7 | 0.4 |
| TAS | 1 | 0.2 | 5 | 1.1 | 4 | 0.8 | 4 | 0.8 | 2 | 0.4 |
| VIC | 85 | 1.6 | 304 | 5.5 | 95 | 1.8 | 34 | 0.6 | 62 | 1.1 |
| WA | 22 | 1.0 | 35 | 1.5 | 32 | 1.4 | 12 | 0.5 | 14 | 0.5 |
| Total | 276 | 1.3 | 564 | 2.6 | 266 | 1.2 | 145 | 0.6 | 165 | 0.7 |

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, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|-----------|-----------|------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 0 – 4 | 9 | 6 | 15 | 13 | 6 | 19 | 12 | 14 | 26 | 5 | 4 | 9 | 7 | 4 | 11 |
| 5 – 14 | 35 | 25 | 60 | 29 | 21 | 50 | 35 | 23 | 58 | 15 | 9 | 24 | 12 | 24 | 36 |
| 15 – 19 | 12 | 7 | 19 | 22 | 23 | 45 | 9 | 14 | 23 | 6 | 5 | 11 | 6 | 5 | 11 |
| 20 – 24 | 20 | 21 | 41 | 47 | 38 | 85 | 11 | 10 | 21 | 9 | 3 | 12 | 7 | 8 | 15 |
| 25 – 29 | 21 | 13 | 34 | 26 | 24 | 50 | 12 | 15 | 27 | 11 | 9 | 20 | 17 | 10 | 27 |
| 30 – 39 | 22 | 10 | 32 | 56 | 64 | 120 | 21 | 15 | 36 | 18 | 14 | 32 | 8 | 9 | 17 |
| 40 – 49 | 14 | 15 | 29 | 35 | 43 | 78 | 11 | 15 | 26 | 5 | 2 | 7 | 10 | 7 | 17 |
| 50 – 59 | 15 | 8 | 23 | 26 | 38 | 64 | 14 | 9 | 23 | 7 | 6 | 13 | 3 | 2 | 5 |
| 60+ | 10 | 13 | 23 | 25 | 28 | 53 | 9 | 17 | 26 | 9 | 8 | 17 | 10 | 16 | 26 |
| Total | 158 | 118 | 276 | 279 | 285 | 564 | 134 | 132 | 266 | 85 | 60 | 145 | 80 | 85 | 165 |

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate¹ of diagnosis of hepatitis B infection, 2008 – 2012, by State/Territory and year

| State/Territory | Year of diagnosis | | | | | | | | | |
|-----------------|-------------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 58 | 15.6 | 106 | 27.8 | 95 | 24.6 | 95 | 23.4 | 106 | 25.9 |
| NSW | 2 489 | 35.5 | 2 618 | 36.9 | 2 561 | 35.6 | 2 525 | 34.8 | 2 327 | 31.8 |
| NT | 200 | 94.3 | 161 | 72.9 | 160 | 68.5 | 161 | 69.6 | 205 | 81.5 |
| QLD | 873 | 20.5 | 1 052 | 24.1 | 1 113 | 25.1 | 893 | 19.8 | 863 | 18.9 |
| SA | 431 | 27.4 | 458 | 28.8 | 432 | 26.9 | 412 | 25.7 | 399 | 24.5 |
| TAS | 67 | 14.4 | 85 | 18.2 | 54 | 11.4 | 50 | 10.7 | 72 | 15.4 |
| VIC | 1 916 | 35.6 | 2 018 | 36.5 | 1 954 | 34.8 | 1 980 | 34.8 | 1 907 | 33.0 |
| WA | 647 | 29.1 | 712 | 30.7 | 769 | 32.6 | 657 | 27.0 | 823 | 32.3 |
| Total | 6 681 | 31.0 | 7 210 | 32.7 | 7 138 | 31.9 | 6 773 | 29.9 | 6 702 | 29.1 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.4 Number of diagnoses of hepatitis B infection, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 14 | 10 | 24 | 2 | 4 | 6 | 10 | 10 | 20 | 5 | 3 | 8 | 8 | 5 | 14 |
| 5 – 14 | 80 | 59 | 141 | 79 | 50 | 129 | 73 | 37 | 111 | 56 | 26 | 83 | 45 | 31 | 77 |
| 15 – 19 | 167 | 126 | 295 | 187 | 137 | 325 | 162 | 127 | 293 | 141 | 106 | 247 | 177 | 80 | 258 |
| 20 – 24 | 352 | 407 | 769 | 396 | 363 | 768 | 340 | 382 | 733 | 355 | 331 | 701 | 340 | 299 | 647 |
| 25 – 29 | 481 | 560 | 1 049 | 540 | 603 | 1 159 | 532 | 653 | 1 207 | 566 | 599 | 1 184 | 583 | 554 | 1 149 |
| 30 – 39 | 977 | 848 | 1 844 | 1 052 | 937 | 2 016 | 1 044 | 932 | 2 002 | 979 | 855 | 1 865 | 1 008 | 870 | 1 900 |
| 40 – 49 | 810 | 462 | 1 278 | 855 | 517 | 1 380 | 772 | 485 | 1 266 | 755 | 448 | 1 213 | 746 | 455 | 1 204 |
| 50 – 59 | 441 | 296 | 739 | 532 | 340 | 876 | 507 | 382 | 891 | 537 | 332 | 872 | 494 | 368 | 864 |
| 60 + | 307 | 226 | 534 | 313 | 220 | 539 | 355 | 245 | 608 | 334 | 258 | 596 | 352 | 232 | 585 |
| Not reported | 2 | 2 | 8 | 7 | 3 | 12 | 2 | 3 | 7 | 1 | 0 | 4 | 4 | 0 | 4 |
| Total | 3 631 | 2 996 | 6 681 | 3 963 | 3 174 | 7 210 | 3 797 | 3 256 | 7 138 | 3 729 | 2 958 | 6 773 | 3 757 | 2 894 | 6 702 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number and rate¹ of diagnosis of newly acquired hepatitis B infection, 2008 – 2012, by State/Territory and year

| State/Territory | Year of diagnosis | | | | | | | | | |
|-----------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 1 | 0.3 | 5 | 1.3 | 3 | 0.6 | 2 | 0.4 | 2 | 0.5 |
| NSW | 45 | 0.6 | 37 | 0.5 | 35 | 0.5 | 30 | 0.4 | 29 | 0.4 |
| NT | 8 | 4.3 | 4 | 1.5 | 4 | 1.5 | 4 | 1.5 | 5 | 1.8 |
| QLD | 46 | 1.1 | 51 | 1.2 | 57 | 1.3 | 46 | 1.0 | 55 | 1.2 |
| SA | 11 | 0.7 | 10 | 0.6 | 21 | 1.3 | 9 | 0.6 | 16 | 1.0 |
| TAS | 15 | 3.4 | 14 | 3.2 | 6 | 1.3 | 14 | 3.1 | 10 | 2.2 |
| VIC | 88 | 1.6 | 90 | 1.6 | 70 | 1.3 | 72 | 1.3 | 52 | 0.9 |
| WA | 48 | 2.1 | 38 | 1.7 | 32 | 1.4 | 18 | 0.7 | 24 | 1.0 |
| Total | 262 | 1.2 | 249 | 1.1 | 228 | 1.0 | 195 | 0.9 | 193 | 0.8 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.6 Number of diagnoses of newly acquired hepatitis B infection, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 0 – 4 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 5 | 6 | 1 | 0 | 1 | 1 | 1 | 2 |
| 5 – 14 | 1 | 2 | 3 | 1 | 0 | 1 | 3 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| 15 – 19 | 7 | 5 | 12 | 3 | 4 | 7 | 5 | 4 | 9 | 4 | 3 | 7 | 4 | 2 | 6 |
| 20 – 24 | 17 | 20 | 37 | 13 | 7 | 20 | 13 | 9 | 22 | 10 | 11 | 21 | 11 | 6 | 17 |
| 25 – 29 | 33 | 13 | 46 | 32 | 14 | 46 | 23 | 15 | 38 | 19 | 9 | 28 | 19 | 11 | 30 |
| 30 – 39 | 50 | 25 | 75 | 49 | 33 | 82 | 38 | 18 | 56 | 47 | 23 | 70 | 31 | 15 | 46 |
| 40 – 49 | 40 | 9 | 49 | 36 | 11 | 47 | 34 | 11 | 45 | 24 | 10 | 34 | 35 | 12 | 47 |
| 50 – 59 | 15 | 3 | 18 | 15 | 9 | 24 | 22 | 8 | 30 | 18 | 5 | 23 | 20 | 5 | 25 |
| 60 + | 17 | 3 | 20 | 14 | 7 | 21 | 11 | 7 | 18 | 10 | 1 | 11 | 19 | 0 | 19 |
| Total | 181 | 81 | 262 | 164 | 85 | 249 | 150 | 78 | 228 | 133 | 62 | 195 | 140 | 53 | 193 |

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of newly acquired hepatitis B infection¹, 2008 – 2012, by exposure category, year and sex

| Exposure category | Year of diagnosis | | | | | | | | | | | | | | |
|----------------------------------|-------------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| Injecting drug use | 33 | 9 | 42 | 36 | 20 | 56 | 32 | 18 | 50 | 30 | 14 | 44 | 20 | 10 | 30 |
| Sexual contact | 16 | 8 | 24 | 23 | 10 | 33 | 6 | 8 | 14 | 11 | 6 | 17 | 12 | 8 | 20 |
| <i>Men who have sex with men</i> | 1 | – | 1 | 7 | – | 7 | 0 | – | 0 | 5 | – | 5 | 3 | – | 3 |
| <i>Heterosexual contact</i> | 13 | 7 | 20 | 12 | 9 | 21 | 5 | 7 | 12 | 5 | 6 | 11 | 9 | 8 | 17 |
| <i>Not further specified</i> | 2 | 1 | 3 | 4 | 1 | 5 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 |
| Blood/tissue recipient | 2 | 0 | 2 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Skin penetration procedure | 6 | 4 | 10 | 3 | 2 | 5 | 7 | 1 | 8 | 10 | 5 | 15 | 1 | 0 | 1 |
| Healthcare exposure | 4 | 1 | 5 | 3 | 1 | 4 | 3 | 0 | 3 | 2 | 3 | 5 | 2 | 2 | 4 |
| Household contact | 3 | 2 | 5 | 2 | 0 | 2 | 3 | 4 | 7 | 2 | 1 | 3 | 2 | 2 | 4 |
| Other | 3 | 1 | 4 | 7 | 2 | 9 | 6 | 5 | 11 | 14 | 1 | 15 | 13 | 1 | 14 |
| Undetermined | 15 | 5 | 20 | 88 | 49 | 137 | 93 | 42 | 135 | 64 | 31 | 95 | 90 | 30 | 120 |
| Total | 82 | 30 | 112 | 164 | 85 | 249 | 150 | 78 | 228 | 133 | 62 | 195 | 140 | 53 | 193 |

¹ Includes diagnoses in SA, TAS and VIC in 2008 – 2012 and diagnoses in ACT, NSW and NT in 2009 – 2012.

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number and percentage of diagnoses of newly acquired hepatitis B infection, 2008 – 2012, and the Australian population, by region/country of birth and year

| Region/ country of birth | Year of diagnosis | | | | | | | | | | Australian population ¹ |
|--|-------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------------------------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | |
| Total with a reported country of birth | 92 | 35.1 | 105 | 42.2 | 142 | 62.3 | 123 | 63.1 | 83 | 43.0 | 21 507 719 |
| Australia | 68 | 73.9 | 70 | 66.7 | 96 | 67.6 | 89 | 72.4 | 62 | 74.7 | 69.8 |
| Overseas born | 24 | 26.1 | 35 | 33.3 | 46 | 32.4 | 34 | 27.6 | 21 | 25.3 | 24.6 |
| <i>Other Oceania</i> | 3 | 3.3 | 6 | 5.7 | 2 | 1.4 | 7 | 5.7 | 1 | 1.2 | 2.8 |
| <i>United Kingdom and Ireland</i> | 4 | 4.3 | 12 | 11.4 | 4 | 2.8 | 4 | 3.3 | 2 | 2.4 | 5.4 |
| <i>Other Europe</i> | 4 | 4.3 | 2 | 1.9 | 8 | 5.6 | 2 | 1.6 | 6 | 7.2 | 4.5 |
| <i>Middle East/North Africa</i> | 1 | 1.1 | 4 | 3.8 | 6 | 4.2 | 6 | 4.9 | 3 | 3.6 | 1.4 |
| <i>Sub-Saharan Africa</i> | 0 | 0.0 | 1 | 1.0 | 7 | 4.9 | 2 | 1.6 | 1 | 1.2 | 1.3 |
| <i>Asia</i> | 10 | 10.9 | 10 | 9.5 | 17 | 12.0 | 13 | 10.6 | 7 | 8.4 | 8.1 |
| <i>North America</i> | 0 | 0.0 | 0 | 0.0 | 1 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0.5 |
| <i>South/Central America and the Caribbean</i> | 2 | 2.2 | 0 | 0.0 | 1 | 0.7 | 0 | 0.0 | 1 | 1.2 | 0.5 |
| Not reported | 170 | 64.9 | 144 | 57.8 | 86 | 37.7 | 72 | 36.9 | 110 | 57.0 | 5.6 |
| Total | 262 | 100 | 249 | 100 | 228 | 100 | 195 | 100 | 193 | 100 | |

¹ Population estimates by region/country of birth from 2011 Census by the Australian Bureau of Statistics.

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number and rate¹ of diagnosis of hepatitis C infection, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 201 | 54.3 | 163 | 42.7 | 223 | 57.9 | 189 | 48.8 | 147 | 37.2 |
| NSW | 3 653 | 52.2 | 3 789 | 53.5 | 3 765 | 52.4 | 3 331 | 46.1 | 3 290 | 45.1 |
| NT | 212 | 92.1 | 166 | 70.8 | 170 | 72.8 | 209 | 84.7 | 195 | 77.1 |
| QLD | 2 575 | 60.2 | 2 634 | 60.3 | 2 681 | 60.4 | 2 424 | 53.8 | 2 376 | 51.9 |
| SA | 584 | 37.0 | 556 | 34.8 | 530 | 33.0 | 460 | 28.5 | 471 | 28.9 |
| TAS | 347 | 74.4 | 283 | 59.8 | 264 | 54.6 | 229 | 48.0 | 265 | 56.1 |
| VIC | 2 412 | 44.9 | 2 510 | 45.7 | 2 585 | 46.2 | 2 326 | 41.2 | 2 234 | 39.0 |
| WA | 1 324 | 59.2 | 1 145 | 49.5 | 1 066 | 45.1 | 1 077 | 44.3 | 1 136 | 45.1 |
| Total | 11 308 | 52.5 | 11 246 | 51.2 | 11 284 | 50.6 | 10 245 | 45.4 | 10 114 | 44.2 |

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 2.1.10 Number of diagnoses of hepatitis C infection, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 8 | 11 | 20 | 4 | 12 | 16 | 10 | 12 | 22 | 6 | 5 | 11 | 6 | 9 | 15 |
| 5 – 14 | 12 | 9 | 21 | 14 | 16 | 31 | 14 | 10 | 26 | 11 | 10 | 22 | 7 | 10 | 18 |
| 15 – 19 | 131 | 174 | 306 | 127 | 144 | 272 | 113 | 133 | 249 | 107 | 131 | 238 | 143 | 111 | 254 |
| 20 – 24 | 612 | 470 | 1 086 | 513 | 453 | 970 | 540 | 396 | 951 | 508 | 365 | 880 | 624 | 323 | 949 |
| 25 – 29 | 951 | 635 | 1 591 | 881 | 641 | 1 532 | 854 | 606 | 1 499 | 802 | 495 | 1 302 | 808 | 478 | 1 293 |
| 30 – 39 | 2 048 | 1 150 | 3 205 | 2 075 | 1 073 | 3 171 | 1 992 | 1 201 | 3 232 | 1 879 | 978 | 2 878 | 1 808 | 975 | 2 800 |
| 40 – 49 | 1 915 | 951 | 2 872 | 1 923 | 926 | 2 859 | 1 838 | 932 | 2 779 | 1 707 | 796 | 2 506 | 1 588 | 772 | 2 365 |
| 50 – 59 | 1 170 | 533 | 1 707 | 1 306 | 565 | 1 876 | 1 338 | 626 | 1 970 | 1 238 | 599 | 1 837 | 1 198 | 595 | 1 795 |
| 60 + | 268 | 228 | 499 | 254 | 256 | 511 | 311 | 224 | 537 | 324 | 233 | 562 | 360 | 258 | 618 |
| Not reported | 0 | 0 | 1 | 1 | 0 | 8 | 10 | 5 | 19 | 5 | 1 | 9 | 5 | 0 | 7 |
| Total | 7 115 | 4 161 | 11 308 | 7 098 | 4 086 | 11 246 | 7 020 | 4 145 | 11 284 | 6 587 | 3 613 | 10 245 | 6 547 | 3 531 | 10 114 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.11 Number of diagnoses of newly acquired hepatitis C infection, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|------------|------------|------------|------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| ACT | 6 | 8 | 12 | 9 | 15 |
| NSW | 26 | 41 | 38 | 53 | 47 |
| NT | 6 | 5 | 0 | 3 | 0 |
| QLD | – | – | – | – | – |
| SA | 43 | 38 | 43 | 33 | 77 |
| TAS | 21 | 22 | 23 | 27 | 23 |
| VIC | 163 | 193 | 205 | 168 | 179 |
| WA | 100 | 93 | 76 | 120 | 125 |
| Total | 365 | 400 | 397 | 413 | 466 |

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, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|------------|------------|------------|------------|----------------|------------|------------|------------|------------|------------|----------------|------------|------------|------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T | M | F | T ¹ | M | F | T | M | F | T ¹ | M | F | T |
| 0 – 4 | 0 | 1 | 1 | 1 | 5 | 6 | 2 | 3 | 5 | 1 | 0 | 1 | 1 | 0 | 1 |
| 5 – 14 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 2 | 2 | 0 | 1 | 1 |
| 15 – 19 | 22 | 19 | 41 | 18 | 11 | 29 | 8 | 20 | 28 | 15 | 23 | 38 | 18 | 19 | 37 |
| 20 – 24 | 55 | 31 | 86 | 76 | 43 | 119 | 59 | 47 | 106 | 64 | 32 | 97 | 91 | 32 | 123 |
| 25 – 29 | 62 | 36 | 98 | 52 | 41 | 93 | 47 | 36 | 83 | 84 | 26 | 110 | 66 | 43 | 109 |
| 30 – 39 | 52 | 42 | 94 | 70 | 34 | 104 | 59 | 48 | 107 | 68 | 24 | 92 | 66 | 40 | 106 |
| 40 – 49 | 22 | 11 | 33 | 18 | 15 | 33 | 34 | 15 | 49 | 39 | 14 | 53 | 46 | 19 | 65 |
| 50 – 59 | 3 | 4 | 7 | 5 | 4 | 9 | 13 | 3 | 16 | 11 | 7 | 18 | 16 | 4 | 20 |
| 60 + | 3 | 2 | 5 | 1 | 0 | 1 | 0 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 4 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 219 | 146 | 365 | 241 | 155 | 400 | 223 | 174 | 397 | 283 | 129 | 413 | 306 | 160 | 466 |

