

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

2014



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Australian Gonococcal Surveillance Programme

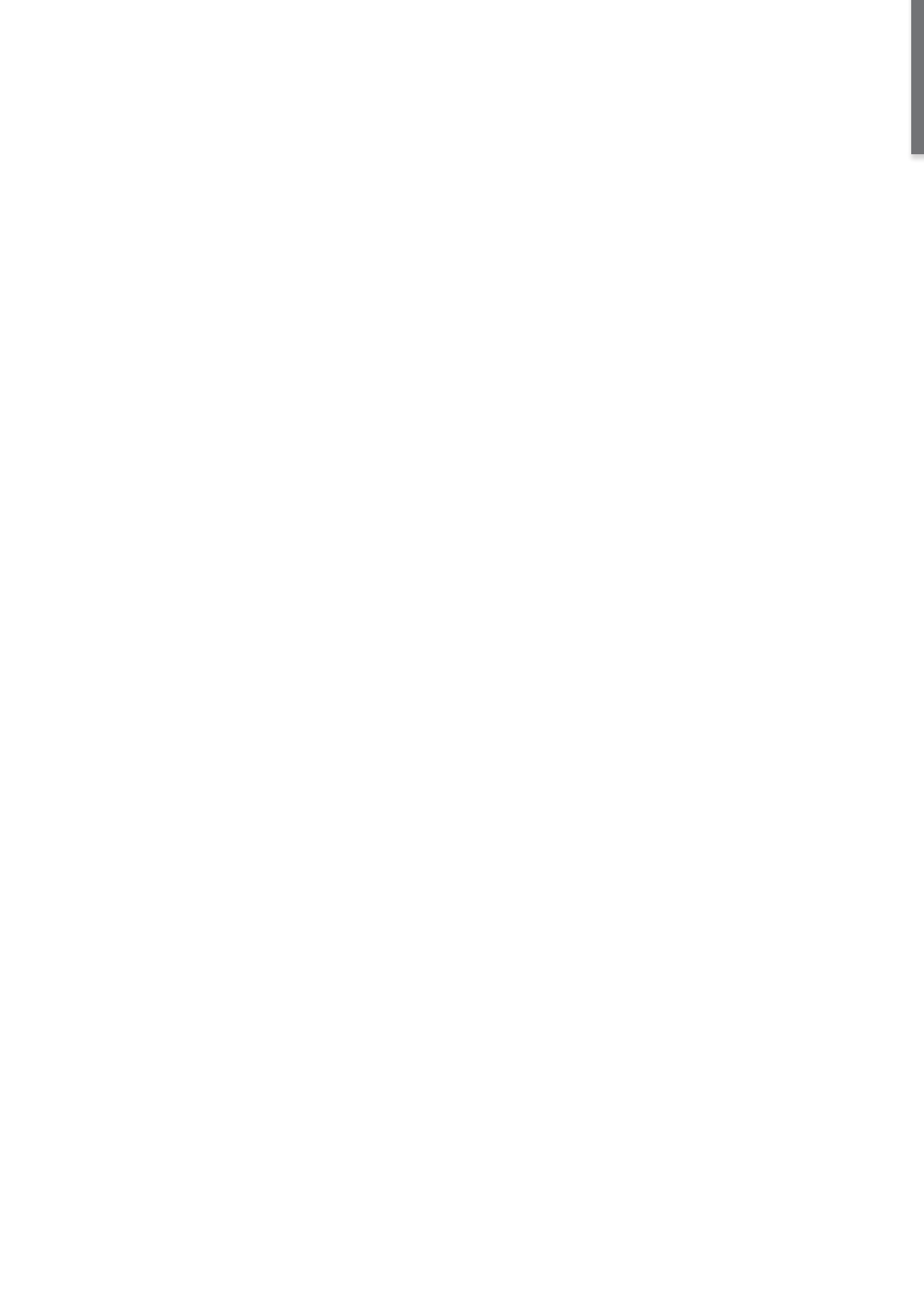
Communicable Diseases Network Australia

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 eighteenth 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 2013 and reported by 31 March 2014 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 2014* 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 2014*, edited by the Centre in 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 2014* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2013, as reported by 31 March 2014. All data in this report are provisional and subject to future revision.

This report could not have been prepared without the collaboration of a large number of organisations involved in health services throughout Australia. The ongoing contribution of all collaborating organisations, listed in the following section, to national surveillance for HIV, viral hepatitis and sexually transmissible infections is gratefully acknowledged.

Acknowledgments

National organisations

- Association for Prevention and Harm Reduction Programs, VIC
- Australasian Society for HIV Medicine, Sydney, NSW
- Australia and New Zealand Liver Transplant Registry, Brisbane, QLD
- Australian Federation of AIDS Organisations, Sydney, NSW
- Australian Government Department of Health, Canberra, ACT
- Australian Injecting and Illicit Drug Users' League
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Paediatric Surveillance Unit and its contributors, Westmead, NSW
- Australian Red Cross Blood Service, Melbourne, VIC
- Centre in Social Research in Health, UNSW, NSW
- Communicable Diseases Network Australia, Canberra, ACT
- Hepatitis Australia, Canberra, ACT
- National Aboriginal Community Controlled Health Organisation, ACT
- National Association of People with HIV Australia, Sydney, NSW
- National Drug and Alcohol Research Centre, UNSW, 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, 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, VIC; Hepatitis B Program, Epidemiology Unit, Victorian Infectious Diseases Reference Laboratory, Melbourne, VIC
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Australian Gonococcal Surveillance Programme

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- Department of Microbiology, The Prince of Wales Hospital, Randwick, NSW
- Microbiology Laboratory, Royal Darwin Hospital, Casuarina, NT
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- Microbiology and Infectious Diseases Department, SA Pathology at Women's and Children's Hospital, North Adelaide, SA
- Department of Microbiology and Infectious Diseases, Royal Hobart Hospital, Hobart, TAS
- The Microbiological Diagnostic Unit (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
- Fremantle Sexual Health Service, Fremantle, WA

Genital Warts Surveillance Network

Contributing organisations

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

Australian HIV Observational Database

- Tamworth Sexual Health Service, Tamworth; Blue Mountains Sexual Health Clinic, Katoomba; Holdsworth House Medical Practice, Darlinghurst; Illawarra Sexual Health, Wollongong; Royal Prince Alfred Hospital Sexual Health Clinic, Camperdown; Macquarie Sexual Health Centre, Dubbo; Nepean Sexual Health and HIV Clinic, Penrith; Holden Street Clinic, Gosford; Lismore Sexual Health & AIDS Services, Lismore; St Vincent's Hospital, Darlinghurst; Sydney Sexual Health Centre, Sydney, Dr Ellis General Medical Practice, Coffs Harbour; Taylor Square Private Clinic, Darlinghurst; East Sydney Doctors, Surry Hills, NSW
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- The Alfred Hospital, Prahran; Melbourne Sexual Health Centre, Carlton; Monash Medical Centre, Clayton; Prahran Market Clinic, South Yarra; The Centre Clinic, St Kilda; The Carlton Clinic, Carlton; Northside Clinic, Fitzroy North, VIC
- Department of Clinical Immunology, Royal Perth Hospital, Perth, WA

Collaboration of Australian Needle and Syringe Programs

- Directions ACT; Canberra, 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 Northern Rivers Harm Reduction Service, Ballina, Byron Bay, Coffs Harbour, Grafton, Lismore, Murwillumbah, Nimbin, and Tweed Heads; Resource and Education Program for IDUs, Redfern; Central Access Service, Kogarah and Sutherland; South Court Primary Care NSP, Nepean; Western Sydney West HIV/Hepatitis C Prevention Service, Blacktown, Mt Druitt and Parramatta, NSW
- 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, QLD
- Drug and Alcohol Services South Australia, Adelaide; Hindmarsh Centre, Hindmarsh; Nunkuwarrin Yunti Community Health Centre, Adelaide; Street Link Youth Health Service, 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, SA
- Anglicare NSP Service, Hobart and Glenorchy; Clarence Community Health Centre, Clarence; Devonport Community Health Centre, Devonport; Salvation Army Launceston, Launceston, TAS
- 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, VIC
- WA AIDS Council Mobile Exchange, Perth; Western Australia Substance Users Association (WASUA), Perth and South Coast, WA
- St Vincent's Centre for Applied Medical Research (AMR) and NSW State Reference Laboratory for HIV at St Vincent's Hospital, Sydney, NSW

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- Simon Donohoe, Australian Federation of AIDS Organisations, Sydney, NSW
- James Ward, Baker IDI Central Australia, NT
- Dr Benjamin Cowie, Victorian Infectious Diseases Reference Laboratory, VIC
- Associate Professor David Wilson (Chair), Professor Basil Donovan, Professor Lisa Maher, Associate Professor Rebecca Guy, Dr Marlene Kong, Dr Iryna Zablotska-Manos, Dr Jenny Iverson, Dr Lei Zhang, Ann McDonald, Andrew Nakhla, Megan Tapia, The Kirby Institute

Summary

HIV infection

- A total of 1 236 cases of newly diagnosed HIV infection was notified in Australia in 2013, similar to the number notified in 2012 (1 253). The rate of HIV diagnosis per 100 000 population increased from around 4.7 in 2004 – 2008 to 5.1 in 2009 – 2013.
- An estimated 26 800 people were living with HIV infection in Australia at the end of 2013.
- 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 around 6.1 in 2004 – 2008 to 5.5 in 2009 – 2013. In Victoria, the rate was stable at around 5.4 in 2004 – 2008 and 5.5 in 2009 – 2013. Population rates of HIV diagnosis increased in Queensland, from around 4.4 in 2004 to 2008, to 5.1 from 2009 to 2013, and in Western Australia, from 3.6 to 4.2. The rates of HIV diagnosis in the less populous jurisdictions with relatively few cases compared with the more populous jurisdictions show considerable variation from year to year. The rate of HIV diagnosis increased in the Australian Capital Territory from 2.0 in 2004 – 2008 to 3.7 in the five years 2009 – 2013, in the Northern Territory from 3.5 to 6.8, and in Tasmania, from 1.6 to 2.7, whereas in South Australia the rate remained stable at 3.6 and 3.4.
- HIV continued to be transmitted primarily through sexual contact between men, accounting for 71% of new HIV diagnoses in 2013.
- The number of notifications of newly acquired HIV infection in Australia increased from 261 in 2004 to 350 in 2013. Notifications of newly acquired HIV infection indicate the lower bound to the number of cases of recent HIV transmission that have actually occurred in Australia.
- The *per capita* rate of HIV diagnosis in the Aboriginal and Torres Strait Islander population was similar to that in the Australian-born non-Indigenous population during the years from 2004 to 2011 and was higher in 2012 and 2013. Aboriginal and Torres Strait Islander cases of HIV infection differed from Australian-born non-Indigenous cases newly diagnosed in the five years from 2009 to 2013 in that a substantially greater proportion were attributed to injecting drug use (12% compared with 3%) and heterosexual contact (21% compared with 13%). A substantially higher proportion of Aboriginal and Torres Strait Islander cases were among women (20%) compared with Australian-born non-Indigenous cases (5%).
- Of 1 417 cases of HIV infection newly diagnosed in 2009 – 2013, for which exposure to HIV was attributed to heterosexual contact, 56% were in people from high prevalence countries or their partners.

Viral hepatitis

- The *per capita* rate of notification of hepatitis B infection in Australia in 2009 – 2013 was stable at around 31 per 100 000 population. The rate of notification of newly acquired hepatitis B infection steadily declined in Australia from 1.2 in 2009 to 0.7 per 100 000 population in 2013.
- An estimated 210 000 people were living in Australia in 2013 with hepatitis B infection. An estimated 389 (300 – 635) deaths in 2013 were attributable to chronic hepatitis B infection. The estimated prevalence of chronic hepatitis B infection in the Australian population in 2013 was 0.97%.
- The *per capita* rate of diagnosis of hepatitis C antibody declined from 52.7 in 2009 to 46.3 per 100 000 population in 2013. The rate of diagnosis of hepatitis C antibody in the Aboriginal and Torres Strait Islander population was more than three times the rate in the non-Indigenous population in 2013.
- An estimated 230 000 people were living in Australia with chronic hepatitis C infection, including 80 000 with moderate to severe liver disease. The estimated number of people living with moderate to severe liver disease has more than doubled (115% increase) over the past ten years. An estimated 630 (400 – 880) deaths attributable to chronic hepatitis C infection occurred in 2013.
- Chronic hepatitis B infection and chronic hepatitis C infection was the underlying cause of liver disease in 8 (3.6%) and 67 (30.2%) of 222 liver transplants in 2013.

- The reported annual number of notifications of newly acquired hepatitis C infection was stable at around 410 cases per year in 2009 – 2013 and accounted for 4% of new hepatitis C diagnoses in 2013.
- 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.
- The proportion of people seen at needle and syringe programs who reported having injected drugs for five years or less was stable in 2009 – 2013 at around 11%. Within this group, hepatitis C prevalence declined from 21% in 2011 to 14% in 2013.

Sexually transmissible infections other than HIV

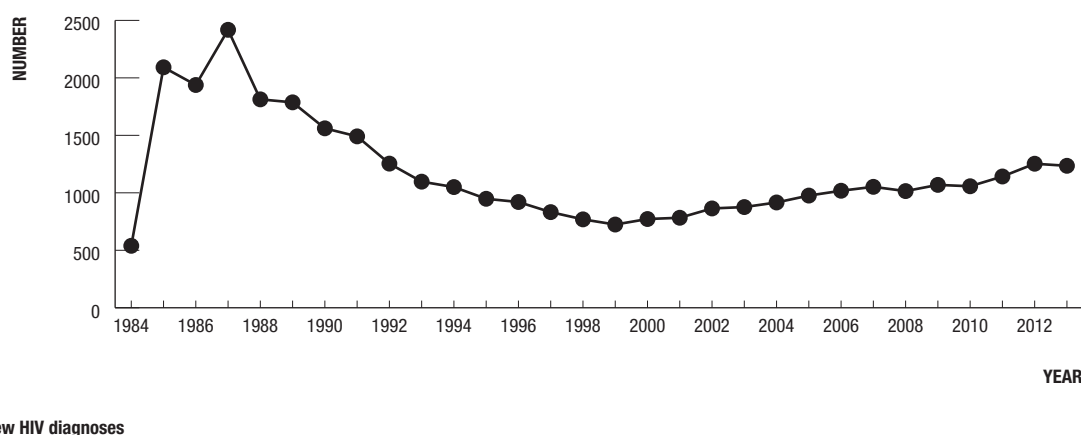
- Chlamydia was the most frequently reported notifiable condition in Australia in 2013 with 82 537 diagnoses. The population rate of diagnosis of chlamydia in 2013 was 359 per 100 000 population, a decline on the rate for 2012 (364). This is the first occurrence of a reversal in the increasing trend in rates of chlamydia diagnosis from the commencement of notification by all state and territory health jurisdictions in 1999.
- One case of donovanosis was notified in 2009, 2010 and 2012, demonstrating the continuing success of efforts to eliminate donovanosis from the Australian population.
- The number of cases of gonorrhoea notified in 2013 was 14 947. The rate of diagnosis of gonorrhoea increased by 72%, from 37.5 per 100 000 population in 2009 to 64.6 in 2013, with increasing diagnoses in both males and females.
- The number of cases of infectious syphilis notified in 2013 was 1 765, the highest number recorded in Australia. The rate of diagnosis of infectious syphilis increased among males from 5.0 in 2004 to 14.0 in 2013. Increased rates of diagnosis of infectious syphilis in 2013 occurred in New South Wales, Queensland, Tasmania and Victoria, particularly among gay men, and declining rates were reported in Western Australia and the Northern Territory.
- The rate of diagnosis of chlamydia in the Aboriginal and Torres Strait Islander population was three times that in the non-Indigenous population in 2009 – 2013. The rate of diagnosis of gonorrhoea in the Aboriginal and Torres Strait Islander population was between 13 to 24 times higher than the rate in the 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 at their first visit to a sexual health centre decreased from 14% in 2007 to 1% in 2013.

Main Findings

HIV infection

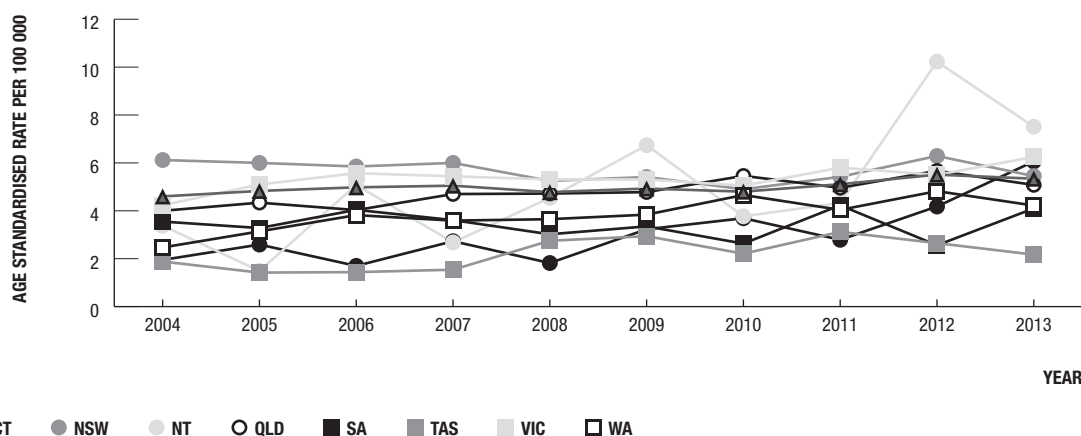
A total of 1 236 cases of HIV infection was notified in Australia in 2013, similar to the number notified in 2012 (1 253). Annual counts of new HIV diagnoses in 2012 and 2013 were as high as those in 1992 (Figure 1). The rate of HIV diagnosis per 100 000 population increased from around 4.7 in 2004 – 2008 to 5.1 in 2009 – 2013, a 9% increase over the past 10 years.

Figure 1 Newly diagnosed HIV infection in Australia by year



Recent trends in the population rate of newly diagnosed HIV infection have differed across Australia. In New South Wales, the rate of HIV diagnosis has remained relatively stable, or slightly declined, from 6.1 per 100 000 population in 2004 to 4.9 in 2010 and 5.5 in 2013 (Figure 2). The rate of HIV diagnosis in the Australian Capital Territory increased substantially from 3.2 in 2009 to 6.1 in 2013. The rate of HIV diagnosis remained stable in Victoria in the years 2004 – 2008 and 2009 – 2013 at around 5.3 and 5.5, respectively, and at around 3.5 and 3.3 in South Australia. Population rates of HIV diagnosis increased over time in the Northern Territory, from 3.5 in 2004 – 2008 to 6.8 in 2009 – 2013, in Queensland, from around 4.4 to 5.1, in Tasmania, from 1.6 to 2.7, and in Western Australia, from 3.6 to 4.2.

Figure 2 Newly diagnosed HIV infection, 2004 – 2013, by year and State/Territory



Of 1 236 cases of HIV infection newly diagnosed in Australia in 2013, 208 (16.8%) 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 2013.

Figure 3 Newly diagnosed HIV infection in Australia, 2004 – 2013, by newly acquired HIV status and year

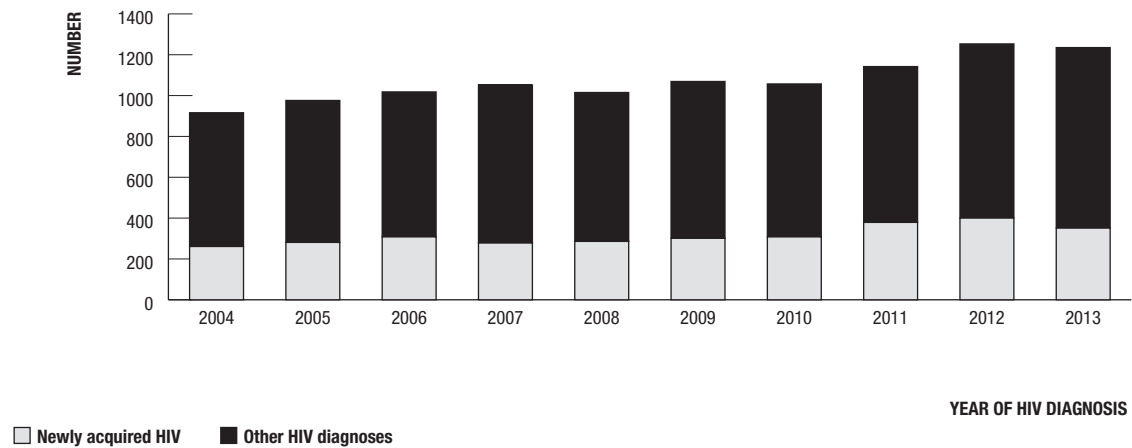
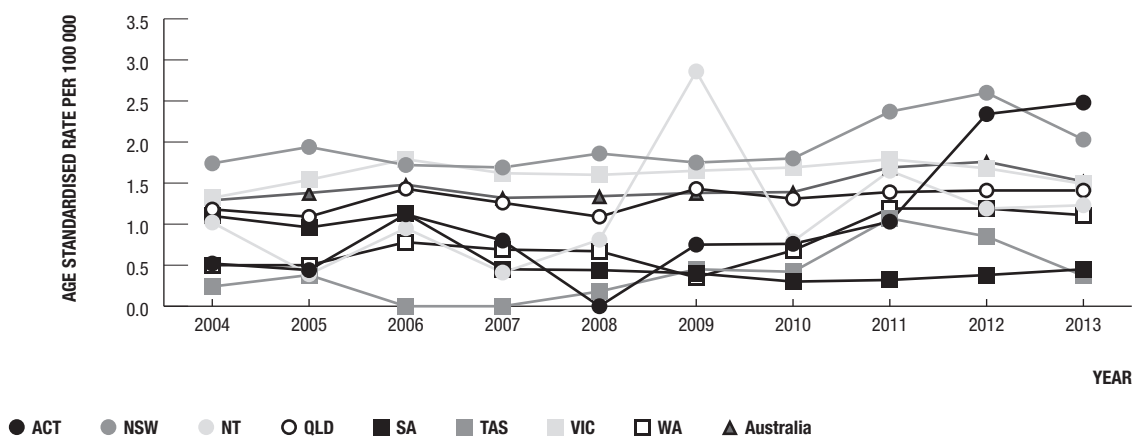
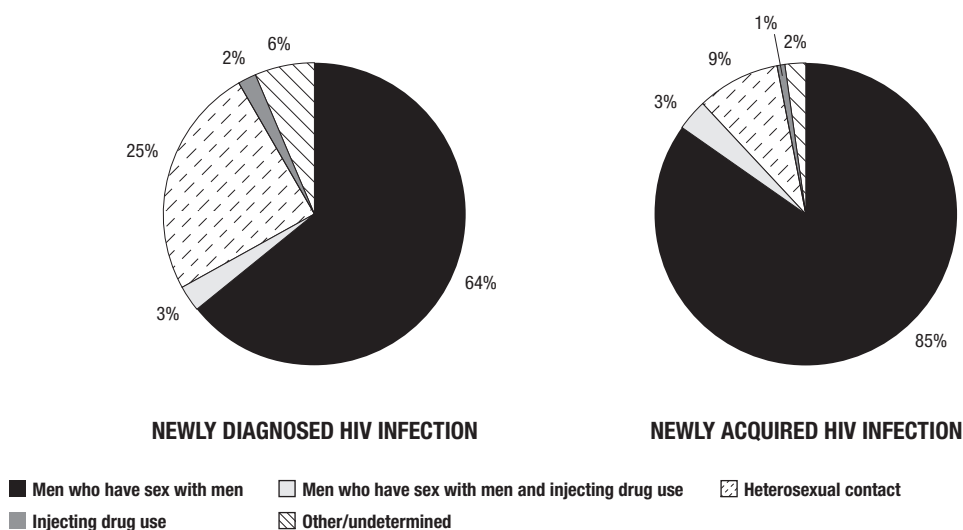


Figure 4 Newly acquired HIV infection, 2004 – 2013, by State/Territory and year



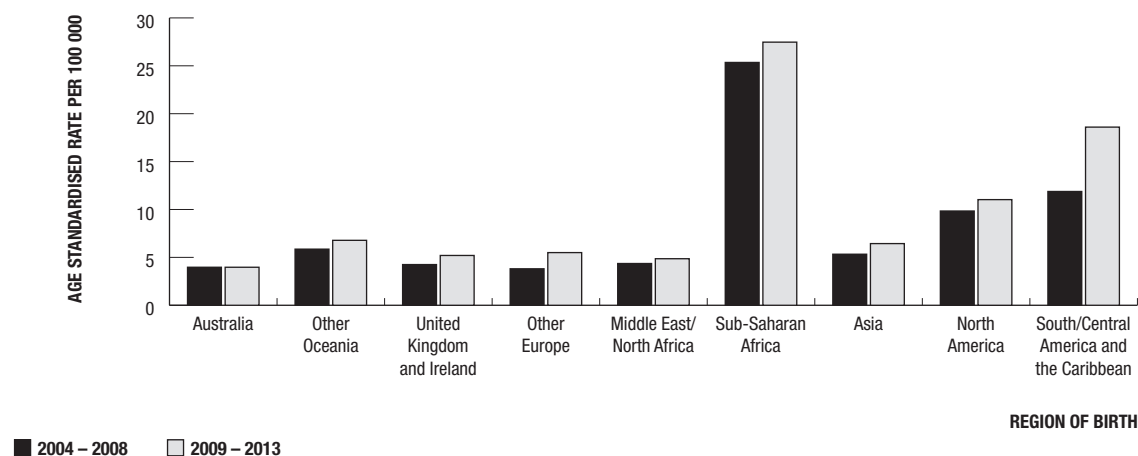
Among cases of newly diagnosed HIV infection, the proportion who acquired the infection in the 12 months prior to diagnosis gradually increased from 28% in 2009 to 33% in 2011 and then declined in 2013 to 28% (Figure 3). In New South Wales, the population rate of diagnosis of newly acquired HIV infection was stable at around 1.7 from 2004 to 2010, then increased to 2.6 in 2012 and declined to 2.0 in 2013 (Figure 4). The rate of diagnosis of newly acquired HIV infection in the Australian Capital Territory increased sharply from 0.8 in 2009 to 2.5 in 2013. In Victoria, the rate was around 1.7 from 2006 to 2012 and declined to 1.5 in 2013. In South Australia, the rate dropped from 1.1 in 2004 to 2006 to 0.4 in 2007 to 2013. The rate in Queensland increased from 1.2, from 2004 to 2008, to 1.4 from 2009 to 2013, in Tasmania from 1.6 to 2.7 and in Western Australia from 0.7 to 1.1.

Figure 5 Newly diagnosed HIV infection and diagnoses of newly acquired HIV infection in Australia, 2009 – 2013, by HIV exposure category



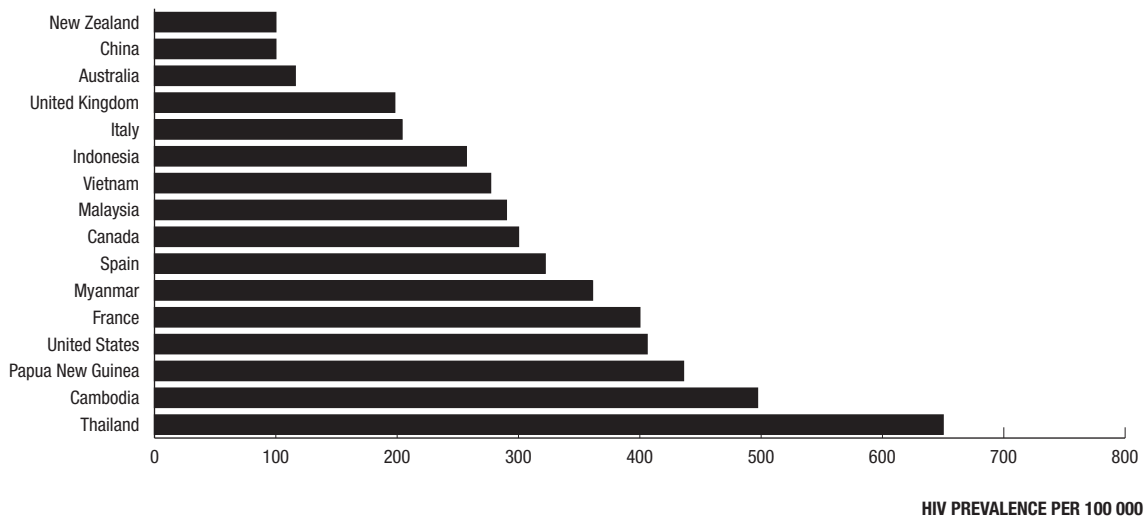
Transmission of HIV in Australia continues to occur primarily through sexual contact between men (Figure 5). In 2009 – 2013, 67% of new HIV diagnoses occurred among men who have sex with men (71% of reported exposure routes), 25% were attributed to heterosexual contact, 2% to injecting drug use and exposure 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 Rate of HIV diagnosis in Australia, 2004 – 2013, by country/region of birth and year



People born in Australia accounted for 53% of cases of HIV infection newly diagnosed in 2009 – 2013. Among Australian-born cases, the rate of HIV diagnosis was stable at 4.0 in 2004 – 2013 (Figure 6). The rate of HIV diagnosis in the overseas-born population increased from 6.7 in 2004 – 2008 to 7.8 in 2009 – 2013. The population rate of HIV diagnosis in the sub-Saharan African-born and Asian-born populations in the 5 years from 2009 to 2013 compared with the previous 5 years increased by 66%; 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 2013, an estimated 26 800 (ranging from the lowest value of 24 500 to a highest value of 30 900) people were living in Australia with HIV infection. As an overall national prevalence (116 per 100 000, range 114 – 134), the level of HIV infection in Australia is lower than in the United Kingdom in 2013 (198 per 100 000 population) and three-to-four-fold lower than in the United States in 2010 (406 per 100 000).