¹ Totals include 4 cases whose sex and age group was not reported and 1 case whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.13 Number of diagnoses of newly acquired hepatitis C infection, 2008 – 2012, by exposure category, year and sex

| Exposure category | Year of diagnosis | | | | | | | | | | | | | | |
|----------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| Injecting drug use | 160 | 95 | 255 | 164 | 95 | 259 | 158 | 103 | 261 | 173 | 62 | 236 | 165 | 96 | 261 |
| Sexual contact | 6 | 8 | 14 | 7 | 8 | 15 | 8 | 3 | 11 | 6 | 7 | 13 | 6 | 3 | 9 |
| Blood/tissue recipient | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Skin penetration procedure | 6 | 4 | 10 | 4 | 4 | 8 | 5 | 5 | 10 | 13 | 2 | 15 | 4 | 2 | 6 |
| Healthcare exposure | 2 | 3 | 5 | 1 | 11 | 12 | 4 | 38 | 42 | 1 | 5 | 6 | 0 | 0 | 0 |
| Household contact | 1 | 0 | 1 | 0 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 2 | 0 | 0 | 0 |
| Other | 14 | 9 | 23 | 27 | 12 | 39 | 22 | 6 | 28 | 19 | 6 | 25 | 19 | 7 | 26 |
| Undetermined | 30 | 27 | 57 | 38 | 23 | 65 | 24 | 18 | 42 | 70 | 46 | 116 | 112 | 52 | 164 |
| Total | 219 | 146 | 365 | 241 | 155 | 400 | 223 | 174 | 397 | 283 | 129 | 413 | 306 | 160 | 466 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.14 Number and percentage of diagnoses of newly acquired hepatitis C infection, 2008 – 2012, and the Australian population, by region/country of birth and year

| Region/country of birth | Year of diagnosis | | | | | | | | | | Australian population ¹ |
|--|-------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------------------------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | |
| Total with a reported country of birth | 282 | 77.3 | 174 | 43.5 | 179 | 45.1 | 202 | 48.9 | 180 | 38.6 | 21 507 719 |
| Australia | 249 | 88.3 | 149 | 85.6 | 154 | 86.0 | 188 | 93.1 | 160 | 88.9 | 69.8 |
| Overseas born | 33 | 11.7 | 25 | 14.4 | 25 | 14.0 | 14 | 6.9 | 20 | 11.1 | 24.6 |
| <i>Other Oceania</i> | 3 | 1.1 | 5 | 2.9 | 5 | 2.8 | 2 | 1.0 | 2 | 1.1 | 2.8 |
| <i>United Kingdom and Ireland</i> | 9 | 3.2 | 5 | 2.9 | 7 | 3.9 | 3 | 1.5 | 4 | 2.2 | 5.4 |
| <i>Other Europe</i> | 3 | 1.1 | 4 | 2.3 | 4 | 2.2 | 0 | 0.0 | 2 | 1.1 | 4.5 |
| <i>Middle East/North Africa</i> | 2 | 0.7 | 2 | 1.1 | 2 | 1.1 | 1 | 0.5 | 1 | 0.6 | 1.4 |
| <i>Sub-Saharan Africa</i> | 2 | 0.7 | 2 | 1.1 | 1 | 0.6 | 1 | 0.5 | 3 | 1.7 | 1.3 |
| <i>Asia</i> | 13 | 4.6 | 3 | 1.7 | 4 | 2.2 | 4 | 2.0 | 8 | 4.4 | 8.1 |
| <i>North America</i> | 1 | 0.4 | 2 | 1.1 | 1 | 0.6 | 1 | 0.5 | 0 | 0.0 | 0.5 |
| <i>South/Central America and the Caribbean</i> | 0 | 0.0 | 2 | 1.1 | 1 | 0.6 | 2 | 1.0 | 0 | 0.0 | 0.5 |
| Not reported | 83 | 22.7 | 226 | 56.5 | 218 | 54.9 | 211 | 51.1 | 286 | 61.4 | 5.6 |
| Total | 365 | 100 | 400 | 100 | 397 | 100 | 413 | 100 | 466 | 100 | |

1 Population estimates by region/country of birth from 2011 Census by the Australian Bureau of Statistics.

Source: National Notifiable Diseases Surveillance System

Table 2.1.15 Number of diagnoses of hepatitis D infection, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|-----------|-----------|-----------|-----------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| ACT | 0 | 0 | 0 | 0 | 0 |
| NSW | 13 | 9 | 9 | 12 | 5 |
| NT | 1 | 0 | 0 | 0 | 0 |
| QLD | 7 | 13 | 20 | 7 | 6 |
| SA | 0 | 0 | 1 | 1 | 8 |
| TAS | 0 | 0 | 0 | 0 | 0 |
| VIC | 14 | 13 | 6 | 16 | 9 |
| WA | 6 | 0 | 0 | 2 | 2 |
| Total | 41 | 35 | 36 | 38 | 30 |

Source: National Notifiable Diseases Surveillance System

Table 2.1.16 Number of diagnoses of hepatitis D infection, 2008 – 2012, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | 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 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| 15 – 19 | 3 | 1 | 4 | 4 | 1 | 5 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| 20 – 24 | 2 | 0 | 2 | 2 | 1 | 3 | 4 | 1 | 5 | 0 | 2 | 2 | 1 | 1 | 2 |
| 25 – 29 | 4 | 0 | 4 | 5 | 4 | 9 | 2 | 0 | 2 | 1 | 2 | 3 | 3 | 0 | 3 |
| 30 – 39 | 11 | 1 | 12 | 3 | 1 | 4 | 1 | 5 | 6 | 7 | 3 | 10 | 5 | 1 | 6 |
| 40 – 49 | 7 | 4 | 11 | 7 | 0 | 7 | 11 | 1 | 12 | 5 | 6 | 11 | 6 | 1 | 7 |
| 50 – 59 | 4 | 1 | 5 | 3 | 1 | 4 | 8 | 1 | 9 | 7 | 0 | 7 | 4 | 4 | 8 |
| 60 + | 2 | 1 | 3 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 2 | 4 | 1 | 1 | 2 |
| Not reported | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 33 | 8 | 41 | 24 | 11 | 35 | 28 | 8 | 36 | 23 | 15 | 38 | 21 | 9 | 30 |

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, 2012, by State/Territory and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | | | | Total |
|------------------|--|-------------------|------------------|--|------------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | | |
| ACT | 0 (0.0) | 1 (100.0) | 0 (0.0) | | 1 |
| NSW | 0 (0.0) | 41 (97.6) | 1 (2.4) | | 42 |
| NT | 0 (0.0) | 3 (100.0) | 0 (0.0) | | 3 |
| QLD | 0 (0.0) | 25 (73.5) | 9 (26.5) | | 34 |
| SA | 0 (0.0) | 7 (100.0) | 0 (0.0) | | 7 |
| TAS | 0 (0.0) | 2 (100.0) | 0 (0.0) | | 2 |
| VIC | 0 (0.0) | 55 (88.7) | 7 (11.3) | | 62 |
| WA | 0 (0.0) | 14 (100.0) | 0 (0.0) | | 14 |
| Total | 0 (0.0) | 148 (89.7) | 17 (10.3) | | 165 |

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number and rate¹ of diagnosis of hepatitis B infection, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 115 | 281.6 | 79 | 203.0 | 75 | 181.8 | 75 | 185.8 | 61 | 143.8 |
| | Non-Indigenous ³ | 85 | 52.0 | 82 | 47.8 | 85 | 49.6 | 86 | 50.6 | 144 | 84.4 |
| SA | Aboriginal and Torres Strait Islander | 26 | 140.3 | 19 | 75.5 | 23 | 109.4 | 29 | 133.5 | 20 | 78.3 |
| | Non-Indigenous ³ | 405 | 26.5 | 439 | 28.7 | 409 | 26.8 | 383 | 25.3 | 379 | 24.8 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 2 | 11.6 | 1 | 8.2 | 2 | 12.4 | 0 | 0.0 |
| | Non-Indigenous ³ | 67 | 15.5 | 83 | 19.3 | 53 | 12.3 | 48 | 11.2 | 72 | 16.7 |
| WA | Aboriginal and Torres Strait Islander | 55 | 109.4 | 33 | 71.5 | 42 | 100.3 | 53 | 91.5 | 43 | 66.8 |
| | Non-Indigenous ³ | 592 | 26.6 | 679 | 30.3 | 727 | 32.6 | 604 | 27.1 | 780 | 34.9 |
| Total | Aboriginal and Torres Strait Islander | 196 | 156.1 | 133 | 105.3 | 141 | 116.3 | 159 | 119.6 | 124 | 85.6 |
| | Non-Indigenous³ | 1 149 | 26.3 | 1 283 | 29.3 | 1 274 | 29.2 | 1 121 | 25.7 | 1 375 | 31.5 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis B infection, 2012, by State/Territory and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status ¹ | | | | Total | |
|------------------|---|--------------|----------------|---------------|---------------------|--------------|
| | Aboriginal and Torres Strait Islander | | Non-Indigenous | | | Not reported |
| ACT | 0 | (0.0) | 104 | (98.1) | 2 (1.9) | 106 |
| NSW | – | | – | | 2 147 (92.3) | 2 327 |
| NT | 61 | (29.8) | 134 | (65.4) | 10 (4.9) | 205 |
| QLD | – | | – | | 604 (70.0) | 863 |
| SA | 20 | (5.0) | 373 | (93.5) | 6 (1.5) | 399 |
| TAS | 0 | (0.0) | 52 | (72.2) | 20 (27.8) | 72 |
| VIC | – | | – | | 1 139 (59.7) | 1 907 |
| WA | 43 | (5.2) | 694 | (84.3) | 86 (10.4) | 823 |
| Total | 200 | (3.0) | 2 488 | (37.1) | 4 014 (59.9) | 6 702 |

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 2.2.4 Number and rate¹ of diagnosis of newly acquired hepatitis B, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NSW | Aboriginal and Torres Strait Islander | 5 | 3.0 | 4 | 2.8 | 2 | 1.4 | 3 | 1.8 | 1 | 0.6 |
| | Non-Indigenous ³ | 40 | 0.6 | 33 | 0.5 | 33 | 0.5 | 27 | 0.4 | 28 | 0.4 |
| NT | Aboriginal and Torres Strait Islander | 4 | 12.8 | 0 | 0.0 | 1 | 1.8 | 1 | 1.2 | 4 | 4.9 |
| | Non-Indigenous ³ | 4 | 2.6 | 4 | 2.3 | 3 | 1.7 | 3 | 1.6 | 1 | 0.6 |
| QLD | Aboriginal and Torres Strait Islander | 8 | 4.6 | 4 | 2.0 | 10 | 7.3 | 8 | 4.9 | 7 | 4.4 |
| | Non-Indigenous ³ | 38 | 0.9 | 47 | 1.1 | 47 | 1.1 | 38 | 0.9 | 48 | 1.2 |
| SA | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 6.8 |
| | Non-Indigenous ³ | 11 | 0.7 | 10 | 0.6 | 21 | 1.4 | 9 | 0.6 | 14 | 0.9 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 2 | 11.6 | 0 | 0.0 | 1 | 6.6 | 0 | 0.0 |
| | Non-Indigenous ³ | 15 | 3.6 | 12 | 3.0 | 6 | 1.5 | 13 | 3.2 | 10 | 2.4 |
| VIC | Aboriginal and Torres Strait Islander | 1 | 3.0 | 3 | 8.8 | 4 | 11.9 | 1 | 3.1 | 3 | 9.1 |
| | Non-Indigenous ³ | 87 | 1.6 | 87 | 1.6 | 66 | 1.2 | 71 | 1.3 | 49 | 0.9 |
| WA | Aboriginal and Torres Strait Islander | 2 | 3.7 | 0 | 0.0 | 2 | 2.6 | 1 | 0.9 | 2 | 2.7 |
| | Non-Indigenous ³ | 46 | 2.1 | 38 | 1.7 | 30 | 1.3 | 17 | 0.8 | 22 | 1.0 |
| Total | Aboriginal and Torres Strait Islander | 20 | 4.1 | 13 | 2.4 | 19 | 3.8 | 15 | 2.6 | 19 | 3.4 |
| | Non-Indigenous³ | 241 | 1.2 | 231 | 1.1 | 206 | 1.0 | 178 | 0.9 | 172 | 0.8 |

¹ Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 2.2.5 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2012, by State/Territory and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status ¹ | | | | Total |
|------------------|---|-------------------|------------------|--|------------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | | |
| ACT | 0 (0.0) | 2 (100.0) | 0 (0.0) | | 2 |
| NSW | 1 (3.4) | 24 (82.8) | 4 (13.8) | | 29 |
| NT | 4 (80.0) | 1 (20.0) | 0 (0.0) | | 5 |
| QLD | 7 (12.7) | 28 (50.9) | 20 (36.4) | | 55 |
| SA | 2 (12.5) | 14 (87.5) | 0 (0.0) | | 16 |
| TAS | 0 (0.0) | 10 (100.0) | 0 (0.0) | | 10 |
| VIC | 3 (5.8) | 45 (86.5) | 4 (7.7) | | 52 |
| WA | 2 (8.3) | 22 (91.7) | 0 (0.0) | | 24 |
| Total | 19 (9.8) | 146 (75.6) | 28 (14.5) | | 193 |

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 2.2.6 Number and rate¹ of diagnosis of hepatitis C infection, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 26 | 51.5 | 27 | 52.3 | 24 | 47.1 | 44 | 85.5 | 23 | 42.4 |
| | Non-Indigenous ³ | 186 | 106.5 | 139 | 80.7 | 146 | 86.1 | 165 | 93.3 | 172 | 99.6 |
| SA | Aboriginal and Torres Strait Islander | 48 | 161.9 | 48 | 171.0 | 68 | 239.3 | 37 | 143.2 | 64 | 222.5 |
| | Non-Indigenous ³ | 536 | 34.9 | 508 | 33.0 | 462 | 30.0 | 423 | 27.5 | 407 | 26.3 |
| TAS | Aboriginal and Torres Strait Islander | 21 | 116.1 | 10 | 65.4 | 13 | 72.8 | 11 | 66.6 | 21 | 109.3 |
| | Non-Indigenous ³ | 326 | 75.1 | 273 | 62.5 | 251 | 56.3 | 218 | 49.5 | 244 | 55.7 |
| WA | Aboriginal and Torres Strait Islander | 130 | 190.3 | 140 | 194.0 | 134 | 196.9 | 148 | 206.9 | 187 | 265.6 |
| | Non-Indigenous ³ | 1 194 | 53.5 | 1 005 | 45.1 | 932 | 41.8 | 929 | 41.8 | 949 | 42.6 |
| Total | Aboriginal and Torres Strait Islander | 225 | 130.2 | 225 | 128.3 | 239 | 140.2 | 240 | 140.7 | 295 | 166.2 |
| | Non-Indigenous³ | 2 242 | 51.1 | 1 925 | 43.8 | 1 791 | 40.8 | 1 735 | 39.5 | 1 772 | 40.3 |

¹ Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 2.2.7 Number (percent) of diagnoses of hepatitis C infection, 2012, by State/Territory and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status ¹ | | | Total |
|------------------|---|---------------------|---------------------|---------------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | |
| ACT | – | – | 114 (77.6) | 147 |
| NSW | – | – | 2 807 (85.3) | 3 290 |
| NT | 23 (11.8) | 164 (84.1) | 8 (4.1) | 195 |
| QLD | – | – | 1 332 (56.1) | 2 376 |
| SA | 64 (13.6) | 380 (80.7) | 27 (5.7) | 471 |
| TAS | 21 (7.9) | 182 (68.7) | 62 (23.4) | 265 |
| VIC | – | – | 1 550 (69.4) | 2 234 |
| WA | 187 (16.5) | 910 (80.1) | 39 (3.4) | 1 136 |
| Total | 731 (7.2) | 3 444 (34.1) | 5 939 (58.7) | 10 114 |

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 2.2.8 Number (percent) of diagnoses of hepatitis D infection, 2012, by State/Territory and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status ¹ | | | Total |
|------------------|---|------------------|-----------------|-----------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | |
| ACT | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 |
| NSW | 0 (0.0) | 5 (100.0) | 0 (0.0) | 5 |
| NT | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 |
| QLD | 0 (0.0) | 4 (66.7) | 2 (33.3) | 6 |
| SA | 1 (12.5) | 7 (87.5) | 0 (0.0) | 8 |
| TAS | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 |
| VIC | 0 (0.0) | 7 (77.8) | 2 (22.2) | 9 |
| WA | 1 (50.0) | 1 (50.0) | 0 (0.0) | 2 |
| Total | 2 (6.7) | 24 (80.0) | 4 (13.3) | 30 |

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

2.3 Long term outcomes among people with chronic viral hepatitis

Table 2.3.1 Number (percent) of liver transplants, 1985 – 2011, by year and primary cause of liver disease, and hepatitis status for cases where the primary diagnosis was hepatocellular carcinoma

| Diagnosis | Year | | | | | | | | | | | | Total ² |
|---------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|--------------------|
| | 1985 – 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | | |
| Hepatitis B | 109 (7.6) | 6 (5.4) | 8 (5.4) | 8 (6.1) | 3 (2.3) | 3 (2.5) | 3 (1.9) | 7 (4.8) | 6 (3.1) | 9 (4.6) | 2 (1.0) | 164 | |
| Hepatitis C | 220 (15.4) | 30 (26.8) | 43 (29.3) | 45 (34.1) | 31 (23.8) | 30 (25.2) | 43 (27.7) | 41 (28.1) | 48 (25.0) | 55 (28.4) | 67 (33.2) | 653 | |
| Hepatitis B/C/D | 12 (0.8) | 3 (2.7) | 0 (0.0) | 2 (1.5) | 2 (1.5) | 2 (1.7) | 5 (3.2) | 1 (0.7) | 3 (1.6) | 3 (1.5) | 1 (0.5) | 34 | |
| Hepatocellular carcinoma | 44 (3.1) | 6 (5.4) | 11 (7.5) | 10 (7.6) | 10 (7.7) | 19 (16.0) | 21 (13.5) | 24 (16.4) | 26 (13.5) | 24 (12.4) | 23 (11.4) | 218 | |
| <i>Hepatitis B</i> | 15 (1.1) | 1 (0.9) | 2 (1.4) | 4 (3.0) | 3 (2.3) | 6 (5.0) | 6 (3.9) | 5 (3.4) | 5 (2.6) | 4 (2.1) | 4 (2.0) | 55 | |
| <i>Hepatitis C</i> | 18 (1.3) | 4 (3.6) | 6 (4.1) | 3 (2.3) | 5 (3.8) | 11 (9.2) | 9 (5.8) | 8 (5.5) | 13 (6.8) | 14 (7.2) | 12 (5.9) | 103 | |
| <i>Hepatitis B/C/D</i> | 1 (0.1) | 0 (0.0) | 1 (0.7) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.6) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.5) | 4 | |
| <i>Hepatitis negative</i> | 10 (0.7) | 1 (0.9) | 2 (1.4) | 3 (2.3) | 2 (1.5) | 2 (1.7) | 5 (3.2) | 11 (7.5) | 8 (4.2) | 6 (3.1) | 6 (3.0) | 56 | |
| Other ¹ | 1 040 (73.0) | 67 (59.8) | 85 (57.8) | 67 (50.8) | 84 (64.6) | 65 (54.6) | 83 (53.5) | 73 (50.0) | 109 (56.8) | 103 (53.1) | 109 (54.0) | 1 885 | |
| Total | 1 425 (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) | 194 (100.0) | 202 (100.0) | 2 954 | |

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

2 Data available to 31 December 2012.

Source: Australia and New Zealand Liver Transplant Registry

2.4 Global comparisons of hepatitis B virus prevalence

Table 2.4.1 Estimated HBV prevalence in selected countries

| Country | Hepatitis B prevalence rate (%) |
|----------------------------|---------------------------------|
| Viet Nam | 12.5 |
| China (excluding Taiwan) | 12.3 |
| Taiwan | 11.7 |
| Afghanistan | 10.5 |
| Cambodia | 10.3 |
| Philippines | 7.4 |
| Fiji | 5.8 |
| Malaysia | 5.6 |
| Korea, Republic of (South) | 5.3 |
| India | 3.2 |
| Greece | 3.1 |
| Sri Lanka | 2.4 |
| Italy | 2.4 |
| Australia | 1.0 |
| United Kingdom | 0.5 |
| New Zealand | 0.5 |

Source: VIDRL/ASHM Hepatitis B Epidemiology Mapping Project; Victorian Infectious Diseases Reference Laboratory & Australasian Society for HIV Medicine, 2013

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3 National surveillance for sexually transmissible infections

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

Table 3.1.1 Number and rate of diagnosis of chlamydia, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ |
| ACT | 988 | 238.2 | 945 | 222.7 | 1 161 | 267.4 | 1 261 | 289.1 | 1 283 | 290.8 |
| NSW | 13 985 | 197.8 | 14 949 | 207.5 | 18 255 | 251.5 | 20 575 | 283.3 | 21 293 | 291.5 |
| NT | 2 289 | 879.9 | 2 445 | 907.8 | 2 662 | 974.8 | 2 629 | 973.1 | 2 532 | 928.3 |
| QLD | 15 190 | 345.5 | 16 694 | 367.8 | 19 216 | 417.2 | 18 647 | 401.2 | 18 849 | 399.3 |
| SA | 3 656 | 232.5 | 3 758 | 234.5 | 4 335 | 266.7 | 5 132 | 314.5 | 4 848 | 296.8 |
| TAS | 1 475 | 309.4 | 1 470 | 303.3 | 2 014 | 413.2 | 1 777 | 368.4 | 1 787 | 372.5 |
| VIC | 12 202 | 220.6 | 13 906 | 243.1 | 16 486 | 284.3 | 19 226 | 329.6 | 20 312 | 345.8 |
| WA | 8 642 | 375.3 | 8 830 | 368.1 | 10 177 | 416.4 | 11 675 | 466.2 | 11 803 | 456.0 |
| Total | 58 427 | 265.4 | 62 997 | 278.4 | 74 306 | 324.4 | 80 922 | 351.1 | 82 707 | 355.1 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.2 Number of diagnoses of chlamydia, 2008 – 2012, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 12 | 11 | 24 | 19 | 24 | 43 | 18 | 26 | 46 | 16 | 20 | 36 | 20 | 19 | 39 |
| 5 – 14 | 50 | 495 | 546 | 67 | 492 | 560 | 87 | 597 | 685 | 89 | 615 | 706 | 89 | 653 | 742 |
| 15 – 19 | 3 701 | 11 228 | 14 961 | 4 092 | 12 148 | 16 262 | 5 306 | 14 614 | 19 968 | 5 492 | 16 168 | 21 689 | 5 383 | 15 511 | 20 932 |
| 20 – 24 | 8 197 | 12 964 | 21 188 | 9 384 | 13 715 | 23 128 | 10 897 | 15 956 | 26 920 | 12 157 | 17 584 | 29 796 | 12 220 | 18 108 | 30 354 |
| 25 – 29 | 5 096 | 5 496 | 10 610 | 5 356 | 6 019 | 11 391 | 6 492 | 6 530 | 13 056 | 7 058 | 7 166 | 14 244 | 7 380 | 7 359 | 14 761 |
| 30 – 39 | 3 992 | 3 404 | 7 406 | 4 202 | 3 546 | 7 755 | 4 875 | 3 991 | 8 891 | 5 072 | 4 273 | 9 357 | 5 706 | 4 532 | 10 255 |
| 40 – 49 | 1 735 | 861 | 2 604 | 1 789 | 860 | 2 651 | 2 161 | 1 063 | 3 230 | 2 251 | 1 192 | 3 446 | 2 552 | 1 242 | 3 796 |
| 50 – 59 | 595 | 218 | 815 | 650 | 233 | 884 | 840 | 251 | 1 092 | 894 | 269 | 1 164 | 991 | 327 | 1 319 |
| 60 + | 206 | 42 | 248 | 219 | 49 | 268 | 298 | 46 | 345 | 343 | 54 | 398 | 385 | 51 | 437 |
| Not reported | 10 | 10 | 25 | 16 | 12 | 55 | 21 | 34 | 73 | 33 | 50 | 86 | 23 | 44 | 72 |
| Total | 23 594 | 34 729 | 58 427 | 25 794 | 37 098 | 62 997 | 30 995 | 43 108 | 74 306 | 33 405 | 47 391 | 80 922 | 34 749 | 47 846 | 82 707 |

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, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|----------|----------|----------|----------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| NT | 1 | 0 | 0 | 0 | 0 |
| QLD | 1 | 1 | 1 | 0 | 0 |
| WA | 0 | 0 | 0 | 0 | 1 |
| Total | 2 | 1 | 1 | 0 | 1 |

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 2008 – 2012, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | 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 | 1 | 0 | 1 |
| 20 – 24 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 – 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 – 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 – 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50 + | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate of diagnosis of gonorrhoea, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------------|--------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ |
| ACT | 21 | 5.4 | 55 | 13.1 | 56 | 13.6 | 128 | 30.1 | 92 | 21.3 |
| NSW | 1 330 | 18.9 | 1 653 | 23.1 | 2 301 | 31.8 | 2 883 | 39.7 | 4 129 | 56.5 |
| NT | 1 550 | 601.8 | 1 551 | 579.0 | 1 933 | 712.0 | 1 952 | 726.9 | 1 536 | 568.1 |
| QLD | 1 638 | 37.5 | 1 787 | 39.6 | 2 385 | 52.1 | 2 954 | 64.0 | 2 700 | 57.5 |
| SA | 493 | 31.4 | 373 | 23.4 | 473 | 29.0 | 445 | 27.5 | 499 | 30.7 |
| TAS | 25 | 5.3 | 21 | 4.5 | 20 | 4.1 | 19 | 3.9 | 35 | 7.4 |
| VIC | 929 | 17.0 | 1 489 | 26.4 | 1 751 | 30.6 | 1 879 | 32.5 | 2 543 | 43.3 |
| WA | 1 693 | 74.0 | 1 347 | 56.4 | 1 403 | 57.9 | 1 839 | 73.4 | 2 115 | 82.8 |
| Total | 7 679 | 35.1 | 8 276 | 36.9 | 10 322 | 45.4 | 12 099 | 52.8 | 13 649 | 58.9 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.6 Number of diagnoses of gonorrhoea, 2008 – 2012, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 1 | 2 | 3 | 6 | 5 | 11 | 3 | 4 | 7 | 4 | 7 | 11 | 4 | 5 | 9 |
| 5 – 14 | 28 | 150 | 178 | 27 | 106 | 134 | 35 | 150 | 186 | 43 | 188 | 231 | 46 | 193 | 239 |
| 15 – 19 | 747 | 843 | 1 591 | 796 | 838 | 1 640 | 928 | 1 055 | 1 984 | 1 027 | 1 283 | 2 311 | 1 039 | 1 225 | 2 264 |
| 20 – 24 | 1 144 | 663 | 1 811 | 1 304 | 803 | 2 110 | 1 625 | 929 | 2 561 | 1 815 | 1 022 | 2 841 | 2 120 | 1 106 | 3 227 |
| 25 – 29 | 911 | 383 | 1 295 | 1 071 | 414 | 1 486 | 1 391 | 487 | 1 882 | 1 569 | 640 | 2 211 | 1 957 | 598 | 2 556 |
| 30 – 39 | 1 178 | 415 | 1 594 | 1 271 | 389 | 1 663 | 1 583 | 443 | 2 028 | 1 822 | 543 | 2 369 | 2 292 | 594 | 2 890 |
| 40 – 49 | 639 | 147 | 787 | 646 | 121 | 767 | 933 | 147 | 1 082 | 1 145 | 186 | 1 331 | 1 376 | 255 | 1 631 |
| 50 – 59 | 264 | 48 | 312 | 289 | 44 | 333 | 367 | 49 | 416 | 493 | 69 | 564 | 495 | 105 | 600 |
| 60 + | 84 | 19 | 103 | 100 | 15 | 115 | 139 | 16 | 155 | 170 | 24 | 196 | 190 | 26 | 216 |
| Not reported | | 2 | 5 | 1 | 1 | 17 | 4 | 3 | 21 | 5 | 5 | 34 | 7 | 9 | 17 |
| Total | 4 996 | 2 672 | 7 679 | 5 511 | 2 736 | 8 276 | 7 008 | 3 283 | 10 322 | 8 093 | 3 967 | 12 099 | 9 526 | 4 116 | 13 649 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate of diagnosis of infectious syphilis, 2008 – 2012, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ |
| ACT | 4 | 1.0 | 11 | 2.9 | 14 | 3.8 | 9 | 2.4 | 15 | 3.8 |
| NSW | 427 | 6.1 | 530 | 7.5 | 421 | 5.9 | 419 | 5.8 | 510 | 7.0 |
| NT | 83 | 33.8 | 38 | 15.1 | 43 | 16.5 | 30 | 11.4 | 14 | 5.1 |
| QLD | 195 | 4.5 | 192 | 4.4 | 227 | 5.1 | 335 | 7.3 | 387 | 8.4 |
| SA | 49 | 3.1 | 56 | 3.5 | 25 | 1.5 | 56 | 2.9 | 43 | 2.7 |
| TAS | 8 | 1.7 | 10 | 2.1 | 6 | 1.2 | 6 | 1.3 | 14 | 2.9 |
| VIC | 380 | 7.0 | 388 | 6.9 | 299 | 5.2 | 332 | 5.8 | 474 | 8.2 |
| WA | 176 | 7.8 | 89 | 3.8 | 85 | 3.6 | 125 | 5.1 | 77 | 3.1 |
| Total | 1 322 | 6.1 | 1 314 | 5.9 | 1 120 | 5.0 | 1 312 | 5.8 | 1 534 | 6.7 |

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, 2008 – 2012, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|------------|----------------|--------------|------------|----------------|------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 – 14 | 0 | 8 | 8 | 0 | 3 | 3 | 0 | 1 | 1 | 7 | 8 | 15 | 2 | 6 | 8 |
| 15 – 19 | 42 | 35 | 77 | 29 | 11 | 40 | 32 | 14 | 46 | 47 | 43 | 90 | 38 | 34 | 72 |
| 20 – 24 | 100 | 29 | 129 | 124 | 24 | 148 | 117 | 25 | 142 | 123 | 37 | 161 | 161 | 29 | 191 |
| 25 – 29 | 175 | 21 | 196 | 162 | 22 | 184 | 140 | 18 | 158 | 154 | 24 | 178 | 188 | 22 | 212 |
| 30 – 39 | 372 | 29 | 401 | 336 | 34 | 370 | 280 | 31 | 313 | 303 | 27 | 330 | 356 | 32 | 388 |
| 40 – 49 | 328 | 10 | 339 | 365 | 10 | 375 | 267 | 19 | 286 | 325 | 18 | 343 | 363 | 16 | 379 |
| 50 – 59 | 116 | 11 | 127 | 132 | 8 | 140 | 112 | 8 | 120 | 120 | 6 | 126 | 203 | 5 | 208 |
| 60 + | 42 | 3 | 45 | 46 | 4 | 50 | 47 | 2 | 49 | 53 | 4 | 57 | 72 | 4 | 76 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 12 | 0 | 0 | 0 |
| Total | 1 175 | 146 | 1 322 | 1 194 | 116 | 1 314 | 995 | 118 | 1 120 | 1 132 | 167 | 1 312 | 1 383 | 148 | 1 534 |

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, 2008 – 2012, by sexual exposure, sex worker status, facility of diagnosis, year and sex

| Characteristic | Year of diagnosis | | | | | | | | | | | | | | |
|---------------------------------------|-------------------|------------|----------------|--------------|------------|----------------|------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 2008 | | | 2009 | | | 2010 | | | 2011 | | | 2012 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| Sexual exposure | | | | | | | | | | | | | | | |
| Heterosexual contact | 82 | 67 | 149 | 92 | 53 | 145 | 94 | 73 | 167 | 134 | 105 | 239 | 114 | 90 | 205 |
| Men who have sex with men | 470 | | 470 | 525 | - | 525 | 434 | - | 434 | 546 | - | 546 | 684 | - | 684 |
| Other/undetermined ² | 170 | 19 | 190 | 38 | 9 | 51 | 49 | 13 | 68 | 56 | 21 | 90 | 72 | 31 | 104 |
| Not reported ² | 453 | 60 | 513 | 539 | 54 | 593 | 418 | 32 | 451 | 396 | 41 | 437 | 513 | 27 | 541 |
| Sex work in the past 12 months | | | | | | | | | | | | | | | |
| Current sex work | 4 | 3 | 7 | 0 | 1 | 1 | 3 | 5 | 8 | 0 | 3 | 3 | 1 | 2 | 3 |
| No sex work | 125 | 28 | 153 | 67 | 16 | 83 | 59 | 12 | 71 | 102 | 24 | 126 | 72 | 8 | 80 |
| Undetermined ² | 591 | 55 | 647 | 528 | 41 | 573 | 482 | 68 | 556 | 449 | 82 | 543 | 476 | 89 | 567 |
| Not reported ² | 455 | 60 | 515 | 599 | 58 | 657 | 451 | 33 | 485 | 581 | 58 | 640 | 834 | 49 | 884 |
| Place of diagnosis | | | | | | | | | | | | | | | |
| Public hospital | 27 | 17 | 44 | 24 | 8 | 32 | 56 | 23 | 79 | 58 | 34 | 92 | 55 | 30 | 85 |
| Sexual health clinic | 95 | 6 | 101 | 69 | 5 | 74 | 177 | 18 | 195 | 201 | 25 | 226 | 181 | 20 | 201 |
| Family planning clinic | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 0 | 3 |
| General practice | 61 | 2 | 63 | 46 | 5 | 51 | 170 | 6 | 176 | 180 | 7 | 187 | 86 | 8 | 94 |
| Other | 54 | 30 | 84 | 42 | 16 | 58 | 66 | 11 | 77 | 64 | 15 | 80 | 66 | 5 | 71 |
| Undetermined ² | 317 | 25 | 343 | 441 | 24 | 469 | 342 | 34 | 382 | 423 | 50 | 485 | 474 | 53 | 528 |
| Not reported ² | 621 | 66 | 687 | 572 | 58 | 630 | 183 | 26 | 210 | 205 | 36 | 241 | 518 | 32 | 552 |
| Total | 1 175 | 146 | 1 322 | 1 194 | 116 | 1 314 | 995 | 118 | 1 120 | 1 132 | 167 | 1 312 | 1 383 | 148 | 1 534 |

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

2 A characteristic was reported 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 rate¹ of diagnosis of chlamydia, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|---|-------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 1 397 | 1 917 | 1 356 | 1 860 | 1 475 | 2 045 | 1 555 | 2 129 | 1 386 | 1 899 |
| | Non-Indigenous ³ | 892 | 524 | 1 089 | 646 | 1 187 | 702 | 1 074 | 639 | 1 146 | 672 |
| QLD | Aboriginal and Torres Strait Islander | 2 316 | 1 151 | 2 314 | 1 144 | 3 059 | 1 501 | 3 201 | 1 575 | 3 066 | 1 540 |
| | Non-Indigenous ³ | 12 874 | 308 | 14 380 | 344 | 16 157 | 387 | 15 446 | 370 | 15 783 | 378 |
| SA | Aboriginal and Torres Strait Islander | 220 | 584 | 190 | 495 | 286 | 763 | 302 | 793 | 319 | 788 |
| | Non-Indigenous ³ | 3 436 | 229 | 3 568 | 238 | 4 049 | 269 | 4 830 | 321 | 4 529 | 301 |
| TAS | Aboriginal and Torres Strait Islander | 24 | 84 | 30 | 105 | 34 | 133 | 45 | 164 | 39 | 156 |
| | Non-Indigenous ³ | 1 451 | 337 | 1 440 | 333 | 1 980 | 459 | 1 732 | 405 | 1 748 | 407 |
| VIC | Aboriginal and Torres Strait Islander | 73 | 152 | 66 | 138 | 111 | 223 | 146 | 298 | 141 | 298 |
| | Non-Indigenous ³ | 12 129 | 223 | 13 840 | 255 | 16 375 | 302 | 19 080 | 352 | 20 171 | 372 |
| WA | Aboriginal and Torres Strait Islander | 1 297 | 1 432 | 1 228 | 1 312 | 1 572 | 1 693 | 1 643 | 1 753 | 1 622 | 1 745 |
| | Non-Indigenous ³ | 7 345 | 329 | 7 602 | 340 | 8 605 | 385 | 10 032 | 449 | 10 181 | 455 |
| Total | Aboriginal and Torres Strait Islander | 5 327 | 1 126 | 5 184 | 1 085 | 6 537 | 1 367 | 6 892 | 1 434 | 6 573 | 1 378 |
| | Non-Indigenous³ | 38 127 | 274 | 41 919 | 301 | 48 353 | 347 | 52 194 | 375 | 53 558 | 384 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.2 Number of diagnoses of chlamydia¹, 2008 – 2012, by age group, Aboriginal and Torres Strait Islander status and year

| Age group (years) | Aboriginal and Torres Strait Islander status | Year | | | | |
|--------------------------|--|---------------|---------------|---------------|---------------|---------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| 0 – 4 | Aboriginal and Torres Strait Islander | 6 | 5 | 5 | 3 | 2 |
| | Non-Indigenous ² | 17 | 31 | 35 | 23 | 36 |
| 5 – 14 | Aboriginal and Torres Strait Islander | 245 | 202 | 289 | 287 | 309 |
| | Non-Indigenous ² | 207 | 256 | 295 | 283 | 307 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 2 193 | 2 168 | 2 757 | 2 902 | 2 673 |
| | Non-Indigenous ² | 9 338 | 10 388 | 12 552 | 13 575 | 13 038 |
| 20 – 29 | Aboriginal and Torres Strait Islander | 2 138 | 2 162 | 2 668 | 2 906 | 2 725 |
| | Non-Indigenous ² | 21 632 | 23 902 | 26 855 | 29 327 | 30 221 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 540 | 499 | 622 | 585 | 629 |
| | Non-Indigenous ² | 4 661 | 4 930 | 5 634 | 5 838 | 6 418 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 152 | 113 | 150 | 170 | 186 |
| | Non-Indigenous ² | 1 600 | 1 628 | 2 000 | 2 081 | 2 356 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 38 | 26 | 33 | 35 | 41 |
| | Non-Indigenous ² | 492 | 562 | 704 | 732 | 845 |
| 60 + | Aboriginal and Torres Strait Islander | 15 | 9 | 13 | 4 | 8 |
| | Non-Indigenous ² | 155 | 170 | 216 | 254 | 270 |
| Total³ | Aboriginal and Torres Strait Islander | 5 327 | 5 184 | 6 537 | 6 892 | 6 573 |
| | Non-Indigenous² | 38 127 | 41 919 | 48 353 | 52 194 | 53 558 |

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

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

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.3 Number of diagnoses of chlamydia¹, 2012, by Aboriginal and Torres Strait Islander status, sex and age group

| Aboriginal and Torres Strait Islander status | Sex | Age group (years) | | | | | | | | Total ⁴ |
|--|--------------------------|-------------------|------------|---------------|---------------|--------------|--------------|------------|------------|--------------------|
| | | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60 + | |
| Aboriginal and Torres Strait Islander | Male | 1 | 49 | 843 | 1 027 | 271 | 86 | 24 | 5 | 2 306 |
| | Female | 1 | 260 | 1 828 | 1 696 | 358 | 100 | 17 | 3 | 4 263 |
| | Total³ | 2 | 309 | 2 673 | 2 725 | 629 | 186 | 41 | 8 | 6 573 |
| Non-Indigenous ² | Male | 18 | 28 | 3 227 | 13 094 | 3 525 | 1 531 | 637 | 237 | 22 317 |
| | Female | 18 | 279 | 9 789 | 17 093 | 2 882 | 824 | 207 | 32 | 31 166 |
| | Total³ | 36 | 307 | 13 038 | 30 221 | 6 418 | 2 356 | 845 | 270 | 53 558 |
| Total | Male | 19 | 77 | 4 070 | 14 121 | 3 796 | 1 617 | 661 | 242 | 24 623 |
| | Female | 19 | 539 | 11 617 | 18 789 | 3 240 | 924 | 224 | 35 | 35 429 |
| | Total³ | 38 | 616 | 15 711 | 32 946 | 7 047 | 2 542 | 886 | 278 | 60 131 |

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, 2012, by State/Territory¹ and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | | | | Total |
|------------------|--|----------------------|----------------------|--|---------------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | | |
| ACT | – | – | 1 256 (97.9) | | 1 283 |
| NSW | – | – | 20 626 (96.9) | | 21 293 |
| NT | 1 386 (54.7) | 968 (38.2) | 178 (7.0) | | 2 532 |
| QLD | 3 066 (16.3) | 8 184 (43.4) | 7 599 (40.3) | | 18 849 |
| SA | 319 (6.6) | 4 191 (86.4) | 338 (7.0) | | 4 848 |
| TAS | 39 (2.2) | 1 144 (64.0) | 604 (33.8) | | 1 787 |
| VIC | 141 (0.7) | 10 497 (51.7) | 9 674 (47.6) | | 20 312 |
| WA | 1 622 (13.7) | 9 303 (78.8) | 878 (7.4) | | 11 803 |
| Total | 6 792 (8.2) | 34 762 (42.0) | 41 153 (49.8) | | 82 707 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Rate¹ of diagnosis of chlamydia, 2008 – 2012, by year, Aboriginal and Torres Strait Islander status and area of residence

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|--------------|--------------|--------------|--------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| Major cities | Aboriginal and Torres Strait Islander | 610 | 658 | 877 | 970 | 1 039 |
| | Non-Indigenous ² | 276 | 305 | 349 | 378 | 387 |
| Inner regional | Aboriginal and Torres Strait Islander | 417 | 387 | 496 | 679 | 692 |
| | Non-Indigenous ² | 226 | 261 | 318 | 335 | 340 |
| Outer regional | Aboriginal and Torres Strait Islander | 1 756 | 1 657 | 2 175 | 2 485 | 2 488 |
| | Non-Indigenous ² | 305 | 328 | 371 | 396 | 405 |
| Remote | Aboriginal and Torres Strait Islander | 2 464 | 2 269 | 3 123 | 3 072 | 2 897 |
| | Non-Indigenous ² | 333 | 324 | 361 | 380 | 406 |
| Very remote | Aboriginal and Torres Strait Islander | 2 648 | 2 629 | 2 982 | 2 823 | 2 398 |
| | Non-Indigenous ² | 318 | 264 | 335 | 329 | 383 |
| Total | Aboriginal and Torres Strait Islander | 1 438 | 1 400 | 1 765 | 1 861 | 1 775 |
| | Non-Indigenous² | 275 | 302 | 349 | 377 | 386 |

¹ Rate per 100 000 population. Population estimates from 2011 Census of Population and Housing (Australian Bureau of Statistics).