Viral hepatitis

The population rate of reported diagnoses of hepatitis A infection in Australia remained at or below 1.3 per 100 000 population in 2009 – 2013, 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, 2004 – 2013, by year and sex

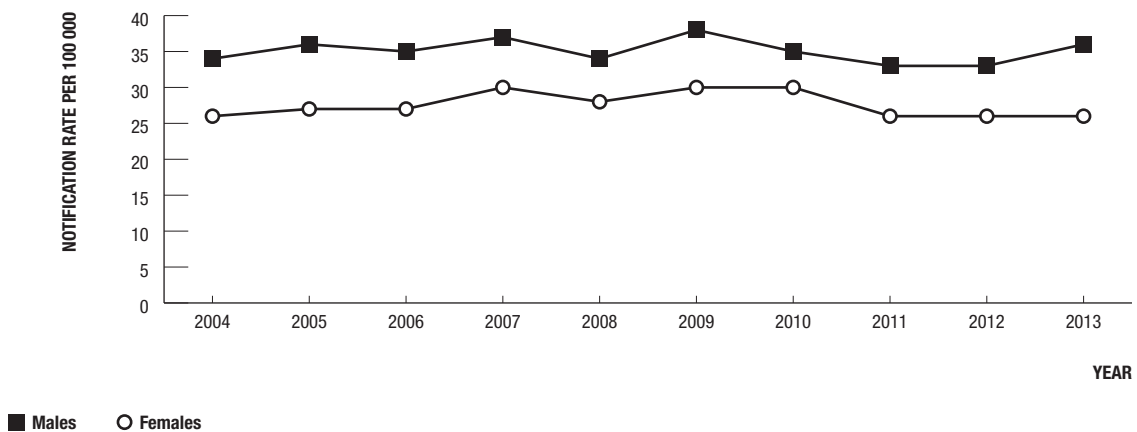
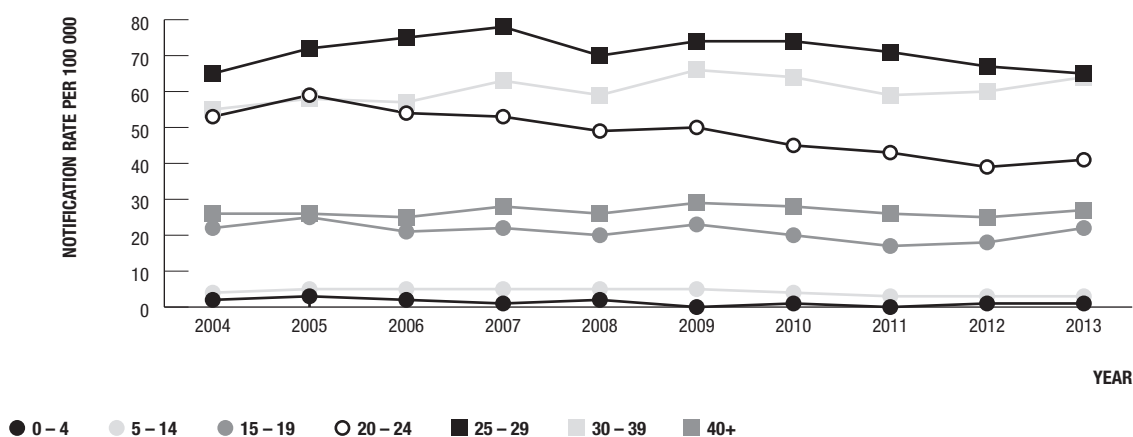


Figure 9 Hepatitis B notifications, 2004 – 2013, by year and age group



The population rate of diagnosis of hepatitis B infection in Australia declined slightly from 33.8 per 100 000 population in 2009 to 30.9 in 2013 (Figure 8). The decreases in the rate of hepatitis B diagnosis were mainly among people aged 20 – 24 years, from 53.2 in 2004 to 41.3 in 2013 (Figure 9). The number and rate of diagnosis of newly acquired hepatitis B decreased from 253 and 1.2 in 2009 to 171 and 0.7 in 2013 (Figure 10). The rate of diagnosis of newly acquired hepatitis B infection declined substantially from 2004 among people aged older than 20 years (Figure 11). Adolescent “catch up” vaccination programs may have contributed to this reduction. However, the rate of diagnosis of newly acquired hepatitis B infection also declined among those aged 30 years or older. Notifications of newly acquired hepatitis B infection have declined in people born overseas but increased in people born in Australia (Table 2.1.8).

Figure 10 Newly acquired hepatitis B notifications, 2004 – 2013, by year and sex

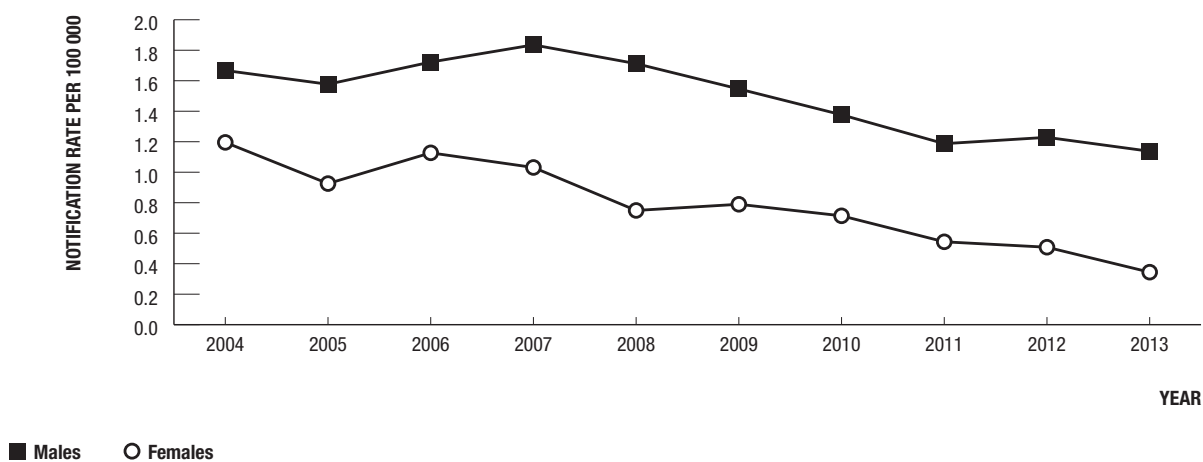
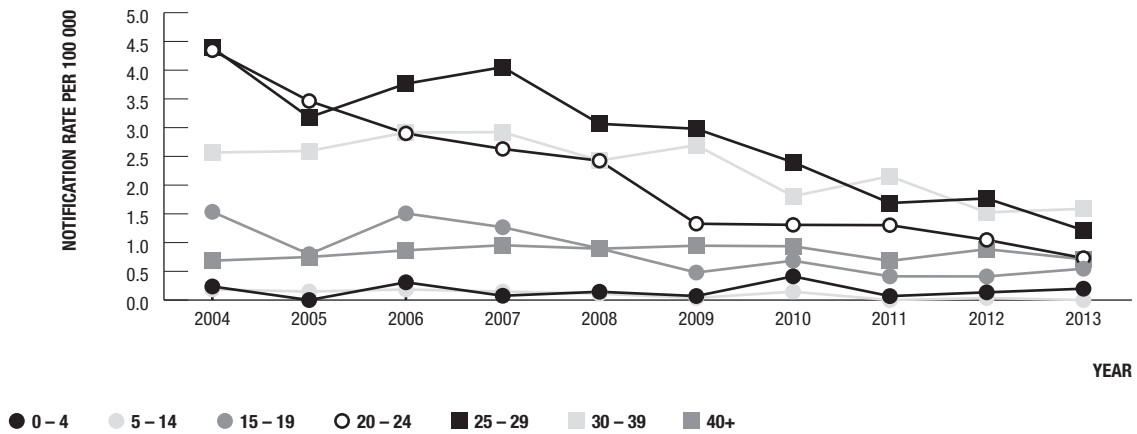
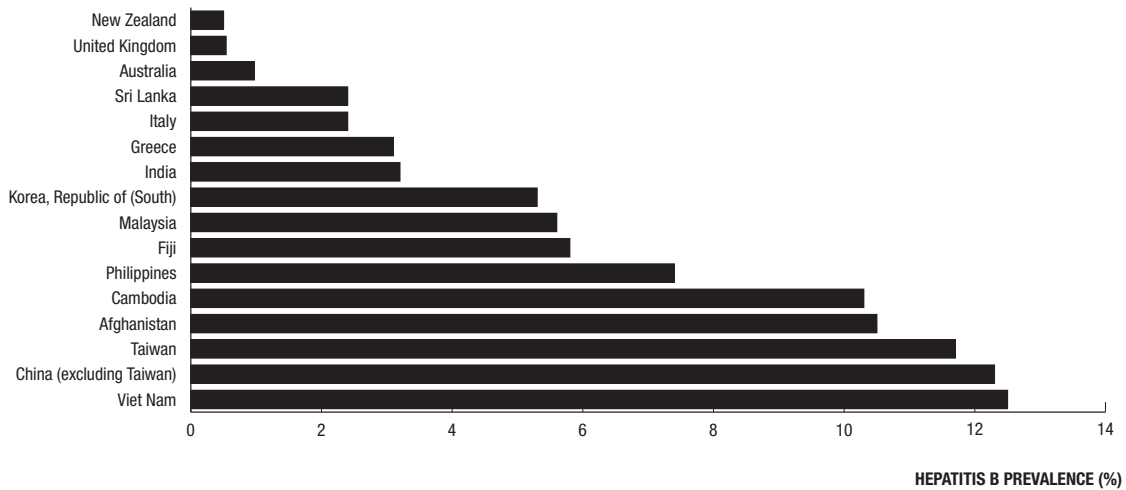


Figure 11 Newly acquired hepatitis B notifications, 2004 – 2013, by year and age group



In 2013, the estimated number of people living in Australia with chronic hepatitis B was 210 000. 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 several other major 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 11 480 and 52.7 in 2009 to 10 698 and 46.3 in 2013. Declines have been observed in all age groups. In the past ten years, the rate declined in most age groups but most prominently in the 25 – 29 year age group (by 50%), and by 43% in the 20 – 24 year age group (Figure 13).

Figure 13 Hepatitis C notifications, 2004 – 2013, by year and age group

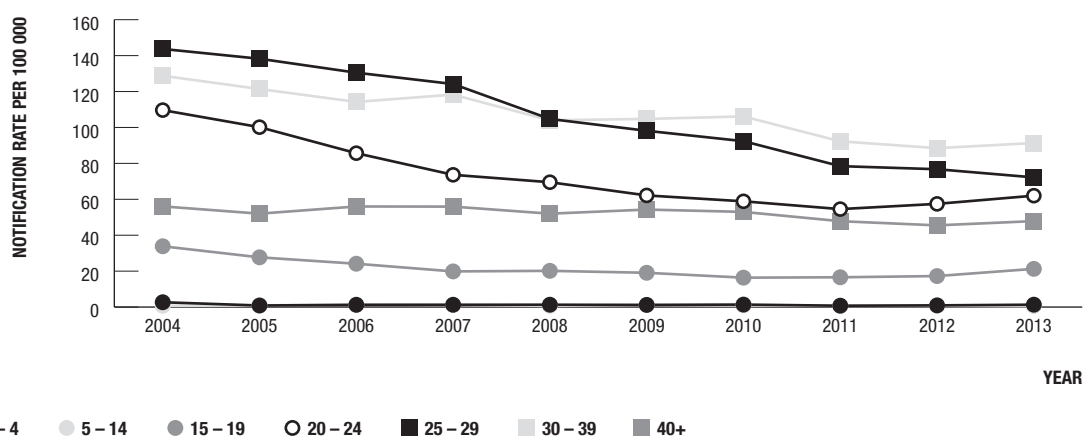
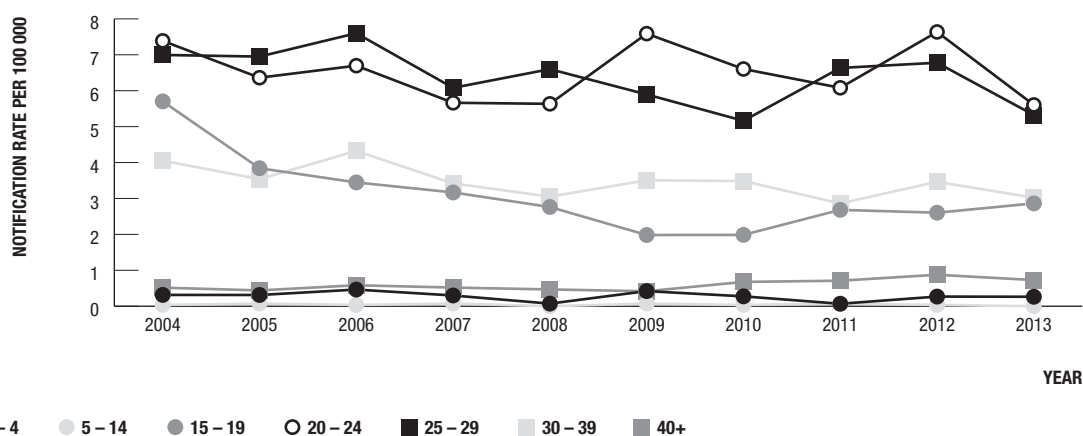


Figure 14 Newly acquired hepatitis C notifications, 2004 – 2013, by year and age group



Around 4.0% of cases of hepatitis C infection diagnosed in 2009 – 2013 were documented as having been acquired within the previous two years. Reports of newly acquired hepatitis C continued to occur at the highest rate among adults aged 20 – 24 and 25 – 29 years (Figure 14) (Table 2.1.13). Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence ranged 5.4 per 100 person years to 13.0 between 2009 and 2013 (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 3.9 in 2013 (Table 4.3.2).

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 210 000 (172 000 – 249 000) people were living with hepatitis B infection and 389 (300 – 635) deaths were attributed to chronic hepatitis B infection in 2013 (Table 6.2.1). 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)

There were an estimated 5 400 (range 5 000 – 5 800) incident cases of hepatitis C in Australia in 2013 (Table 6.3.1). An estimated 310 000 (240 000 – 325 000) people living in Australia in 2013 had been exposed to hepatitis C virus. Of these, 80 000 people were estimated to have cleared their infection, and 230 000 (180 000 – 245 000) had chronic hepatitis C infection. Of these, 155 000 (115 000 – 165 000) had early liver

disease (stage F0/1), 64 000 (43 600 – 79 000) had moderate-to-severe liver disease (stage F2/3), and 11 400 (7 100 – 17 000) were living with hepatitis C related cirrhosis. The estimated number of people with at least moderate liver disease has more than doubled (115% increase) over the last 10 years.

Hepatitis C prevalence in 2013 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 2013, with 82 537 newly diagnosed cases. The population rate of reported diagnoses reached a peak in 2012 at 364 per 100 000 population and declined slightly to 359 in 2013. The rate among women peaked in 2011 at 422 per 100 000 population and declined to 410 in 2013 whereas the rate among men peaked in 2012 at 307 and declined to 303 in 2013 (Figure 15). This is the first time in recent history that there has been a decline in rates of chlamydia diagnosis.

Figure 15 Chlamydia notifications, 2004 – 2013, by year and sex

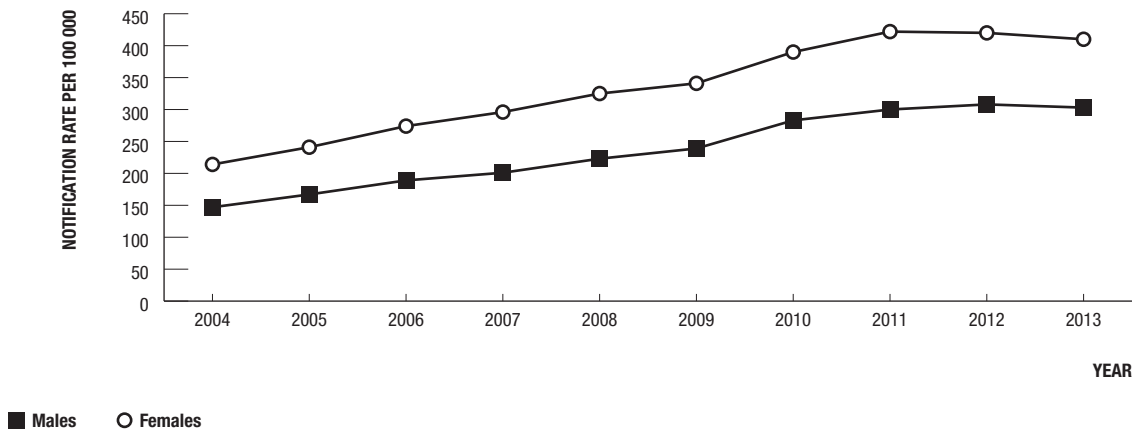
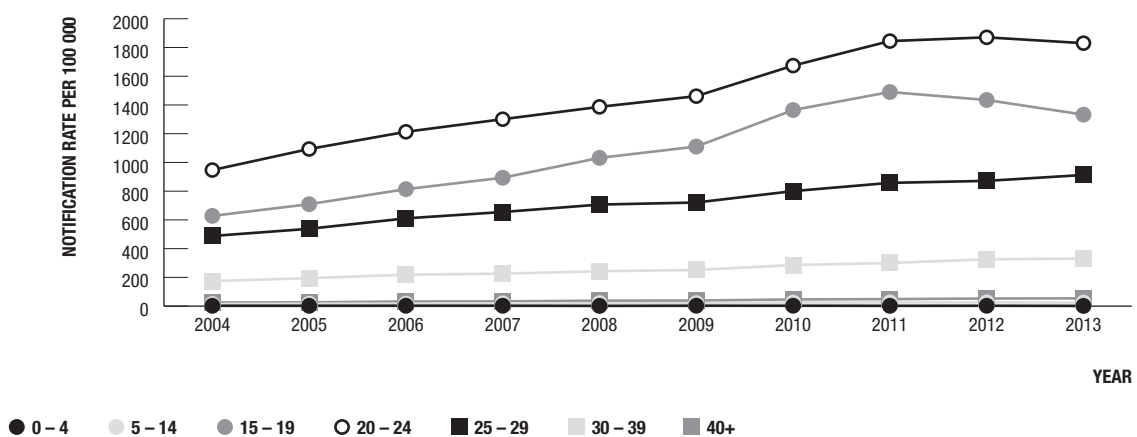


Figure 16 Chlamydia notifications, 2004 – 2013, by year and age group



The decline in the rate of chlamydia diagnosis commenced first in Western Australia in 2011 and in the Australian Capital Territory, New South Wales, Tasmania and Victoria in 2012. Rates of chlamydia diagnosis have not yet declined in the Northern Territory, Queensland or South Australia. Chlamydia diagnoses in the 15 – 24 year age group accounted for 61% of the annual number of diagnoses in 2011 and 57.8% of diagnoses in 2013 (Figure 16). In 2009 – 2013, the female-to-male sex ratio in the 15 – 19 year age group was 3:1 whereas it was 1:1 in the 25 – 29 year age group. Age- and sex-specific patterns of diagnosis may have been influenced by differential testing rates.

Figure 17 Gonorrhoea notifications, 2004 – 2013, by year and sex

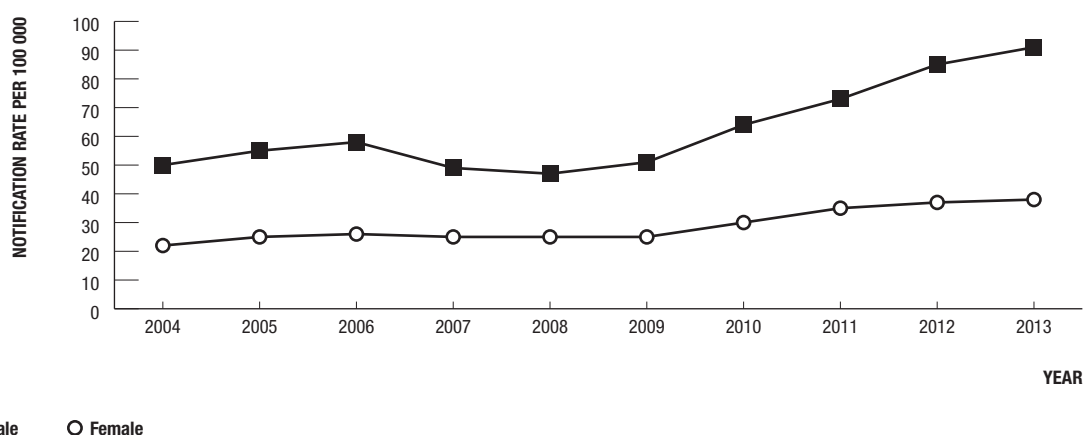
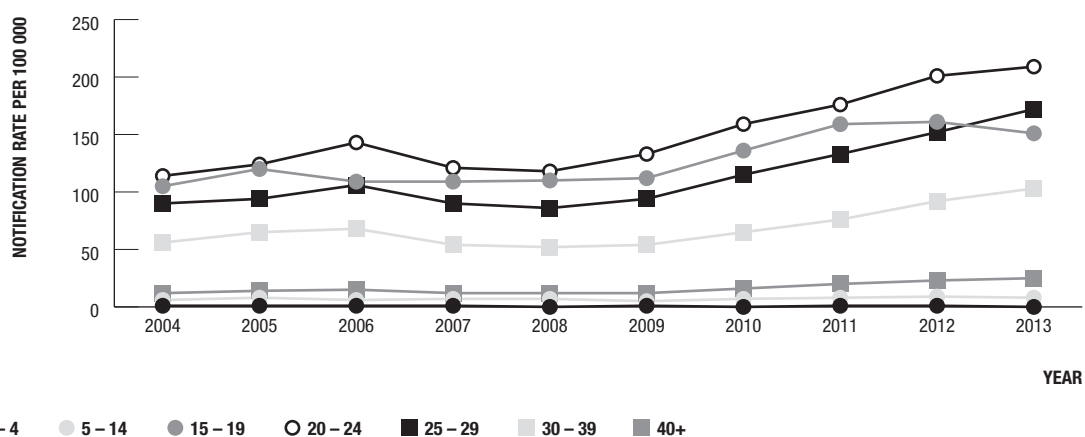


Figure 18 Gonorrhoea notifications, 2004 – 2013, by year and age group



The population rate of diagnosis of gonorrhoea among males and females was relatively stable in 2004 – 2008 at around 50 and 25, respectively, followed by a substantial increase in diagnosis rates among males, from 51 in 2009 to 91 in 2013, and a comparatively small increase among females, from 25 in 2009 to 38 in 2013 (Figure 17). The rates of diagnosis of gonorrhoea increased by at least 2-fold in the Australian Capital Territory, New South Wales, South Australia and Tasmania. In the past ten years, the rate of gonorrhoea diagnosis continued to increase in all age groups except the 15 – 19 year age group. The rate of gonorrhoea diagnosis was highest in the 15 – 19 year age group at 161 in 2012 and declined to 151 in 2013 (Figure 18). The proportion of gonorrhoea diagnoses among people aged 15 – 19 years was 19% in 2009 – 2011 and declined to 17% and 15% in 2012 and 2013, respectively.

Figure 19 Infectious syphilis notifications, 2004 – 2013, by year and sex

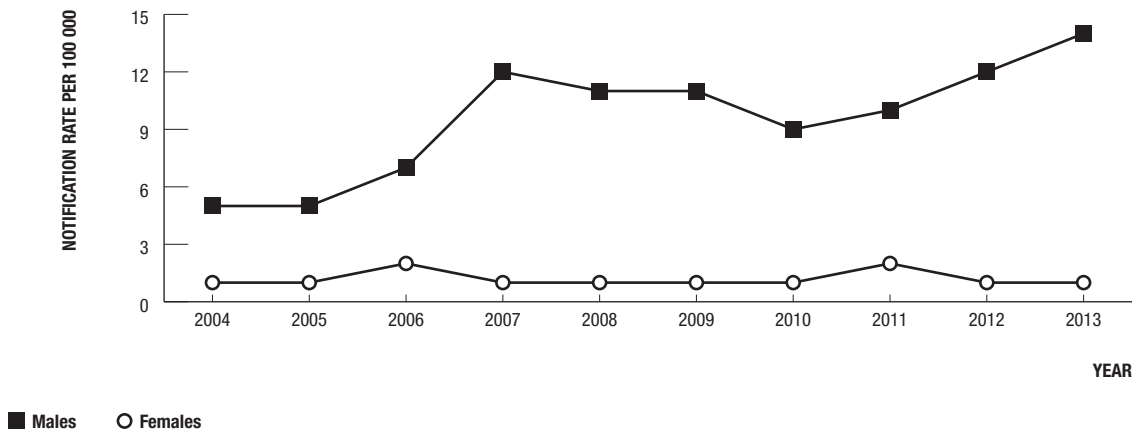
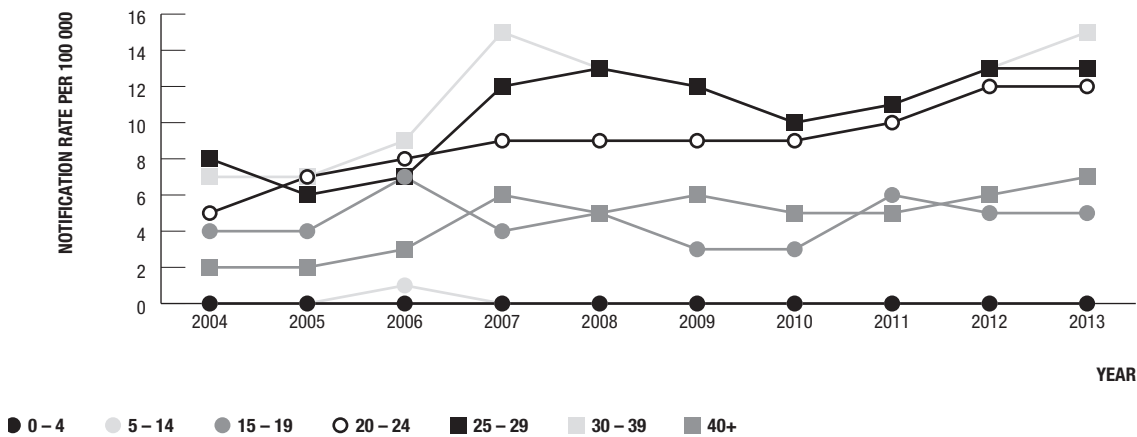


Figure 20 Infectious syphilis notifications, 2004 – 2013, by year and age group



The rate of diagnosis of infectious syphilis among men increased to greater than 9.0 per 100 000 population in the years 2007 – 2009 and increased again from 9.0 in 2010 to 14.0 in 2013 whereas the rate among women remained stable at 1.0 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, New South Wales, Queensland and Victoria recorded increasing rates of diagnosis of infectious syphilis whereas rates were stable or declining in Western Australia and in the Northern Territory. 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 and gonorrhoea in the Northern Territory continue to be substantially greater than those in other states and territories. No cases of donovanosis were diagnosed in Australia in 2013, maintaining virtual elimination.