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.6 Number and rate¹ of diagnosis of gonorrhoea, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|---|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 1 382 | 1 934.5 | 1 412 | 1 962.5 | 1 770 | 2 457.2 | 1 798 | 2 476.2 | 1 323 | 1 862.2 |
| | Non-Indigenous ³ | 168 | 98.5 | 139 | 82.6 | 163 | 97.2 | 154 | 96.5 | 213 | 124.9 |
| QLD | Aboriginal and Torres Strait Islander | 691 | 358.5 | 669 | 333.7 | 976 | 479.5 | 1 329 | 661.8 | 1 113 | 562.5 |
| | Non-Indigenous ³ | 947 | 22.7 | 1 118 | 26.8 | 1 409 | 33.8 | 1 625 | 38.8 | 1 587 | 37.8 |
| SA | Aboriginal and Torres Strait Islander | 141 | 388.9 | 164 | 463.2 | 234 | 661.8 | 214 | 592.8 | 198 | 546.6 |
| | Non-Indigenous ³ | 352 | 23.2 | 209 | 13.7 | 239 | 15.4 | 231 | 15.2 | 301 | 20.1 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 1 | 4.1 | 0 | 0.0 | 0 | 0.0 |
| | Non-Indigenous ³ | 25 | 5.8 | 21 | 5.0 | 19 | 4.4 | 19 | 4.3 | 35 | 8.2 |
| VIC | Aboriginal and Torres Strait Islander | 10 | 19.5 | 11 | 25.7 | 13 | 31.3 | 12 | 29.0 | 25 | 64.7 |
| | Non-Indigenous ³ | 919 | 17.0 | 1 478 | 27.3 | 1 738 | 32.0 | 1 867 | 34.4 | 2 518 | 46.4 |
| WA | Aboriginal and Torres Strait Islander | 1 223 | 1 448.1 | 913 | 1 046.1 | 839 | 956.6 | 1 153 | 1 304.9 | 1 145 | 1 264.5 |
| | Non-Indigenous ³ | 470 | 21.1 | 434 | 19.0 | 564 | 24.9 | 686 | 29.7 | 970 | 43.3 |
| Total | Aboriginal and Torres Strait Islander | 3 447 | 772.4 | 3 169 | 699.7 | 3 833 | 841.6 | 4 506 | 979.4 | 3 804 | 828.5 |
| | Non-Indigenous³ | 2 881 | 20.7 | 3 399 | 24.3 | 4 132 | 29.5 | 4 582 | 32.7 | 5 624 | 40.3 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.7 Number of diagnoses of gonorrhoea¹, 2008 – 2012, by age group, Aboriginal and Torres Strait Islander status and year

| Age group (years) | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|--------------------------|--|-------------------|--------------|--------------|--------------|--------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| 0 – 4 | Aboriginal and Torres Strait Islander | 3 | 4 | 1 | 7 | 4 |
| | Non-Indigenous ² | 4 | 4 | 2 | 2 | 4 |
| 5 – 14 | Aboriginal and Torres Strait Islander | 166 | 117 | 155 | 208 | 199 |
| | Non-Indigenous ² | 11 | 15 | 26 | 21 | 29 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 1 147 | 1 064 | 1 315 | 1 619 | 1 358 |
| | Non-Indigenous ² | 350 | 444 | 509 | 449 | 604 |
| 20 – 29 | Aboriginal and Torres Strait Islander | 1 387 | 1 382 | 1 637 | 1 881 | 1 550 |
| | Non-Indigenous ² | 1 177 | 1 489 | 1 788 | 1 971 | 2 574 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 519 | 468 | 558 | 608 | 503 |
| | Non-Indigenous ² | 685 | 757 | 872 | 993 | 1 243 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 169 | 109 | 140 | 152 | 147 |
| | Non-Indigenous ² | 416 | 393 | 568 | 677 | 723 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 44 | 17 | 23 | 30 | 39 |
| | Non-Indigenous ² | 182 | 210 | 239 | 320 | 305 |
| 60 + | Aboriginal and Torres Strait Islander | 12 | 8 | 4 | 1 | 4 |
| | Non-Indigenous ² | 56 | 70 | 107 | 116 | 126 |
| Total³ | Aboriginal and Torres Strait Islander | 3 447 | 3 169 | 3 833 | 4 506 | 3 804 |
| | Non-Indigenous² | 2 881 | 3 399 | 4 132 | 4 582 | 5 624 |

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

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

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.8 Number of diagnoses of gonorrhoea¹, 2012, by Aboriginal and Torres Strait Islander status, sex and age group

| Aboriginal and Torres Strait Islander status | Sex | Age group (years) | | | | | | | | Total ⁴ |
|--|--------------------------|-------------------|------------|--------------|--------------|--------------|------------|------------|------------|--------------------|
| | | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60 + | |
| Aboriginal and Torres Strait Islander | Male | 2 | 37 | 513 | 758 | 269 | 96 | 27 | 4 | 1 706 |
| | Female | 2 | 162 | 845 | 792 | 234 | 51 | 12 | 0 | 2 098 |
| | Total | 4 | 199 | 1 358 | 1 550 | 503 | 147 | 39 | 4 | 3 804 |
| Non-Indigenous ² | Male | 2 | 6 | 350 | 1 992 | 1 047 | 615 | 255 | 111 | 4 385 |
| | Female | 2 | 23 | 254 | 581 | 193 | 108 | 50 | 15 | 1 234 |
| | Total³ | 4 | 29 | 604 | 2 574 | 1 243 | 723 | 305 | 126 | 5 624 |
| Total | Male | 4 | 43 | 863 | 2 750 | 1 316 | 711 | 282 | 115 | 6 091 |
| | Female | 4 | 185 | 1 099 | 1 373 | 427 | 159 | 62 | 15 | 3 332 |
| | Total³ | 8 | 228 | 1 962 | 4 124 | 1 746 | 870 | 344 | 130 | 9 428 |

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, 2012, by State/Territory¹ and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | | | |
|------------------|--|---------------------|---------------------|---------------|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | Total |
| ACT | 1 (1.1) | 91 (98.9) | 0 (0.0) | 92 |
| NSW | – | – | 3 049 (73.8) | 4 129 |
| NT | 1 323 (86.1) | 168 (10.9) | 45 (2.9) | 1 536 |
| QLD | 1 113 (41.2) | 800 (29.6) | 787 (29.1) | 2 700 |
| SA | 198 (39.7) | 284 (56.9) | 17 (3.4) | 499 |
| TAS | 0 (0.0) | 32 (91.4) | 3 (8.6) | 35 |
| VIC | 25 (1.0) | 1 607 (63.2) | 911 (35.8) | 2 543 |
| WA | 1 145 (54.1) | 967 (45.7) | 3 (0.1) | 2 115 |
| Total | 3 904 (28.6) | 4 930 (36.1) | 4 815 (35.3) | 13 649 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.10 Rate¹ of diagnosis of gonorrhoea, 2008 – 2012, by year, Aboriginal and Torres Strait Islander status and area of residence

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|------------|--------------|--------------|--------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| Major cities | Aboriginal and Torres Strait Islander | 146 | 109 | 124 | 192 | 240 |
| | Non-Indigenous ² | 22 | 27 | 33 | 36 | 45 |
| Inner regional | Aboriginal and Torres Strait Islander | 37 | 54 | 64 | 107 | 165 |
| | Non-Indigenous ² | 6 | 10 | 10 | 12 | 15 |
| Outer regional | Aboriginal and Torres Strait Islander | 719 | 630 | 854 | 1 225 | 1 089 |
| | Non-Indigenous ² | 23 | 22 | 26 | 31 | 30 |
| Remote | Aboriginal and Torres Strait Islander | 2 290 | 2 043 | 2 659 | 2 610 | 2 384 |
| | Non-Indigenous ² | 31 | 36 | 39 | 41 | 55 |
| Very remote | Aboriginal and Torres Strait Islander | 2 436 | 2 332 | 2 628 | 2 982 | 2 193 |
| | Non-Indigenous ² | 51 | 40 | 79 | 77 | 91 |
| Total | Aboriginal and Torres Strait Islander | 931 | 856 | 1 035 | 1 217 | 1 027 |
| | Non-Indigenous² | 21 | 25 | 30 | 33 | 41 |

¹ Rate per 100 000 population. Population estimates from 2011 Census of Population and Housing (Australian Bureau of Statistics).

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.11 Number and rate¹ of diagnosis of infectious syphilis, 2008 – 2012, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|---|-------------------|-------------|--------------|-------------|------------|-------------|--------------|-------------|--------------|-------------|
| | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | Aboriginal and Torres Strait Islander | 0 | 0 | 1 | 11.3 | 0 | 0.0 | 0 | 0.0 | 1 | 20.9 |
| | Non-Indigenous ³ | 4 | 1.0 | 10 | 2.6 | 14 | 3.9 | 9 | 2.5 | 14 | 3.8 |
| NSW | Aboriginal and Torres Strait Islander | 7 | 4.5 | 11 | 7.4 | 8 | 5.1 | 4 | 3.0 | 8 | 5.5 |
| | Non-Indigenous ³ | 420 | 6.3 | 519 | 7.8 | 413 | 6.2 | 415 | 6.2 | 502 | 7.5 |
| NT | Aboriginal and Torres Strait Islander | 66 | 115.6 | 37 | 71.7 | 40 | 73.8 | 28 | 42.1 | 13 | 20.3 |
| | Non-Indigenous ³ | 17 | 9.7 | 1 | 0.6 | 3 | 1.6 | 2 | 1.3 | 1 | 0.7 |
| QLD | Aboriginal and Torres Strait Islander | 22 | 11.8 | 29 | 18.0 | 70 | 38.6 | 119 | 59.5 | 117 | 61.4 |
| | Non-Indigenous ³ | 173 | 4.1 | 163 | 3.9 | 157 | 3.8 | 216 | 5.2 | 270 | 6.5 |
| SA | Aboriginal and Torres Strait Islander | 5 | 17.9 | 8 | 30.3 | 4 | 13.1 | 14 | 62.7 | 9 | 34.6 |
| | Non-Indigenous ³ | 44 | 2.9 | 48 | 3.1 | 21 | 1.4 | 42 | 2.1 | 34 | 2.2 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 6.6 | 0 | 0.0 |
| | Non-Indigenous ³ | 8 | 1.8 | 10 | 2.3 | 6 | 1.3 | 5 | 1.2 | 14 | 3.2 |
| VIC | Aboriginal and Torres Strait Islander | 3 | 9.1 | 1 | 3.1 | 1 | 3.0 | 5 | 15.7 | 6 | 16.2 |
| | Non-Indigenous ³ | 377 | 7.0 | 387 | 7.1 | 298 | 5.4 | 327 | 6.0 | 468 | 8.7 |
| WA | Aboriginal and Torres Strait Islander | 77 | 86.5 | 33 | 39.0 | 19 | 25.8 | 29 | 40.7 | 13 | 21.5 |
| | Non-Indigenous ³ | 99 | 4.5 | 56 | 2.5 | 66 | 3.0 | 96 | 4.3 | 64 | 2.9 |
| Total | Aboriginal and Torres Strait Islander | 180 | 30.0 | 120 | 22.3 | 142 | 25.0 | 200 | 32.4 | 167 | 27.2 |
| | Non-Indigenous³ | 1 142 | 5.4 | 1 194 | 5.7 | 978 | 4.6 | 1 112 | 5.2 | 1 367 | 6.5 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, year and Aboriginal and Torres Strait Islander status from *2011 Census of Population and Housing* (Australian Bureau of Statistics).

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

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

Source: National Notifiable Diseases Surveillance System

Table 3.2.12 Number of diagnoses of infectious syphilis¹, 2008 – 2012, by age group, Aboriginal and Torres Strait Islander status and year

| Age group (years) | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|--------------------------|--|-------------------|--------------|------------|--------------|--------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| 0 – 4 | Aboriginal and Torres Strait Islander | 0 | 0 | 0 | 0 | 0 |
| | Non-Indigenous ² | 0 | 0 | 0 | 0 | 0 |
| 5 – 14 | Aboriginal and Torres Strait Islander | 8 | 3 | 1 | 12 | 7 |
| | Non-Indigenous ² | 0 | 0 | 0 | 3 | 1 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 51 | 18 | 26 | 67 | 46 |
| | Non-Indigenous ² | 26 | 22 | 20 | 23 | 26 |
| 20 – 29 | Aboriginal and Torres Strait Islander | 58 | 39 | 56 | 59 | 62 |
| | Non-Indigenous ² | 267 | 293 | 244 | 280 | 341 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 29 | 37 | 33 | 32 | 29 |
| | Non-Indigenous ² | 372 | 333 | 280 | 298 | 359 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 25 | 14 | 18 | 20 | 16 |
| | Non-Indigenous ² | 314 | 361 | 268 | 323 | 363 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 8 | 8 | 8 | 8 | 6 |
| | Non-Indigenous ² | 119 | 132 | 112 | 118 | 202 |
| 60 + | Aboriginal and Torres Strait Islander | 1 | 1 | 0 | 2 | 1 |
| | Non-Indigenous ² | 44 | 49 | 49 | 55 | 75 |
| Total³ | Aboriginal and Torres Strait Islander | 180 | 120 | 142 | 200 | 167 |
| | Non-Indigenous² | 1 142 | 1 194 | 978 | 1 112 | 1 367 |

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

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

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.13 Number of diagnoses of infectious syphilis¹, 2012, by Aboriginal and Torres Strait Islander status, sex and age group

| | | Age group (years) | | | | | | | | Total |
|--|--------------------------|-------------------|----------|-----------|------------|------------|------------|------------|-----------|--------------|
| Aboriginal and Torres Strait Islander status | Sex | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60 + | |
| Aboriginal and Torres Strait Islander | Male | 0 | 2 | 17 | 34 | 19 | 11 | 4 | 0 | 87 |
| | Female | 0 | 5 | 29 | 28 | 10 | 5 | 2 | 1 | 80 |
| | Total | 0 | 7 | 46 | 62 | 29 | 16 | 6 | 1 | 167 |
| Non-Indigenous ² | Male | 0 | 0 | 21 | 315 | 337 | 352 | 199 | 72 | 1 296 |
| | Female | 0 | 1 | 5 | 23 | 22 | 11 | 3 | 3 | 68 |
| | Total³ | 0 | 1 | 26 | 341 | 359 | 363 | 202 | 75 | 1 367 |
| Total | Male | 0 | 2 | 38 | 349 | 356 | 363 | 203 | 72 | 1 383 |
| | Female | 0 | 6 | 34 | 51 | 32 | 16 | 5 | 4 | 148 |
| | Total³ | 0 | 8 | 72 | 403 | 388 | 379 | 208 | 76 | 1 534 |

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, 2012, by State/Territory¹ and Aboriginal and Torres Strait Islander status

| State/Territory | Aboriginal and Torres Strait Islander status | | | | |
|-----------------|--|---------------------|------------------|--------------|--|
| | Aboriginal and Torres Strait Islander | Non-Indigenous | Not reported | Total | |
| ACT | 1 (6.7) | 14 (93.3) | 0 (0.0) | 15 | |
| NSW | 8 (1.6) | 457 (89.6) | 45 (8.8) | 510 | |
| NT | 13 (92.9) | 1 (7.1) | 0 (0.0) | 14 | |
| QLD | 117 (30.2) | 256 (66.1) | 14 (3.6) | 387 | |
| SA | 9 (20.9) | 34 (79.1) | 0 (0.0) | 43 | |
| TAS | 0 (0.0) | 14 (100.0) | 0 (0.0) | 14 | |
| VIC | 6 (1.3) | 417 (88.0) | 51 (10.8) | 474 | |
| WA | 13 (16.9) | 64 (83.1) | 0 (0.0) | 77 | |
| Total | 167 (10.9) | 1 257 (81.9) | 110 (7.2) | 1 534 | |

Source: National Notifiable Diseases Surveillance System

Table 3.2.15 Rate¹ of diagnosis of infectious syphilis, 2008 – 2012, by year, Aboriginal and Torres Strait Islander status and area of residence

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|-----------|-----------|-----------|-----------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 |
| Major cities | Aboriginal and Torres Strait Islander | 8 | 8 | 5 | 15 | 15 |
| | Non-Indigenous ² | 7 | 7 | 6 | 6 | 8 |
| Inner regional | Aboriginal and Torres Strait Islander | 7 | 3 | 2 | 7 | 6 |
| | Non-Indigenous ² | 1 | 2 | 1 | 2 | 2 |
| Outer regional | Aboriginal and Torres Strait Islander | 14 | 24 | 36 | 30 | 40 |
| | Non-Indigenous ² | 3 | 2 | 3 | 1 | 1 |
| Remote | Aboriginal and Torres Strait Islander | 101 | 53 | 86 | 116 | 96 |
| | Non-Indigenous ² | 1 | | 1 | 1 | 1 |
| Very remote | Aboriginal and Torres Strait Islander | 129 | 66 | 68 | 101 | 58 |
| | Non-Indigenous ² | 5 | 6 | 6 | 5 | 1 |
| Total | Aboriginal and Torres Strait Islander | 33 | 22 | 26 | 36 | 30 |
| | Non-Indigenous² | 5 | 6 | 5 | 5 | 7 |

1 Rate per 100 000 population. Population estimates from 2011 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 2012 by State/Territory, sex and site and antibiotic resistance

| Sex and Site | State/Territory | | | | | | | | Total |
|----------------------------------|-----------------|--------------|------------|------------|------------|-----------|--------------|------------|--------------|
| | ACT | NSW | NT | QLD | SA | TAS | VIC | WA | |
| Males | | | | | | | | | |
| Urethra | 26 | 877 | 214 | 392 | 83 | 9 | 547 | 313 | 2 461 |
| Rectal | 18 | 282 | 1 | 68 | 34 | 2 | 340 | 31 | 776 |
| Pharynx | 10 | 279 | 0 | 37 | 12 | 2 | 197 | 25 | 562 |
| DGI ¹ | 0 | 1 | 4 | 2 | 0 | 0 | 1 | 6 | 14 |
| Other/Not specified | 0 | 10 | 2 | 3 | 0 | 0 | 31 | 1 | 47 |
| Total | 54 | 1 449 | 221 | 502 | 129 | 13 | 1 116 | 376 | 3 860 |
| Females | | | | | | | | | |
| Cervix | 2 | 187 | 108 | 195 | 19 | 1 | 112 | 162 | 786 |
| Rectal | 0 | 3 | 0 | 3 | 0 | 0 | 2 | 2 | 10 |
| Pharynx | 0 | 66 | 0 | 4 | 2 | 0 | 16 | 4 | 92 |
| DGI ¹ | 0 | 0 | 6 | 11 | 0 | 0 | 0 | 3 | 20 |
| Other/Not specified | 0 | 7 | 0 | 4 | 1 | 0 | 3 | 1 | 16 |
| Total | 2 | 263 | 114 | 217 | 22 | 1 | 133 | 172 | 924 |
| Antibiotic Resistance (%) | | | | | | | | | |
| Ceftriaxone ² | 3.6 | 4.5 | 0 | 2.4 | 0.7 | 0 | 8.4 | 1.2 | 4.4 |
| Ciprofloxacin | 33.9 | 31.7 | 2.8 | 16.9 | 32.7 | 35.7 | 45.8 | 23.8 | 30.3 |
| Azithromycin | 0 | 0.5 | 0.3 | 2.1 | 0.7 | 0 | 2.7 | 0.6 | 1.3 |
| Penicillin | 14.3 | 28.3 | 3.1 | 25.8 | 35.3 | 35.7 | 53.3 | 20.5 | 32.1 |
| Total | 56 | 1 712 | 335 | 719 | 151 | 14 | 1 249 | 548 | 4 784 |

1 Disseminated gonococcal infection.

2 Decreased susceptibility.

Source: Australian Gonococcal Surveillance Programme

Table 3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 2008 – 2012, by sex, site and year

| Sex and Site | Year of diagnosis | | | | |
|---------------------|-------------------|------------|--------------|--------------|--------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Males | | | | | |
| Urethra | 457 | 523 | 644 | 689 | 877 |
| Rectal | 181 | 193 | 328 | 248 | 282 |
| Pharynx | 99 | 101 | 184 | 201 | 279 |
| Other/Not specified | 3 | 8 | 39 | 7 | 11 |
| Total | 740 | 825 | 1 195 | 1 145 | 1 449 |
| Females | | | | | |
| Cervix | 102 | 100 | 113 | 135 | 187 |
| Rectal | 1 | 4 | 2 | 8 | 3 |
| Pharynx | 11 | 15 | 11 | 41 | 66 |
| Other/Not specified | 3 | 5 | 7 | 3 | 7 |
| Total | 117 | 124 | 133 | 187 | 263 |
| Total | 857 | 949 | 1 328 | 1 322 | 1 712 |

Source: Australian Gonococcal Surveillance Programme

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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, 2008 – 2012, 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

| Year | | Sexual health clinic | | | | | Total | |
|------|-------------------------|--|--|--|---|----------------------------|----------|---|
| | | 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 |
| 2008 | Men 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 | Men 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 | Men 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 (0.8) | 74 (0.7) |
| 2011 | Men seen | 6 029 | 1 485 | 3 107 | 2 112 | 4 777 | 12 346 | 29 856 |
| | Tested | 2 587 | 890 | 940 | 1 083 | 4 078 | 6 990 | 16 568 |
| | Newly diagnosed (%) | 43 (1.7) | 22 (2.5) | 3 (0.3) | 7 (0.6) | 11 (0.3) | 48 (0.7) | 134 (0.8) |
| | Previously negative (%) | 35 (1.7) | 5 (1.4) | 3 (0.4) | 4 (1.2) | 8 (0.3) | 41 (0.8) | 96 (0.7) |
| 2012 | Men seen | 6 823 | 1 567 | 3 506 | 2 393 | 4 878 | 15 601 | 34 768 |
| | Tested | 2 487 | 985 | 1 120 | 996 | 4 149 | 8 586 | 18 323 |
| | Newly diagnosed (%) | 42 (1.7) | 21 (2.1) | 3 (0.3) | 12 (1.2) | 11 (0.3) | 45 (0.5) | 134 (0.7) |
| | Previously negative (%) | 35 (1.7) | 8 (1.8) | 2 (0.3) | 4 (1.2) | 11 (0.4) | 35 (0.5) | 95 (0.7) |

| | | Sexual health clinic | | | | | | |
|------|-------------------------|--|--|--|---|----------------------------|---|----------|
| Year | | 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 |
| 2008 | Women 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 | Women 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 | Women 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) |
| 2011 | Women seen | 3 486 | 658 | 1 810 | 1 443 | 2 579 | 8 556 | 18 532 |
| | Tested | 1 336 | 374 | 394 | 668 | 2 096 | 3 885 | 8 753 |
| | Newly diagnosed (%) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 3 (0.6) | 0 (0.0) | 2 (0.1) | 6 (0.1) |
| | Previously negative (%) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 1 (0.6) | 0 (0.0) | 2 (0.1) | 4 (0.1) |
| 2012 | Women seen | 3 855 | 634 | 2 012 | 1 684 | 2 622 | 8 762 | 19 569 |
| | Tested | 1 165 | 349 | 486 | 590 | 2 140 | 4 126 | 8 856 |
| | Newly diagnosed (%) | 1 (0.1) | 2 (0.6) | 0 (0.0) | 0 (0.0) | 1 (0.05) | 0 (0.0) | 4 (0.05) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.08) | 0 (0.0) | 1 (0.02) |

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, 2008 – 2012, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed following a previous negative test by year, sex and exposure category

| Year | | HIV exposure category | | | | | | Total |
|------|-------------------------|--|---|--------------------|-------------------------------|-----------------------------------|-----------|-----------|
| | | 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 | |
| 2008 | Men 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 | Men 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 | Men seen | 11 441 | 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) |
| 2011 | Men seen | 12 945 | 2 984 | 473 | 4 588 | 10 068 | 1 782 | 29 856 |
| | Tested | 8 651 | 1 444 | 267 | 2 639 | 4 874 | 137 | 16 568 |
| | Newly diagnosed (%) | 129 (1.5) | 12 (0.8) | 0 (0.0) | 1 (0.04) | 8 (0.8) | 1 (0.2) | 134 (0.8) |
| | Previously negative (%) | 95 (1.3) | 5 (0.4) | 0 (0.0) | 0 (0.0) | 1 (0.08) | 0 (0.0) | 96 (0.9) |
| 2012 | Men seen | 15 179 | 3 518 | 414 | 5 959 | 11 245 | 1 971 | 34 768 |
| | Tested | 9 705 | 2 286 | 253 | 3 297 | 4 971 | 97 | 18 323 |
| | Newly diagnosed (%) | 129 (1.3) | 25 (1.1) | 0 (0.0) | 2 (0.06) | 3 (0.06) | 0 (0.0) | 134 (0.7) |
| | Previously negative (%) | 91 (1.1) | 21 (1.3) | 0 (0.0) | 2 (0.1) | 2 (0.08) | 0 (0.0) | 95 (0.8) |

| | | HIV exposure category | | | | | |
|-------------|-------------------------|-------------------------|--------------------|-------------------------------|-----------------------------------|-------------|----------|
| Year | | Sex worker ² | Injecting drug use | Heterosexual contact overseas | Heterosexual contact in Australia | Other women | Total |
| 2008 | Women 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 | Women 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 | Women 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) |
| 2011 | Women seen | 4 719 | 356 | 3 101 | 8 934 | 1 422 | 18 532 |
| | Tested | 2 799 | 208 | 1 577 | 3 942 | 227 | 8 753 |
| | Newly diagnosed (%) | 2 (0.1) | 0 (0.0) | 3 (0.2) | 1 (0.03) | 0 (0.0) | 6 (0.1) |
| | Previously negative (%) | 2 (0.1) | 0 (0.0) | 1 (0.1) | 1 (0.05) | 0 (0.0) | 4 (0.1) |
| 2012 | Women seen | 4 186 | 286 | 3 903 | 9 589 | 1 605 | 19 569 |
| | Tested | 2 619 | 154 | 1 870 | 3 852 | 281 | 8 776 |
| | Newly diagnosed (%) | 1 (0.04) | 0 (0.0) | 1 (0.05) | 2 (0.05) | 0 (0.0) | 4 (0.05) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.05) | 0 (0.0) | 1 (0.02) |

1 Includes men with a history of injecting drug use.

2 Includes women with 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, 2008 – 2012, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed following a previous negative test by year, sex and age group

| Year | | Age group (years) | | | | | Total | Total | |
|------|-------------------------|-------------------|----------|----------|----------|---------|---------|-----------|-----------|
| | | 13 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | | | 60+ |
| 2008 | Men seen | 846 | 10 483 | 6 130 | 3 054 | 1 394 | 723 | 22 630 | 22 630 |
| | Tested | 464 | 5 554 | 3 188 | 1 511 | 707 | 380 | 11 804 | 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) | 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) | 74 (1.0) |
| 2009 | Men seen | 981 | 11 315 | 6 315 | 3 254 | 1 465 | 703 | 24 033 | 24 033 |
| | Tested | 515 | 6 574 | 3 635 | 1 777 | 783 | 365 | 13 649 | 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) | 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) | 96 (1.0) |
| 2010 | Men seen | 1 153 | 12 761 | 7 078 | 3 974 | 1 715 | 882 | 27 563 | 27 563 |
| | Tested | 690 | 7 723 | 4 247 | 2 305 | 992 | 473 | 16 430 | 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) | 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) | 74 (0.7) |
| 2011 | Men seen | 1 283 | 13 997 | 7 869 | 3 990 | 1 799 | 918 | 29 856 | 29 856 |
| | Tested | 722 | 7 833 | 4 453 | 2 091 | 966 | 503 | 16 568 | 16 568 |
| | Newly diagnosed (%) | 1 (0.2) | 57 (0.7) | 39 (0.9) | 28 (1.3) | 8 (0.8) | 1 (0.2) | 134 (0.8) | 134 (0.8) |
| | Previously negative (%) | 0 (0.0) | 41 (0.9) | 31 (0.9) | 19 (1.2) | 4 (0.6) | 1 (0.3) | 96 (0.9) | 96 (0.7) |
| 2012 | Men seen | 1 516 | 16 434 | 9 057 | 4 641 | 2 020 | 1 099 | 34 768 | 34 768 |
| | Tested | 720 | 8 633 | 4 923 | 2 385 | 1 029 | 633 | 18 323 | 18 323 |
| | Newly diagnosed (%) | 2 (0.3) | 55 (0.6) | 49 (1.0) | 19 (0.8) | 9 (0.9) | 0 (0.0) | 134 (0.7) | 134 (0.7) |
| | Previously negative (%) | 2 (0.7) | 42 (0.8) | 34 (0.9) | 10 (0.5) | 7 (0.9) | 0 (0.0) | 95 (0.8) | 95 (0.7) |

| Year | | Age group (years) | | | | | | Total | Total |
|------|-------------------------|-------------------|----------|----------|---------|---------|---------|----------|-----------|
| | | 13 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60+ | | |
| 2008 | Women seen | 1 520 | 8 379 | 3 804 | 1 507 | 415 | 91 | 15 716 | 22 630 |
| | Tested | 548 | 3 475 | 1 650 | 630 | 162 | 27 | 6 492 | 11 804 |
| | Newly diagnosed (%) | 0 (0.0) | 2 (0.06) | 1 (0.06) | 1 (0.2) | 0 (0.0) | 1 (3.8) | 5 (0.08) | 95 (0.8) |
| | Previously negative (%) | 0 (0.0) | 1 (0.05) | 1 (0.08) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (0.05) | 74 (1.0) |
| 2009 | Women seen | 1 490 | 8 744 | 3 990 | 1 562 | 409 | 92 | 16 287 | 24 033 |
| | Tested | 515 | 3 390 | 1 910 | 772 | 149 | 32 | 6 768 | 13 649 |
| | Newly diagnosed (%) | 0 (0.0) | 3 (0.09) | 0 (0.0) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.06) | 114 (0.8) |
| | Previously negative (%) | 0 (0.0) | 3 (0.1) | 0 (0.0) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.08) | 96 (1.0) |
| 2010 | Women seen | 1 557 | 9 795 | 4 739 | 1 735 | 491 | 127 | 18 444 | 27 563 |
| | Tested | 675 | 4 661 | 2 540 | 934 | 248 | 66 | 9 124 | 16 430 |
| | Newly diagnosed (%) | 0 (0.0) | 1 (0.02) | 1 (0.04) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (0.02) | 94 (0.6) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 74 (0.7) |
| 2011 | Women seen | 1 663 | 10 129 | 4 622 | 1 553 | 445 | 120 | 18 532 | 29 856 |
| | Tested | 659 | 4 581 | 2 386 | 859 | 230 | 38 | 8 753 | 16 568 |
| | Newly diagnosed (%) | 0 (0.0) | 3 (0.1) | 2 (0.1) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 6 (0.1) | 134 (0.8) |
| | Previously negative (%) | 0 (0.0) | 2 (0.1) | 1 (0.1) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.1) | 96 (0.7) |
| 2012 | Women seen | 1 876 | 10 873 | 4 556 | 1 631 | 517 | 116 | 19 569 | 34 768 |
| | Tested | 574 | 4 697 | 2 343 | 947 | 263 | 32 | 8 856 | 18 323 |
| | Newly diagnosed (%) | 0 (0.0) | 2 (0.04) | 1 (0.04) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.05) | 134 (0.7) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 1 (0.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.02) | 95 (0.7) |

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), 2008 – 2012, 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

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 | 1396 | 764 | 2170 (36) | 29 (2.1) | 3 (0.4) | 33 (1.5) | 852 (63) | 453 (61) | 1311 (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 | 1725 | 915 | 2657 (45) | 28 (1.6) | 2 (0.2) | 31 (1.2) | 840 (49) | 471 (52) | 1318 (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 | 1580 | 759 | 2353 (38) | 21 (1.3) | 2 (0.3) | 23 (1.0) | 838 (53) | 398 (53) | 1244 (53) |

2011

| 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 | 64 | 31 | 95 (56) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 44 (71) | 12 (39) | 56 (60) |
| NSW | 21 | 455 | 224 | 682 (36) | 5 (1.1) | 1 (0.5) | 7 (1.0) | 220 (49) | 129 (59) | 350 (52) |
| NT | 3 | 46 | 21 | 68 (33) | 1 (2.2) | 0 (0.0) | 1 (1.5) | 22 (55) | 10 (48) | 32 (52) |
| QLD | 8 | 376 | 148 | 528 (40) | 8 (2.1) | 0 (0.0) | 8 (1.5) | 158 (43) | 63 (43) | 221 (43) |
| SA | 7 | 129 | 76 | 207 (51) | 2 (1.6) | 3 (4.0) | 5 (2.4) | 67 (52) | 31 (41) | 98 (48) |
| TAS | 4 | 43 | 25 | 68 (28) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 17 (40) | 14 (56) | 31 (46) |
| VIC | 6 | 335 | 162 | 499 (55) | 4 (1.2) | 0 (0.0) | 4 (0.8) | 229 (69) | 93 (59) | 324 (66) |
| WA | 3 | 112 | 77 | 190 (77) | 1 (0.9) | 3 (3.9) | 4 (2.1) | 69 (63) | 34 (47) | 104 (57) |
| Total | 53 | 1560 | 764 | 2337 (41) | 21 (1.4) | 7 (0.9) | 29 (1.2) | 826 (54) | 386 (52) | 1216 (53) |

2012

| 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 | 53 | 25 | 78 (65) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 34 (64) | 16 (64) | 50 (64) |
| NSW | 20 | 465 | 223 | 697 (47) | 7 (1.5) | 0 (0.0) | 8 (1.2) | 213 (47) | 121 (55) | 338 (50) |
| NT | 3 | 30 | 15 | 46 (21) | 1 (3.3) | 0 (0.0) | 1 (2.2) | 11 (37) | 5 (33) | 16 (35) |
| QLD | 8 | 415 | 153 | 570 (45) | 7 (1.7) | 2 (1.3) | 9 (1.6) | 183 (45) | 83 (54) | 267 (47) |
| SA | 7 | 123 | 73 | 197 (42) | 2 (1.6) | 4 (5.5) | 6 (3.1) | 51 (42) | 28 (39) | 79 (41) |
| TAS | 4 | 36 | 38 | 74 (28) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 17 (47) | 17 (46) | 34 (47) |
| VIC | 6 | 304 | 128 | 433 (52) | 1 (0.3) | 0 (0.0) | 1 (0.2) | 214 (71) | 83 (65) | 297 (69) |
| WA | 3 | 120 | 63 | 184 (79) | 0 (0.0) | 3 (4.8) | 3 (1.6) | 71 (59) | 31 (48) | 103 (56) |
| Total | 52 | 1546 | 718 | 2279 (46) | 18 (1.2) | 9 (1.3) | 28 (1.2) | 794 (52) | 384 (54) | 1184 (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, 2008 – 2012, 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

| 2008 | | | | | | | | | |
|---|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Age group</i> | | | | | | | | | |
| Less than 20 years | 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 |
| <i>Time since first injection</i> | | | | | | | | | |
| 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 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| 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 |
| <i>Age group</i> | | | | | | | | | |
| 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 |
| <i>Time since first injection</i> | | | | | | | | | |
| 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 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| 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 |
| <i>Age group</i> | | | | | | | | | |
| 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 |
| <i>Time since first injection</i> | | | | | | | | | |
| 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 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| 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 |
| Not reported | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| Total | 87 | 37 | 125 | 2.3 | 0.0 | 1.6 | 10 | 27 | 15 |