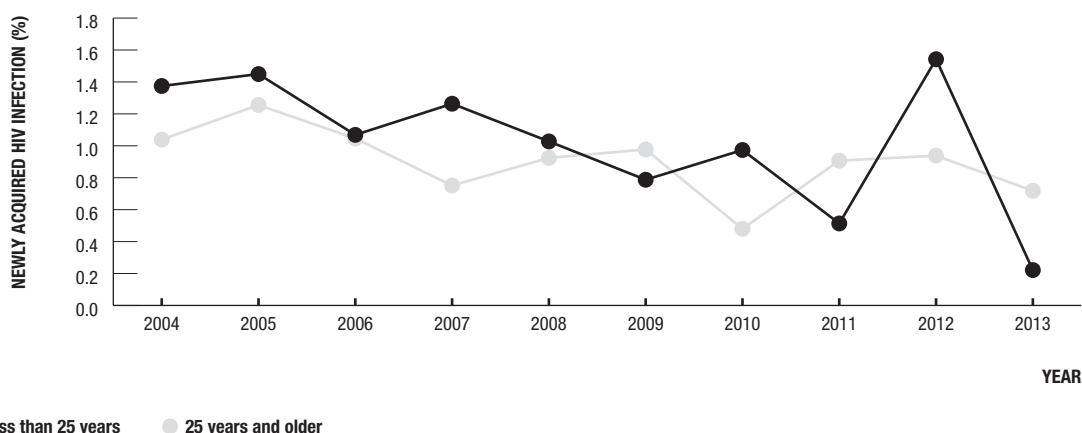
HIV, viral hepatitis and sexually transmissible infections in selected populations

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 infection, gay and other men who have sex with men, Aboriginal and Torres Strait Islander people, people from high HIV prevalence countries and their partners, travellers and migrant workers, sex workers, people who inject drugs, young people, non-hepatitis B vaccinated people and people in custodial settings. 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

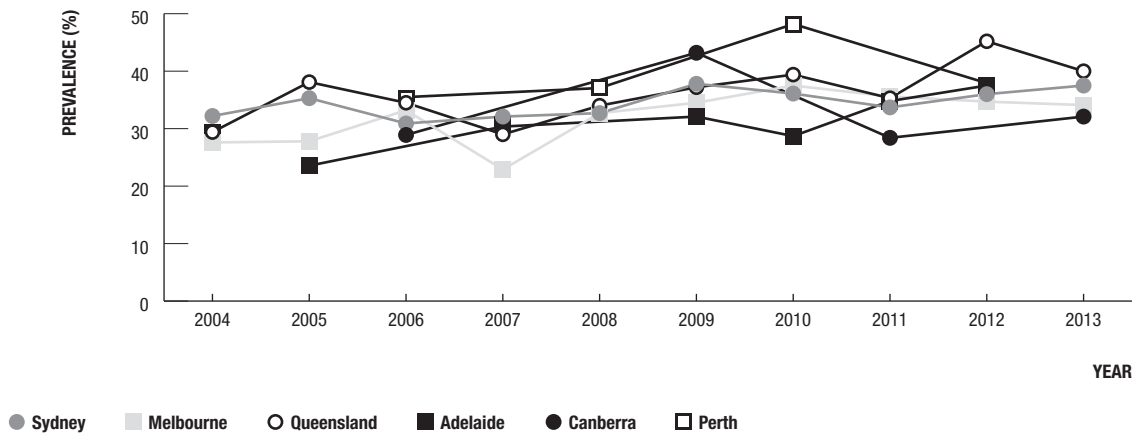
Men who have sex with men continue to make up the majority of people with diagnosed HIV infection in Australia. The overall number of new HIV diagnoses in this category was 3 343 in 2004 – 2008 and 3 863 in 2009 – 2013. Sexual transmission between men accounted for a greater proportion of diagnoses of newly acquired HIV infection in 2009 – 2013 (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, 2004 – 2013, by year and age group



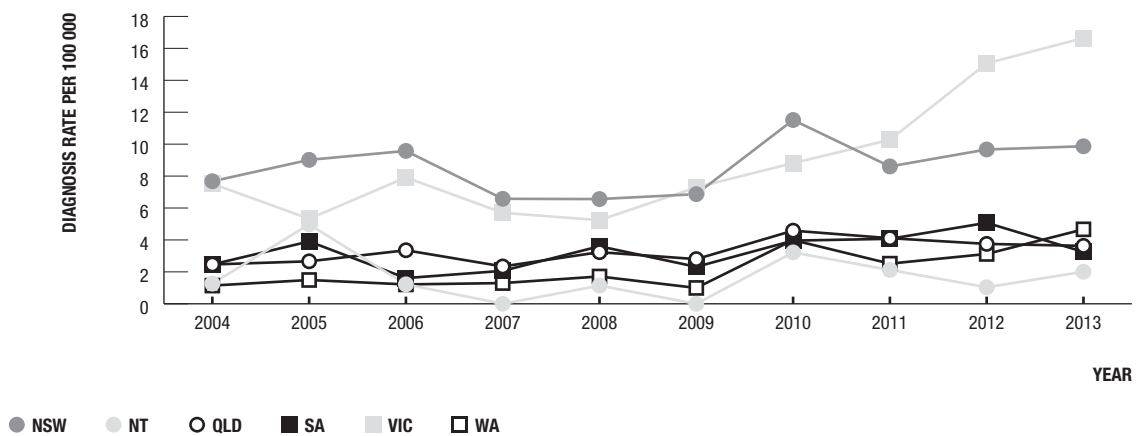
Among men who have sex with men seen at metropolitan sexual health clinics, the percentage of those younger than 25 years of age who were diagnosed with newly acquired HIV infection in the ten years from 2004 to 2013 dropped to its lowest point (0.2) in 2013. Among men aged 25 years and older, the percentage with newly acquired infection declined from 1.0% in 2004 to 0.7% in 2013 (Figure 21).

Figure 22 Prevalence of condom-less anal intercourse with casual partners reported by men in Gay Community Periodic Surveys



The proportion of Sydney respondents to the Gay Community Periodic Survey who reported condom-less anal intercourse with casual partners increased from around 32% in 2004 – 2008 to 36% in 2009 – 2013 (Figure 22). The same survey carried out in Queensland indicated that the proportion of respondents reporting unsafe sexual behaviour increased from around 32% in 2004 – 2008 to around 39% in 2009 – 2013. The respondents in Melbourne also indicated an increase in unsafe sexual behaviour, from around 28% in 2004 – 2008, to 35% in 2009 – 2013. A recent decline in unsafe sexual behaviour was reported in Perth.

Figure 23 Gonococcal rectal infection among men, 2004 – 2013, 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 2004 – 2008 to 6.9 in 2009 – 2013. In Victoria, the rate of rectal gonococcal isolates more than doubled over the past five years, from 7.3 in 2009 to 16.6 in 2013 (Figure 23).

Aboriginal and Torres Strait Islander people

The rates of HIV diagnosis *per capita* in the Aboriginal and Torres Strait Islander and in the Australian-born non-Indigenous population were similar in 2004 – 2013 (Figure 24). In the Aboriginal and Torres Strait Islander population, the rate of HIV diagnosis was relatively stable in 2004 – 2011 at around 3.5 and increased to 4.8 per 100 000 population in 2012 and 2013. In the Australian-born non-Indigenous population, the rate of HIV diagnosis was also relatively stable at around 3.8 in 2004 – 2011 and then increased to 4.2 in 2012 and declined to 3.9 in 2013. 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 in the Australian born population, 2004 – 2013, by Aboriginal and Torres Strait Islander status and year

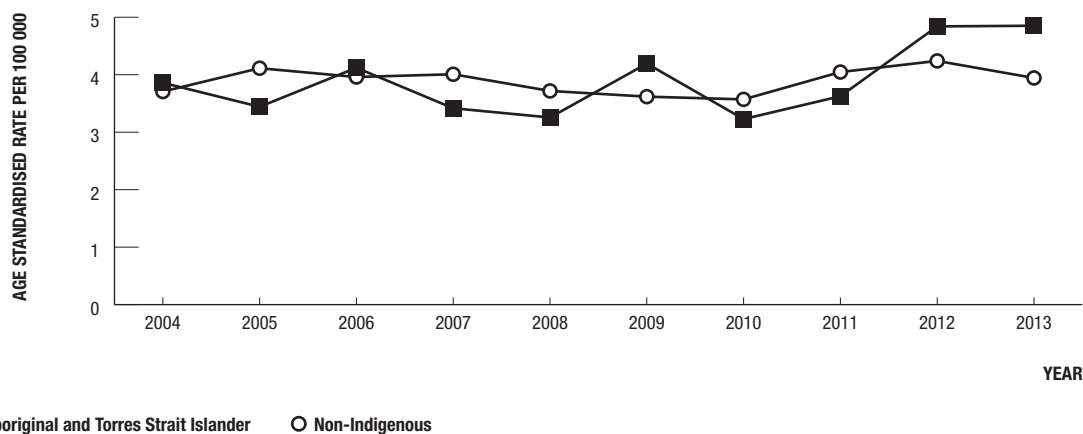
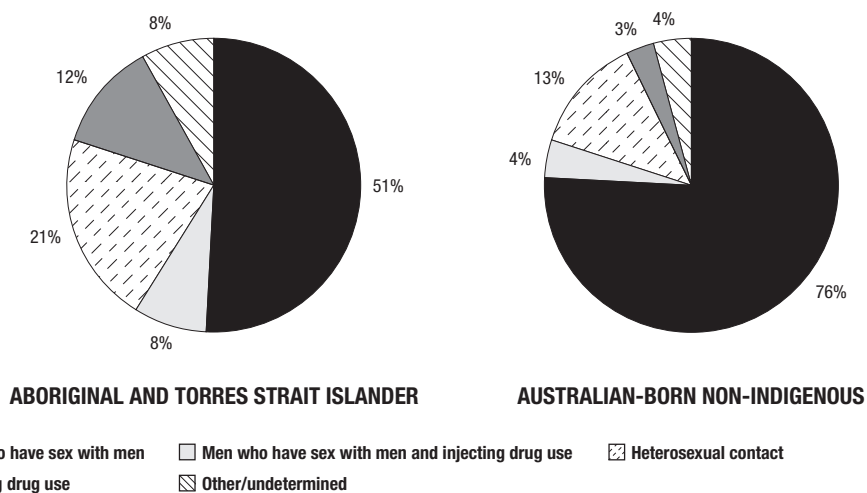


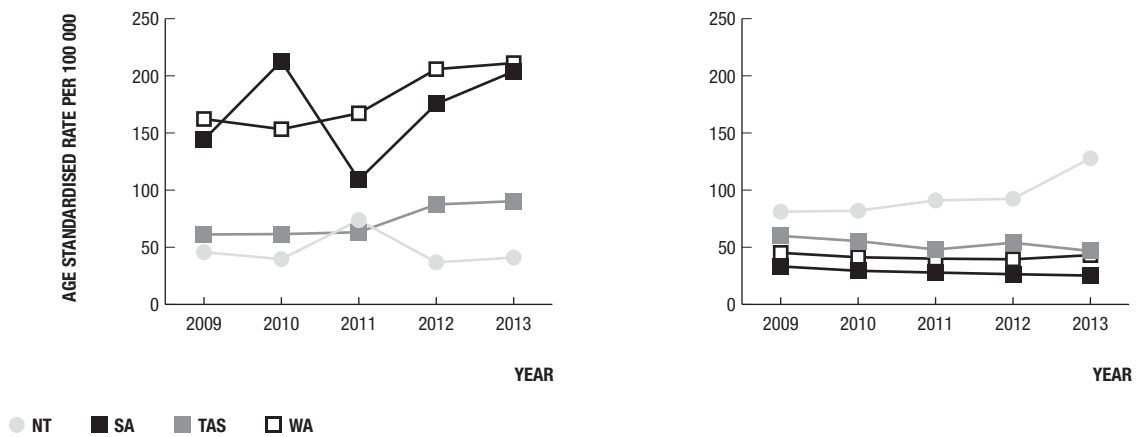
Figure 25 Newly diagnosed HIV infection, 2009 – 2013, by Aboriginal and Torres Strait Islander status and HIV exposure category



In 2009 – 2013, the most frequently reported route of HIV transmission was sexual contact between men in both the Australian-born non-Indigenous cases (80%) and in the Aboriginal and Torres Strait Islander cases (59%). Heterosexual contact was the reported source of exposure to HIV in 21% of Aboriginal and Torres Strait Islander cases and in 13% of Australian-born non-Indigenous cases (Figure 25). Aboriginal and Torres Strait Islander cases differed from non-Indigenous cases in that a greater proportion of infections were attributed to injecting drug use (12% among Aboriginal and Torres Strait Islander cases vs 3% for non-Indigenous cases), and a greater proportion of infections were among women (20.3% among Aboriginal and Torres Strait Islander cases vs 4.8% for non-Indigenous cases in 2009 – 2013).

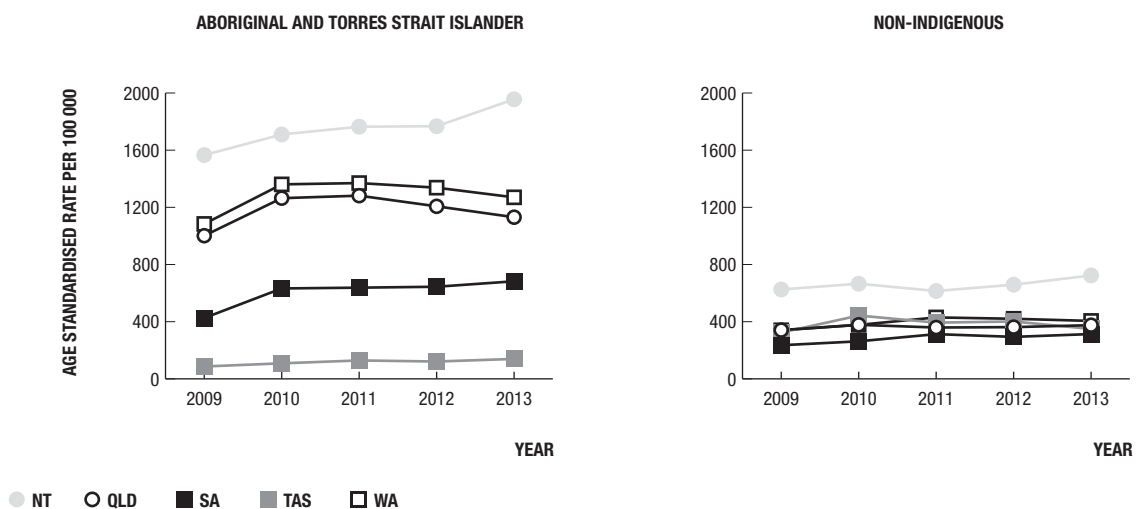
The rate of notification of hepatitis B infection in the Aboriginal and Torres Strait Islander population resident in the Australian Capital Territory, Northern Territory, South Australia, Tasmania and Western Australia declined from 100.2 in 2009 to 72.3 in 2013, and the rate of diagnosis of newly acquired hepatitis B infection was 3.5 or less in 2009 – 2013. In the non-Indigenous population, the rate of notification of hepatitis B increased from 28.6 in 2009 to 32.3 in 2013. The population rate of notification of newly acquired hepatitis B infection was around 1 per 100 000 population in 2009 – 2013.

Figure 26 Hepatitis C notifications, 2009 – 2013, by Aboriginal and Torres Strait Islander status, State/Territory and year



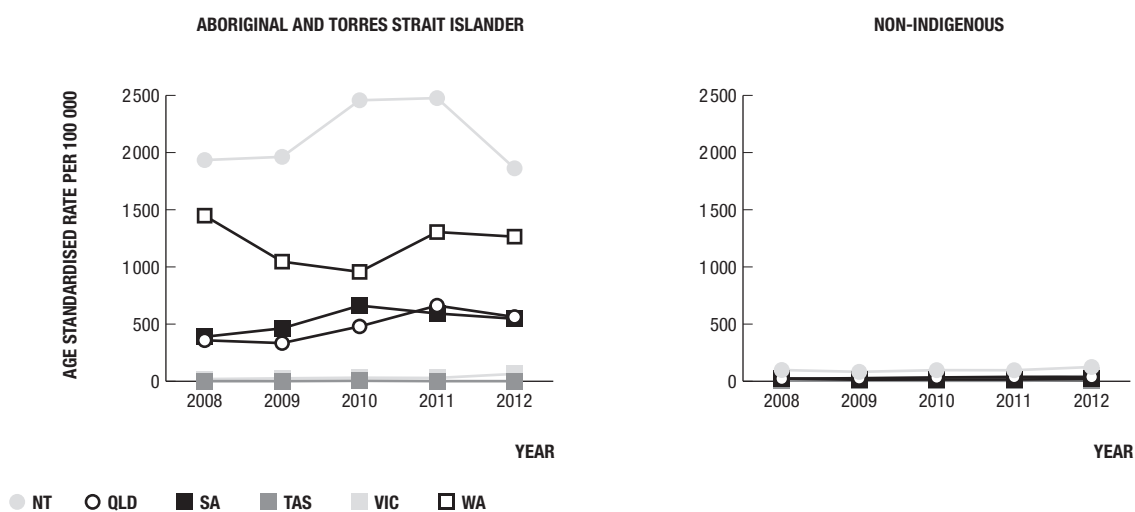
The population rate of notification of hepatitis C infection in the Aboriginal and Torres Strait Islander population resident in the Northern Territory, South Australia, Tasmania and Western Australia increased from 109.6 in 2009 to 141.9 per 100 000 population in 2013 and decreased in the non-Indigenous population from 43.6 in 2009 to 40.6 in 2013. In the Northern Territory, the rate of hepatitis C notification in the non-Indigenous population increased from 81.0 in 2009 to 127.8 in 2013 but has remained relatively stable in the Aboriginal and Torres Strait Islander population. In South Australia, Tasmania and Western Australia, the rate of hepatitis C notification was substantially greater in the Aboriginal and Torres Strait Islander population than in the non-Indigenous population.

Figure 27 Chlamydia notifications, 2009 – 2013, by Aboriginal and Torres Strait Islander status, State/Territory and year



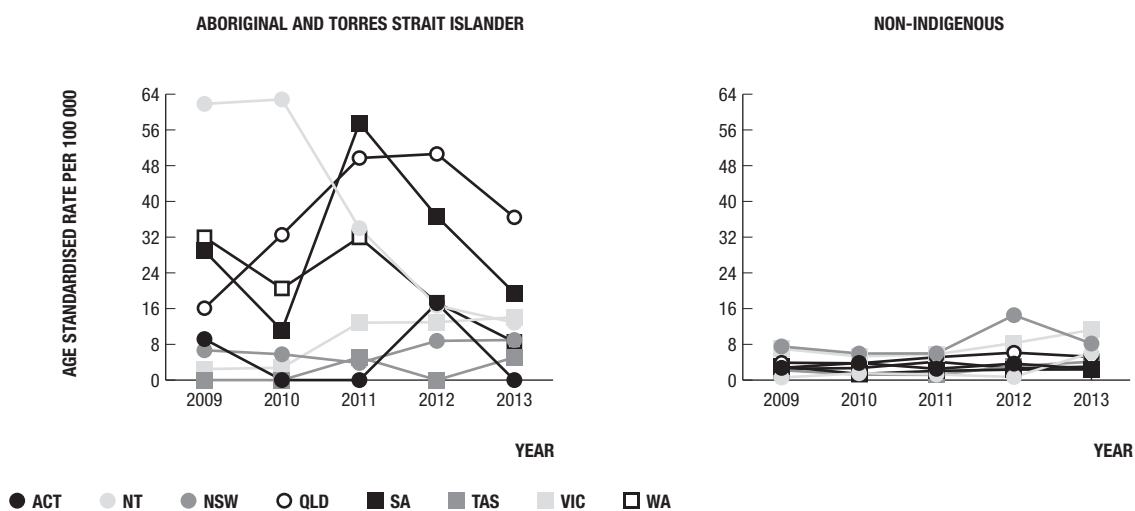
The rate of notification of chlamydia in the Aboriginal and Torres Strait Islander population was around 1 220 in 2009 – 2013. In the non-Indigenous population resident in State/Territory jurisdictions other than the Australian Capital Territory, New South Wales and Victoria, the rate of chlamydia notification increased steadily from 327 in 2009 to 379 in 2013 (Figure 27).

Figure 28 Gonorrhoea notifications, 2009 – 2013, by Aboriginal and Torres Strait Islander status, State/ Territory and year



The rate of notification 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 588 in 2009 to 788 in 2011 and declined to 694 in 2013. In the non-Indigenous population, the rate of gonorrhoea notification increased from 23.9 in 2009 to 47.9 in 2013 (Figure 28).

Figure 29 Infectious syphilis notifications, 2009 – 2013, by Aboriginal and Torres Strait Islander status, State/ Territory and year



The rate of notification of infectious syphilis in the Aboriginal and Torres Strait Islander population increased from 19.7 in 2009 to 27.4 in 2011 and declined to 17.7 in 2013 (Figure 29). The rate of infectious syphilis notification in the Aboriginal and Torres Strait Islander population resident in the Northern Territory declined from 61.8 in 2009 to 12.8 in 2013 whereas the rate increased in Queensland, from 16.1 in 2009 to 36.4 in 2013. The rate of notification of infectious syphilis in the non-Indigenous population was stable at around 5.6 per 100 000 population in 2009 – 2013.

People who inject drugs

In 2004 – 2013, approximately 6% of HIV notifications 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, 2004 – 2013, by year and sex

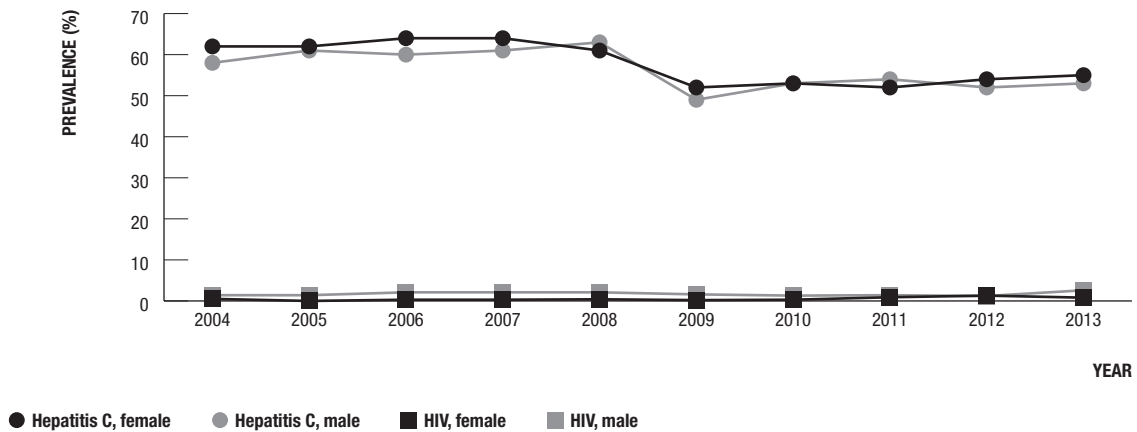
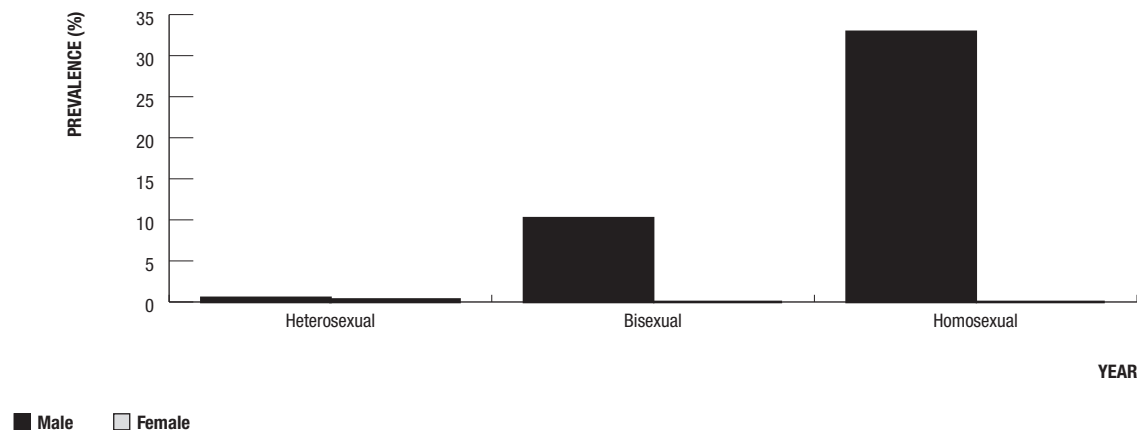


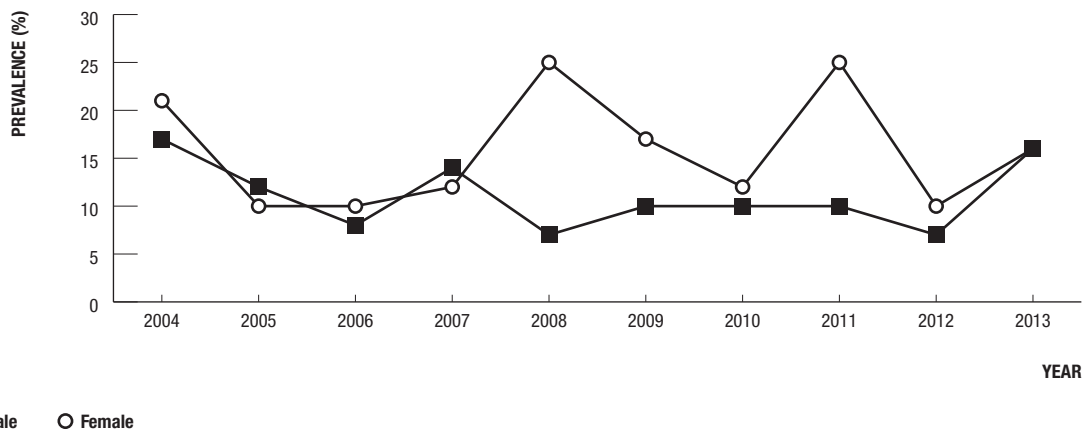
Figure 31 HIV prevalence at needle and syringe programs, 2013, by sexual identity



HIV prevalence among people who inject drugs attending needle and syringe programs has remained low (at 1 – 2% during 2004 – 2013) (Figure 30) but in the subgroup of homosexual men, prevalence was 33% in 2013 (Figure 31). Of 3 249 men and 2 034 women with a history of injecting drug use who were tested for HIV antibody at metropolitan sexual health centres in 2004 – 2013, 7 males (0.2%) and one woman (0.2%) was diagnosed with HIV infection (Figures 36 and 37).

In contrast to the low HIV prevalence, hepatitis C antibody prevalence among people attending needle and syringe programs remained high during 2004 – 2013 (Figure 30). Hepatitis C prevalence decreased among both males and females from around 62% in 2008 to around 53% in 2009 and has remained stable since 2009. The decline in hepatitis C prevalence in 2009 was not explained by demographic or laboratory factors.

Figure 32 Prevalence of sharing among recent initiates to injecting¹ seen at needle and syringe programs, 2004 – 2013, 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 proportion of people attending needle and syringe programs who reported having initiated injection drug use in the previous five years remained stable at 9% – 12% between 2009 – 2013; hepatitis C prevalence among this group declined from 20% in 2009 to 14% in 2013. Fluctuations in the prevalence of reported sharing of injecting equipment among women with a history of injecting drug use of less than five years may be attributable to the relatively small number of women with a short duration of injecting drug use (Figure 32). The low proportion of people in the survey who reported initiation of injection drug use in the previous five years (around 13% in 2013) and the low proportion of survey respondents aged younger than 20 years (around 2% in 2013) suggests that there has been a decrease in the prevalence of injecting drug use among young people in Australia.

Heterosexual transmission of HIV infection

The number of new HIV diagnoses for which exposure to HIV was attributed to heterosexual contact increased from 1 132 in 2004 – 2008 to 1 417 in 2009 – 2013, a 25% increase. These levels account for 22.7% and 24.6% of total HIV diagnoses in 2004 – 2008 and in 2009 – 2013, respectively.

Figure 33 Newly diagnosed HIV infection among men who report an exposure other than sex with men, 2004 – 2013, by year and exposure category

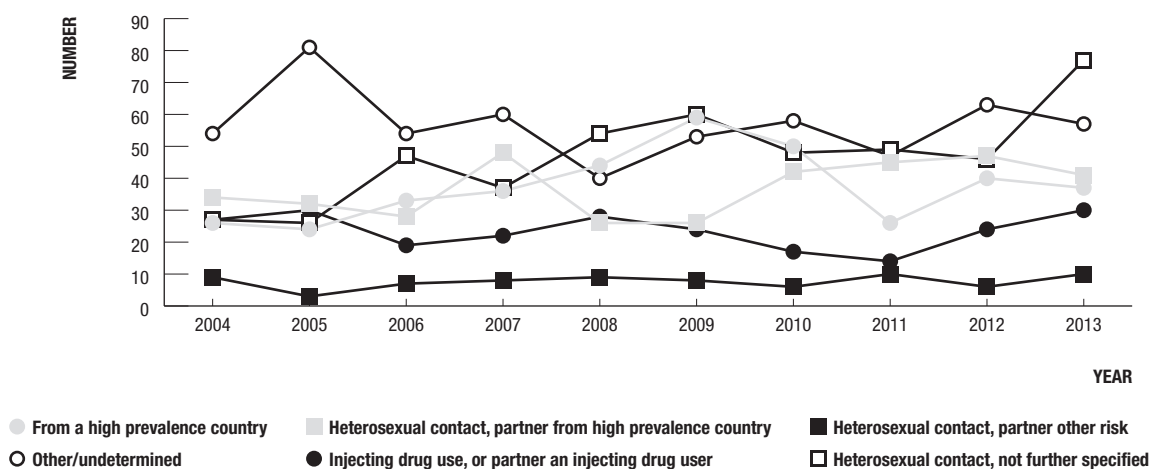
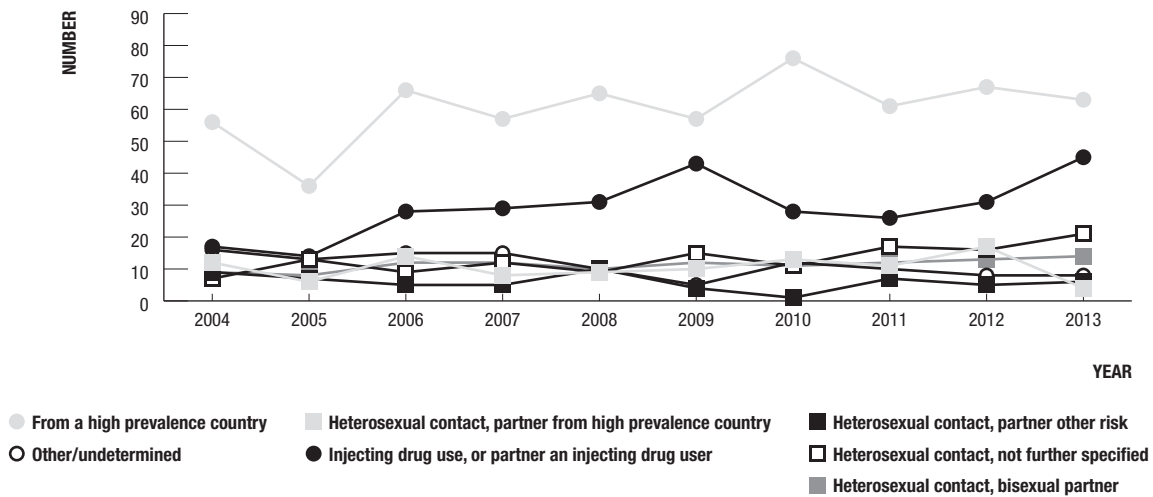


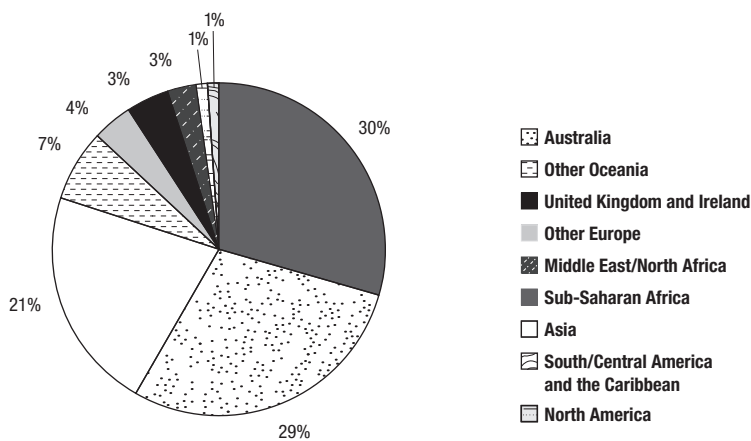
Figure 34 Newly diagnosed HIV among women, 2004 – 2013, by year and HIV exposure category



Cases whose HIV infection was acquired in a high HIV prevalence country accounted for 39% and 37% of HIV diagnoses attributed to heterosexual contact in 2004 – 2008 and 2009 – 2013, respectively. In both five-year intervals, the majority of cases came from high HIV prevalence countries in sub-Saharan Africa (63% in 2004 – 2008 and 75% in 2009 – 2013), South East Asia (29% in 2004 – 2008 and 21% in 2009 – 2013) and North Africa/Middle East (7% in 2004 – 2008 and 4% in 2009 – 2012). Women accounted for 63% and 60% of cases from high prevalence countries in 2004 – 2008 and in 2009 – 2013, respectively.