2011

| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
|---|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Age group</i> | | | | | | | | | |
| Less than 20 years | 22 | 12 | 34 | 0.0 | 0.0 | 0.0 | 5 | 17 | 9 |
| 20 to 24 years | 96 | 44 | 142 | 1.0 | 4.6 | 2.1 | 18 | 32 | 22 |
| 25 to 34 years | 457 | 287 | 748 | 0.2 | 0.4 | 0.3 | 46 | 49 | 47 |
| 35 to 44 years | 569 | 250 | 824 | 1.6 | 0.4 | 1.3 | 59 | 57 | 58 |
| 45+ years | 410 | 169 | 580 | 2.4 | 1.8 | 2.2 | 68 | 57 | 64 |
| Not reported | 6 | 2 | 9 | 0.0 | 0.0 | 0.0 | 50 | 0 | 44 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 174 | 85 | 261 | 2.3 | 0.0 | 1.5 | 17 | 31 | 21 |
| 5 to 9 years | 135 | 95 | 230 | 1.5 | 2.1 | 1.7 | 39 | 39 | 39 |
| 10 to 14 years | 252 | 145 | 400 | 0.4 | 0.7 | 0.5 | 51 | 50 | 51 |
| 15 to 19 years | 296 | 173 | 474 | 1.7 | 0.0 | 1.3 | 56 | 57 | 55 |
| 20+ years | 656 | 251 | 909 | 1.4 | 1.6 | 1.4 | 69 | 61 | 67 |
| Not reported | 47 | 15 | 63 | 0.0 | 0.0 | 0.0 | 38 | 43 | 40 |
| Total | 1 560 | 764 | 2 337 | 1.4 | 0.9 | 1.2 | 54 | 52 | 53 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| Amphetamines | 18 | 11 | 29 | 5.6 | 0.0 | 3.5 | 11 | 27 | 17 |
| Heroin | 10 | 18 | 28 | 0.0 | 0.0 | 0.0 | 20 | 35 | 30 |
| Other opiates | 11 | 12 | 24 | 9.1 | 0.0 | 4.2 | 27 | 25 | 25 |
| All other drugs | 74 | 7 | 81 | 0.0 | 0.0 | 0.0 | 7 | 14 | 7 |
| Not reported | 1 | 0 | 1 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| Total | 114 | 48 | 163 | 1.8 | 0.0 | 1.2 | 11 | 28 | 15 |

2012

| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
|---|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Age group</i> | | | | | | | | | |
| Less than 20 years | 22 | 6 | 28 | 0.0 | 0.0 | 0.0 | 5 | 0 | 4 |
| 20 to 24 years | 108 | 32 | 141 | 0.0 | 0.0 | 0.0 | 10 | 38 | 16 |
| 25 to 34 years | 412 | 241 | 657 | 0.5 | 1.2 | 0.8 | 44 | 55 | 48 |
| 35 to 44 years | 585 | 266 | 856 | 0.9 | 0.4 | 0.8 | 58 | 53 | 57 |
| 45+ years | 418 | 172 | 595 | 2.6 | 2.9 | 2.7 | 65 | 58 | 62 |
| Not reported | 1 | 1 | 2 | 0.0 | 0.0 | 0.0 | 100 | 100 | 100 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 200 | 55 | 257 | 1.5 | 0.0 | 1.2 | 13 | 31 | 17 |
| 5 to 9 years | 123 | 88 | 212 | 0.0 | 2.3 | 0.9 | 36 | 41 | 38 |
| 10 to 14 years | 206 | 152 | 361 | 1.0 | 0.7 | 0.8 | 47 | 54 | 50 |
| 15 to 19 years | 278 | 143 | 425 | 0.7 | 0.0 | 0.7 | 56 | 60 | 57 |
| 20+ years | 695 | 262 | 961 | 1.6 | 2.3 | 1.8 | 66 | 59 | 64 |
| Not reported | 44 | 18 | 63 | 0.0 | 0.0 | 0.0 | 51 | 56 | 52 |
| Total | 1 546 | 718 | 2 279 | 1.2 | 1.3 | 1.2 | 52 | 54 | 53 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| Amphetamines | 10 | 17 | 27 | 10.0 | 0.0 | 3.7 | 20 | 41 | 33 |
| Heroin | 15 | 10 | 26 | 0.0 | 0.0 | 0.0 | 21 | 20 | 24 |
| Other opiates | 8 | 6 | 14 | 0.0 | 0.0 | 0.0 | 50 | 33 | 43 |
| All other drugs | 92 | 3 | 95 | 0.0 | 0.0 | 0.0 | 3 | 0 | 3 |
| Not reported | 1 | 0 | 1 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| Total | 126 | 36 | 163 | 0.8 | 0.0 | 0.6 | 10 | 31 | 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, 2008 – 2012, 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

| 2008 | | | | | | | | | |
|--|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Sexual identity</i> | | | | | | | | | |
| 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 |
| <i>Sex work last month</i> | | | | | | | | | |
| 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 |
| <i>Country/region of birth</i> | | | | | | | | | |
| 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 |
| <i>Other Oceania</i> | 34 | 27 | 63 | 8.8 | 0.0 | 6.4 | 41 | 50 | 44 |
| <i>Asia</i> | 21 | 7 | 28 | 4.8 | 0.0 | 3.6 | 89 | 50 | 80 |
| <i>United Kingdom and Ireland</i> | 68 | 43 | 113 | 0.0 | 0.0 | 0.0 | 61 | 72 | 65 |
| <i>Other</i> | 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 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| 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 |
| <i>Sexual identity</i> | | | | | | | | | |
| 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 |
| <i>Sex work last month</i> | | | | | | | | | |
| 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 |
| <i>Country/region of birth</i> | | | | | | | | | |
| 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 |
| <i>Other Oceania</i> | 54 | 30 | 84 | 0.0 | 0.0 | 0.0 | 43 | 57 | 48 |
| <i>Asia</i> | 24 | 7 | 32 | 4.2 | 0.0 | 3.1 | 42 | 43 | 41 |
| <i>United Kingdom and Ireland</i> | 82 | 37 | 120 | 0.0 | 0.0 | 0.0 | 51 | 57 | 53 |
| <i>Other</i> | 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 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| 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 |
| <i>Sexual identity</i> | | | | | | | | | |
| 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 |
| <i>Sex work last month</i> | | | | | | | | | |
| 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 |
| <i>Country/region of birth</i> | | | | | | | | | |
| 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 |
| <i>Other Oceania</i> | 47 | 28 | 76 | 2.1 | 0.0 | 1.3 | 52 | 68 | 57 |
| <i>Asia</i> | 23 | 6 | 29 | 0.0 | 0.0 | 0.0 | 57 | 83 | 62 |
| <i>United Kingdom and Ireland</i> | 64 | 29 | 93 | 0.0 | 0.0 | 0.0 | 64 | 48 | 59 |
| <i>Other</i> | 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 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| 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 |

2011

| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
|--|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Sexual identity</i> | | | | | | | | | |
| Heterosexual | 1 393 | 547 | 1 943 | 0.4 | 0.9 | 0.6 | 55 | 51 | 54 |
| Bisexual | 57 | 141 | 203 | 5.3 | 1.4 | 3.0 | 44 | 51 | 48 |
| Homosexual | 51 | 38 | 91 | 23.5 | 0.0 | 13.2 | 39 | 41 | 40 |
| Not reported | 59 | 38 | 100 | 0.0 | 0.0 | 0.0 | 58 | 68 | 62 |
| <i>Sex work last month</i> | | | | | | | | | |
| No | 1 452 | 666 | 2 125 | 1.3 | 0.9 | 1.2 | 54 | 51 | 53 |
| Yes | 29 | 75 | 108 | 0.0 | 1.3 | 1.9 | 64 | 56 | 58 |
| Not reported | 79 | 23 | 104 | 2.5 | 0.0 | 1.9 | 56 | 61 | 57 |
| <i>Country/region of birth</i> | | | | | | | | | |
| Australia | 1 322 | 665 | 1 999 | 1.5 | 1.1 | 1.4 | 53 | 52 | 52 |
| Overseas born | 220 | 95 | 316 | 0.5 | 0.0 | 0.3 | 55 | 47 | 53 |
| <i>Other Oceania</i> | 46 | 34 | 80 | 0.0 | 0.0 | 0.0 | 50 | 58 | 53 |
| <i>Asia</i> | 24 | 7 | 31 | 4.2 | 0.0 | 3.2 | 67 | 14 | 55 |
| <i>United Kingdom and Ireland</i> | 73 | 34 | 108 | 0.0 | 0.0 | 0.0 | 58 | 50 | 55 |
| <i>Other</i> | 77 | 20 | 97 | 0.0 | 0.0 | 0.0 | 55 | 45 | 53 |
| Not reported | 18 | 4 | 22 | 0.0 | 0.0 | 0.0 | 76 | 50 | 71 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| English | 1 444 | 731 | 2 187 | 1.4 | 1.0 | 1.3 | 53 | 52 | 52 |
| Other language | 100 | 28 | 129 | 1.0 | 0.0 | 0.8 | 68 | 41 | 62 |
| Not reported | 16 | 5 | 21 | 0.0 | 1.0 | 0.0 | 81 | 40 | 71 |
| Total | 1 560 | 764 | 2 337 | 1.4 | 0.9 | 1.2 | 54 | 52 | 53 |

2012

| | Number tested | | | Percent with HIV antibody | | | Percent with hepatitis C antibody | | |
|--|---------------|------------|--------------------|---------------------------|------------|--------------------|-----------------------------------|-----------|--------------------|
| | Male | Female | Total ¹ | Male | Female | Total ¹ | Male | Female | Total ¹ |
| <i>Sexual identity</i> | | | | | | | | | |
| Heterosexual | 1 350 | 506 | 1 859 | 0.3 | 1.6 | 0.7 | 53 | 54 | 53 |
| Bisexual | 69 | 127 | 200 | 2.9 | 0.0 | 1.5 | 47 | 56 | 52 |
| Homosexual | 42 | 31 | 77 | 21.4 | 0.0 | 11.7 | 29 | 45 | 36 |
| Not reported | 85 | 54 | 143 | 3.5 | 1.9 | 2.8 | 55 | 54 | 55 |
| <i>Sex work last month</i> | | | | | | | | | |
| No | 1 451 | 629 | 2 090 | 1.2 | 1.3 | 1.2 | 52 | 53 | 52 |
| Yes | 37 | 72 | 114 | 2.7 | 1.4 | 2.6 | 50 | 60 | 57 |
| Not reported | 58 | 17 | 75 | 0.0 | 0.0 | 0.0 | 53 | 71 | 57 |
| <i>Country/region of birth</i> | | | | | | | | | |
| Australia | 1 328 | 630 | 1 972 | 0.9 | 1.4 | 1.1 | 51 | 53 | 52 |
| Overseas born | 202 | 85 | 288 | 3.0 | 0.0 | 2.1 | 57 | 63 | 58 |
| <i>Other Oceania</i> | 49 | 32 | 81 | 4.1 | 0.0 | 2.5 | 44 | 65 | 52 |
| <i>Asia</i> | 22 | 3 | 26 | 0.0 | 0.0 | 0.0 | 86 | 100 | 84 |
| <i>United Kingdom and Ireland</i> | 73 | 26 | 99 | 1.4 | 0.0 | 1.0 | 57 | 65 | 59 |
| <i>Other</i> | 58 | 24 | 82 | 5.2 | 0.0 | 3.7 | 56 | 54 | 55 |
| Not reported | 16 | 3 | 19 | 0.0 | 0.0 | 0.0 | 50 | 67 | 53 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| English | 1 446 | 685 | 2 143 | 1.0 | 1.3 | 1.2 | 52 | 54 | 52 |
| Other language | 96 | 27 | 126 | 3.1 | 0.0 | 2.4 | 58 | 52 | 56 |
| Not reported | 4 | 6 | 10 | 0.0 | 0.0 | 0.0 | 25 | 83 | 60 |
| Total | 1 546 | 718 | 2 279 | 1.2 | 1.3 | 1.2 | 52 | 54 | 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, 2008 – 2012

| Year/ Age group | Person years at risk | Number newly diagnosed | Incidence per 100 person years |
|--------------------|----------------------|------------------------|--------------------------------|
| 2008 | | | |
| Less than 20 years | 3.1 | 0 | 0 |
| 20 – 29 years | 18.8 | 1 | 5.3 |
| 30+ years | 43.9 | 5 | 11.4 |
| Total | 65.7 | 6 | 9.1 |
| 2009 | | | |
| Less than 20 years | 2.3 | 1 | 42.7 |
| 20 – 29 years | 19.3 | 2 | 10.4 |
| 30+ years | 45.5 | 1 | 2.2 |
| Total | 67.2 | 4 | 6 |
| 2010 | | | |
| Less than 20 years | 0.8 | 0 | 0 |
| 20 – 29 years | 16.8 | 4 | 23.8 |
| 30+ years | 43.1 | 2 | 4.6 |
| Total | 60.7 | 6 | 9.9 |
| 2011 | | | |
| Less than 20 years | 0.7 | 2 | 285.7 |
| 20 – 29 years | 11.9 | 4 | 33.7 |
| 30+ years | 34.8 | 1 | 2.9 |
| Total | 47.4 | 7 | 14.8 |
| 2012 | | | |
| Less than 20 years | 0.4 | 1 | 251.9 |
| 20 – 29 years | 7.7 | 1 | 13 |
| 30+ years | 19.3 | 0 | 0 |
| Total | 27.4 | 2 | 7.3 |

Source: Kirketon Road Centre

Table 4.3.2 Incidence of hepatitis C virus infection among people who inject drugs enrolled in the Hepatitis C Incidence and Transmission Study – community (HITS-c), Sydney, 2009 – 2012

| Year/ Age group | Person years at risk | Number newly diagnosed | Incidence per 100 person years |
|--------------------|----------------------|------------------------|--------------------------------|
| 2009 | | | |
| Less than 20 years | 4.2 | 1 | 23.5 |
| 20 – 29 years | 35 | 4 | 11.4 |
| 30+ years | 19.7 | 1 | 5.1 |
| Total | 58.9 | 6 | 10.2 |
| 2010 | | | |
| Less than 20 years | 3.7 | 0 | 0 |
| 20 – 29 years | 46.6 | 5 | 10.7 |
| 30+ years | 37.5 | 1 | 2.7 |
| Total | 87.7 | 6 | 6.8 |
| 2011 | | | |
| Less than 20 years | 1.8 | 1 | 57 |
| 20 – 29 years | 57.4 | 3 | 5.2 |
| 30+ years | 46.8 | 5 | 10.7 |
| Total | 106 | 9 | 8.5 |
| 2012 | | | |
| Less than 20 years | 0.7 | 0 | 0 |
| 20 – 29 years | 44.7 | 5 | 11.2 |
| 30+ years | 48.6 | 3 | 6.2 |
| Total | 94 | 8 | 8.5 |

Source: The Kirby Institute

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 antibody¹, 1985 – 2012, by State/Territory and years of donation

| State/ Territory | 1985 ² – 2002 | | | 2003 – 2004 | | | 2005 – 2006 | | | All years | | |
|---------------------|--------------------------|------------|------------|------------------|----------|------------|------------------|----------|------------|-------------------|------------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| ACT ³ | 195 633 | 1 | 0.5 | – | – | – | – | – | – | 195 633 | 1 | 0.5 |
| NSW | 5 164 642 | 40 | 0.8 | 660 010 | 5 | 0.8 | 731 741 | 2 | 0.3 | 9 047 416 | 53 | 0.6 |
| NT | 153 591 | 1 | 0.7 | 20 039 | 0 | 0.0 | 19 322 | 0 | 0.0 | 261 462 | 2 | 0.8 |
| QLD | 3 122 219 | 31 | 1.0 | 462 505 | 3 | 0.6 | 476 755 | 1 | 0.2 | 5 635 952 | 49 | 0.9 |
| SA | 1 641 783 | 6 | 0.4 | 189 913 | 1 | 0.5 | 222 315 | 1 | 0.4 | 2 849 008 | 10 | 0.4 |
| TAS | 408 695 | 1 | 0.2 | 50 328 | 0 | 0.0 | 59 686 | 0 | 0.0 | 770 801 | 1 | 0.1 |
| VIC | 4 406 731 | 17 | 0.4 | 536 706 | 0 | 0.0 | 505 378 | 1 | 0.2 | 7 261 607 | 28 | 0.4 |
| WA | 1 486 492 | 13 | 0.9 | 233 840 | 0 | 0.0 | 220 642 | 0 | 0.0 | 2 708 483 | 15 | 0.6 |
| Total | 16 579 786 | 110 | 0.7 | 2 153 341 | 9 | 0.4 | 2 235 839 | 5 | 0.2 | 28 730 362 | 159 | 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 – 2012, by HIV exposure category and sex, and number of new HIV infections in blood donors with a previous donation negative for HIV antibody by years of donation

| HIV exposure category | 1985 – 2002 | | 2003 – 2004 | | 2005 – 2006 | | 2007 – 2008 | | 2009 – 2010 | | 2011 – 2012 | | All years | | |
|--|-------------|-----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|------------|-----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | Total |
| Men who have sex with men ¹ | 20 | – | 4 | – | 1 | – | 5 | – | 2 | – | 2 | – | 34 | – | 34 |
| Injecting drug use | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| Heterosexual contact | 24 | 25 | 1 | 1 | 1 | 3 | 4 | 2 | 5 | 3 | 5 | 1 | 40 | 35 | 75 |
| 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 | 26 | 3 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 1 | 32 | 4 | 36 |
| Total | 75 | 35 | 8 | 1 | 2 | 3 | 13 | 2 | 7 | 3 | 8 | 2 | 113 | 46 | 159 |
| New HIV infection² | 30 | 16 | 5 | 2 | 1 | 2 | 4 | 0 | 3 | 2 | 2 | 1 | 45 | 23 | 68 |

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 antigen¹ by State/Territory and year of donation

| State/ Territory | 2008 | | | 2009 | | | 2010 | | |
|---------------------|------------------|------------|-------------|------------------|------------|------------|------------------|------------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 387 669 | 46 | 11.9 | 424 627 | 46 | 10.8 | 428 144 | 44 | 10.3 |
| NT | 11 981 | 0 | 0.0 | 12 123 | 2 | 16.5 | 11 269 | 1 | 8.9 |
| QLD | 256 224 | 16 | 6.2 | 270 890 | 13 | 4.8 | 271 934 | 22 | 8.1 |
| SA | 134 384 | 9 | 6.7 | 138 255 | 9 | 6.5 | 132 871 | 6 | 4.5 |
| TAS | 37 257 | 1 | 2.7 | 41 010 | 0 | 0.0 | 44 706 | 1 | 2.2 |
| VIC | 289 338 | 44 | 15.2 | 310 968 | 35 | 11.3 | 304 717 | 38 | 12.5 |
| WA | 124 581 | 8 | 6.4 | 130 714 | 20 | 15.3 | 131 795 | 11 | 8.3 |
| Total | 1 241 434 | 124 | 10.0 | 1 328 587 | 125 | 9.4 | 1 325 436 | 123 | 9.3 |

| State/ Territory | 2011 | | | 2012 | | |
|---------------------|------------------|------------|------------|------------------|------------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 441 983 | 46 | 10.4 | 419 000 | 40 | 9.5 |
| NT | 11 554 | 3 | 26.0 | 10 610 | 1 | 9.4 |
| QLD | 274 814 | 16 | 5.8 | 262 480 | 20 | 7.6 |
| SA | 134 363 | 6 | 4.5 | 129 620 | 7 | 5.4 |
| TAS | 48 248 | 1 | 2.1 | 50 202 | 3 | 6.0 |
| VIC | 319 371 | 31 | 9.7 | 312 886 | 24 | 7.7 |
| WA | 132 049 | 15 | 11.4 | 127 653 | 18 | 14.1 |
| Total | 1 362 382 | 118 | 8.7 | 1 312 451 | 113 | 8.6 |