Excluding cases from a high prevalence country, the number whose exposure to HIV was attributed to heterosexual contact increased by 28%, from 689 in 2004 – 2008 to 880 in 2009 – 2013. Men and women with HIV infection who reported a partner from a high prevalence country accounted for 31% and 29% of heterosexual cases newly diagnosed in 2004 – 2008, and in 2009 – 2013, respectively. Of new HIV diagnoses in 2009 – 2013 for which the country of birth of the heterosexual partner was reported (73.5%), 27% of partners were from a high HIV prevalence country in sub-Saharan Africa, 71% were from a high HIV prevalence country in South East Asia and 2% were from high HIV prevalence countries in North Africa/Middle East. Cases with partners with other risks for HIV infection accounted for 25% and 19% of diagnoses in 2004 – 2008 and in 2009 – 2013, respectively. Heterosexual contact, not further specified, was reported in 45% of cases attributed to heterosexual contact in 2004 – 2008 and 51% in 2009 – 2013. The source of exposure to HIV remained undetermined for substantial numbers of men in 2004 – 2013 (Figure 33).

Figure 35 HIV infection attributed to heterosexual contact, 2009 – 2013, by region of birth



Among 1 417 cases of HIV infection diagnosed in Australia in 2009 – 2013 for which exposure to HIV was attributed to heterosexual contact, the country of birth was reported as Australia in 29%, sub-Saharan Africa in 30% and Asia in 22% of cases (Figure 35).

Figure 36 HIV prevalence among heterosexually active men seen at sexual health clinics, 2004 – 2013, by year and HIV exposure category

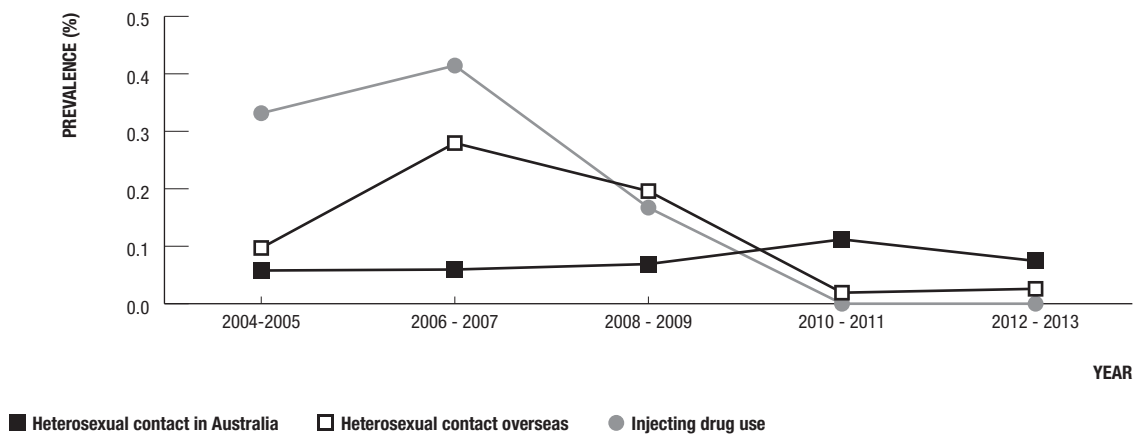
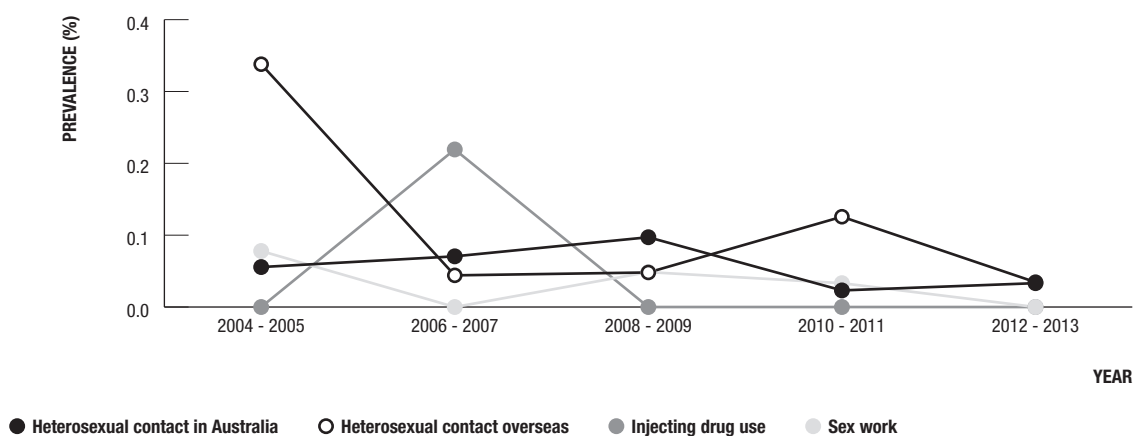
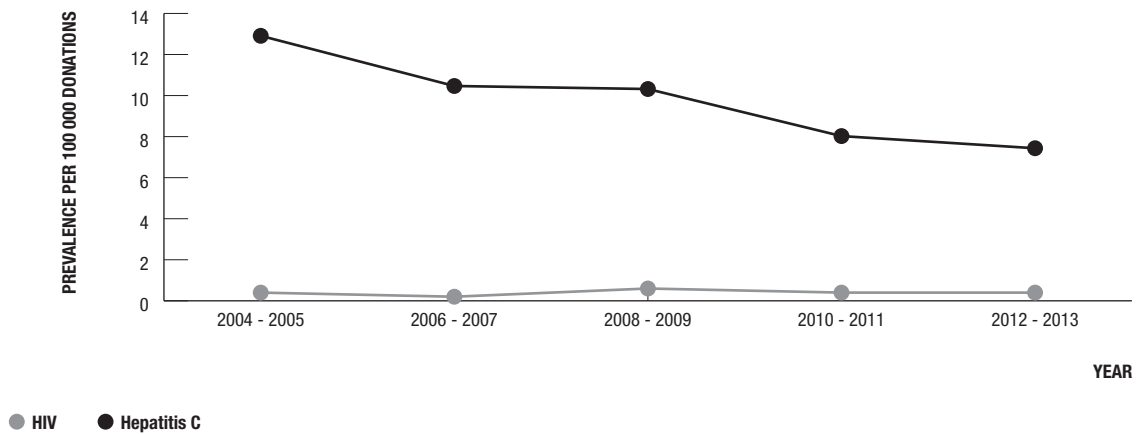


Figure 37 HIV prevalence among heterosexually active women seen at sexual health clinics, 2004 – 2013, by year and HIV exposure category



HIV prevalence has remained below 0.5% among heterosexually active men and women seen through metropolitan sexual health clinics. In 2004 – 2013, 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, 2004 – 2013, by year

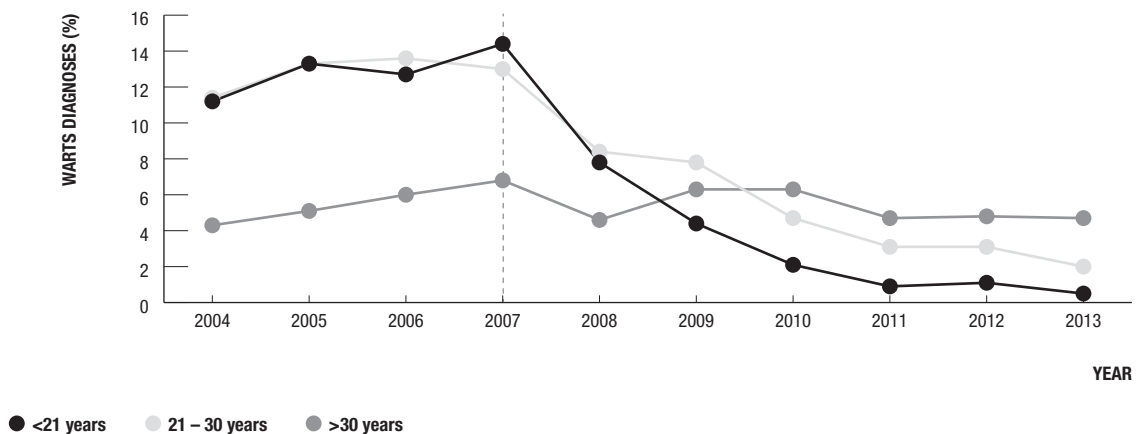


Levels of HIV infection in blood donors, who undergo a screening interview to exclude those with recognised risk factors for HIV infection, have been below 1 per 100 000 donations since 1985 (Figure 38).

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.

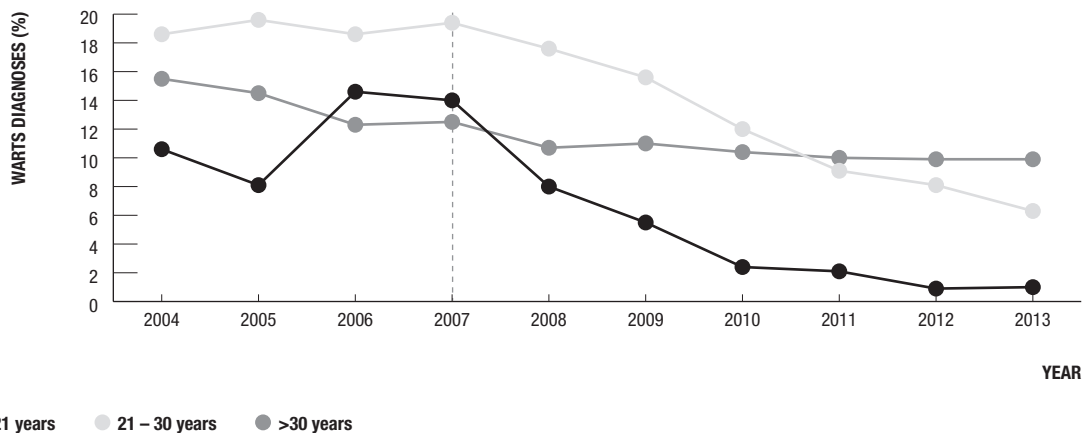
Figure 39 Proportion of Australian born women diagnosed with genital warts at first visit, 2004 – 2013, by year and age group



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

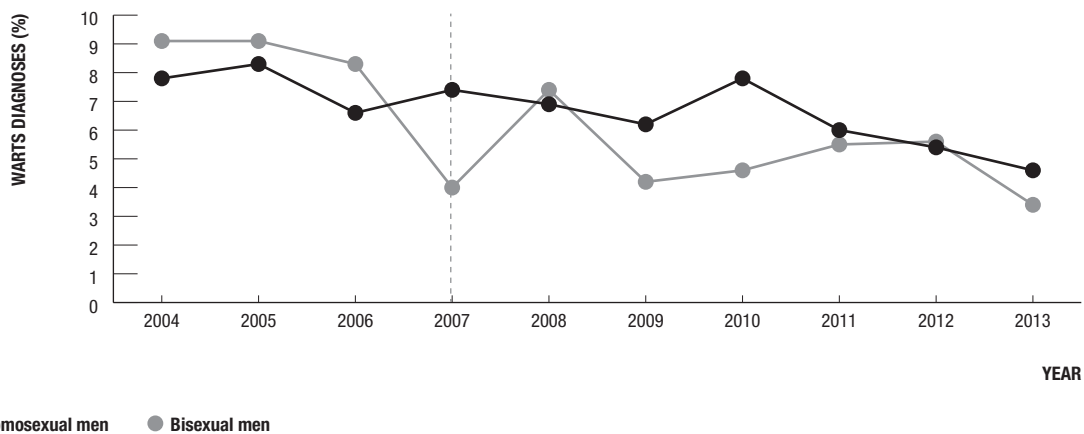
Information available from six sexual health services included in the Genital Warts Surveillance Network indicates that the genital warts diagnosis rate among Australian-born women, aged 21 years or younger in July 2007 and thus eligible for free HPV vaccine, was greater than 14% in 2007 and then declined to 0.5% in 2013 (Figure 39). Among Australian-born heterosexual men in the same age group, the genital warts diagnosis rate was 14% in 2007 and declined to 1% in 2013 (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, 2004 – 2013, by year and age group



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, 2004 – 2013, by year

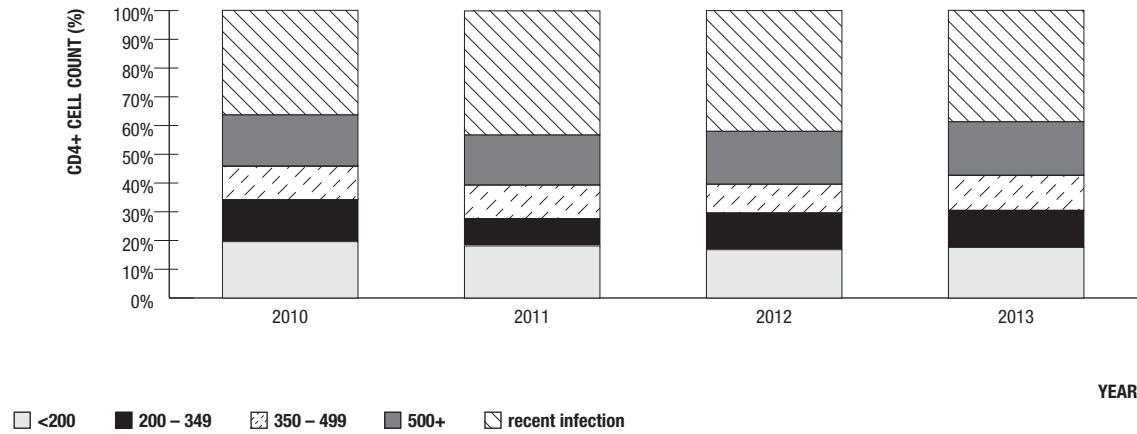


The dotted line represents the start of the national HPV vaccination program in mid-2007.

Illness and treatment in people with HIV infection and viral hepatitis

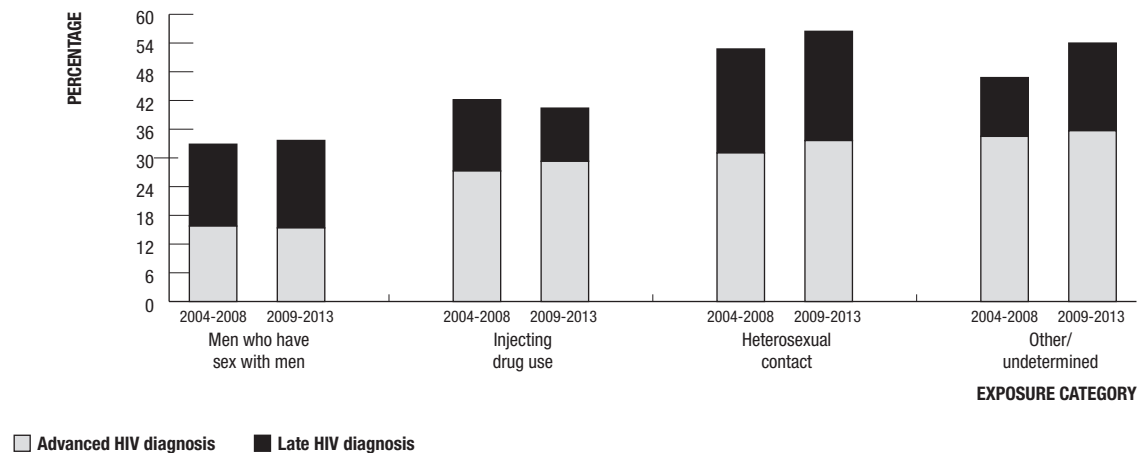
In the past 10 years, the proportion of cases diagnosed with advanced HIV infection, measured by a CD4+ cell count of less than 200 cells/ μ l, has remained relatively stable at about 20% (Figure 42). The proportion with a late diagnosis, defined by a CD4+ cell count of less than 350 cells/ μ l at HIV diagnosis, has also remained relatively stable at 39% (Table 1.1.1).

Figure 42 Diagnoses of newly acquired HIV infection and CD4+ cell count among other new HIV diagnoses in Australia, 2010 – 2013, by year



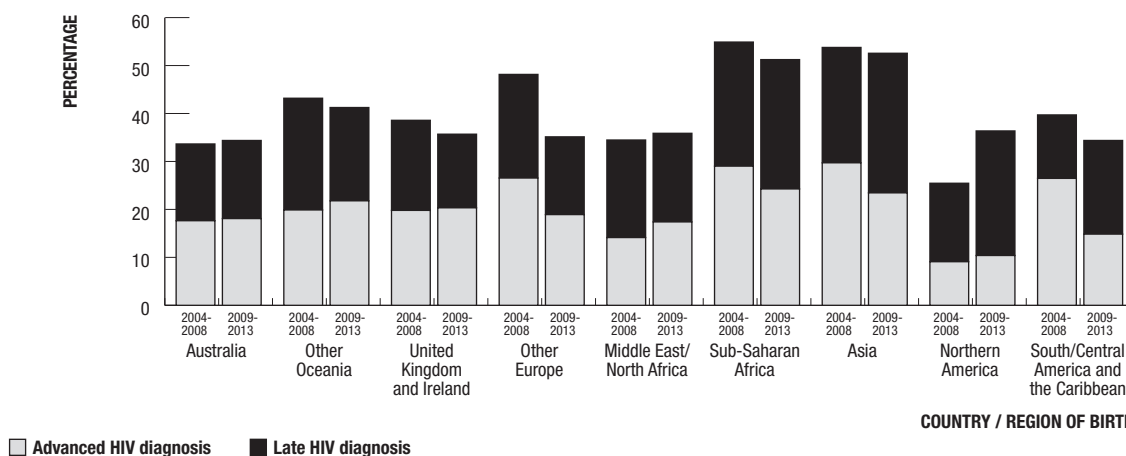
The extent of advanced and late HIV diagnosis differed by exposure category. Advanced and late HIV diagnoses were least common among men who have sex with men (Figure 43). In 2009 – 2013, around 15% and 3% of HIV diagnoses among men who have sex with men were advanced and late HIV diagnoses, respectively, whereas advanced and late diagnoses accounted for 29% and 40% of diagnoses among people who injected drugs and for 34% and 56% 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 and advanced HIV diagnoses¹, 2004 – 2013, by year and exposure category



¹ A late HIV diagnosis 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.

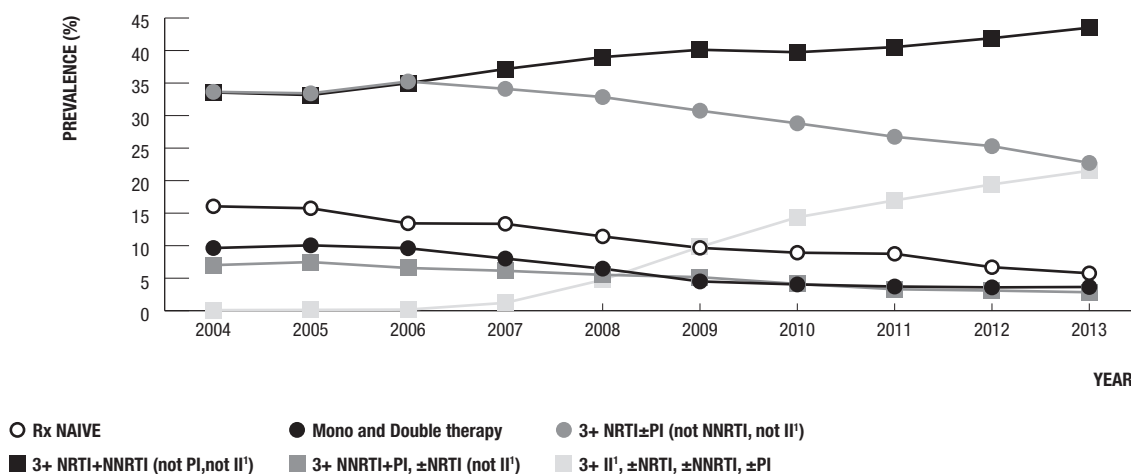
Figure 44 Late and advanced HIV diagnoses¹, 2004 – 2013, by year and region of birth



1 A late HIV diagnosis 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

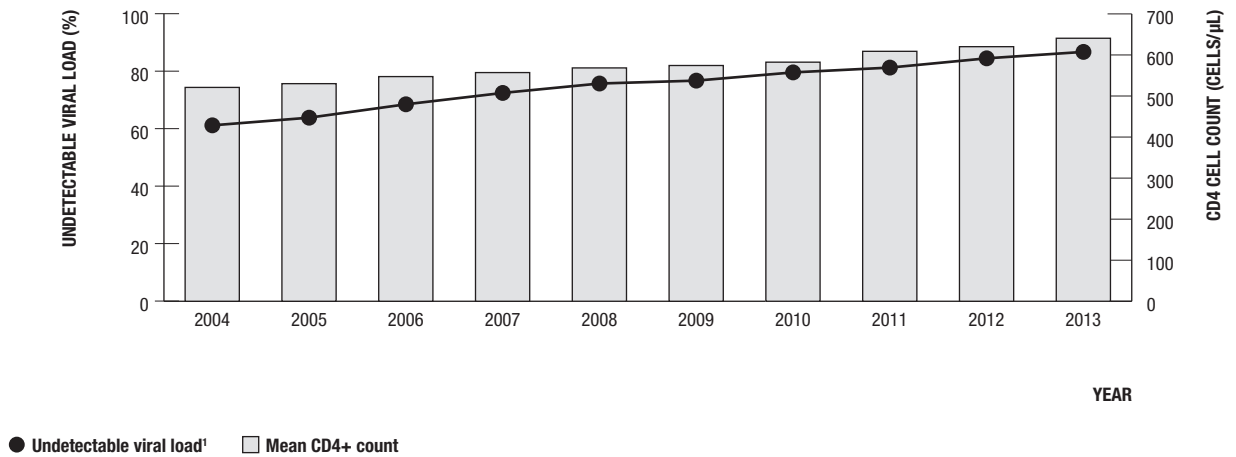
There is no comprehensive registry of advanced illness related to hepatitis B and C in Australia. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 222 people who had a liver transplant in 2013, 67 (30.2%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 8 (3.6%) people having liver transplants (Table 2.3.1).

Figure 45 Treatment uptake among people enrolled on the Australian HIV Observational Database, 2004 – 2013



1 II = Integrase Inhibitor.

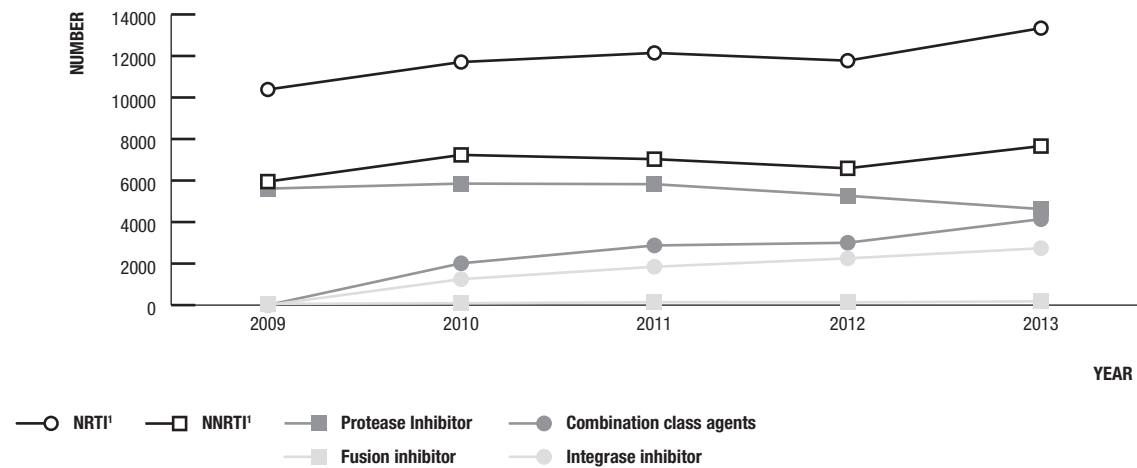
Figure 46 HIV viral load and CD4+ cell count among people enrolled on the Australian HIV Observational Database, 2004 – 2013, by year



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

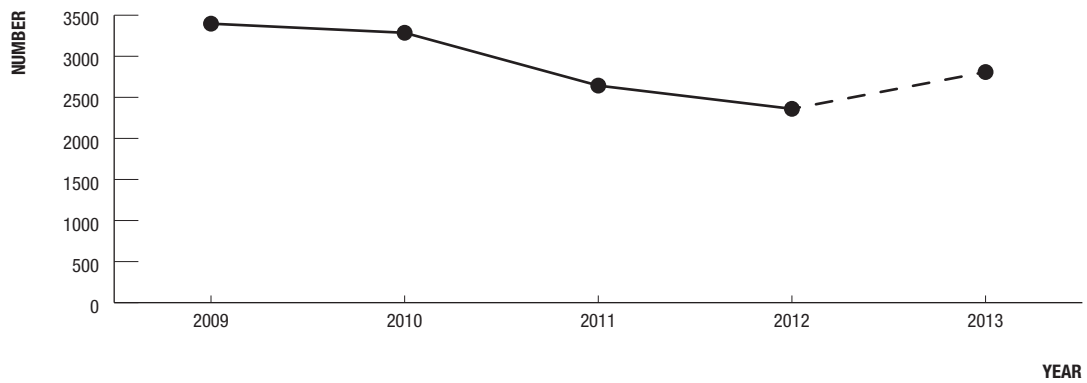
The Australian HIV Observational Database (AHOD) indicated that 90% of 2 328 people under follow up in 2013 were receiving triple combination antiretroviral treatment for HIV infection (Figure 45). Of people receiving antiretroviral therapy who were monitored through AHOD, the proportion with undetectable viral load (<50 copies/ml) has increased from 58% in 2004 to 88% in 2013. The mean CD4+ cell count also steadily increased to 640 cells/µL in 2013 (Figure 46). Of people enrolled in the Australian HIV Observational Database in 2013, 9% had been diagnosed with both HIV and hepatitis C antibody.

Figure 47 Estimated number of people dispensed drugs for HIV infection, 2009 – 2013, by class of drug and year



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

Figure 48 Estimated number of people dispensed drugs for hepatitis C infection, 2009 – 2013, by year



● Hepatitis C infection

Note Estimates from April 2013 based on PBS item reports; this is a change in methodology due to a change in data reporting from PBS and therefore caution should be taken in comparing trends between 2013 and pre-2013 data.

Use of antiretroviral therapy by men who have sex with men participating in the Gay Community Periodic Surveys in Melbourne increased from 51.5% in 2008 to 72.6% in 2011, resulting in the highest reported uptake among in Australia in 2011. The percentage of men in Sydney who reported use of antiretroviral therapy increased from 73.5% in 2009 to 76.6% in 2013.