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 antibody¹, by State/Territory and year of donation

| State/ Territory | 2008 | | | 2009 | | | 2010 | | |
|---------------------|------------------|------------|-------------|------------------|------------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 387 669 | 61 | 15.7 | 424 627 | 52 | 12.2 | 428 144 | 40 | 9.3 |
| NT | 11 981 | 0 | 0.0 | 12 123 | 1 | 8.2 | 11 269 | 1 | 8.9 |
| QLD | 256 224 | 31 | 12.1 | 270 890 | 22 | 8.1 | 271 934 | 16 | 5.9 |
| SA | 134 384 | 9 | 6.7 | 138 255 | 14 | 10.1 | 132 871 | 7 | 5.3 |
| TAS | 37 257 | 4 | 10.7 | 41 010 | 5 | 12.2 | 44 706 | 1 | 2.2 |
| VIC | 289 338 | 20 | 6.9 | 310 968 | 24 | 7.7 | 304 717 | 16 | 5.3 |
| WA | 124 581 | 5 | 4.0 | 130 714 | 10 | 7.7 | 131 795 | 4 | 3.0 |
| Total | 1 241 434 | 130 | 10.5 | 1 328 587 | 128 | 9.6 | 1 325 436 | 85 | 6.4 |

| State/ Territory | 2011 | | | 2012 | | |
|---------------------|------------------|-----------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 441 983 | 33 | 7.5 | 419 000 | 31 | 7.4 |
| NT | 11 554 | 1 | 8.7 | 10 610 | 1 | 9.4 |
| QLD | 274 814 | 16 | 5.8 | 262 480 | 26 | 9.9 |
| SA | 134 363 | 5 | 3.7 | 129 620 | 5 | 3.9 |
| TAS | 48 248 | 1 | 2.1 | 50 202 | 2 | 4.0 |
| VIC | 319 371 | 14 | 4.4 | 312 886 | 19 | 6.1 |
| WA | 132 049 | 11 | 8.3 | 127 653 | 7 | 5.5 |
| Total | 1 362 382 | 81 | 5.9 | 1 312 451 | 91 | 6.9 |

¹ Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

4.5 Genital Warts Surveillance Network

Table 4.5.1 Number of Australian born women seen for the first time at sexual health services participating in the Genital Wart Surveillance Network, 2004 – 2012, and number (percent) diagnosed with genital warts by year and age group

| | Warts diagnosis ¹ | | |
|--------------------|--------------------------------------|--|--------------------------------------|
| | Australian born women aged ≤21 years | Australian born women aged 21 – 30 years | Australian born women aged >30 years |
| 2004 | | | |
| Seen | 981 | 1 919 | 1 326 |
| No. with warts (%) | 86 (8.8) | 240 (12.5) | 51 (3.8) |
| 2005 | | | |
| Seen | 908 | 1 809 | 1 250 |
| No. with warts (%) | 92 (10.1) | 235 (13.0) | 59 (4.7) |
| 2006 | | | |
| Seen | 956 | 1 927 | 1 226 |
| No. with warts (%) | 100 (10.5) | 238 (12.3) | 66 (5.4) |
| 2007 | | | |
| Seen | 1 104 | 2 028 | 1 368 |
| No. with warts (%) | 127 (11.5) | 229 (11.3) | 77 (5.6) |
| 2008 | | | |
| Seen | 1 192 | 1 810 | 1 259 |
| No. with warts (%) | 70 (5.9) | 128 (7.1) | 49 (3.9) |
| 2009 | | | |
| Seen | 1 288 | 1 924 | 1 330 |
| No. with warts (%) | 36 (2.8) | 130 (6.8) | 67 (5.0) |
| 2010 | | | |
| Seen | 1 451 | 1 971 | 1 270 |
| No. with warts (%) | 17 (1.2) | 92 (4.7) | 80 (6.3) |
| 2011 | | | |
| Seen | 1 525 | 1 840 | 1 217 |
| No. with warts (%) | 13 (0.8) | 57 (3.1) | 54 (4.4) |
| 2012 | | | |
| Seen | 1 447 | 2 038 | 1 255 |
| No. with warts (%) | 16 (1.1) | 64 (3.1) | 67 (5.3) |

1 Data from 8 services from NSW, NT, QLD, TAS, VIC, WA.

Source: Genital Warts Surveillance Network

Table 4.5.2 Number of Australian born men seen for the first time at sexual health services participating in the Genital Wart Surveillance Network, 2004 – 2012, number (percent) diagnosed with genital warts, by age group, gender of sexual partners, and year

| | Warts diagnosis ¹ | | | | |
|--------------------|---|---|---|--------------------------------|------------------------------|
| | Australian born heterosexual men aged ≤21 years | Australian born heterosexual men aged 21 – 30 years | Australian born heterosexual men aged 21 – 30 years | Australian born homosexual men | Australian born bisexual men |
| 2004 | | | | | |
| Seen | 321 | 1 627 | 1 765 | 1 102 | 292 |
| No. with warts (%) | 23 (7.2) | 275 (16.9) | 256 (14.5) | 100 (9.1) | 26 (8.9) |
| 2005 | | | | | |
| Seen | 280 | 1 664 | 1 646 | 1 149 | 314 |
| No. with warts (%) | 20 (7.1) | 311 (18.7) | 217 (13.2) | 114 (9.9) | 26 (8.3) |
| 2006 | | | | | |
| Seen | 301 | 1 582 | 1 544 | 1 189 | 301 |
| No. with warts (%) | 42 (13.9) | 291 (18.4) | 197 (12.8) | 86 (7.2) | 23 (7.6) |
| 2007 | | | | | |
| Seen | 387 | 1 744 | 1 641 | 1 234 | 334 |
| No. with warts (%) | 47 (12.1) | 318 (18.2) | 182 (11.1) | 115 (9.3) | 19 (5.7) |
| 2008 | | | | | |
| Seen | 492 | 1 892 | 1 628 | 1 214 | 324 |
| No. with warts (%) | 30 (6.1) | 285 (15.1) | 148 (9.1) | 92 (7.6) | 22 (6.8) |
| 2009 | | | | | |
| Seen | 686 | 2 151 | 1 821 | 1 493 | 314 |
| No. with warts (%) | 33 (4.8) | 301 (14.0) | 185 (10.2) | 101 (6.8) | 19 (6.0) |
| 2010 | | | | | |
| Seen | 784 | 2 297 | 1 853 | 1 589 | 397 |
| No. with warts (%) | 14 (1.8) | 254 (11.1) | 195 (10.5) | 121 (7.6) | 25 (6.3) |
| 2011 | | | | | |
| Seen | 731 | 2 190 | 1 749 | 1 489 | 337 |
| No. with warts (%) | 16 (2.2) | 194 (8.9) | 165 (9.4) | 93 (6.2) | 24 (7.1) |
| 2012 | | | | | |
| Seen | 663 | 2 319 | 1 872 | 1 661 | 325 |
| No. with warts (%) | 10 (1.5) | 179 (7.7) | 182 (9.7) | 96 (5.8) | 20 (6.1) |

¹ Data from 8 services from NSW, NT, QLD, TAS, VIC, WA.

Source: Genital Warts Surveillance Network

Tables

5 Risk behaviour

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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 Periodic Surveys, 2008 – 2012, 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 | | | | | | |
|---|-----------------------|-------|-------|-------|-------------------------|-------|-------|-------|------------------------|-------|-------|-------|-------|-------|-------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2008 | 2009 | 2010 | 2011 | 2012 | 2008 | 2009 | 2010 | 2011 | 2012 |
| Sample size | 2 186 | 2 240 | 2 707 | 3 176 | 2 828 | 1 223 | 1 257 | 1 641 | 1 660 | 1 317 | 2 002 | 2 061 | 2 425 | 1 919 | 2 034 |
| Unprotected anal intercourse with regular partners ¹ | 31.2 | 32.6 | 34 | 27.6 | 29.5 | 33.3 | 33.9 | 30.1 | 28.5 | 39.1 | 33.6 | 32.5 | 35 | 34.8 | 28.6 |
| Unprotected anal intercourse with casual partners ¹ | 23.1 | 27.6 | 25.6 | 22.4 | 23.8 | 24.9 | 24.2 | 24.5 | 23.4 | 30 | 24.3 | 24.8 | 27.1 | 26.3 | 23.3 |
| Injecting drug use ^{1,3} | 8.1 | 7.8 | 6.9 | 5.2 | 5.9 | 5.1 | 6.1 | 5.3 | 5.9 | 3 | 6.2 | 6.7 | 4.5 | 4.9 | 9.5 |
| Sample size | 1 888 | 1 973 | 2 421 | 2 825 | 2 515 | 1 138 | 1 183 | 1 518 | 1 535 | 1 222 | 1 850 | 1 916 | 2 211 | 1 757 | 1 877 |
| HIV antibody testing ⁴ | 71 | 70.4 | 59.3 | 62.3 | 58.2 | 65.8 | 59.9 | 58 | 58.5 | 63.4 | 63.9 | 67.8 | 62.4 | 61.5 | 68.2 |

| | Adelaide | | | Canberra | | | Perth | | |
|---|----------|-------|------|----------|------|------|-------|------|------|
| | 2009 | 2010 | 2011 | 2009 | 2011 | 2012 | 2009 | 2010 | 2012 |
| Sample size | 896 | 1 031 | 697 | 289 | 269 | 790 | 717 | 912 | 815 |
| Unprotected anal intercourse with regular partners ¹ | 27.5 | 30.9 | 29.5 | 38.9 | 42.2 | 27.3 | 34.6 | 34.8 | 35.9 |
| Unprotected anal intercourse with casual partners ¹ | 22.5 | 16.4 | 22.1 | 34.7 | 17.7 | 25.2 | 26.9 | 31.4 | 26.5 |
| Injecting drug use ⁵ | — | — | — | — | — | — | — | — | — |
| Sample size | 858 | 965 | 654 | 281 | 259 | 755 | 686 | 882 | 787 |
| HIV antibody testing ⁴ | 66.3 | 50.5 | 51.9 | 67.1 | 67.3 | 59.4 | 57.3 | 62.9 | 48.7 |

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: Centre for Social Research in Health; 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, 2008 – 2012, 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

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 |
| <i>Time since first injection</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Time since first injection</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| 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 |

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 |
| <i>Time since first injection</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| 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 | 1580 | 759 | 2353 | 46 | 51 | 48 | 52 | 56 | 54 | 1403 | 660 | 2073 | 12 | 13 | 12 |

2011

| | 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 |
| <i>Time since first injection</i> | | | | | | | | | | | | | | | |
| Less than 5 years | 174 | 85 | 261 | 35 | 52 | 41 | 40 | 56 | 46 | 142 | 74 | 218 | 10 | 25 | 15 |
| 5 to 9 years | 135 | 95 | 230 | 48 | 58 | 52 | 56 | 65 | 60 | 118 | 86 | 204 | 13 | 17 | 15 |
| 10 to 14 years | 252 | 145 | 400 | 50 | 51 | 51 | 53 | 61 | 56 | 227 | 133 | 362 | 16 | 19 | 17 |
| 15 to 19 years | 296 | 173 | 474 | 52 | 51 | 51 | 53 | 55 | 53 | 264 | 148 | 416 | 17 | 20 | 18 |
| 20+ years | 656 | 251 | 909 | 49 | 49 | 49 | 52 | 58 | 54 | 586 | 223 | 810 | 14 | 7 | 12 |
| Not reported | 47 | 15 | 63 | 40 | 53 | 43 | 49 | 40 | 46 | 34 | 11 | 46 | 18 | 0 | 16 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| Amphetamine | 382 | 247 | 632 | 47 | 50 | 49 | 49 | 55 | 51 | 320 | 215 | 537 | 14 | 16 | 15 |
| Heroin | 513 | 267 | 783 | 50 | 53 | 51 | 57 | 57 | 57 | 463 | 239 | 705 | 15 | 14 | 15 |
| Other opiates | 448 | 202 | 655 | 50 | 53 | 51 | 53 | 62 | 56 | 430 | 181 | 615 | 14 | 14 | 14 |
| All other drugs | 214 | 46 | 262 | 38 | 39 | 38 | 41 | 61 | 44 | 156 | 39 | 196 | 15 | 23 | 17 |
| Not reported | 3 | 2 | 5 | 33 | 50 | 40 | 33 | 100 | 60 | 2 | 1 | 3 | 0 | 0 | 0 |
| Total | 1560 | 764 | 2337 | 48 | 51 | 49 | 51 | 58 | 54 | 1371 | 675 | 2056 | 15 | 15 | 15 |

2012

| | 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 |
| <i>Time since first injection</i> | | | | | | | | | | | | | | | |
| Less than 5 years | 200 | 55 | 257 | 38 | 62 | 43 | 43 | 65 | 48 | 149 | 50 | 201 | 7 | 10 | 8 |
| 5 to 9 years | 123 | 88 | 212 | 49 | 55 | 51 | 50 | 64 | 56 | 114 | 78 | 193 | 16 | 13 | 15 |
| 10 to 14 years | 206 | 152 | 361 | 49 | 53 | 50 | 53 | 62 | 57 | 188 | 134 | 325 | 21 | 22 | 22 |
| 15 to 19 years | 278 | 143 | 425 | 54 | 51 | 53 | 60 | 55 | 58 | 252 | 131 | 386 | 18 | 19 | 18 |
| 20+ years | 695 | 262 | 961 | 46 | 45 | 46 | 54 | 51 | 53 | 644 | 229 | 876 | 15 | 12 | 14 |
| Not reported | 44 | 18 | 63 | 48 | 50 | 48 | 57 | 44 | 52 | 33 | 14 | 48 | 28 | 20 | 25 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| Amphetamine | 355 | 216 | 577 | 46 | 46 | 46 | 50 | 56 | 52 | 327 | 188 | 521 | 17 | 15 | 16 |
| Heroin | 507 | 262 | 773 | 52 | 54 | 53 | 61 | 59 | 61 | 466 | 234 | 704 | 20 | 14 | 18 |
| Other opiates | 416 | 187 | 605 | 47 | 47 | 47 | 54 | 54 | 54 | 393 | 171 | 565 | 12 | 18 | 14 |
| All other drugs | 257 | 49 | 309 | 38 | 61 | 42 | 43 | 59 | 46 | 190 | 41 | 233 | 12 | 17 | 13 |
| Not reported | 11 | 4 | 15 | 36 | 50 | 40 | 27 | 50 | 33 | 4 | 2 | 6 | 14 | 0 | 10 |
| Total | 1 546 | 718 | 2 279 | 47 | 50 | 48 | 53 | 57 | 55 | 1 380 | 636 | 2 029 | 16 | 16 | 16 |

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

Source: Collaboration of Australian Needle and Syringe Programs

Table 5.2.2 Number of people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2008 – 2012, 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

2008

| | 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 |
| <i>Age group</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Age group</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Age group</i> | | | | | | | | | | | | | | | |
| 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 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| Heterosexual | 1 390 | 558 | 1 954 | 45 | 49 | 46 | 51 | 55 | 52 | 751 | 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 |

2011

| | 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 |
| <i>Age group</i> | | | | | | | | | | | | | | | |
| Less than 20 years | 22 | 12 | 34 | 36 | 75 | 50 | 36 | 75 | 50 | 17 | 5 | 22 | 65 | 60 | 64 |
| 20 to 24 years | 96 | 44 | 142 | 43 | 57 | 48 | 43 | 64 | 50 | 72 | 31 | 105 | 56 | 32 | 49 |
| 25 to 34 years | 457 | 287 | 748 | 50 | 56 | 52 | 54 | 63 | 57 | 270 | 204 | 476 | 36 | 30 | 34 |
| 35 to 44 years | 569 | 250 | 824 | 45 | 50 | 47 | 49 | 56 | 51 | 278 | 158 | 438 | 26 | 26 | 26 |
| 45+ years | 410 | 169 | 580 | 51 | 42 | 48 | 55 | 51 | 54 | 163 | 65 | 228 | 29 | 29 | 29 |
| Not reported | 6 | 2 | 9 | 17 | 0 | 11 | 33 | 0 | 22 | 2 | 2 | 4 | 50 | 50 | 50 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| Heterosexual | 1 393 | 547 | 1 943 | 47 | 49 | 48 | 51 | 56 | 53 | 728 | 332 | 1 062 | 33 | 26 | 31 |
| Bisexual | 57 | 141 | 203 | 58 | 58 | 58 | 60 | 60 | 59 | 29 | 93 | 125 | 41 | 37 | 39 |
| Homosexual | 51 | 38 | 91 | 59 | 58 | 58 | 53 | 71 | 60 | 23 | 20 | 44 | 48 | 20 | 36 |
| Not reported | 59 | 38 | 100 | 46 | 47 | 46 | 46 | 68 | 54 | 22 | 20 | 42 | 45 | 45 | 45 |
| Total | 1 560 | 764 | 2 337 | 48 | 51 | 49 | 51 | 58 | 54 | 802 | 465 | 1 273 | 34 | 29 | 32 |

2012

| | 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 |
| <i>Age group</i> | | | | | | | | | | | | | | | |
| Less than 20 years | 22 | 6 | 28 | 45 | 67 | 50 | 50 | 50 | 50 | 16 | 5 | 21 | 63 | 40 | 57 |
| 20 to 24 years | 108 | 32 | 141 | 46 | 75 | 52 | 52 | 75 | 57 | 79 | 27 | 106 | 43 | 52 | 45 |
| 25 to 34 years | 412 | 241 | 657 | 51 | 54 | 52 | 58 | 63 | 60 | 262 | 180 | 446 | 37 | 34 | 36 |
| 35 to 44 years | 585 | 266 | 856 | 47 | 50 | 48 | 52 | 53 | 52 | 306 | 165 | 474 | 27 | 28 | 28 |
| 45+ years | 418 | 172 | 595 | 45 | 42 | 44 | 52 | 49 | 52 | 143 | 70 | 215 | 24 | 27 | 26 |
| Not reported | 1 | 1 | 2 | 100 | 0 | 50 | 100 | 100 | 100 | 0 | 1 | 1 | 0 | 0 | 0 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| Heterosexual | 1 350 | 506 | 1 859 | 46 | 48 | 47 | 53 | 55 | 54 | 694 | 314 | 1 010 | 29 | 28 | 29 |
| Bisexual | 69 | 127 | 200 | 59 | 56 | 58 | 62 | 60 | 61 | 40 | 94 | 136 | 48 | 47 | 48 |
| Homosexual | 42 | 31 | 77 | 48 | 61 | 55 | 48 | 68 | 58 | 21 | 11 | 34 | 52 | 0 | 35 |
| Not reported | 85 | 54 | 143 | 52 | 54 | 51 | 59 | 56 | 57 | 51 | 29 | 83 | 47 | 38 | 43 |
| Total | 1 546 | 718 | 2 279 | 47 | 50 | 48 | 53 | 57 | 55 | 806 | 448 | 1 263 | 32 | 32 | 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

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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 2012 by State/Territory of HIV diagnosis and sex

| State/Territory | Male | Female | Total | % |
|-----------------|---------------|--------------|---------------|--------------|
| ACT | 236 | 38 | 274 | 1.1 |
| NSW | 11 583 | 1 101 | 12 684 | 49.3 |
| NT | 157 | 40 | 197 | 0.8 |
| QLD | 3 257 | 439 | 3 696 | 14.4 |
| SA | 946 | 147 | 1 093 | 4.3 |
| TAS | 145 | 25 | 170 | 0.7 |
| VIC | 5 425 | 534 | 5 959 | 23.2 |
| WA | 1 288 | 347 | 1 635 | 6.4 |
| Total | 23 037 | 2 671 | 25 708 | 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 2012

| Characteristic | Number | Plausible range |
|--|---------|-------------------|
| Hepatitis B prevalence in 2012 | 207 000 | 170 000 – 245 000 |
| During 2012 | | |
| Deaths attributable to chronic hepatitis B | 383 | 295 – 624 |

Note: Using an alternative methodology, the number of people living with hepatitis B virus infection in Australia in 2011 was estimated at 218 000 (plausible range 192 000 – 284 000). Accessible from: <http://onlinelibrary.wiley.com/doi/10.1111/1753-6405.12049/abstract>.