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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, median CD4+ cell count and 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 |
|--|-----------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|
| | ≤ 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | |
| Total cases | 25 469 | 976 | 1 018 | 1 052 | 1 015 | 1 069 | 1 057 | 1 142 | 1 253 | 1 236 | 35 287 |
| Males (%) | 92.3 | 90 | 85.1 | 86.8 | 85.8 | 86.2 | 85.2 | 87.3 | 87.3 | 86.9 | 90.7 |
| Median age (years) | | | | | | | | | | | |
| Male | 33 | 37 | 38 | 38 | 37 | 37 | 37 | 37 | 36 | 37 | 34 |
| Female | 29 | 32 | 31 | 32 | 31 | 32 | 31 | 34 | 33 | 33 | 31 |
| Language spoken at home² | | | | | | | | | | | |
| English | 553 | 662 | 660 | 788 | 758 | 799 | 762 | 881 | 901 | 609 | 7 373 |
| Other language | 53 | 55 | 74 | 82 | 69 | 114 | 114 | 116 | 146 | 115 | 938 |
| Not reported | 310 | 259 | 284 | 182 | 188 | 156 | 181 | 145 | 206 | 512 | 2 423 |
| Late and advanced HIV infection status at HIV diagnosis³ | | | | | | | | | | | |
| Late HIV diagnosis (%) ⁴ | 36.5 | 36.2 | 43.2 | 37.8 | 38.2 | 41.1 | 43.0 | 36.9 | 37.2 | 37.4 | 38.8 |
| Advanced HIV diagnosis (%) ⁴ | 20.2 | 20.8 | 23.3 | 19.6 | 18.0 | 20.1 | 21.0 | 19.8 | 18.1 | 18.6 | 19.9 |
| Median CD4+ cell count (cells/μl) | 445 | 450 | 408 | 422 | 420 | 406 | 400 | 430 | 435 | 432 | 423 |
| State/Territory | | | | | | | | | | | |
| Australian Capital Territory | 291 | 8 | 6 | 9 | 7 | 12 | 14 | 11 | 17 | 24 | 399 |
| New South Wales | 14 661 | 409 | 400 | 415 | 368 | 384 | 351 | 391 | 458 | 401 | 18 238 |
| Northern Territory | 145 | 3 | 11 | 6 | 11 | 16 | 6 | 9 | 27 | 19 | 253 |
| Queensland | 2 706 | 172 | 164 | 195 | 201 | 209 | 242 | 223 | 259 | 236 | 4 607 |
| South Australia | 952 | 51 | 62 | 56 | 47 | 53 | 42 | 67 | 41 | 69 | 1 440 |
| Tasmania | 111 | 7 | 7 | 7 | 13 | 14 | 10 | 15 | 13 | 11 | 208 |
| Victoria | 5 293 | 262 | 288 | 287 | 286 | 292 | 282 | 328 | 316 | 365 | 7 999 |
| Western Australia | 1 310 | 64 | 80 | 77 | 82 | 89 | 110 | 98 | 122 | 111 | 2 143 |
| HIV exposure category (%)⁵ | | | | | | | | | | | |
| Men who have sex with men | 77.6 | 72.0 | 66.7 | 67.9 | 65.5 | 64.4 | 66.4 | 70.7 | 70.5 | 66.0 | 74.7 |
| Men who have sex with men and injecting drug use | 4.4 | 4.5 | 4.3 | 3.0 | 3.4 | 3.7 | 2.2 | 2.9 | 2.8 | 3.7 | 4.1 |
| Injecting drug use ⁶ | 4.1 | 3.5 | 2.8 | 2.8 | 3.3 | 2.4 | 2.4 | 1.9 | 2.3 | 2.4 | 3.6 |
| Heterosexual contact | 11.0 | 19.4 | 25.5 | 25.2 | 27.1 | 28.3 | 28.3 | 23.3 | 23.8 | 26.6 | 15.3 |
| <i>Person from a high prevalence country</i> | 2.9 | 6.7 | 10.4 | 9.4 | 11.2 | 11.4 | 12.7 | 8.0 | 9.1 | 8.3 | 4.9 |
| <i>Partner with/at risk of HIV infection</i> | 4.2 | 8.2 | 7.3 | 9.1 | 7.1 | 6.7 | 7.9 | 8.5 | 8.1 | 7.7 | 5.3 |
| <i>Not further specified</i> | 3.9 | 4.5 | 7.9 | 6.7 | 8.7 | 10.2 | 7.7 | 6.9 | 6.5 | 10.6 | 5.1 |
| Haemophilia/coagulation disorder | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 |
| Receipt of blood/tissue | 1.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.8 |
| Mother with/at risk of HIV infection | 0.3 | 0.6 | 0.6 | 0.9 | 0.6 | 1.1 | 0.6 | 0.9 | 0.3 | 0.8 | 0.5 |
| Health care setting | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other/undermined exposure | 14.6 | 8.6 | 6.2 | 6.0 | 4.2 | 5.1 | 6.3 | 4.2 | 5.6 | 4.9 | 11.9 |

1 Not adjusted for multiple reporting.

2 Language spoken at home was sought among cases of HIV infection newly diagnosed from 1 January 2004. Total number with language spoken at home in 2004 – 2013 only.

3 Late diagnosis, advanced infection and median CD4+ cell count for HIV diagnoses in 2004 only. Total percentage with late HIV diagnosis and advanced HIV infection, and median CD4+ cell count for diagnoses in 2004 – 2013 only.

4 Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of 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 2013, by age group, year and sex

| Age group (years) | Sex | Year of HIV diagnosis | | | | | | | | | | Total |
|--------------------------|-----|-----------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | | ≤ 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| 0 – 1 | M | 45 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 51 |
| | F | 23 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | 34 |
| 2 – 12 | M | 90 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 1 | 0 | 112 |
| | F | 24 | 2 | 1 | 5 | 1 | 8 | 2 | 5 | 0 | 6 | 54 |
| 13 – 19 | M | 449 | 10 | 9 | 8 | 7 | 10 | 12 | 12 | 18 | 14 | 549 |
| | F | 101 | 3 | 6 | 2 | 6 | 3 | 3 | 6 | 6 | 11 | 147 |
| 20 – 24 | M | 2 794 | 71 | 54 | 64 | 86 | 71 | 70 | 91 | 110 | 97 | 3 508 |
| | F | 281 | 13 | 18 | 11 | 23 | 12 | 20 | 9 | 20 | 16 | 423 |
| 25 – 29 | M | 4 683 | 113 | 118 | 129 | 134 | 153 | 140 | 172 | 205 | 185 | 6 032 |
| | F | 389 | 14 | 36 | 29 | 25 | 33 | 37 | 25 | 31 | 23 | 642 |
| 30 – 39 | M | 8 884 | 323 | 301 | 310 | 277 | 305 | 277 | 309 | 327 | 308 | 11 621 |
| | F | 474 | 43 | 49 | 55 | 57 | 53 | 61 | 55 | 64 | 55 | 966 |
| 40 – 49 | M | 4 353 | 218 | 242 | 253 | 234 | 233 | 245 | 238 | 241 | 264 | 6 521 |
| | F | 185 | 16 | 25 | 19 | 22 | 22 | 17 | 35 | 23 | 25 | 389 |
| 50 – 59 | M | 1 552 | 99 | 101 | 96 | 89 | 115 | 105 | 126 | 126 | 134 | 2 543 |
| | F | 72 | 4 | 9 | 12 | 7 | 10 | 9 | 6 | 10 | 20 | 159 |
| 60+ | M | 512 | 41 | 38 | 47 | 39 | 31 | 47 | 45 | 66 | 69 | 935 |
| | F | 73 | 1 | 2 | 4 | 2 | 3 | 2 | 2 | 3 | 4 | 96 |
| Not reported | M | 134 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 136 |
| | F | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| Sub-total | M | 23 496 | 878 | 866 | 913 | 871 | 921 | 900 | 997 | 1 094 | 1 072 | 32 008 |
| | F | 1 654 | 97 | 149 | 138 | 144 | 146 | 152 | 144 | 157 | 161 | 2 942 |
| Total² | | 25 469 | 976 | 1 018 | 1 052 | 1 015 | 1 069 | 1 057 | 1 142 | 1 253 | 1 236 | 35 287 |

1 Not adjusted for multiple reporting.

2 Totals include 88 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 2013, by State/Territory and whether or not HIV infection was newly diagnosed in Australia

| State/Territory | Place of first diagnosis of HIV infection | | Total diagnoses |
|------------------------------|---|--------------------------|-----------------|
| | Newly diagnosed in Australia | Newly diagnosed overseas | |
| Australian Capital Territory | 21 | 3 | 24 |
| New South Wales | 354 | 47 | 401 |
| Northern Territory | 13 | 6 | 19 |
| Queensland | 181 | 55 | 236 |
| South Australia | 58 | 11 | 69 |
| Tasmania | 10 | 1 | 11 |
| Victoria | 307 | 58 | 365 |
| Western Australia | 84 | 27 | 111 |
| Total | 1 028 | 208 | 1 236 |

Source: State/Territory health authorities

Table 1.1.4 Number (percent) of new HIV diagnoses in Australia, 2009 – 2013, and age standardised rate per 100 000 population by year of HIV diagnosis and region of birth

| Region/Country of birth | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
|---|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|--------------|-------------|-----------------------|
| | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate | Number | % | Age standardised rate |
| Australia | 566 | 53.0 | 3.7 | 562 | 53.1 | 3.7 | 630 | 55.2 | 4.1 | 675 | 53.9 | 4.3 | 634 | 51.3 | 4.1 |
| Overseas born | 479 | 44.8 | 7.9 | 469 | 44.3 | 7.3 | 488 | 42.7 | 7.5 | 559 | 44.6 | 8.0 | 566 | 45.8 | 8.1 |
| Other Oceania | 49 | 4.6 | 6.5 | 43 | 4.1 | 6.0 | 62 | 5.4 | 8.1 | 65 | 5.2 | 8.1 | 77 | 6.2 | 9.5 |
| United Kingdom and Ireland | 59 | 5.5 | 6.2 | 43 | 4.1 | 4.8 | 57 | 5.0 | 6.1 | 58 | 4.6 | 6.9 | 49 | 4.0 | 5.5 |
| Other Europe | 46 | 4.3 | 5.5 | 54 | 5.1 | 5.8 | 51 | 4.5 | 6.6 | 53 | 4.2 | 7.0 | 56 | 4.5 | 6.5 |
| Middle East/North Africa | 21 | 2.0 | 5.9 | 13 | 1.2 | 3.3 | 17 | 1.5 | 5.1 | 19 | 1.5 | 5.1 | 31 | 2.5 | 8.3 |
| Sub-Saharan Africa | 115 | 10.8 | 37.7 | 122 | 11.5 | 36.9 | 86 | 7.5 | 36.3 | 92 | 7.3 | 26.2 | 98 | 7.9 | 28.9 |
| Asia | 152 | 14.2 | 6.8 | 159 | 15.0 | 6.8 | 168 | 14.7 | 6.9 | 216 | 17.2 | 8.5 | 191 | 15.5 | 7.7 |
| Northern America | 15 | 1.4 | 11.2 | 17 | 1.6 | 12.2 | 16 | 1.4 | 11.4 | 25 | 2.0 | 15.6 | 19 | 1.5 | 12.3 |
| South/Central America and the Caribbean | 22 | 2.1 | 15.6 | 18 | 1.7 | 14.1 | 31 | 2.7 | 21.7 | 31 | 2.5 | 19.8 | 45 | 3.6 | 35.3 |
| Total with a reported country of birth | 1 045 | 97.8 | 4.8 | 1 031 | 97.4 | 4.7 | 1 118 | 97.9 | 5.0 | 1 234 | 98.5 | 5.4 | 1 200 | 97.1 | 5.2 |
| Not reported | 24 | 2.2 | | 26 | 2.5 | | 24 | 2.1 | | 19 | 1.5 | | 36 | 2.9 | |
| Total | 1 069 | 100 | | 1 057 | 100 | | 1 142 | 100 | | 1 253 | 100 | | 1 236 | 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), 2009 – 2013, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

| Characteristic | Sex | Year of HIV diagnosis | | | | |
|--|-----|-----------------------|------------------|------------------|-------------------|-------------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| State/Territory | | | | | | |
| Australian Capital Territory | M | 275 (6) | 640 (10) | 460 (10) | 515 (14) | 420 (20) |
| | F | 218 (2) | 465 (2) | — (1) | 215 (2) | 345 (4) |
| New South Wales | M | 410 (307) | 413 (290) | 440 (333) | 460 (387) | 433 (344) |
| | F | 340 (42) | 356 (29) | 257 (30) | 442 (42) | 360 (32) |
| Northern Territory | M | 433 (10) | 418 (4) | 307 (7) | 272 (19) | 390 (9) |
| | F | 680 (5) | — (1) | — (1) | 372 (8) | 502 (8) |
| Queensland | M | 435 (146) | 375 (182) | 430 (168) | 480 (219) | 460 (197) |
| | F | 380 (24) | 405 (40) | 420 (22) | 350 (30) | 320 (35) |
| South Australia | M | 379 (40) | 357 (36) | 432 (44) | 440 (28) | 338 (49) |
| | F | 353 (9) | 582 (6) | 313 (16) | 440 (9) | 339 (15) |
| Tasmania | M | 713 (10) | 340 (9) | 363 (11) | 336 (13) | 229 (8) |
| | F | 216 (3) | — (1) | 357 (4) | — (0) | 279 (3) |
| Victoria | M | 442 (230) | 419 (208) | 433 (192) | 425 (128) | 454 (195) |
| | F | 322 (25) | 388 (30) | 298 (22) | 399 (21) | 318 (16) |
| Western Australia | M | 344 (56) | 399 (71) | 372 (62) | 444 (90) | 464 (75) |
| | F | 299 (24) | 364 (28) | 380 (27) | 420 (25) | 382 (22) |
| HIV exposure category | | | | | | |
| Men who have sex with men ¹ | M | 449 (626) | 435 (623) | 452 (667) | 470 (719) | 457 (691) |
| Injecting drug use ² | M | 352 (18) | 400 (17) | 250 (14) | 559 (16) | 4980 (22) |
| | F | — (1) | 511 (7) | 275 (6) | 360 (5) | — (0) |
| Heterosexual contact | M | 284 (126) | 320 (115) | 340 (119) | 338 (118) | 360 (141) |
| | F | 320 (121) | 357 (120) | 347 (106) | 377 (123) | 340 (123) |
| Other/undetermined | M | 320 (32) | 309 (38) | 349 (26) | 307 (38) | 320 (39) |
| | F | 465 (12) | 437 (10) | 457 (11) | 620 (9) | 405 (12) |
| Newly acquired HIV infection status | | | | | | |
| Diagnoses of newly acquired infection ³ | M | 550 (259) | 524 (275) | 510 (319) | 550 (325) | 504 (291) |
| | F | 630 (13) | 516 (12) | 592 (15) | 498 (16) | 515 (12) |
| Other HIV diagnoses ⁴ | M | 360 (546) | 330 (535) | 380 (508) | 370 (573) | 399 (606) |
| | F | 307 (121) | 358 (125) | 318 (108) | 377 (121) | 324 (123) |
| Total | | 406 (941) | 400 (948) | 430 (950) | 435 (1036) | 430 (1035) |

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 | | |
|--|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|--------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | | 2009 – 2013 | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | | Male | Female |
| Person from a high prevalence country | 59 | 57 | 50 | 76 | 26 | 61 | 41 | 67 | 37 | 63 | 213 | 324 | 537 |
| Sub-Saharan Africa | 55 | 38 | 44 | 53 | 25 | 39 | 32 | 42 | 27 | 45 | 183 | 217 | 400 |
| South East Asia | 3 | 17 | 4 | 21 | 1 | 20 | 8 | 23 | 5 | 13 | 21 | 94 | 115 |
| North Africa/Middle East | 1 | 2 | 2 | 2 | 0 | 2 | 1 | 2 | 5 | 5 | 9 | 13 | 22 |
| Partner from a high prevalence country | 26 | 10 | 42 | 13 | 45 | 11 | 47 | 17 | 41 | 4 | 201 | 55 | 256 |
| Sub-Saharan Africa | 7 | 8 | 2 | 7 | 5 | 8 | 2 | 4 | 5 | 4 | 21 | 31 | 52 |
| South East Asia | 15 | 1 | 25 | 0 | 28 | 1 | 37 | 5 | 33 | 0 | 138 | 7 | 145 |
| North Africa/Middle East | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 3 |
| South East Asia | 1 | 0 | 3 | 1 | 3 | 1 | 3 | 5 | 1 | 0 | 11 | 7 | 18 |
| North Africa/Middle East | 3 | 1 | 12 | 5 | 9 | 0 | 5 | 1 | 2 | 0 | 31 | 7 | 38 |
| Heterosexual contact with partner at risk | 69 | 66 | 54 | 45 | 59 | 53 | 54 | 55 | 90 | 79 | 326 | 298 | 624 |
| Injecting drug use | 1 | 4 | 0 | 5 | 0 | 3 | 2 | 3 | 3 | 7 | 6 | 22 | 28 |
| Bisexual man | 4 | 4 | 1 | 1 | 7 | 7 | 5 | 5 | 3 | 6 | 23 | 23 | 23 |
| Partner with medically acquired HIV | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Partner with HIV infection whose exposure was other than those above | 8 | 14 | 6 | 10 | 10 | 17 | 6 | 15 | 10 | 21 | 40 | 77 | 117 |
| Not further specified | 60 | 43 | 48 | 28 | 49 | 26 | 46 | 31 | 77 | 45 | 280 | 173 | 453 |
| Total | 154 | 133 | 146 | 134 | 130 | 125 | 142 | 139 | 168 | 146 | 650 | 631 | 1 281 |

Source: State/Territory health authorities

Table 1.1.7 Number of specimens tested for HIV antibody in public health laboratories, 2004 – 2013, by State/Territory and year of test

| State/ Territory | Year of HIV antibody test | | | | | | | | | |
|------------------|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| ACT ¹ | 14 388 | 15 551 | 16 565 | 17 602 | 19 443 | 20 173 | — | 21 316 | 22 435 | 22 837 |
| NSW | 347 064 | 356 046 | 322 569 | 251 724 | 191 873 | 114 041 | 151 320 | 119 225 | 128 425 | 117 771 |
| NT | 15 323 | 15 217 | 7 247 | 6 686 | 7 782 | 6 360 | 6 924 | 8 466 | 10 065 | 12 083 |
| QLD | 206 322 | 222 558 | 238 509 | 251 430 | 253 778 | 210 315 | 135 198 | 144 908 | 148 677 | 114 565 |
| SA | 83 970 | 88 158 | 88 552 | 80 664 | 95 696 | 62 560 | 61 252 | 64 010 | 42 501 | 66 137 |
| TAS | 12 754 | 13 041 | 12 573 | 12 248 | 13 346 | 4 126 | 4 447 | 4 571 | 16 038 | 16 302 |
| VIC | 152 284 | 165 461 | 183 508 | 253 145 | 231 844 | 224 300 | 148 623 | 235 822 | 200 331 | 280 280 |
| WA | 102 694 | 114 203 | 101 277 | 104 540 | 124 688 | 167 695 | 134 241 | 133 468 | 173 890 | 187 650 |
| Total | 934 799 | 990 235 | 970 800 | 978 039 | 938 450 | 809 570 | 642 005 | 731 786 | 742 362 | 817 625 |

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 infection, 2004 – 2013, 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 ^{1,2} |
|--|-----|-----------------------|------|------|------|------|------|------|------|------|------|----------------------|
| | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Total cases | | 261 | 281 | 308 | 278 | 286 | 301 | 308 | 379 | 400 | 350 | 3 152 |
| Males (%) | M | 94.3 | 96.8 | 93.5 | 95.7 | 95.1 | 94.7 | 95.5 | 95.5 | 95.7 | 95.7 | 95.3 |
| Median age (years) | M | 35 | 35 | 36 | 35 | 36 | 36 | 35 | 35 | 33 | 34 | 35 |
| | F | 23 | 27 | 35 | 35 | 31 | 29 | 38 | 35 | 26 | 37 | 31 |
| State/Territory | | | | | | | | | | | | |
| Australian Capital Territory | M | 2 | 1 | 3 | 2 | 0 | 3 | 3 | 4 | 10 | 8 | 36 |
| | F | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| New South Wales | M | 113 | 128 | 110 | 112 | 123 | 114 | 125 | 166 | 178 | 144 | 1 313 |
| | F | 5 | 3 | 7 | 4 | 6 | 8 | 2 | 4 | 8 | 3 | 50 |
| Northern Territory | M | 2 | 1 | 2 | 1 | 2 | 4 | 2 | 2 | 2 | 3 | 21 |
| | F | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 5 |
| Queensland | M | 42 | 42 | 57 | 48 | 44 | 60 | 54 | 58 | 61 | 60 | 526 |
| | F | 3 | 1 | 1 | 4 | 2 | 2 | 4 | 4 | 3 | 5 | 29 |
| South Australia | M | 15 | 15 | 17 | 7 | 6 | 6 | 4 | 5 | 6 | 7 | 88 |
| | F | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 |
| Tasmania | M | 1 | 2 | 0 | 0 | 1 | 2 | 2 | 5 | 4 | 2 | 19 |
| | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Victoria | M | 62 | 74 | 85 | 82 | 81 | 88 | 89 | 97 | 94 | 85 | 837 |
| | F | 4 | 4 | 8 | 3 | 5 | 2 | 5 | 4 | 2 | 2 | 39 |
| Western Australia | M | 9 | 9 | 14 | 14 | 15 | 8 | 15 | 25 | 28 | 26 | 163 |
| | F | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 4 | 2 | 3 | 15 |
| HIV exposure category | | | | | | | | | | | | |
| Men who have sex with men | M | 209 | 234 | 246 | 230 | 240 | 246 | 265 | 327 | 346 | 292 | 2 635 |
| Men who have sex with men and injecting drug use | M | 13 | 15 | 15 | 6 | 11 | 11 | 7 | 7 | 14 | 16 | 114 |
| Injecting drug use ³ | M | 2 | 2 | 2 | 2 | 0 | 3 | 1 | 2 | 3 | 2 | 19 |
| | F | 4 | 1 | 2 | 1 | 3 | 0 | 1 | 1 | 1 | 0 | 14 |
| Heterosexual contact | M | 16 | 9 | 16 | 20 | 18 | 19 | 13 | 21 | 15 | 17 | 164 |
| | F | 10 | 8 | 16 | 10 | 11 | 14 | 12 | 15 | 15 | 14 | 125 |
| Health care setting | M | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other/undetermined | M | 5 | 12 | 9 | 8 | 3 | 6 | 8 | 5 | 5 | 8 | 69 |
| | F | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| Evidence of newly acquired infection | | | | | | | | | | | | |
| Testing history only | M | 105 | 128 | 150 | 122 | 123 | 136 | 131 | 142 | 158 | 161 | 1 356 |
| | F | 10 | 5 | 7 | 5 | 7 | 5 | 7 | 4 | 2 | 3 | 55 |
| Primary HIV infection only | M | 46 | 49 | 44 | 61 | 60 | 52 | 80 | 98 | 93 | 66 | 649 |
| | F | 3 | 2 | 9 | 5 | 5 | 6 | 1 | 9 | 10 | 5 | 55 |
| Testing history and primary HIV infection | M | 95 | 95 | 94 | 83 | 89 | 97 | 83 | 122 | 132 | 108 | 998 |
| | F | 1 | 2 | 3 | 2 | 2 | 4 | 5 | 4 | 4 | 6 | 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 6 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 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 (%) |
| 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) | 4 (3.3) | 7 (7.7) |
| 2013 | 97 | 21.6 | 3 (1.0) | 4 (4.1) | 3 (3.1) |

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

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

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

Table 1.3.1 Characteristics of cases of newly diagnosed HIV infection in Aboriginal and Torres Strait Islander people, 2004 – 2013, by year. Number of cases, median age and percent (number) of total cases by sex, newly acquired infection, HIV status at diagnosis, State/Territory and HIV exposure category

| Characteristic | Year of HIV diagnosis | | | | | | | | | | Total ^{1,2} |
|--|-----------------------|----------|-----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Total cases | 22 | 20 | 23 | 19 | 19 | 24 | 22 | 23 | 33 | 26 | 231 |
| Males (%) | 72.7 | 85.0 | 73.9 | 84.2 | 79.0 | 83.3 | 68.2 | 73.9 | 81.8 | 84.6 | 78.8 |
| Median age (years) | 29 | 33 | 31 | 33 | 36 | 37 | 35 | 33 | 27 | 37 | 33 |
| Newly acquired HIV infection (%)¹ | 31.8 (7) | 15.0 (3) | 30.4 (7) | 26.3 (5) | 31.6 (6) | 29.2 (7) | 22.7 (5) | 21.7 (5) | 30.3 (10) | 34.6 (9) | 27.7 (64) |
| Late and advanced HIV infection status at HIV diagnosis (%)^{2,3} | | | | | | | | | | | |
| Late HIV diagnosis | 40.0 | 35.7 | 17.6 | 46.7 | 46.7 | 50.0 | 30.0 | 40.9 | 41.7 | 52.4 | 40.5 |
| Advanced HIV diagnosis | 35.0 | 14.3 | 11.8 | 13.3 | 20.0 | 36.4 | 10.0 | 36.4 | 29.2 | 33.3 | 25.3 |
| State/Territory (%) | | | | | | | | | | | |
| Australian Capital Territory | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New South Wales | 4 | 3 | 9 | 8 | 8 | 9 | 7 | 5 | 11 | 8 | 72 |
| Northern Territory | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 2 | 1 | 8 |
| Queensland | 5 | 9 | 6 | 5 | 2 | 8 | 8 | 8 | 14 | 9 | 74 |
| South Australia | 2 | 0 | 0 | 1 | 4 | 2 | 1 | 1 | 1 | 2 | 14 |
| Tasmania | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 4 |
| Victoria | 4 | 2 | 2 | 3 | 0 | 1 | 3 | 1 | 5 | 5 | 26 |
| Western Australia | 5 | 6 | 6 | 2 | 4 | 3 | 2 | 5 | 0 | 0 | 33 |
| HIV exposure category (%)⁴ | | | | | | | | | | | |
| Men who have sex with men | 52.4 (11) | 35.0 (7) | 47.8 (11) | 47.4 (9) | 47.4 (9) | 52.6 (10) | 60.0 (12) | 63.6 (14) | 71.9 (23) | 24.0 (6) | 50.9 (112) |
| Men who have sex with men, and injecting drug use | 0.0 (0) | 25.0 (5) | 4.3 (1) | 15.8 (3) | 5.3 (1) | 15.8 (3) | 5.0 (1) | 0.0 (0) | 3.1 (1) | 20.0 (5) | 9.1 (20) |
| Injecting drug use ⁵ | 19.0 (4) | 15.0 (3) | 21.7 (5) | 15.8 (3) | 36.8 (7) | 10.5 (2) | 20.0 (4) | 4.5 (1) | 6.3 (2) | 24.0 (6) | 16.8 (37) |
| Heterosexual contact | 28.6 (6) | 25.0 (5) | 26.1 (6) | 21.1 (4) | 10.5 (2) | 21.1 (4) | 15.0 (3) | 27.3 (6) | 18.8 (6) | 32.0 (8) | 22.7 (50) |
| 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 of HIV infection | 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) | 0.0 (0) | 0.5 (1) |
| Health care setting | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) |
| Other/undermined exposure | 4.5 (1) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 0.0 (0) | 20.8 (5) | 9.1 (2) | 4.3 (1) | 3.0 (1) | 3.8 (1) | 4.8 (11) |

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. Late diagnosis and advanced infection for HIV diagnoses in 2004 only. Total percentage with late HIV diagnosis and advanced HIV infection in 2004 – 2013 only.

3. Late HIV diagnosis was defined as newly diagnosed HIV infection with a CD4+ cell count of less than 350 cells/μl, and advanced HIV infection as newly diagnosed infection with a CD4+ cell count of less than 200 cells/μl.

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

5. Excludes men who have sex with men.

Source: State/Territory health authorities

Table 1.3.2 Rate of diagnosis of HIV infection¹, 2009 – 2013, by area of residence, Aboriginal and Torres Strait Islander status and year

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|----------|----------|----------|----------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| Major cities | Aboriginal and Torres Strait Islander | 8 | 6 | 5 | 9 | 6 |
| | non-Indigenous ² | 6 | 6 | 6 | 6 | 6 |
| Inner regional | Aboriginal and Torres Strait Islander | 1 | 2 | 2 | 4 | 2 |
| | non-Indigenous ² | 2 | 2 | 2 | 2 | 2 |
| Outer regional | Aboriginal and Torres Strait Islander | 2 | 3 | 3 | 3 | 5 |
| | non-Indigenous ² | 3 | 3 | 3 | 4 | 4 |
| Remote | Aboriginal and Torres Strait Islander | 0 | 2 | 0 | 2 | 2 |
| | non-Indigenous ² | 2 | 1 | 1 | 3 | 3 |
| Very remote | Aboriginal and Torres Strait Islander | 2 | 1 | 4 | 0 | 1 |
| | non-Indigenous ² | 4 | 3 | 2 | 9 | 4 |
| Total | Aboriginal and Torres Strait Islander | 4 | 3 | 3 | 5 | 4 |
| | non-Indigenous² | 5 | 5 | 5 | 6 | 5 |

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, 2004 – 2013, by State/Territory and year of birth

| State/ Territory | Year of birth | | | | | | | | | |
|------------------|---------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2004 – 2005 | | 2006 – 2007 | | 2008 – 2009 | | 2010 – 2011 | | 2012 – 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 0 | 0.0 | 0 | 0.0 | 1 | 10.3 | 3 | 29.2 | 7 | 64.1 |
| NSW | 26 | 14.7 | 19 | 10.1 | 28 | 14.1 | 30 | 15.0 | 36 | 18.3 |
| NT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 12.2 |
| QLD | 13 | 12.8 | 14 | 12.3 | 13 | 10.1 | 10 | 7.8 | 8 | 6.3 |
| SA | 1 | 2.9 | 4 | 10.5 | 4 | 10.0 | 4 | 10.0 | 5 | 12.2 |
| TAS | 0 | 0.0 | 1 | 7.6 | 1 | 7.5 | 3 | 23.1 | 0 | 0.0 |
| VIC | 7 | 5.6 | 17 | 12.5 | 32 | 22.5 | 31 | 21.8 | 45 | 29.1 |
| WA | 3 | 5.8 | 2 | 3.5 | 0 | 0.0 | 7 | 11.0 | 6 | 8.9 |
| Total | 50 | 9.6 | 57 | 10.1 | 79 | 13.1 | 88 | 14.5 | 108 | 17.4 |

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

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

Table 1.4.2 Number of perinatally exposed children born in Australia, 2004 – 2013, 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 | Number with HIV |
| 2004 – 2005 ¹ | 45 | 0 | 4 | 2 | 50 | 2 |
| 2006 – 2007 | 52 | 3 | 5 | 3 | 57 | 6 |
| 2008 – 2009 ² | 76 | 0 | 0 | 0 | 79 | 1 |
| 2010 – 2011 ³ | 85 | 1 | 2 | 0 | 88 | 1 |
| 2012 – 2013 ⁴ | 99 | 1 | 3 | 2 | 108 | 3 |
| Total | 357 | 5 | 14 | 7 | 382 | 13 |

1 Total includes 1 HIV negative child born in 2004 – 2005 whose mother's date of HIV diagnosis was not reported.

2 Total includes 3 children born in 2008 – 2009 (2 HIV negative and 1 with HIV infection) whose mother's date of HIV diagnosis was not reported.

3 Total includes 1 HIV negative child born in 2010 – 2011 whose mother's date of HIV diagnosis was not reported.

4 Total includes 7 children born in 2012 – 2013 (all HIV negative) whose mother's date of HIV diagnosis was not reported.

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 | |
|--------------------------------|-------------------|-------------------|
| | 2013 ¹ | Rate ² |
| Africa | | |
| Mauritius ³ | 9 635 | 743 |
| Somalia ³ | 32 313 | 308 |
| South Africa ³ | 6 274 091 | 11 842 |
| Sudan South ³ | 153 108 | 1 355 |
| Zambia ³ | 1 110 409 | 7 638 |
| Zimbabwe ³ | 1 390 293 | 9 826 |
| Asia Pacific | | |
| Australia | 26 800 | 116 |
| Cambodia ³ | 75 248 | 497 |
| China ⁴ | 780 000 | <100 |
| Indonesia ³ | 641 359 | 257 |
| Japan ⁴ | 7 900 | <100 |
| Malaysia ³ | 86 324 | 290 |
| Myanmar ³ | 192 465 | 361 |
| New Zealand ⁵ | 2 600 | <100 |
| Papua New Guinea ³ | 31 945 | 436 |
| Philippines ⁵ | 15 000 | <100 |
| Republic of Korea ³ | 15 000 | <100 |
| Thailand ³ | 435 284 | 650 |
| Vietnam ³ | 248 646 | 277 |
| Europe | | |
| France ⁵ | 160 000 | 400 |
| Germany ⁶ | 77 513 | <100 |
| Italy ³ | 122 018 | 204 |
| Spain ³ | 150 424 | 322 |
| United Kingdom ³ | 126 660 | 198 |
| North America | | |
| Canada ³ | 71 000 | 300 |
| United States ⁷ | 1 144 500 | 406 |

1 Estimated number of people living with HIV/AIDS.

2 Rate per 100 000 population.

3 Estimated HIV prevalence in people in all age in 2013.

4 Estimated HIV prevalence in people in all age in 2011.

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

6 Estimated HIV prevalence in people in all age in 2012.

7 Estimated HIV prevalence for people aged ≥13 in 2010.

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2 National surveillance for viral hepatitis

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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, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 6 | 1.5 | 5 | 1.3 | 3 | 0.7 | 1 | 0.3 | 4 | 1.0 |
| NSW | 98 | 1.4 | 83 | 1.2 | 57 | 0.8 | 42 | 0.6 | 62 | 0.8 |
| NT | 1 | 0.4 | 3 | 1.9 | 3 | 1.1 | 3 | 1.0 | 0 | 0.0 |
| QLD | 56 | 1.3 | 40 | 0.9 | 26 | 0.6 | 34 | 0.7 | 45 | 1.0 |
| SA | 59 | 3.7 | 4 | 0.3 | 6 | 0.4 | 7 | 0.4 | 11 | 0.7 |
| TAS | 5 | 1.1 | 4 | 0.8 | 4 | 0.8 | 2 | 0.4 | 0 | 0.0 |
| VIC | 303 | 5.5 | 96 | 1.8 | 34 | 0.6 | 61 | 1.1 | 53 | 0.9 |
| WA | 35 | 1.5 | 32 | 1.4 | 12 | 0.5 | 14 | 0.6 | 14 | 0.5 |
| Total | 563 | 2.6 | 267 | 1.2 | 145 | 0.6 | 164 | 0.7 | 189 | 0.8 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.2 Number of diagnoses of hepatitis A infection, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|------------|------------|------------|------------|------------|-----------|-----------|------------|-----------|-----------|------------|------------|-----------|------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 0 – 4 | 13 | 6 | 19 | 12 | 14 | 26 | 5 | 4 | 9 | 6 | 3 | 9 | 8 | 3 | 11 |
| 5 – 14 | 29 | 20 | 49 | 35 | 24 | 59 | 15 | 9 | 24 | 12 | 24 | 36 | 18 | 23 | 41 |
| 15 – 19 | 22 | 23 | 45 | 9 | 14 | 23 | 6 | 5 | 11 | 6 | 5 | 11 | 10 | 8 | 18 |
| 20 – 24 | 47 | 38 | 85 | 11 | 10 | 21 | 9 | 3 | 12 | 7 | 8 | 15 | 15 | 7 | 22 |
| 25 – 29 | 26 | 24 | 50 | 12 | 15 | 27 | 11 | 9 | 20 | 17 | 10 | 27 | 10 | 8 | 18 |
| 30 – 39 | 56 | 64 | 120 | 21 | 15 | 36 | 18 | 14 | 32 | 9 | 9 | 18 | 22 | 10 | 32 |
| 40 – 49 | 35 | 43 | 78 | 11 | 15 | 26 | 5 | 2 | 7 | 10 | 7 | 17 | 9 | 4 | 13 |
| 50 – 59 | 26 | 38 | 64 | 14 | 9 | 23 | 7 | 6 | 13 | 3 | 2 | 5 | 12 | 6 | 18 |
| 60+ | 25 | 28 | 53 | 9 | 17 | 26 | 9 | 8 | 17 | 10 | 16 | 26 | 8 | 7 | 15 |
| Total | 279 | 284 | 563 | 134 | 133 | 267 | 85 | 60 | 145 | 80 | 84 | 164 | 112 | 76 | 189 |

¹ Total includes cases whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate¹ of diagnosis of hepatitis B infection, 2009 – 2013, by State/Territory and year

| State/Territory | Year of diagnosis | | | | | | | | | |
|-----------------|-------------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 107 | 28.5 | 96 | 24.9 | 95 | 24.0 | 106 | 26.1 | 111 | 27.3 |
| NSW | 2 810 | 39.9 | 2 604 | 36.6 | 2 503 | 34.9 | 2 319 | 32.0 | 2 539 | 34.6 |
| NT | 161 | 74.9 | 162 | 73.4 | 167 | 73.0 | 196 | 79.3 | 331 | 129.7 |
| QLD | 1 055 | 24.3 | 1 114 | 25.3 | 875 | 19.6 | 874 | 19.3 | 951 | 20.7 |
| SA | 451 | 28.4 | 429 | 26.9 | 431 | 27.0 | 432 | 26.7 | 294 | 18.1 |
| TAS | 84 | 18.1 | 55 | 11.8 | 51 | 11.0 | 71 | 15.5 | 58 | 12.3 |
| VIC | 2 010 | 36.6 | 1 953 | 35.1 | 1 984 | 35.3 | 1 908 | 33.4 | 1 884 | 32.4 |
| WA | 703 | 30.6 | 775 | 33.2 | 648 | 27.0 | 831 | 33.0 | 983 | 37.8 |
| Total | 7 381 | 33.8 | 7 188 | 32.5 | 6 754 | 30.2 | 6 737 | 29.6 | 7 151 | 30.9 |

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 2.1.4 Number of diagnoses of hepatitis B infection, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 0 – 4 | 2 | 4 | 6 | 9 | 7 | 16 | 4 | 3 | 7 | 5 | 5 | 10 | 6 | 8 | 14 |
| 5 – 14 | 70 | 42 | 112 | 65 | 39 | 105 | 47 | 25 | 73 | 47 | 30 | 78 | 44 | 24 | 68 |
| 15 – 19 | 176 | 115 | 291 | 143 | 107 | 254 | 117 | 95 | 212 | 165 | 73 | 238 | 216 | 73 | 292 |
| 20 – 24 | 383 | 354 | 748 | 328 | 349 | 686 | 323 | 306 | 635 | 312 | 278 | 596 | 370 | 251 | 628 |
| 25 – 29 | 540 | 601 | 1 156 | 531 | 654 | 1 202 | 566 | 585 | 1 164 | 575 | 515 | 1 100 | 565 | 530 | 1 099 |
| 30 – 39 | 1 097 | 973 | 2 099 | 1 078 | 955 | 2 054 | 1 002 | 896 | 1 923 | 1 038 | 922 | 1 981 | 1 184 | 915 | 2 117 |
| 40 – 49 | 896 | 548 | 1 451 | 797 | 503 | 1 309 | 763 | 454 | 1 224 | 748 | 471 | 1 224 | 775 | 495 | 1 274 |
| 50 – 59 | 542 | 360 | 906 | 527 | 390 | 919 | 542 | 334 | 880 | 505 | 379 | 885 | 591 | 362 | 955 |
| 60 + | 350 | 244 | 598 | 367 | 259 | 636 | 355 | 272 | 631 | 374 | 245 | 620 | 395 | 305 | 700 |
| Not reported | 9 | 3 | 14 | 3 | 2 | 7 | 2 | 0 | 5 | 4 | 0 | 5 | 1 | 1 | 4 |
| Total | 4 065 | 3 244 | 7 381 | 3 848 | 3 265 | 7 188 | 3 721 | 2 970 | 6 754 | 3 773 | 2 918 | 6 737 | 4 147 | 2 964 | 7 151 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number and rate¹ of diagnosis of newly acquired hepatitis B infection, 2009 – 2013, by State/Territory and year

| State/Territory | Year of diagnosis | | | | | | | | | |
|-----------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 5 | 1.3 | 3 | 0.7 | 2 | 0.5 | 2 | 0.5 | 4 | 1.0 |
| NSW | 36 | 0.5 | 35 | 0.5 | 30 | 0.4 | 30 | 0.4 | 33 | 0.5 |
| NT | 4 | 1.5 | 4 | 1.5 | 4 | 1.5 | 5 | 1.8 | 6 | 2.3 |
| QLD | 55 | 1.3 | 60 | 1.4 | 45 | 1.0 | 54 | 1.2 | 45 | 1.0 |
| SA | 10 | 0.6 | 21 | 1.3 | 9 | 0.6 | 17 | 1.0 | 8 | 0.4 |
| TAS | 14 | 3.3 | 6 | 1.4 | 14 | 3.2 | 10 | 2.2 | 3 | 0.7 |
| VIC | 91 | 1.7 | 69 | 1.2 | 71 | 1.3 | 55 | 1.0 | 34 | 0.6 |
| WA | 38 | 1.7 | 32 | 1.4 | 18 | 0.7 | 25 | 1.0 | 39 | 1.5 |
| Total | 253 | 1.2 | 230 | 1.0 | 193 | 0.9 | 198 | 0.9 | 172 | 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 2.1.6 Number of diagnoses of newly acquired hepatitis B infection, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 0 – 4 | 1 | 0 | 1 | 1 | 5 | 6 | 1 | 0 | 1 | 1 | 1 | 2 | 1 | 2 | 3 |
| 5 – 14 | 0 | 0 | 1 | 2 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 15 – 19 | 3 | 1 | 7 | 6 | 3 | 10 | 3 | 3 | 6 | 4 | 1 | 6 | 4 | 3 | 8 |
| 20 – 24 | 12 | 11 | 21 | 12 | 8 | 21 | 9 | 9 | 21 | 10 | 6 | 17 | 10 | 1 | 12 |
| 25 – 29 | 28 | 12 | 47 | 22 | 16 | 39 | 18 | 11 | 28 | 19 | 10 | 30 | 19 | 3 | 21 |
| 30 – 39 | 54 | 32 | 83 | 41 | 19 | 56 | 45 | 21 | 67 | 31 | 18 | 48 | 38 | 14 | 51 |
| 40 – 49 | 39 | 13 | 48 | 34 | 12 | 46 | 26 | 11 | 35 | 35 | 15 | 48 | 30 | 11 | 44 |
| 50 – 59 | 16 | 10 | 24 | 20 | 8 | 30 | 20 | 5 | 24 | 20 | 5 | 25 | 17 | 3 | 17 |
| 60 + | 14 | 7 | 21 | 13 | 7 | 18 | 10 | 1 | 11 | 19 | 1 | 20 | 12 | 3 | 15 |
| Total | 167 | 86 | 253 | 151 | 79 | 230 | 132 | 61 | 193 | 139 | 58 | 198 | 131 | 40 | 172 |

¹ Totals include people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of newly acquired hepatitis B infection¹, 2009 – 2013, by exposure category, year and sex

| Exposure category | Year of diagnosis | | | | | | | | | | | | | | |
|----------------------------------|-------------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|-------------------|-----------|------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 ² | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| Injecting drug use | 36 | 20 | 56 | 32 | 18 | 50 | 31 | 14 | 45 | 25 | 11 | 37 | 27 | 9 | 36 |
| Sexual contact | 29 | 9 | 38 | 7 | 10 | 17 | 19 | 7 | 26 | 21 | 11 | 32 | 18 | 3 | 21 |
| <i>Men who have sex with men</i> | 9 | — | 9 | 1 | — | 2 | 6 | — | 6 | 5 | — | 5 | 7 | — | 7 |
| <i>Heterosexual contact</i> | 14 | 5 | 19 | 4 | 7 | 11 | 8 | 3 | 11 | 7 | 3 | 10 | 7 | 3 | 10 |
| <i>Not further specified</i> | 6 | 4 | 10 | 2 | 3 | 4 | 5 | 4 | 9 | 9 | 8 | 17 | 4 | 0 | 4 |
| Blood/tissue recipient | 2 | 1 | 3 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Skin penetration procedure | 2 | 1 | 3 | 3 | 1 | 4 | 8 | 3 | 11 | 1 | 0 | 1 | 3 | 1 | 4 |
| Healthcare exposure | 2 | 3 | 5 | 4 | 1 | 5 | 6 | 6 | 12 | 5 | 5 | 10 | 3 | 1 | 4 |
| Household contact | 2 | 1 | 3 | 3 | 2 | 5 | 2 | 0 | 2 | 2 | 2 | 4 | 0 | 0 | 0 |
| Other | 6 | 4 | 10 | 8 | 8 | 16 | 9 | 5 | 14 | 18 | 5 | 23 | 8 | 3 | 12 |
| Undetermined | 88 | 47 | 135 | 92 | 39 | 131 | 57 | 26 | 83 | 67 | 24 | 91 | 72 | 23 | 95 |
| Total | 167 | 86 | 253 | 151 | 79 | 230 | 132 | 61 | 193 | 139 | 58 | 198 | 131 | 40 | 172 |

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

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number and percentage of diagnoses of newly acquired hepatitis B infection, 2009 – 2013, and the Australian population, by region/country of birth and year

| Region/ country of birth | Year of diagnosis | | | | | | | | | | | | Australian population ¹ |
|---|-------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------------------------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | Number | Percent | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | | | |
| Total with a reported country of birth | 102 | 40.3 | 139 | 60.4 | 120 | 62.2 | 103 | 52.0 | 107 | 62.2 | 107 | 62.2 | 21 507 719 |
| Australia | 70 | 68.6 | 95 | 68.3 | 88 | 73.3 | 77 | 74.8 | 82 | 76.6 | 82 | 76.6 | 69.8 |
| Overseas born | 32 | 31.4 | 44 | 31.7 | 32 | 26.7 | 26 | 25.2 | 25 | 23.4 | 25 | 23.4 | 24.6 |
| Other Oceania | 5 | 4.9 | 1 | 0.7 | 6 | 5.0 | 1 | 1.0 | 2 | 1.9 | 2 | 1.9 | 2.8 |
| United Kingdom and Ireland | 11 | 10.8 | 3 | 2.2 | 2 | 1.7 | 2 | 1.9 | 2 | 1.9 | 2 | 1.9 | 5.4 |
| Other Europe | 2 | 2.0 | 8 | 5.8 | 3 | 2.5 | 8 | 7.8 | 5 | 4.7 | 5 | 4.7 | 4.5 |
| Middle East/North Africa | 4 | 3.9 | 6 | 4.3 | 6 | 5.0 | 4 | 3.9 | 3 | 2.8 | 3 | 2.8 | 1.4 |
| Sub-Saharan Africa | 1 | 1.0 | 7 | 5.0 | 2 | 1.7 | 1 | 1.0 | 1 | 0.9 | 1 | 0.9 | 1.3 |
| Asia | 9 | 8.8 | 17 | 12.2 | 13 | 10.8 | 8 | 7.8 | 10 | 9.3 | 10 | 9.3 | 8.1 |
| North America | 0 | 0.0 | 1 | 0.7 | 0 | 0.0 | 1 | 1.0 | 1 | 0.9 | 1 | 0.9 | 0.5 |
| South/Central America and the Caribbean | 0 | 0.0 | 1 | 0.7 | 0 | 0.0 | 1 | 1.0 | 1 | 0.9 | 1 | 0.9 | 0.5 |
| Not reported | 151 | 59.7 | 91 | 39.6 | 73 | 37.8 | 95 | 48.0 | 65 | 37.8 | 65 | 37.8 | 5.6 |
| Total | 253 | 100 | 230 | 100 | 193 | 100 | 198 | 100 | 172 | 100 | 172 | 100 | |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number and rate¹ of diagnosis of hepatitis C infection, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 163 | 43.1 | 223 | 58.5 | 189 | 49.0 | 147 | 37.2 | 184 | 45.9 |
| NSW | 4 053 | 57.2 | 3 980 | 55.6 | 3 370 | 46.7 | 3 277 | 45.1 | 3 546 | 48.2 |
| NT | 168 | 73.6 | 169 | 72.7 | 211 | 87.6 | 191 | 77.4 | 257 | 103.9 |
| QLD | 2 634 | 60.7 | 2 672 | 60.7 | 2 408 | 54.0 | 2 385 | 52.6 | 2 469 | 53.6 |
| SA | 563 | 35.6 | 534 | 33.4 | 474 | 29.4 | 487 | 29.8 | 476 | 29.1 |
| TAS | 281 | 59.7 | 267 | 55.8 | 229 | 48.3 | 262 | 56.0 | 229 | 48.5 |
| VIC | 2 503 | 45.9 | 2 576 | 46.4 | 2 330 | 41.5 | 2 239 | 39.2 | 2 275 | 39.2 |
| WA | 1 138 | 49.7 | 1 065 | 45.4 | 1 083 | 45.0 | 1 139 | 45.5 | 1 279 | 49.3 |
| Total | 11 503 | 52.7 | 11 486 | 51.8 | 10 294 | 45.9 | 10 127 | 44.5 | 10 715 | 46.3 |

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, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 4 | 13 | 17 | 8 | 11 | 19 | 4 | 6 | 10 | 5 | 6 | 11 | 12 | 7 | 19 |
| 5 – 14 | 14 | 18 | 33 | 16 | 8 | 26 | 10 | 7 | 18 | 7 | 13 | 21 | 7 | 7 | 14 |
| 15 – 19 | 89 | 124 | 214 | 81 | 113 | 196 | 85 | 113 | 199 | 112 | 96 | 208 | 137 | 101 | 239 |
| 20 – 24 | 502 | 432 | 937 | 496 | 381 | 889 | 486 | 338 | 829 | 589 | 302 | 893 | 619 | 334 | 956 |
| 25 – 29 | 865 | 625 | 1 499 | 865 | 595 | 1 495 | 773 | 495 | 1 272 | 789 | 468 | 1 265 | 823 | 423 | 1 249 |
| 30 – 39 | 2 155 | 1 117 | 3 297 | 2 045 | 1 239 | 3 328 | 1 899 | 986 | 2 907 | 1 823 | 987 | 2 826 | 1 895 | 1 067 | 2 971 |
| 40 – 49 | 1 974 | 929 | 2 914 | 1 892 | 935 | 2 836 | 1 724 | 780 | 2 506 | 1 578 | 789 | 2 372 | 1 707 | 759 | 2 471 |
| 50 – 59 | 1 380 | 613 | 1 999 | 1 412 | 668 | 2 087 | 1 299 | 624 | 1 924 | 1 237 | 612 | 1 851 | 1 328 | 667 | 1 996 |
| 60 + | 294 | 275 | 570 | 340 | 237 | 579 | 352 | 252 | 609 | 397 | 270 | 667 | 486 | 295 | 783 |
| Not reported | 19 | 1 | 23 | 21 | 6 | 31 | 11 | 6 | 20 | 9 | 0 | 13 | 10 | 4 | 17 |
| Total | 7 293 | 4 147 | 11 503 | 7 176 | 4 193 | 11 486 | 6 643 | 3 607 | 10 294 | 6 546 | 3 543 | 10 127 | 7 024 | 3 664 | 10 715 |

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, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|------------|------------|------------|------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| ACT | 8 | 12 | 10 | 15 | 14 |
| NSW | 41 | 37 | 52 | 50 | 43 |
| NT | 5 | 0 | 3 | 0 | 1 |
| QLD | – | – | – | – | – |
| SA | 35 | 43 | 33 | 80 | 62 |
| TAS | 22 | 23 | 27 | 23 | 19 |
| VIC | 195 | 208 | 167 | 190 | 145 |
| WA | 93 | 77 | 120 | 128 | 123 |
| Total | 399 | 400 | 412 | 486 | 407 |

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, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|------------|------------|------------|------------|----------------|------------|------------|------------|------------|------------|----------------|------------|------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T ¹ | M | F | T | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 1 | 5 | 6 | 1 | 3 | 4 | 1 | 0 | 1 | 3 | 1 | 4 | 3 | 1 | 4 |
| 5 – 14 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 15 – 19 | 12 | 9 | 21 | 6 | 21 | 27 | 8 | 22 | 30 | 12 | 15 | 27 | 19 | 12 | 31 |
| 20 – 24 | 76 | 41 | 117 | 58 | 44 | 102 | 69 | 32 | 101 | 95 | 34 | 129 | 63 | 29 | 92 |
| 25 – 29 | 51 | 43 | 94 | 47 | 38 | 85 | 79 | 27 | 106 | 66 | 45 | 111 | 61 | 28 | 90 |
| 30 – 39 | 80 | 36 | 116 | 60 | 47 | 107 | 72 | 25 | 97 | 71 | 43 | 114 | 73 | 37 | 110 |
| 40 – 49 | 18 | 14 | 32 | 34 | 19 | 53 | 43 | 14 | 57 | 46 | 21 | 67 | 42 | 16 | 58 |
| 50 – 59 | 5 | 5 | 10 | 16 | 3 | 19 | 11 | 6 | 17 | 21 | 5 | 26 | 11 | 4 | 15 |
| 60 + | 1 | 0 | 1 | 0 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 4 | 6 | 0 | 6 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 |
| Total | 244 | 155 | 399 | 223 | 177 | 400 | 284 | 128 | 412 | 316 | 167 | 486 | 278 | 127 | 407 |

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.13 Number of diagnoses of newly acquired hepatitis C infection, 2009 – 2013, by exposure category, year and sex

| Exposure category | Year of diagnosis | | | | | | | | | | | | | | |
|----------------------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------|------------|------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T | M | F | T | M | F | T ¹ | M | F | T ¹ |
| Injecting drug use | 167 | 94 | 261 | 159 | 106 | 265 | 174 | 62 | 236 | 172 | 99 | 274 | 205 | 93 | 300 |
| Sexual contact | 7 | 8 | 15 | 7 | 3 | 10 | 4 | 4 | 8 | 3 | 6 | 9 | 12 | 4 | 16 |
| Blood/tissue recipient | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 |
| Skin penetration procedure | 4 | 4 | 8 | 5 | 6 | 11 | 13 | 3 | 16 | 4 | 4 | 8 | 4 | 2 | 6 |
| Healthcare exposure | 2 | 12 | 14 | 4 | 36 | 40 | 3 | 7 | 10 | 1 | 2 | 3 | 4 | 2 | 6 |
| Household contact | 0 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |
| Other | 24 | 11 | 35 | 21 | 9 | 30 | 21 | 7 | 28 | 24 | 8 | 32 | 24 | 9 | 33 |
| Undetermined | 40 | 25 | 65 | 24 | 15 | 39 | 68 | 44 | 112 | 111 | 46 | 157 | 25 | 16 | 41 |
| Total | 244 | 155 | 399 | 223 | 177 | 400 | 284 | 128 | 412 | 316 | 167 | 486 | 278 | 127 | 407 |

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, 2009 – 2013, and the Australian population, by region/country of birth and year

| Region/country of birth | Year of diagnosis | | | | | | | | | | | | Australian population ¹ |
|--|-------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|-------------|------------------------------------|------------------------------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | Percent | Australian population ¹ | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | | | |
| Total with a reported country of birth | 197 | 49.4 | 206 | 51.5 | 221 | 53.6 | 266 | 54.7 | 342 | 84.0 | 84.0 | 21 507 719 | |
| Australia | 166 | 84.3 | 177 | 85.9 | 205 | 92.8 | 234 | 88.0 | 308 | 90.1 | 90.1 | 69.8 | |
| Overseas born | 31 | 15.7 | 29 | 14.1 | 16 | 7.2 | 32 | 12.0 | 34 | 9.9 | 9.9 | 24.6 | |
| <i>Other Oceania</i> | 7 | 3.6 | 5 | 2.4 | 2 | 0.9 | 2 | 0.8 | 8 | 2.3 | 2.3 | 2.8 | |
| <i>United Kingdom and Ireland</i> | 6 | 3.0 | 8 | 3.9 | 3 | 1.4 | 9 | 3.4 | 6 | 1.8 | 1.8 | 5.4 | |
| <i>Other Europe</i> | 4 | 2.0 | 4 | 1.9 | 0 | 0.0 | 4 | 1.5 | 3 | 0.9 | 0.9 | 4.5 | |
| <i>Middle East/North Africa</i> | 2 | 1.0 | 2 | 1.0 | 1 | 0.5 | 3 | 1.1 | 4 | 1.2 | 1.2 | 1.4 | |
| <i>Sub-Saharan Africa</i> | 2 | 1.0 | 2 | 1.0 | 1 | 0.5 | 3 | 1.1 | 5 | 1.5 | 1.5 | 1.3 | |
| <i>Asia</i> | 6 | 3.0 | 5 | 2.4 | 7 | 3.2 | 8 | 3.0 | 6 | 1.8 | 1.8 | 8.1 | |
| <i>North America</i> | 3 | 1.5 | 3 | 1.5 | 2 | 0.9 | 2 | 0.8 | 2 | 0.6 | 0.6 | 0.5 | |
| <i>South/Central America and the Caribbean</i> | 1 | 0.5 | 0 | 0.0 | 0 | 0.0 | 1 | 0.4 | 0 | 0.0 | 0.0 | 0.5 | |
| Not reported | 202 | 50.6 | 194 | 48.5 | 191 | 46.4 | 220 | 45.3 | 65 | 16.0 | 16.0 | 5.6 | |
| Total | 399 | 100 | 400 | 100 | 412 | 100 | 486 | 100 | 407 | 100 | 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, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|-----------|-----------|-----------|-----------|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| ACT | 0 | 0 | 0 | 0 | 0 |
| NSW | 9 | 9 | 13 | 5 | 9 |
| NT | 0 | 0 | 0 | 0 | 1 |
| QLD | 13 | 20 | 7 | 7 | 13 |
| SA | 0 | 1 | 1 | 7 | 4 |
| TAS | 0 | 0 | 0 | 0 | 0 |
| VIC | 13 | 6 | 16 | 10 | 22 |
| WA | 0 | 0 | 2 | 2 | 4 |
| Total | 35 | 36 | 39 | 31 | 53 |