Source: VIDRL/ASHM Hepatitis B Epidemiology Mapping Project; Victorian Infectious Diseases Reference Laboratory & Australasian Society for HIV Medicine, 2013

Table 6.2.2 Estimated number of people living with hepatitis C virus infection in 2012 by stage of liver disease

| Characteristic | Number | Plausible range |
|--|----------------|--------------------------|
| Total hepatitis C prevalence | 310 000 | 239 000 – 391 000 |
| <i>Exposed to hepatitis C but not chronically infected</i> | <i>80 000</i> | <i>60 800 – 99 200</i> |
| <i>Chronic hepatitis C infection with stage F0/1 liver disease</i> | <i>173 500</i> | <i>132 000 – 215 000</i> |
| <i>Chronic hepatitis C infection with stage F2/3 liver disease</i> | <i>51 500</i> | <i>39 100 – 63 700</i> |
| <i>Living with hepatitis C-related cirrhosis</i> | <i>6 500</i> | <i>4 550 – 8 450</i> |
| During 2012 | | |
| Hepatitis C-related liver failure | 260 | 182 – 338 |
| Hepatitis C-related hepatocellular carcinoma | 132 | 92 – 172 |

Source: Linear extrapolations of estimates from Hepatitis C Virus Projections Working Group

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7 Uptake of treatment for HIV infection and viral hepatitis

7.1 Uptake of antiretroviral treatment for HIV infection

Table 7.1.1 Antiretroviral treatment among people enrolled in the Australian HIV Observational Database in 2012

| Characteristic | Current antiretroviral treatment ¹ | | | | | | Total |
|--|---|-------------------------|--------------------------------|----------------------------------|-----------------------------|---------------------------|--------------|
| | None | Mono and Double therapy | 3+ NRTI±PI (not NNRTI, not II) | 3+ NwRTI +NNRTI (not PI, not II) | 3+ NNRTI+PI, ±NRTI (not II) | 3+ II, ±NRTI, ±NNRTI, ±PI | |
| Total number | 163 | 114 | 575 | 950 | 99 | 441 | 2 342 |
| Sex | | | | | | | |
| Male | 150 (92) | 109 (96) | 507 (88) | 872 (92) | 96 (97) | 419 (95) | 2 153 |
| Female | 13 (8) | 5 (4) | 68 (12) | 78 (8) | 3 (3) | 22 (5) | 189 |
| Age at enrolment (years) | | | | | | | |
| Less than 30 | 24 (15) | 4 (4) | 63 (11) | 103 (11) | 9 (9) | 35 (8) | 238 |
| 30 – 39 | 85 (52) | 29 (25) | 204 (35) | 315 (33) | 29 (29) | 119 (27) | 781 |
| 40 – 49 | 31 (19) | 49 (43) | 198 (34) | 320 (34) | 39 (39) | 169 (38) | 806 |
| 50+ | 23 (14) | 32 (28) | 110 (19) | 212 (22) | 22 (22) | 118 (27) | 517 |
| Exposure category | | | | | | | |
| Men who have sex with men | 131 (80) | 97 (85) | 424 (74) | 680 (72) | 79 (80) | 362 (82) | 1 773 |
| Other/not reported | 32 (20) | 17 (15) | 151 (26) | 270 (28) | 20 (20) | 79 (18) | 569 |
| Viral load at enrolment (copies/ml) | | | | | | | |
| Less than 400 | 42 (28) | 24 (23) | 92 (17) | 97 (11) | 24 (24) | 68 (16) | 347 |
| 400 – 10,000 | 57 (39) | 69 (66) | 357 (65) | 610 (69) | 56 (57) | 265 (63) | 1 414 |
| 10,000+ | 49 (33) | 12 (11) | 100 (18) | 173 (20) | 19 (19) | 85 (20) | 438 |
| Not reported | 15 | 9 | 26 | 70 | 0 | 23 | 143 |
| CD4+ count at enrolment (cells/µl) | | | | | | | |
| Less than 200 | 4 (3) | 11 (11) | 52 (10) | 74 (8) | 10 (12) | 54 (13) | 205 |
| 200 – 500 | 53 (35) | 42 (40) | 237 (44) | 365 (41) | 41 (48) | 179 (44) | 917 |
| 500+ | 95 (63) | 51 (49) | 246 (46) | 446 (50) | 35 (41) | 173 (43) | 1 046 |
| Not reported | 11 | 10 | 40 | 65 | 13 | 35 | 174 |
| AIDS prior to enrolment | | | | | | | |
| No | 160 (98) | 86 (75) | 492 (86) | 820 (86) | 75 (76) | 329 (75) | 1 962 |
| Yes | 3 (2) | 28 (25) | 83 (14) | 129 (14) | 24 (24) | 112 (25) | 379 |
| Hepatitis C antibody positive | | | | | | | |
| No | 136 (83) | 95 (83) | 449 (78) | 783 (82) | 90 (91) | 357 (81) | 1 910 |
| Yes | 13 (8) | 9 (8) | 67 (12) | 59 (6) | 7 (7) | 56 (13) | 211 |
| No test done | 14 (9) | 10 (9) | 59 (10) | 108 (11) | 2 (2) | 28 (6) | 221 |
| Regimen of longest duration in 2011 | | | | | | | |
| None | 152 (93) | 7 (6) | 29 (5) | 73 (8) | 2 (2) | 22 (5) | 285 |
| Mono and Double therapy | 1 (1) | 102 (89) | 4 (1) | 3 (0) | 0 (0) | 5 (1) | 115 |
| 3+ NRTI±PI (not NNRTI, not II) | 3 (2) | 2 (2) | 529 (92) | 6 (1) | 3 (3) | 22 (5) | 565 |
| 3+ NRTI+NNRTI (not PI,not II) | 3 (2) | 1 (1) | 10 (2) | 866 (91) | 4 (4) | 19 (4) | 903 |
| 3+ NNRTI+PI, ±NRTI (not II) | 1 (1) | 0 (0) | 0 (0) | 0 (0) | 90 (91) | 5 (1) | 96 |
| 3+ II, ±NRTI, ±NNRTI, ±PI | 3 (2) | 2 (2) | 3 (1) | 2 (0) | 0 (0) | 368 (83) | 378 |

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, 2008 – 2012 and proportion¹ reporting use of antiretroviral treatment for HIV infection, by city and year

| City | Year of survey | | | | |
|--|----------------|------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Melbourne | | | | | |
| Sample size | 152 | 145 | 214 | 162 | 157 |
| Proportion reporting use of antiretroviral therapy | 63.3 | 61.3 | 69.7 | 72.6 | 77.7 |
| Queensland | | | | | |
| Sample size | 85 | 74 | 123 | 125 | 95 |
| Proportion reporting use of antiretroviral therapy | 66.1 | 61.5 | 68.5 | 69.7 | 69.8 |
| Sydney² | | | | | |
| Sample size | 298 | 267 | 286 | 351 | 313 |
| Proportion reporting use of antiretroviral therapy | 70.6 | 73.5 | 68.9 | 70.6 | 80.2 |
| Adelaide, Canberra & Perth (combined)³ | | | | | |
| Sample size | 31 | 46 | 96 | 53 | 63 |
| Proportion reporting use of antiretroviral therapy | 72.7 | 62.9 | 76.4 | 89.1 | 83.3 |

1 Age standardised and venue adjusted prevalence.

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

3 Adelaide, Canberra and Perth (combined) includes data from Perth only in 2008, from Adelaide and Canberra in 2009, from Adelaide and Perth in 2010, from Adelaide and Canberra in 2011 and from Adelaide and Perth in 2012.

Source: Centre for Social Research in Health; The Kirby Institute; State AIDS Councils, State/Territory organisations representing people living with HIV/AIDS

7.2 Monitoring prescriptions for HIV treatment

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

| Antiretroviral agent | Year of prescription ^{1,2} | | | | |
|---|-------------------------------------|----------------|----------------|----------------|----------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Nucleoside analogue reverse transcriptase inhibitors | | | | | |
| Abacavir | 595 | 544 | 492 | 473 | 425 |
| Didanosine | 322 | 229 | 163 | 117 | 84 |
| Emtricitabine | 181 | 131 | 211 | 146 | 157 |
| Lamivudine | 1 051 | 921 | 822 | 718 | 609 |
| Stavudine | 145 | 104 | 77 | 48 | 36 |
| Zidovudine | 190 | 156 | 128 | 98 | 70 |
| Lamivudine & Zidovudine | 980 | 846 | 719 | 602 | 461 |
| Abacavir & Lamivudine | 2 367 | 2 243 | 2 220 | 2 179 | 2 041 |
| Abacavir, Lamivudine & Zidovudine | 276 | 240 | 163 | 133 | 103 |
| Tenofovir | 1 419 | 1 294 | 1 586 | 1 967 | 2 039 |
| Tenofovir & Emtricitabine | 4 097 | 5 246 | 4 772 | 4 510 | 4 404 |
| Non-nucleoside analogue reverse transcriptase inhibitors | | | | | |
| Delavirdine | 6 | 7 | 6 | - | - |
| Efavirenz | 2 762 | 2 996 | 2 003 | 973 | 738 |
| Nevirapine | 2 667 | 2 791 | 2 809 | 2 728 | 2 376 |
| Etravirine | - | 155 | 403 | 456 | 454 |
| Rilpivirine | - | - | - | - | 18 |
| Protease inhibitors | | | | | |
| Atazanavir | 2 254 | 2 609 | 2 879 | 2 906 | 2 582 |
| Darunavir | 407 | 685 | 887 | 1 058 | 1 131 |
| Fosamprenavir | 233 | 219 | 181 | 148 | 111 |
| Indinavir | 76 | 52 | 31 | 21 | 18 |
| Lopinavir & ritonavir | 1 775 | 1 871 | 1 734 | 1 581 | 1 341 |
| Ritonavir | 2 413 | 2 850 | 3 181 | 3 098 | 2 652 |
| Saquinavir | 167 | 148 | 121 | 95 | 72 |
| Tipranavir | 31 | 27 | 20 | 15 | 11 |
| Fusion inhibitors | | | | | |
| Enfuvirtide | 118 | 60 | 37 | 22 | 13 |
| Maraviroc | - | - | 55 | 118 | 122 |
| Integrase inhibitor | | | | | |
| Raltegravir | 287 | 821 | 1 250 | 1 848 | 2 250 |
| Combination Class Agents | | | | | |
| Tenofovir, Emtricitabine & Efavirenz | - | - | 2 013 | 2 873 | 2 786 |
| Tenofovir, Emtricitabine & Rilpivirine | - | - | - | - | 217 |
| Total patients³ | 10 200 | 10 900 | 12 400 | 12 700 | 12 800 |
| Total cost⁴ (\$'000s) | 136 625 | 156 810 | 181 508 | 200 165 | 210 005 |

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.

3 Total patients calculated as (Lamivudine + Combivir (Lamivudine & Zidovudine)+Trizivir (Abacavir, Lamivudine & Zidovudine)+Kivexa (Abacavir & Lamivudine)+Emtricitabine +Truvada(Tenofovir & Emtricitabine) + Atripla(Tenofovir & Emtricitabine & Efavirenz) + Exiplera(Tenofovir & Emtricitabine & Rilpivirine))/the proportion of patients in the Australian HIV Observational Database receiving any of the previously mentioned drugs in each year. Estimates of total patients are rounded to nearest 100 patients.

4 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 C infection through the Highly Specialised Drugs (S100) Program, by year¹

| Year | Pegylated Interferon and Ribavirin | Total cost (\$'000s) ² |
|-------------------------------|------------------------------------|-----------------------------------|
| 2008 | | |
| January - March | 2 324 | 10 263 |
| April - June | 2 478 | 11 174 |
| July - September ³ | 2 416 | 10 704 |
| October - December | 2 298 | 10 311 |
| 2009 | | |
| January - March | 2 235 | 10 124 |
| April - June | 2 497 | 11 346 |
| July - September | 2 673 | 11 983 |
| October - December | 2 632 | 11 777 |
| 2010 | | |
| January - March | 2 387 | 10 702 |
| April - June | 2 500 | 11 205 |
| July - September | 2 605 | 11 969 |
| October - December | 2 366 | 10 937 |
| 2011 | | |
| January - March | 2 061 | 9 712 |
| April - June | 2 103 | 10 176 |
| July - September | 2 020 | 10 098 |
| October - December | 1 746 | 9 170 |
| 2012 | | |
| January - March | 1 564 | 8 399 |
| April - June | 1 627 | 8 471 |
| July - September | 2 024 | 10 977 |
| October - December | 1 865 | 10 477 |

1 An estimated 3 172, 3 397, 3 286, 2 643 and 2 360 people were receiving treatment throughout 2008 to 2012, respectively. Calculations were based on the assumption that 50% of people were receiving treatment for 6 months and the remaining 50% were receiving treatment for 12 months.

2 Public hospital expenditure only.

3 Number of person years from September 2008 was estimated from the HSD Program Public Hospital Dispensed National Pack Number Report.

Source: Highly Specialised Drugs (S100) Program

Methodological notes

1 National surveillance for newly diagnosed HIV infection

1.1 National HIV Registry

National surveillance for newly diagnosed HIV infection

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 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). Advanced HIV infection was defined as newly diagnosed HIV infection with a CD4+ cell count of less than 200 cells/ μ l, and late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of 200 or more and less than 350 cells/ μ l.

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, South Australia, Victoria, Western Australia and at the NSW State Reference Laboratory for HIV, were tested for incident HIV infection using the BED capture enzyme immunoassay (BED-CEIA; 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 Surveillance and Evaluation Program at 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 2003 – 2012, 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 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 the Aboriginal and Torres Strait Islander population, adjusted for undercount of Aboriginal and Torres Strait Islander status (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. Cases of newly diagnosed 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. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data – United States and 6 U.S. dependent areas – 2010. *HIV Surveillance Supplemental Report* 2012; 17 (No 3, part A). <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>. Published June 2012. Accessed 27 September 2013
- Health Protection Agency. HIV in the United Kingdom: 2012 Report: London: Health Protection Services, Colindale. November 2012.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). Global report: UNAIDS report on the global AIDS epidemic 2012. UNAIDS, 2012. <http://www.unaids.org>
- Public Health Agency of Canada. Summary: Estimates of HIV prevalence and incidence in Canada, 2011. Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, 2012. <http://webqa.phac-aspc.gc.ca/aids-sida/publication/survreport/estimat2011-eng.php>

2 National surveillance for viral hepatitis

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

New diagnoses of hepatitis A and 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, prevalent and newly acquired hepatitis C and hepatitis D 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 2008 – 2012) using the 2012 census population distribution available through the Australian Bureau of Statistics.

2.3 Long term outcomes among people with chronic viral hepatitis

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

2.4 Global comparisons of hepatitis B virus prevalence

The data in Table 2.4.1 were obtained from the following sources:

- Kowdley K, Wang C, Welch S, Roberts H. Prevalence of chronic hepatitis B among foreign-born persons living in the United States by country of origin. *Hepatology*. Epub 2012 Feb 16
- Turnour CE, Cretikos MA, Conaty SJ. Prevalence of chronic hepatitis B in South Western Sydney: evaluation of the country of birth method using maternal seroprevalence data. *Aust N Z J Public Health*. 2011;35(1):22-26.
- The prevalence estimates for Australia presented in this table were taken from Table 6.2.1

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 the 2011 census population distribution 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 2012).

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 2008 (51 sites), 2009 (51 sites), 2010 (52 sites) 2011 (52 sites) and 2012 (52 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 Genital warts surveillance network

The Genital Warts Surveillance Network is a surveillance system to monitor the diagnosis of genital warts in Australia and is funded by bioCSL Pty Ltd. The network comprises eight sexual health services in New South Wales, Northern Territory, Queensland, Tasmania, Victoria and Western Australia. 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 (Ali H *et al*. 2013).

Routinely collected data at sexual health services includes data on demographics, sexual behaviour, 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 Australian born patients seen for the first time at sexual health services were included. Genital warts diagnosis rates were calculated by dividing the total number of patients seen at the clinic by the number of patients diagnosed with genital warts, 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 51 needle and syringe programs in 2008, 51 in 2009, 52 in 2010, 52 in 2011 and 52 in 2012. 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 on cumulative cases of newly diagnosed HIV infection notified to the National HIV Registry, adjusted for estimated numbers of deaths. 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). Probabilistically-defined mortality was simulated using the age, sex and State/Territory-stratified ABS general population mortality data, AIDS status and previously calculated standardised mortality ratios for people 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 infection were developed through the Victorian Infectious Diseases Reference Laboratory/Australasian Society for HIV Medicine Hepatitis B Epidemiology Mapping Project. The estimates presented were derived from two sources:

- A deterministic compartmental mathematical model of hepatitis B virus infection in the Australian population from 1951-2050.
- Using the Census method, attributing prevalence of chronic hepatitis B prevalence by country of birth and also by Aboriginal and Torres Strait Islander status, applied to the Australian population data provided in the 2011 Census. For details see MacLachlan *et al* ANZJPH 2013 "The burden of chronic hepatitis B virus infection in Australia, 2011" Accessible from <http://onlinelibrary.wiley.com/doi/10.1111/1753-6405.12049/abstract>

The model was parameterised using a wide range of data sources including the ABS, existing mathematical models, surveillance notifications, epidemiological research and clinical studies. Important factors such as migration, attributable and all-cause mortality, the ageing of the population, the variable natural history of chronic HBV infection and the impact of vaccination were all incorporated.

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 2013, 28 participating clinical sites enrolled over 3 800 people into the AHOD.

Data from all 28 participating clinical sites was 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 2012 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 2012, 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 (The Kirby Institute 2013).

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 treatments

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

The number of people dispensed each antiretroviral drug during a calendar year was estimated from the proportional quarterly change in total allocated dose calculated as the product of dispensed pack numbers and dose per pack and applied to the 2008 quarter 1 and quarter 2 S100 patient numbers. A moving average filter incorporating the previous 2 quarters, current quarter and following quarter was applied to account for seasonal variation in reported numbers. Patient numbers for antiretroviral drugs introduced after 2008 (rilpivirine, etravirine, maraviroc, atripla and eviplera) were estimated using patient dose years based on dispensed pack numbers and dose per pack and using usual adult daily dosing.

The number of people dispensed lamivudine was also estimated using patient dose years based on dispensed pack numbers and dose per pack and using usual adult daily dosing. This was because patient numbers dispensed lamivudine were only reported as an aggregate of the number of people dispensed lamivudine for HIV treatment and HBV treatment but later reports included disaggregated data on dispensed lamivudine pack numbers.

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 total number of people receiving treatment for HIV infection was estimated by summing the number of people dispensed (lamivudine + kivexa + combivir + trizivir + emtricitabine + truvada + atripla + eviplera) through the S100 Program, divided by the proportion of people enrolled on AHOD who were receiving any of these mutually exclusive antiretroviral treatments during the same calendar year.

7.3 Monitoring prescriptions for treatment of viral hepatitis

The number of prescriptions for lamivudine, adefovir and entecavir for treatment of hepatitis B infection, for interferon and ribavirin therapy, pegylated interferon and ribavirin combination therapy and pegylated interferon only, was monitored through the Highly Specialised Drugs (HSDs) Program, a joint Australian Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Australian Government Department of Health and Ageing. 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.

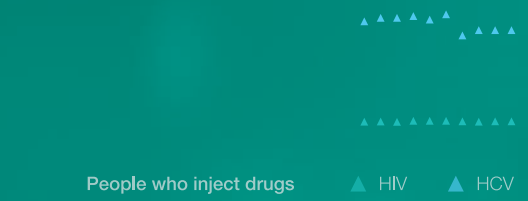
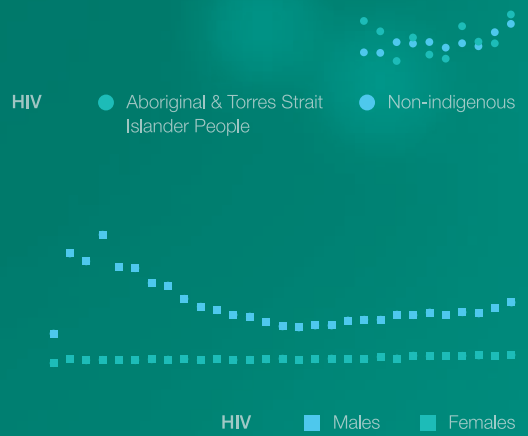
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