Source: National Notifiable Diseases Surveillance System

Table 2.1.16 Number of diagnoses of hepatitis D infection, 2009 – 2013, by age group, year and sex

| Age group | Year of diagnosis | | | | | | | | | | | | | | |
|--------------|-------------------|-----------|-----------|-----------|----------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T | M | F | T ¹ | 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 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 15 – 19 | 4 | 1 | 5 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 2 |
| 20 – 24 | 2 | 1 | 3 | 4 | 1 | 5 | 0 | 2 | 2 | 1 | 2 | 3 | 2 | 0 | 2 |
| 25 – 29 | 5 | 4 | 9 | 2 | 0 | 2 | 1 | 2 | 3 | 3 | 0 | 3 | 5 | 2 | 7 |
| 30 – 39 | 3 | 1 | 4 | 1 | 5 | 6 | 7 | 3 | 10 | 5 | 1 | 6 | 9 | 7 | 16 |
| 40 – 49 | 7 | 0 | 7 | 11 | 1 | 12 | 5 | 6 | 11 | 6 | 1 | 7 | 8 | 3 | 11 |
| 50 – 59 | 3 | 1 | 4 | 8 | 1 | 9 | 7 | 0 | 7 | 4 | 4 | 8 | 8 | 4 | 12 |
| 60 + | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 3 | 5 | 1 | 1 | 2 | 2 | 1 | 3 |
| Not reported | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 24 | 11 | 35 | 28 | 8 | 36 | 23 | 16 | 39 | 21 | 10 | 31 | 34 | 19 | 53 |

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, 2013, 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 | 0 | 0.0 | 4 | 100.0 | 0 | 0.0 | 4 | |
| NSW | 2 | 3.2 | 60 | 96.8 | 0 | 0.0 | 62 | |
| NT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | |
| QLD | 0 | 0.0 | 37 | 82.2 | 8 | 17.8 | 45 | |
| SA | 0 | 0.0 | 11 | 100.0 | 0 | 0.0 | 11 | |
| TAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | |
| VIC | 1 | 1.9 | 51 | 96.2 | 1 | 1.9 | 53 | |
| WA | 0 | 0.0 | 14 | 100.0 | 0 | 0.0 | 14 | |
| Total | 3 | (1.6) | 177 | (93.7) | 9 | (4.8) | 189 | |

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 2.2.2 Number and rate¹ of diagnosis of hepatitis B, 2009 – 2013, by State/Territory², Aboriginal and Torres Strait Islander status and year

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|--------------|--------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | Aboriginal and Torres Strait Islander | 3 | 30.3 | 3 | 45.4 | 0 | 0.0 | 0 | 0.0 | 4 | 56.8 |
| | Non-Indigenous ³ | 104 | 28.2 | 93 | 24.5 | 95 | 24.3 | 106 | 26.6 | 107 | 26.7 |
| NT | Aboriginal and Torres Strait Islander | 82 | 189.0 | 76 | 165.5 | 79 | 171.5 | 57 | 112.1 | 74 | 142.0 |
| | Non-Indigenous ³ | 79 | 47.1 | 86 | 50.4 | 88 | 49.7 | 139 | 77.6 | 257 | 140.7 |
| SA | Aboriginal and Torres Strait Islander | 19 | 77.8 | 19 | 80.9 | 33 | 134.3 | 20 | 68.3 | 17 | 65.3 |
| | Non-Indigenous ³ | 432 | 27.9 | 410 | 26.3 | 398 | 25.6 | 412 | 26.0 | 277 | 17.5 |
| TAS | Aboriginal and Torres Strait Islander | 2 | 10.1 | 1 | 6.7 | 2 | 10.5 | 0 | 0.0 | 2 | 11.0 |
| | Non-Indigenous ³ | 82 | 18.6 | 54 | 12.2 | 49 | 11.1 | 71 | 16.3 | 56 | 12.5 |
| WA | Aboriginal and Torres Strait Islander | 36 | 66.5 | 41 | 82.3 | 52 | 85.8 | 47 | 58.8 | 26 | 38.3 |
| | Non-Indigenous ³ | 667 | 30.0 | 734 | 32.5 | 596 | 25.7 | 784 | 32.3 | 957 | 38.2 |
| Total | Aboriginal and Torres Strait Islander | 142 | 100.2 | 140 | 99.8 | 166 | 110.4 | 124 | 68.9 | 123 | 72.2 |
| | Non-Indigenous³ | 1 364 | 28.6 | 1 377 | 28.5 | 1 226 | 25.0 | 1 512 | 30.1 | 1 654 | 32.3 |

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 2.2.3 Number (percent) of diagnoses of hepatitis B infection, 2013, 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 | 4 | 3.6 | 105 | 94.6 | 2 | 1.8 | 111 |
| NSW | — | — | — | — | 2 345 | 92.4 | 2 539 |
| NT | 74 | 22.4 | 239 | 72.2 | 18 | 5.4 | 331 |
| QLD | — | — | — | — | 706 | 74.2 | 951 |
| SA | 17 | 5.8 | 275 | 93.5 | 2 | 0.7 | 294 |
| TAS | 2 | 3.4 | 43 | 74.1 | 13 | 22.4 | 58 |
| VIC | — | — | — | — | 1 101 | 58.4 | 1 884 |
| WA | 26 | (2.6) | 892 | (90.7) | 65 | 6.6 | 983 |
| Total | 206 | (2.9) | 2 693 | 37.7 | 4 252 | 59.5 | 7 151 |

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, 2009 – 2013, by State/Territory², Aboriginal and Torres Strait Islander status and year

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | Non-Indigenous ³ | 5 | 1.3 | 3 | 0.7 | 2 | 0.5 | 2 | 0.5 | 4 | 1.1 |
| NSW | Aboriginal and Torres Strait Islander | 4 | 2.4 | 2 | 1.1 | 3 | 1.5 | 1 | 1.0 | 2 | 1.1 |
| | Non-Indigenous ³ | 32 | 0.5 | 33 | 0.5 | 27 | 0.4 | 29 | 0.8 | 31 | 0.4 |
| NT | Aboriginal and Torres Strait Islander | 0 | 0.0 | 1 | 1.4 | 1 | 0.9 | 4 | 4.1 | 4 | 4.4 |
| | Non-Indigenous ³ | 4 | 2.1 | 3 | 1.6 | 3 | 1.5 | 1 | 0.6 | 2 | 1.1 |
| QLD | Aboriginal and Torres Strait Islander | 5 | 2.3 | 13 | 8.6 | 8 | 4.1 | 8 | 4.2 | 4 | 1.5 |
| | Non-Indigenous ³ | 50 | 1.2 | 47 | 1.1 | 37 | 0.9 | 46 | 1.1 | 41 | 0.9 |
| SA | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 5.6 | 0 | 0.0 |
| | Non-Indigenous ³ | 10 | 0.6 | 21 | 1.3 | 9 | 0.6 | 15 | 0.9 | 8 | 0.4 |
| TAS | Aboriginal and Torres Strait Islander | 2 | 10.1 | 0 | 0.0 | 1 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| | Non-Indigenous ³ | 12 | 3.0 | 6 | 1.4 | 13 | 3.1 | 10 | 2.4 | 3 | 0.7 |
| VIC | Aboriginal and Torres Strait Islander | 3 | 7.8 | 4 | 10.0 | 1 | 2.5 | 3 | 7.5 | 0 | 0.0 |
| | Non-Indigenous ³ | 88 | 1.6 | 65 | 1.2 | 70 | 1.3 | 52 | 0.9 | 34 | 0.6 |
| WA | Aboriginal and Torres Strait Islander | 0 | 0.0 | 2 | 2.1 | 1 | 0.7 | 2 | 2.2 | 3 | 5.8 |
| | Non-Indigenous ³ | 38 | 1.8 | 30 | 1.3 | 17 | 0.7 | 23 | 1.0 | 36 | 1.4 |
| Total | Aboriginal and Torres Strait Islander | 14 | 2.2 | 22 | 3.8 | 15 | 2.1 | 20 | 3.4 | 13 | 1.9 |
| | Non-Indigenous³ | 239 | 1.1 | 208 | 1.0 | 178 | 0.8 | 178 | 0.9 | 159 | 0.7 |

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, 2013, 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 | 0 | (0) | 4 | (100) | 0 | (0) | 4 |
| NSW | 2 | (6.1) | 25 | (75.8) | 6 | (18.2) | 33 |
| NT | 4 | (66.7) | 2 | (33.3) | 0 | (0) | 6 |
| QLD | 4 | (8.9) | 21 | (46.7) | 20 | (44.4) | 45 |
| SA | 0 | (0) | 7 | (87.5) | 1 | (12.5) | 8 |
| TAS | 0 | (0) | 3 | (100) | 0 | (0) | 3 |
| VIC | 0 | (0) | 32 | (94.1) | 2 | (5.9) | 34 |
| WA | 3 | (7.7) | 36 | (92.3) | 0 | (0) | 39 |
| Total | 13 | (7.6) | 130 | (75.6) | 29 | (16.9) | 172 |

Source: National Notifiable Diseases Surveillance System

Table 2.2.6 Number and rate¹ of diagnosis of hepatitis C, 2009 – 2013, by State/Territory², Aboriginal and Torres Strait Islander status and year

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|------------------|--|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 27 | 45.7 | 24 | 39.6 | 43 | 73.7 | 25 | 36.8 | 23 | 41.0 |
| | Non-Indigenous ³ | 141 | 81.0 | 145 | 82.0 | 168 | 91.0 | 166 | 92.4 | 234 | 127.8 |
| SA | Aboriginal and Torres Strait Islander | 46 | 144.2 | 72 | 212.7 | 34 | 109.1 | 62 | 175.4 | 69 | 203.9 |
| | Non-Indigenous ³ | 517 | 33.2 | 462 | 29.4 | 440 | 27.8 | 425 | 26.4 | 407 | 25.2 |
| TAS | Aboriginal and Torres Strait Islander | 11 | 61.2 | 13 | 61.5 | 11 | 63.1 | 21 | 87.4 | 19 | 90.3 |
| | Non-Indigenous ³ | 270 | 59.9 | 254 | 55.4 | 218 | 48.0 | 241 | 53.9 | 210 | 46.8 |
| WA | Aboriginal and Torres Strait Islander | 140 | 162.2 | 130 | 153.3 | 152 | 167.2 | 187 | 205.8 | 201 | 211.1 |
| | Non-Indigenous ³ | 998 | 45.1 | 935 | 41.2 | 931 | 40.0 | 952 | 39.5 | 1 078 | 43.1 |
| Total | Aboriginal and Torres Strait Islander | 224 | 109.6 | 239 | 115.5 | 240 | 116.1 | 295 | 132.7 | 312 | 141.9 |
| | Non-Indigenous³ | 1 926 | 43.6 | 1 796 | 40.0 | 1 757 | 38.5 | 1 784 | 38.3 | 1 929 | 40.6 |

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, 2013, by State/Territory¹ and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | | Non-Indigenous | | Not reported | | Total |
|------------------|--|--------------|----------------|---------------|--------------|---------------|---------------|
| | Aboriginal and Torres Strait Islander | | | | | | |
| ACT | — | — | — | — | 139 | (75.5) | 184 |
| NSW | — | — | — | — | 3 071 | (86.6) | 3 546 |
| NT | 23 | (8.9) | 218 | (84.8) | 16 | (6.2) | 257 |
| QLD | — | — | — | — | 1 324 | (53.6) | 2 469 |
| SA | 69 | (14.5) | 375 | (78.8) | 32 | (6.7) | 476 |
| TAS | 19 | (8.3) | 140 | (61.1) | 70 | (30.6) | 229 |
| VIC | — | — | — | — | 1 625 | (71.4) | 2 275 |
| WA | 201 | (15.7) | 1 032 | (80.7) | 46 | (3.6) | 1 279 |
| Total | 796 | (7.4) | 3 596 | (33.6) | 6 323 | (59.0) | 10 715 |

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, 2013, by State/Territory¹ and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | | Non-Indigenous | | Not reported | | Total |
|------------------|--|------------|----------------|-------------|--------------|-------------|-----------|
| | Aboriginal and Torres Strait Islander | | | | | | |
| ACT | 0 | | 0 | | 0 | | 0 |
| NSW | — | — | — | — | 3 | (33.3) | 9 |
| NT | 0 | (0) | 1 | (100) | 0 | (0) | 1 |
| QLD | — | — | — | — | 4 | (30.8) | 13 |
| SA | 0 | (0) | 4 | (100) | 0 | (0) | 4 |
| TAS | 0 | | 0 | | 0 | | 0 |
| VIC | 0 | (0) | 20 | (90.9) | 2 | (9.1) | 22 |
| WA | 0 | (0) | 4 | (100) | 0 | (0) | 4 |
| Total | 0 | (0) | 44 | (83) | 9 | (17) | 53 |

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 – 2013, 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 – 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | | | |
| Hepatitis B | 115 (7.5) | 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) | 8 (3.6) | 172 | | |
| Hepatitis C | 250 (16.3) | 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) | 67 (30.2) | 720 | | |
| Hepatitis B/C/D | 15 (1.0) | 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) | 5 (2.3) | 39 | | |
| Hepatocellular carcinoma | 50 (3.2) | 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) | 30 (13.5) | 248 | | |
| <i>Hepatitis B</i> | 16 (1.0) | 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) | 4 (1.8) | 59 | | |
| <i>Hepatitis C</i> | 22 (1.4) | 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) | 18 (8.1) | 121 | | |
| <i>Hepatitis B/C/D</i> | 1 (0.1) | 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) | 1 (0.5) | 5 | | |
| <i>Hepatitis negative</i> | 11 (0.7) | 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) | 7 (3.2) | 63 | | |
| Other ¹ | 1 107 (72.0) | 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) | 112 (50.5) | 1 997 | | |
| Total | 1 537 (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) | 222 (100.0) | 3 176 | | |

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

2 Data available to 31 December 2013.

Source: Australia and New Zealand Liver Transplant Registry

2.4 Global comparisons of hepatitis B virus prevalence

Table 2.4.1 Estimated hepatitis B virus 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 rate¹ of diagnosis of chlamydia infection, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | 948 | 228.8 | 1 161 | 274.3 | 1 261 | 296.0 | 1 283 | 299.0 | 1 269 | 298.9 |
| NSW | 14 955 | 212.3 | 18 264 | 257.5 | 20 578 | 290.2 | 21 302 | 298.7 | 20 828 | 289.5 |
| NT | 2 445 | 927.0 | 2 662 | 995.2 | 2 629 | 992.0 | 2 722 | 1 014.8 | 3 008 | 1 104.2 |
| QLD | 16 693 | 375.9 | 19 213 | 426.0 | 18 646 | 410.2 | 18 819 | 408.0 | 19 497 | 417.4 |
| SA | 3 758 | 240.5 | 4 335 | 272.9 | 5 132 | 322.2 | 4 864 | 305.0 | 5 183 | 324.8 |
| TAS | 1 470 | 309.0 | 2 014 | 420.7 | 1 777 | 375.9 | 1 786 | 380.6 | 1 538 | 333.5 |
| VIC | 13 914 | 249.1 | 16 493 | 291.2 | 19 220 | 337.5 | 20 329 | 354.3 | 19 467 | 336.4 |
| WA | 8 830 | 376.8 | 10 178 | 425.9 | 11 675 | 477.2 | 11 798 | 465.3 | 11 747 | 448.6 |
| Total | 63 013 | 284.9 | 74 320 | 331.9 | 80 918 | 359.4 | 82 903 | 364.3 | 82 537 | 358.7 |

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 3.1.2 Number of diagnoses of chlamydia, 2009 – 2013, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|--------------------------|-------------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 17 | 19 | 36 | 16 | 22 | 40 | 13 | 17 | 30 | 18 | 19 | 37 | 8 | 15 | 23 |
| 5 – 14 | 36 | 251 | 287 | 41 | 310 | 351 | 46 | 331 | 377 | 42 | 369 | 411 | 39 | 333 | 372 |
| 15 – 19 | 3 230 | 10 521 | 13 767 | 4 227 | 12 779 | 17 044 | 4 379 | 14 113 | 18 518 | 4 364 | 13 443 | 17 840 | 4 056 | 12 440 | 16 502 |
| 20 – 24 | 9 477 | 14 699 | 24 212 | 11 087 | 17 085 | 28 243 | 12 335 | 18 795 | 31 187 | 12 302 | 19 366 | 31 693 | 11 963 | 19 260 | 31 236 |
| 25 – 29 | 5 824 | 6 533 | 12 373 | 6 992 | 7 133 | 14 160 | 7 566 | 7 870 | 15 458 | 7 928 | 8 064 | 16 017 | 8 378 | 8 547 | 16 931 |
| 30 – 39 | 4 400 | 3 838 | 8 245 | 5 192 | 4 285 | 9 503 | 5 345 | 4 580 | 9 937 | 6 033 | 4 906 | 10 956 | 6 199 | 5 192 | 11 397 |
| 40 – 49 | 1 888 | 928 | 2 818 | 2 230 | 1 133 | 3 371 | 2 369 | 1 276 | 3 648 | 2 644 | 1 326 | 3 972 | 2 658 | 1 397 | 4 057 |
| 50 – 59 | 654 | 252 | 907 | 866 | 276 | 1 143 | 933 | 291 | 1 225 | 1 061 | 355 | 1 417 | 1 140 | 396 | 1 536 |
| 60 + | 248 | 49 | 297 | 332 | 52 | 385 | 367 | 63 | 431 | 402 | 51 | 454 | 395 | 63 | 458 |
| Not reported | 25 | 19 | 71 | 25 | 41 | 80 | 42 | 62 | 107 | 33 | 67 | 106 | 8 | 16 | 25 |
| Total¹ | 25 799 | 37 109 | 63 013 | 31 008 | 43 116 | 74 320 | 33 395 | 47 398 | 80 918 | 34 827 | 47 966 | 82 903 | 34 844 | 47 659 | 82 537 |

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, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | |
|------------------|-------------------|----------|----------|----------|----------|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| QLD | 1 | 1 | 0 | 0 | 0 |
| WA | 0 | 0 | 0 | 1 | 0 |
| Total | 1 | 1 | 0 | 1 | 0 |

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 2009 – 2013, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | | |
|-------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | | |
| | 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 | 0 |
| 15 – 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 20 – 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 25 – 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 – 39 | 0 | 0 | 0 | 1 | 0 | 1 | 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 | 0 |
| 50 – 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60+ | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | |

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate of diagnosis of gonorrhoea, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ |
| ACT | 55 | 13.4 | 56 | 13.9 | 128 | 30.8 | 92 | 21.7 | 114 | 26.5 |
| NSW | 1 653 | 23.5 | 2 302 | 32.4 | 2 882 | 40.4 | 4 130 | 57.5 | 4 234 | 58.4 |
| NT | 1 551 | 589.1 | 1 933 | 723.9 | 1 952 | 738.1 | 1 822 | 681.9 | 1 957 | 722.8 |
| QLD | 1 787 | 40.3 | 2 385 | 53.0 | 2 952 | 64.9 | 2 691 | 58.3 | 2 732 | 58.7 |
| SA | 373 | 23.8 | 473 | 29.6 | 445 | 28.0 | 506 | 31.6 | 855 | 49.6 |
| TAS | 21 | 4.6 | 20 | 4.3 | 19 | 4.0 | 35 | 7.6 | 69 | 15.2 |
| VIC | 1 491 | 26.9 | 1 752 | 31.2 | 1 883 | 33.2 | 2 455 | 42.7 | 3 014 | 51.7 |
| WA | 1 348 | 57.4 | 1 403 | 58.7 | 1 839 | 74.7 | 2 111 | 83.7 | 1 972 | 75.7 |
| Total | 8 279 | 37.5 | 10 324 | 46.2 | 12 100 | 53.7 | 13 842 | 60.8 | 14 947 | 64.6 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.6 Number of diagnoses of gonorrhoea, 2009 – 2013, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|--------------|--------------|----------------|---------------|--------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| 0 – 4 | 6 | 5 | 11 | 2 | 4 | 6 | 4 | 7 | 11 | 4 | 5 | 9 | 3 | 3 | 6 |
| 5 – 14 | 27 | 108 | 136 | 35 | 149 | 185 | 43 | 188 | 231 | 45 | 207 | 252 | 41 | 184 | 225 |
| 15 – 19 | 793 | 834 | 1 633 | 935 | 1 059 | 1 995 | 1 030 | 1 285 | 2 315 | 1 081 | 1 272 | 2 353 | 1 090 | 1 145 | 2 239 |
| 20 – 24 | 1 286 | 806 | 2 095 | 1 623 | 930 | 2 560 | 1 816 | 1 024 | 2 844 | 2 135 | 1 135 | 3 271 | 2 259 | 1 159 | 3 423 |
| 25 – 29 | 1 053 | 410 | 1 464 | 1 379 | 479 | 1 862 | 1 569 | 637 | 2 208 | 1 956 | 627 | 2 584 | 2 195 | 766 | 2 966 |
| 30 – 39 | 1 252 | 390 | 1 645 | 1 577 | 442 | 2 021 | 1 823 | 542 | 2 369 | 2 297 | 611 | 2 912 | 2 595 | 701 | 3 302 |
| 40 – 49 | 640 | 119 | 759 | 937 | 147 | 1 086 | 1 140 | 186 | 1 326 | 1 371 | 260 | 1 631 | 1 508 | 316 | 1 825 |
| 50 – 59 | 286 | 44 | 330 | 362 | 49 | 411 | 492 | 69 | 563 | 496 | 103 | 599 | 555 | 98 | 655 |
| 60 + | 169 | 20 | 189 | 156 | 21 | 177 | 173 | 24 | 199 | 184 | 26 | 210 | 201 | 31 | 234 |
| Not reported | 1 | 1 | 17 | 4 | 3 | 21 | 5 | 5 | 34 | 7 | 9 | 21 | 7 | 2 | 72 |
| Total | 5 513 | 2 737 | 8 279 | 7 010 | 3 283 | 10 324 | 8 095 | 3 967 | 12 100 | 9 576 | 4 255 | 13 842 | 10 454 | 4 405 | 14 947 |

¹ Totals include diagnoses in people whose sex was not reported

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate¹ of diagnosis of infectious syphilis, 2009 – 2013, by State/Territory and year

| State/ Territory | Year of diagnosis | | | | | | | | | |
|------------------|-------------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ | Number | Rate ¹ |
| ACT | 11 | 3.0 | 14 | 3.8 | 9 | 2.5 | 15 | 3.9 | 10 | 2.5 |
| NSW | 531 | 7.5 | 423 | 5.9 | 424 | 5.9 | 525 | 7.3 | 598 | 8.2 |
| NT | 38 | 15.2 | 43 | 16.7 | 30 | 11.5 | 14 | 5.2 | 22 | 9.1 |
| QLD | 192 | 4.4 | 228 | 5.1 | 341 | 7.6 | 388 | 8.5 | 325 | 7.0 |
| SA | 56 | 3.5 | 26 | 1.6 | 56 | 2.9 | 60 | 2.9 | 56 | 2.8 |
| TAS | 10 | 2.1 | 6 | 1.2 | 6 | 1.3 | 14 | 3.0 | 19 | 4.1 |
| VIC | 387 | 7.0 | 298 | 5.3 | 331 | 5.8 | 477 | 8.3 | 652 | 11.2 |
| WA | 89 | 3.9 | 80 | 3.4 | 125 | 5.2 | 76 | 3.1 | 83 | 3.2 |
| Total | 1 314 | 6.0 | 1 118 | 5.0 | 1 322 | 5.8 | 1 569 | 6.9 | 1 765 | 7.6 |

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.8 Number of diagnoses of infectious syphilis, 2009 – 2013, by age group, year and sex

| Age group (years) | Year of diagnosis | | | | | | | | | | | | | | |
|-------------------|-------------------|-----------|----------------|------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | 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 | 1 | 1 | 0 | 0 | 0 | 4 | 5 | 9 | 1 | 4 | 5 | 0 | 8 | 8 |
| 15 – 19 | 26 | 12 | 38 | 23 | 12 | 35 | 37 | 45 | 82 | 33 | 27 | 60 | 31 | 27 | 58 |
| 20 – 24 | 110 | 22 | 132 | 106 | 27 | 133 | 117 | 37 | 154 | 141 | 39 | 181 | 155 | 29 | 184 |
| 25 – 29 | 159 | 24 | 183 | 147 | 15 | 162 | 162 | 27 | 189 | 194 | 23 | 218 | 217 | 16 | 233 |
| 30 – 39 | 338 | 34 | 372 | 279 | 35 | 316 | 296 | 28 | 324 | 370 | 31 | 402 | 454 | 30 | 485 |
| 40 – 49 | 377 | 11 | 388 | 269 | 19 | 288 | 340 | 17 | 357 | 367 | 17 | 384 | 431 | 23 | 454 |
| 50 – 59 | 131 | 9 | 140 | 117 | 8 | 125 | 127 | 7 | 134 | 215 | 6 | 221 | 218 | 12 | 230 |
| 60 + | 52 | 4 | 56 | 52 | 2 | 54 | 57 | 4 | 61 | 81 | 5 | 86 | 100 | 2 | 102 |
| Not reported | 0 | 0 | 4 | 0 | 0 | 5 | 0 | 0 | 12 | 1 | 11 | 12 | 0 | 0 | 11 |
| Total | 1 193 | 83 | 1 314 | 724 | 118 | 1 118 | 1 140 | 170 | 1 322 | 1 403 | 163 | 1 569 | 1 606 | 147 | 1 765 |

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, 2009 – 2013, by sexual exposure, sex worker status, facility of diagnosis, year and sex

| Characteristic | Year of diagnosis | | | | | | | | | | | | | | |
|---------------------------------------|-------------------|------------|----------------|------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
| | 2009 | | | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
| | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ | M | F | T ¹ |
| Sexual exposure | | | | | | | | | | | | | | | |
| Heterosexual contact | 94 | 54 | 148 | 94 | 73 | 167 | 137 | 106 | 243 | 127 | 100 | 228 | 162 | 100 | 263 |
| Men who have sex with men | 523 | - | 523 | 436 | - | 436 | 550 | - | 550 | 717 | - | 717 | 962 | - | 962 |
| Other/undetermined ² | 36 | 9 | 49 | 46 | 12 | 64 | 56 | 22 | 90 | 72 | 31 | 115 | 65 | 21 | 97 |
| Not reported ² | 540 | 54 | 594 | 417 | 33 | 451 | 397 | 42 | 439 | 487 | 21 | 509 | 416 | 26 | 442 |
| Sex work in the past 12 months | | | | | | | | | | | | | | | |
| Current sex work | 0 | 1 | 1 | 3 | 5 | 8 | 0 | 3 | 3 | 1 | 5 | 6 | 9 | 2 | 11 |
| No sex work | 67 | 16 | 83 | 57 | 12 | 69 | 104 | 24 | 128 | 113 | 12 | 126 | 307 | 25 | 333 |
| Undetermined ² | 526 | 42 | 572 | 484 | 67 | 557 | 455 | 83 | 550 | 477 | 92 | 581 | 355 | 66 | 431 |
| Not reported ² | 600 | 58 | 658 | 449 | 34 | 484 | 581 | 60 | 641 | 812 | 43 | 856 | 934 | 54 | 989 |
| Place of diagnosis | | | | | | | | | | | | | | | |
| Public hospital | 25 | 9 | 34 | 54 | 22 | 76 | 59 | 36 | 95 | 56 | 32 | 89 | 70 | 36 | 107 |
| Sexual health clinic | 69 | 5 | 74 | 175 | 18 | 193 | 203 | 25 | 228 | 203 | 23 | 226 | 305 | 12 | 317 |
| Family planning clinic | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 1 | 4 | 1 | 0 | 1 |
| General practice | 46 | 5 | 51 | 171 | 6 | 177 | 182 | 7 | 189 | 98 | 8 | 107 | 171 | 21 | 193 |
| Other | 42 | 16 | 58 | 68 | 11 | 79 | 64 | 15 | 80 | 79 | 9 | 90 | 156 | 8 | 165 |
| Undetermined ² | 438 | 24 | 466 | 341 | 34 | 381 | 426 | 50 | 487 | 474 | 53 | 535 | 136 | 18 | 162 |
| Not reported ² | 573 | 58 | 631 | 183 | 27 | 211 | 205 | 37 | 242 | 490 | 26 | 518 | 766 | 52 | 819 |
| Total | 1 193 | 117 | 1 314 | 993 | 118 | 1 118 | 1 140 | 170 | 1 322 | 1 403 | 152 | 1 569 | 1 605 | 147 | 1 764 |

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

2 A characteristic was reported as "undetermined" when the information was sought in a 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, 2009 – 2013, by State/Territory², Aboriginal and Torres Strait Islander status and year

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|---|-------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| NT | Aboriginal and Torres Strait Islander | 1 356 | 1 565.8 | 1 475 | 1 709.9 | 1 555 | 1 764.1 | 1 554 | 1 767.6 | 1 696 | 1 955.9 |
| | | 1 090 | 625.3 | 1 187 | 665.7 | 1 074 | 614.7 | 1 168 | 658.9 | 1 312 | 723.4 |
| QLD | Aboriginal and Torres Strait Islander | 2 316 | 1 001.5 | 3 065 | 1 264.1 | 3 203 | 1 281.6 | 3 066 | 1 207.1 | 2 940 | 1 131.0 |
| | | 14 377 | 341.2 | 16 148 | 378.0 | 15 443 | 359.1 | 15 753 | 361.9 | 16 557 | 375.5 |
| SA | Aboriginal and Torres Strait Islander | 190 | 425.6 | 286 | 632.4 | 302 | 638.0 | 332 | 644.4 | 345 | 682.6 |
| | | 3 568 | 235.1 | 4 049 | 262.5 | 4 830 | 312.8 | 4 532 | 293.7 | 4 838 | 313.3 |
| TAS | Aboriginal and Torres Strait Islander | 30 | 86.4 | 34 | 108.5 | 45 | 128.8 | 39 | 121.2 | 49 | 139.4 |
| | | 1 440 | 323.9 | 1 980 | 442.7 | 1 732 | 393.4 | 1 747 | 401.4 | 1 489 | 348.0 |
| WA | Aboriginal and Torres Strait Islander | 1 234 | 1 083.9 | 1 573 | 1 360.8 | 1 643 | 1 369.8 | 1 621 | 1 337.6 | | 1 270.1 |
| | | 7 596 | 339.9 | 8 605 | 377.5 | 10 032 | 429.8 | 10 177 | 420.3 | 10 148 | 405.2 |
| Total | Aboriginal and Torres Strait Islander | 5 126 | 1 018.0 | 6 433 | 1 241.6 | 6 748 | 1 262.3 | 6 612 | 1 220.0 | 6 629 | 1 206.8 |
| | | 28 071 | 327.0 | 31 969 | 366.8 | 33 111 | 376.5 | 33 377 | 374.0 | 34 344 | 379.0 |

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, 2009 – 2013, by age group, Aboriginal and Torres Strait Islander status and year

| Age group (years) | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|--------------------------|--|-------------------|---------------|---------------|---------------|---------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| 0 – 4 | Aboriginal and Torres Strait Islander | 2 | 3 | 2 | 1 | 5 |
| | Non-Indigenous ² | 0 | 3 | 2 | 2 | 1 |
| 5 – 14 | Aboriginal and Torres Strait Islander | 132 | 167 | 171 | 195 | 195 |
| | Non-Indigenous ² | 87 | 96 | 74 | 104 | 78 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 2 004 | 2 575 | 2 665 | 2 518 | 2 412 |
| | Non-Indigenous ² | 6 305 | 7 553 | 7 845 | 7 350 | 6 975 |
| 20 – 24 | Aboriginal and Torres Strait Islander | 1 588 | 1 949 | 2 083 | 2 063 | 2 046 |
| | Non-Indigenous ² | 11 318 | 12 689 | 13 274 | 13 333 | 13 532 |
| 25 – 29 | Aboriginal and Torres Strait Islander | 710 | 873 | 987 | 892 | 939 |
| | Non-Indigenous ² | 5 558 | 6 066 | 6 404 | 6 550 | 7 064 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 525 | 663 | 619 | 686 | 755 |
| | Non-Indigenous ² | 3 321 | 3 798 | 3 704 | 4 058 | 4 541 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 127 | 155 | 179 | 193 | 214 |
| | Non-Indigenous ² | 1 015 | 1 191 | 1 211 | 1 319 | 1 431 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 29 | 33 | 37 | 54 | 58 |
| | Non-Indigenous ² | 325 | 407 | 430 | 479 | 546 |
| 60 + | Aboriginal and Torres Strait Islander | 9 | 15 | 5 | 10 | 5 |
| | Non-Indigenous ² | 114 | 147 | 155 | 170 | 176 |
| Total³ | Aboriginal and Torres Strait Islander | 5 126 | 6 433 | 6 748 | 6 612 | 6 629 |
| | Non-Indigenous² | 28 071 | 31 969 | 33 111 | 33 377 | 34 344 |

1 Includes State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of chlamydia 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, 2013, by Aboriginal and Torres Strait Islander status², sex and age group

| Aboriginal and Torres Strait Islander status | Sex | Age group (years) | | | | | | | | | |
|--|--------------------------|-------------------|------------|--------------|---------------|--------------|--------------|--------------|------------|------------|---------------|
| | | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 24 | 25 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60 + | Total |
| Aboriginal and Torres Strait Islander | Male | 1 | 23 | 733 | 742 | 361 | 333 | 101 | 31 | 4 | 2 329 |
| | Female | 4 | 172 | 1 679 | 1 304 | 578 | 422 | 113 | 27 | 1 | 4 300 |
| | Total³ | 5 | 195 | 2 412 | 2 046 | 939 | 755 | 214 | 58 | 5 | 6 629 |
| non-Indigenous ² | Male | 1 | 8 | 1 648 | 5 161 | 3 513 | 2 390 | 874 | 399 | 154 | 14 148 |
| | Female | 0 | 70 | 5 327 | 8 371 | 3 551 | 2 151 | 557 | 147 | 22 | 20 196 |
| | Total³ | 1 | 78 | 6 975 | 13 532 | 7 064 | 4 541 | 1 431 | 546 | 176 | 34 344 |
| Total | Male | 2 | 31 | 2 381 | 5 903 | 3 874 | 2 723 | 975 | 430 | 158 | 16 477 |
| | Female | 4 | 242 | 7 006 | 9 675 | 4 129 | 2 573 | 670 | 174 | 23 | 24 496 |
| | Total³ | 6 | 273 | 9 387 | 15 578 | 8 003 | 5 296 | 1 645 | 604 | 181 | 40 973 |

1 In State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of chlamydia 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 3.2.4 Number (percent) of diagnoses of chlamydia, 2013, 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 | – | | 1 202 | 1 269 |
| NSW | – | | 20 253 | 20 828 |
| NT | 1 696 | 1 089 | 223 | 3 008 |
| QLD | 2 940 | 8 357 | 8 200 | 19 497 |
| SA | 345 | 4 542 | 296 | 5 183 |
| TAS | 49 | 933 | 556 | 1 538 |
| VIC | | | 19 152 | 19 467 |
| WA | 1 599 | 9 130 | 1 018 | 11 747 |
| Total | 6 801 | 24 836 | 50 900 | 82 537 |

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 chlamydia diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Rate of diagnosis of chlamydia¹, 2009 – 2013, by area of residence, Aboriginal and Torres Strait Islander status and year

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|--------------|--------------|--------------|--------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| Major cities | Aboriginal and Torres Strait Islander | 592 | 762 | 823 | 874 | 840 |
| | Non-Indigenous ² | 328 | 361 | 369 | 361 | 367 |
| Inner regional | Aboriginal and Torres Strait Islander | 396 | 467 | 582 | 633 | 531 |
| | Non-Indigenous ² | 299 | 356 | 339 | 336 | 332 |
| Outer regional | Aboriginal and Torres Strait Islander | 1 593 | 2 007 | 2 223 | 2 142 | 2 015 |
| | Non-Indigenous ² | 363 | 397 | 406 | 405 | 403 |
| Remote | Aboriginal and Torres Strait Islander | 1 641 | 2 274 | 2 282 | 2 273 | 2 311 |
| | Non-Indigenous ² | 379 | 438 | 411 | 465 | 408 |
| Very remote | Aboriginal and Torres Strait Islander | 2 191 | 2 465 | 2 276 | 2 096 | 2 226 |
| | Non-Indigenous ² | 413 | 450 | 511 | 549 | 533 |
| Total | Aboriginal and Torres Strait Islander | 1 308 | 1 608 | 1 656 | 1 591 | 1 565 |
| | Non-Indigenous² | 333 | 371 | 376 | 371 | 373 |

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 rate of diagnosis of gonorrhoea¹, 2009 – 2013, by State/Territory, Aboriginal and Torres Strait Islander status² and year

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|---|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | Aboriginal and Torres Strait Islander | 3 | 45.3 | 0 | 0.0 | 3 | 39.4 | 1 | 8.8 | 1 | 8.3 |
| | Non-Indigenous ³ | 52 | 12.9 | 56 | 14.1 | 125 | 30.7 | 91 | 21.9 | 113 | 26.9 |
| NT | Aboriginal and Torres Strait Islander | 1 412 | 1 651.4 | 1 770 | 2 052.3 | 1 798 | 2 050.3 | 1 603 | 1 857.2 | 1 731 | 2 033.0 |
| | Non-Indigenous ³ | 139 | 80.7 | 163 | 93.0 | 154 | 91.9 | 219 | 123.9 | 226 | 124.6 |
| QLD | Aboriginal and Torres Strait Islander | 669 | 293.8 | 976 | 404.0 | 1 328 | 538.0 | 1 110 | 440.7 | 901 | 367.2 |
| | Non-Indigenous ³ | 1 118 | 26.6 | 1 409 | 33.1 | 1 624 | 37.7 | 1 581 | 36.1 | 1 831 | 41.5 |
| SA | Aboriginal and Torres Strait Islander | 164 | 395.6 | 234 | 552.0 | 214 | 479.9 | 201 | 437.8 | 299 | 634.5 |
| | Non-Indigenous ³ | 209 | 13.5 | 239 | 15.0 | 231 | 14.8 | 305 | 19.5 | 556 | 31.6 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 1 | 3.3 | 0 | 0.0 | 0 | 0.0 | 1 | 2.3 |
| | Non-Indigenous ³ | 21 | 4.8 | 19 | 4.3 | 19 | 4.2 | 35 | 8.1 | 68 | 16.0 |
| VIC | Aboriginal and Torres Strait Islander | 11 | 21.9 | 13 | 26.3 | 12 | 22.9 | 25 | 50.0 | 21 | 36.2 |
| | Non-Indigenous ³ | 1 480 | 26.9 | 1 739 | 31.2 | 1 871 | 33.2 | 2 430 | 42.7 | 2 993 | 51.8 |
| WA | Aboriginal and Torres Strait Islander | 914 | 860.4 | 839 | 769.4 | 1 153 | 1 023.1 | 1 143 | 968.3 | 1 098 | 927.8 |
| | Non-Indigenous ³ | 434 | 19.2 | 564 | 24.5 | 686 | 28.5 | 968 | 39.9 | 874 | 34.7 |
| Total | Aboriginal and Torres Strait Islander | 3 173 | 588.7 | 3 833 | 687.2 | 4 508 | 778.2 | 4 083 | 690.3 | 4 052 | 694.1 |
| | Non-Indigenous³ | 3 453 | 23.9 | 4 189 | 29.9 | 4 710 | 34.6 | 5 629 | 52.1 | 6 661 | 47.9 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, Aboriginal and Torres Strait Islander status and year from *Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 – 2026* (Australian Bureau of Statistics).

2 In 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, 2009 – 2013, by age group, Aboriginal and Torres Strait Islander status and year

| Age group (years) | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|--------------------------|--|-------------------|--------------|--------------|--------------|--------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| 0 – 4 | Aboriginal and Torres Strait Islander | 4 | 1 | 7 | 4 | 3 |
| | Non-Indigenous ² | 5 | 3 | 3 | 4 | 0 |
| 5 – 14 | Aboriginal and Torres Strait Islander | 119 | 154 | 206 | 213 | 201 |
| | Non-Indigenous ² | 15 | 26 | 22 | 29 | 19 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 1 064 | 1 320 | 1 624 | 1 440 | 1 288 |
| | Non-Indigenous ² | 451 | 513 | 462 | 614 | 652 |
| 20 – 24 | Aboriginal and Torres Strait Islander | 893 | 1 034 | 1 132 | 1 065 | 997 |
| | Non-Indigenous ² | 862 | 1 021 | 1 121 | 1 404 | 1 572 |
| 25 – 29 | Aboriginal and Torres Strait Islander | 490 | 599 | 748 | 609 | 645 |
| | Non-Indigenous ² | 657 | 791 | 909 | 1 167 | 1 379 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 469 | 558 | 608 | 547 | 646 |
| | Non-Indigenous ² | 770 | 881 | 1 025 | 1 238 | 1 507 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 109 | 140 | 152 | 159 | 225 |
| | Non-Indigenous ² | 395 | 579 | 694 | 728 | 949 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 17 | 23 | 30 | 42 | 30 |
| | Non-Indigenous ² | 210 | 246 | 322 | 302 | 380 |
| 60 + | Aboriginal and Torres Strait Islander | 8 | 4 | 1 | 4 | 17 |
| | Non-Indigenous ² | 70 | 107 | 117 | 120 | 132 |
| Total³ | Aboriginal and Torres Strait Islander | 3 173 | 3 833 | 4 508 | 3 966 | 4 052 |
| | Non-Indigenous² | 3 453 | 4 189 | 4 710 | 5 629 | 6 661 |

1 Includes State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of chlamydia 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, 2013, by Aboriginal and Torres Strait Islander status², sex and age group

| Aboriginal and Torres Strait Islander status | Sex | Age group (years) | | | | | | | | | | Total ⁴ |
|--|--------------------------|-------------------|------------|--------------|--------------|--------------|--------------|--------------|------------|------------|---------------|--------------------|
| | | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 24 | 25 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60 + | | |
| Aboriginal and Torres Strait Islander | Male | 0 | 19 | 488 | 510 | 331 | 340 | 118 | 20 | 15 | 1 841 | |
| | Female | 3 | 113 | 742 | 537 | 342 | 339 | 121 | 10 | 4 | 2 211 | |
| | Total³ | 3 | 132 | 1 230 | 1 047 | 673 | 679 | 239 | 30 | 19 | 4 052 | |
| Non-Indigenous ² | Male | 0 | 2 | 310 | 1 095 | 1 117 | 1 314 | 848 | 338 | 120 | 5 150 | |
| | Female | 0 | 8 | 223 | 449 | 289 | 253 | 132 | 61 | 16 | 1 433 | |
| | Total³ | 0 | 10 | 534 | 1 548 | 1 409 | 1 571 | 981 | 399 | 138 | 6 661 | |
| Total | Male | 0 | 21 | 798 | 1 605 | 1 448 | 1 654 | 966 | 358 | 135 | 6 991 | |
| | Female | 3 | 121 | 965 | 986 | 631 | 592 | 253 | 71 | 20 | 3 644 | |
| | Total³ | 3 | 142 | 1 764 | 2 595 | 2 082 | 2 250 | 1 220 | 429 | 157 | 10 713 | |

1 In State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of chlamydia 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, 2013, 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 | 113 | 0 | | 114 |
| NSW | 131 | 2 240 | 1 863 | | 4 234 |
| NT | 1 731 | 188 | 38 | | 1 957 |
| QLD | 901 | 794 | 1 037 | | 2 732 |
| SA | 299 | 478 | 78 | | 855 |
| TAS | 1 | 65 | 3 | | 69 |
| VIC | 21 | 1 817 | 1 176 | | 3 014 |
| WA | 1 098 | 872 | 2 | | 1 972 |
| Total | 4 183 | 6 567 | 4 197 | | 14 947 |

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 chlamydia diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.10 Rate of diagnosis of gonorrhoea¹, 2009 – 2013, by area of residence, Aboriginal and Torres Strait Islander status and year

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|------------|------------|------------|------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| Major cities | Aboriginal and Torres Strait Islander | 86 | 91 | 138 | 173 | 198 |
| | Non-Indigenous ² | 26 | 31 | 34 | 40 | 45 |
| Inner regional | Aboriginal and Torres Strait Islander | 39 | 53 | 85 | 123 | 61 |
| | Non-Indigenous ² | 11 | 12 | 14 | 16 | 19 |
| Outer regional | Aboriginal and Torres Strait Islander | 626 | 865 | 1 114 | 943 | 840 |
| | Non-Indigenous ² | 24 | 28 | 32 | 31 | 31 |
| Remote | Aboriginal and Torres Strait Islander | 1 141 | 1 510 | 1 684 | 1 522 | 1 558 |
| | Non-Indigenous ² | 24 | 24 | 27 | 36 | 29 |
| Very remote | Aboriginal and Torres Strait Islander | 1 997 | 2 168 | 2 384 | 2 098 | 2 128 |
| | Non-Indigenous ² | 54 | 91 | 88 | 114 | 80 |
| Total | Aboriginal and Torres Strait Islander | 716 | 848 | 978 | 869 | 845 |
| | Non-Indigenous² | 25 | 29 | 32 | 38 | 43 |

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.II Number and rate¹ of diagnosis of infectious syphilis, 2009 – 2013, by year, State/Territory² and Aboriginal and Torres Strait Islander status

| State/ Territory | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | | | | | | |
|---------------------|--|-------------------|-------------|------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | | Number | Rate | Number | Rate | Number | Rate | Number | Rate | Number | Rate |
| ACT | Aboriginal and Torres Strait Islander | 1 | 9.2 | 0 | 0.0 | 0 | 0.0 | 1 | 17.2 | 0 | 0.0 |
| | Non-Indigenous ³ | 10 | 2.7 | 14 | 3.8 | 9 | 2.5 | 14 | 3.7 | 10 | 2.5 |
| NSW | Aboriginal and Torres Strait Islander | 12 | 6.7 | 10 | 5.8 | 6 | 3.8 | 8 | 8.8 | 15 | 9.0 |
| | Non-Indigenous ³ | 519 | 7.5 | 413 | 5.9 | 418 | 6.0 | 517 | 14.5 | 583 | 8.2 |
| NT | Aboriginal and Torres Strait Islander | 37 | 61.8 | 40 | 62.8 | 28 | 34.0 | 13 | 16.7 | 12 | 12.8 |
| | Non-Indigenous ³ | 1 | 0.6 | 3 | 1.5 | 2 | 1.3 | 1 | 0.7 | 10 | 6.1 |
| QLD | Aboriginal and Torres Strait Islander | 30 | 16.1 | 69 | 32.5 | 121 | 49.7 | 120 | 50.6 | 93 | 36.4 |
| | Non-Indigenous ³ | 162 | 3.9 | 159 | 3.7 | 220 | 5.1 | 268 | 6.1 | 231 | 5.2 |
| SA | Aboriginal and Torres Strait Islander | 8 | 28.9 | 4 | 11.1 | 14 | 57.5 | 12 | 36.6 | 7 | 19.5 |
| | Non-Indigenous ³ | 48 | 3.1 | 22 | 1.4 | 42 | 2.1 | 48 | 2.3 | 49 | 2.4 |
| TAS | Aboriginal and Torres Strait Islander | 0 | 0.0 | 0 | 0.0 | 1 | 5.1 | 0 | 0.0 | 1 | 5.1 |
| | Non-Indigenous ³ | 10 | 2.2 | 6 | 1.2 | 5 | 1.2 | 14 | 3.1 | 18 | 4.1 |
| VIC | Aboriginal and Torres Strait Islander | 1 | 2.5 | 1 | 2.8 | 5 | 12.9 | 6 | 13.0 | 6 | 14.1 |
| | Non-Indigenous ³ | 386 | 7.0 | 297 | 5.3 | 326 | 5.8 | 471 | 8.3 | 646 | 11.2 |
| WA | Aboriginal and Torres Strait Islander | 33 | 32.0 | 19 | 20.5 | 29 | 31.9 | 13 | 17.3 | 8 | 8.5 |
| | Non-Indigenous ³ | 56 | 2.5 | 61 | 2.7 | 96 | 4.1 | 63 | 2.6 | 75 | 3.0 |
| Total | Aboriginal and Torres Strait Islander | 122 | 19.7 | 143 | 21.4 | 204 | 27.4 | 173 | 26.9 | 142 | 17.7 |
| | Non-Indigenous³ | 1 192 | 5.6 | 975 | 4.5 | 1 118 | 5.1 | 1 396 | 7.4 | 1 622 | 7.2 |

1 Age standardised rate per 100 000 population. Population estimates by State/Territory, Aboriginal and Torres Strait Islander status and year from *Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 – 2026* (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, 2009 – 2013, by age group, Aboriginal and Torres Strait Islander status and year

| Aboriginal and Torres Strait Islander status | | Year of diagnosis | | | | |
|--|--|-------------------|------------|--------------|--------------|--------------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| Age group (years) | | | | | | |
| 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 | 1 | 0 | 6 | 4 | 8 |
| | Non-Indigenous ² | 0 | 0 | 3 | 1 | 0 |
| 15 – 19 | Aboriginal and Torres Strait Islander | 18 | 21 | 68 | 39 | 36 |
| | Non-Indigenous ² | 20 | 14 | 14 | 21 | 22 |
| 20 – 24 | Aboriginal and Torres Strait Islander | 19 | 35 | 36 | 50 | 39 |
| | Non-Indigenous ² | 113 | 98 | 118 | 131 | 144 |
| 25 – 29 | Aboriginal and Torres Strait Islander | 21 | 21 | 29 | 22 | 12 |
| | Non-Indigenous ² | 162 | 141 | 160 | 196 | 221 |
| 30 – 39 | Aboriginal and Torres Strait Islander | 40 | 39 | 34 | 34 | 21 |
| | Non-Indigenous ² | 332 | 277 | 290 | 368 | 464 |
| 40 – 49 | Aboriginal and Torres Strait Islander | 14 | 18 | 20 | 15 | 23 |
| | Non-Indigenous ² | 374 | 270 | 337 | 369 | 431 |
| 50 – 59 | Aboriginal and Torres Strait Islander | 8 | 9 | 9 | 8 | 2 |
| | Non-Indigenous ² | 132 | 116 | 125 | 213 | 228 |
| 60 + | Aboriginal and Torres Strait Islander | 1 | 0 | 2 | 1 | 1 |
| | Non-Indigenous ² | 55 | 54 | 59 | 85 | 101 |
| Total³ | Aboriginal and Torres Strait Islander | 122 | 143 | 204 | 173 | 142 |
| | Non-Indigenous² | 1 192 | 975 | 1 118 | 1 396 | 1 622 |

1 Includes 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, 2013, by Aboriginal and Torres Strait Islander status, sex and age group

| Aboriginal and Torres Strait Islander status | | Sex | Age group (years) | | | | | | | | Total |
|--|--------------------------|----------|-------------------|-----------|------------|------------|------------|------------|------------|------------|--------------|
| | | | 0 – 4 | 5 – 14 | 15 – 19 | 20 – 24 | 25 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | |
| Aboriginal and Torres Strait Islander | Male | 0 | 0 | 12 | 19 | 9 | 14 | 18 | 1 | 1 | 74 |
| | Female | 0 | 8 | 24 | 20 | 3 | 7 | 5 | 1 | 0 | 68 |
| | Total³ | 0 | 8 | 36 | 39 | 12 | 21 | 23 | 2 | 1 | 142 |
| Non-Indigenous ² | Male | 0 | 0 | 19 | 135 | 208 | 440 | 413 | 217 | 99 | 1 531 |
| | Female | 0 | 0 | 3 | 9 | 13 | 23 | 18 | 11 | 2 | 79 |
| | Total³ | 0 | 0 | 22 | 144 | 221 | 464 | 431 | 228 | 101 | 1 622 |
| Total | Male | 0 | 0 | 31 | 154 | 217 | 454 | 431 | 218 | 100 | 1 605 |
| | Female | 0 | 8 | 27 | 29 | 16 | 30 | 23 | 12 | 2 | 147 |
| | Total³ | 0 | 8 | 58 | 183 | 233 | 485 | 454 | 230 | 102 | 1 764 |

1 Includes State/Territory health jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses in each year in 2009 – 2013.

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

3 Includes diagnoses in people whose age was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.14 Number (percent) of diagnoses of infectious syphilis, 2013, 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 | 10 | 0 | 10 |
| NSW | 15 | 538 | 45 | 598 |
| NT | 12 | 10 | 0 | 22 |
| QLD | 93 | 214 | 17 | 324 |
| SA | 7 | 38 | 11 | 56 |
| TAS | 1 | 18 | 0 | 19 |
| VIC | 6 | 554 | 92 | 652 |
| WA | 8 | 75 | 0 | 83 |
| Total | 142 | 1 457 | 165 | 1 764 |

Source: National Notifiable Diseases Surveillance System

Table 3.2.15 Rate of diagnosis of infectious syphilis¹, 2009 – 2013, by area of residence, Aboriginal and Torres Strait Islander status and year

| Area of residence | Aboriginal and Torres Strait Islander status | Year of diagnosis | | | | |
|-------------------|--|-------------------|-----------|-----------|-----------|-----------|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| Major cities | Aboriginal and Torres Strait Islander | 7 | 4 | 12 | 12 | 7 |
| | Non-Indigenous ² | 7 | 5 | 6 | 7 | 8 |
| Inner regional | Aboriginal and Torres Strait Islander | 4 | 2 | 6 | 5 | 7 |
| | Non-Indigenous ² | 2 | 1 | 2 | 3 | 3 |
| Outer regional | Aboriginal and Torres Strait Islander | 22 | 28 | 25 | 32 | 24 |
| | Non-Indigenous ² | 2 | 3 | 2 | 2 | 2 |
| Remote | Aboriginal and Torres Strait Islander | 28 | 43 | 14 | 15 | 31 |
| | Non-Indigenous ² | 0 | 1 | 1 | 1 | 2 |
| Very remote | Aboriginal and Torres Strait Islander | 61 | 71 | 122 | 81 | 62 |
| | Non-Indigenous ² | 6 | 5 | 4 | 2 | 2 |
| Total | Aboriginal and Torres Strait Islander | 19 | 22 | 31 | 25 | 20 |
| | Non-Indigenous² | 6 | 5 | 5 | 6 | 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 2013 by State/Territory, sex and site and antibiotic resistance

| Sex and Site | State/Territory | | | | | | | | Total ¹ |
|-----------------------------------|-----------------|------------------|------------|------------|------------|-----------|--------------|------------|--------------------|
| | ACT | NSW ¹ | NT | QLD | SA | TAS | VIC | WA | |
| Males | | | | | | | | | |
| Genital | 23 | 790 | 208 | 376 | 120 | 24 | 695 | 276 | 2 512 |
| Rectal | 12 | 292 | 2 | 67 | 22 | 12 | 383 | 48 | 838 |
| Pharynx | 6 | 224 | 2 | 36 | 14 | 4 | 253 | 27 | 566 |
| Disseminated gonococcal infection | 0 | 4 | 7 | 5 | 0 | 0 | 0 | 6 | 22 |
| Other/Not specified | 0 | 17 | 2 | 6 | 2 | 0 | 62 | 5 | 94 |
| Total | 41 | 1 327 | 221 | 490 | 158 | 40 | 1 393 | 362 | 4 032 |
| Females | | | | | | | | | |
| Genital | 3 | 169 | 114 | 166 | 42 | 4 | 129 | 117 | 744 |
| Rectal | 0 | 2 | 0 | 3 | 5 | 0 | 1 | 2 | 13 |
| Pharynx | 0 | 44 | 0 | 2 | 4 | 1 | 9 | 2 | 62 |
| Disseminated gonococcal infection | 0 | 5 | 7 | 5 | 0 | 0 | 0 | 3 | 20 |
| Other/Not specified | 0 | 6 | 1 | 4 | 3 | 0 | 7 | 2 | 23 |
| Total | 3 | 226 | 122 | 180 | 54 | 5 | 146 | 126 | 862 |
| Antibiotic Resistance (%) | | | | | | | | | |
| Ceftriaxone ² | 0.0 | 11.8 | 1.2 | 4.9 | 1.9 | 24.4 | 11.8 | 2.7 | 8.8 |
| Ciprofloxacin | 20.5 | 35.6 | 8.2 | 14.9 | 12.3 | 48.9 | 44.4 | 25.2 | 34.1 |
| Azithromycin | 2.3 | 0.9 | 0.3 | 5.7 | 2.8 | 0.0 | 2.3 | 1.8 | 2.1 |
| Penicillin | 15.9 | 38.1 | 6.4 | 31.2 | 18.4 | 37.8 | 44.1 | 27.3 | 34.7 |
| Total¹ | 44 | 1 555 | 343 | 670 | 212 | 45 | 1 539 | 488 | 4 896 |

1 Total includes 2 people whose sex was not reported.

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, 2009 – 2013, by sex, site and year

| Sex and Site | Year of diagnosis | | | | |
|----------------------------|-------------------|--------------|--------------|--------------|-------------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 ¹ |
| Males | | | | | |
| Urethra | 523 | 644 | 689 | 877 | 808 |
| Rectal | 193 | 328 | 248 | 282 | 312 |
| Pharynx | 101 | 184 | 201 | 279 | 240 |
| Other/Not specified | 8 | 39 | 7 | 11 | 22 |
| Total | 825 | 1 195 | 1 145 | 1 449 | 1 382 |
| Females | | | | | |
| Cervix | 100 | 113 | 135 | 187 | 172 |
| Rectal | 4 | 2 | 8 | 3 | 2 |
| Pharynx | 15 | 11 | 41 | 66 | 46 |
| Other/Not specified | 5 | 7 | 3 | 7 | 11 |
| Total | 124 | 133 | 187 | 263 | 234 |
| Total^{1,2} | 949 | 1 328 | 1 322 | 1 712 | 1 618 |

1 Totals include isolates for which the site of specimen collection was not reported.

2 Totals include isolates for which the sex of the person was not reported.

Source: Australian Gonococcal Surveillance Programme

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

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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, 2009 – 2013, 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 ² | Gold Coast Sexual Health Service, QLD | Clinic 275 Adelaide, SA | Melbourne Sexual Health Centre, VIC | Fremantle Sexual Health Service, WA ³ | | |
| 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) | |
| 2013 | Men seen | 7 764 | — | — | 2 973 | 4 862 | 15 675 | 1 196 | 32 470 | |
| | Tested | 5 044 | — | — | 1 029 | 4 255 | 6 806 | 562 | 17 696 | |
| | Newly diagnosed (%) | 25 (0.5) | — | — | 5 (0.5) | 14 (0.3) | 69 (1.0) | 0 (0.0) | 113 (0.6) | |
| | Previously negative (%) | 13 (0.4) | — | — | 1 (0.3) | 11 (0.4) | 63 (1.3) | 0 (0.0) | 88 (0.8) | |

Sexual health clinic

| Year | Sexual health clinic | | | | | | | | | | Total |
|-------------|--|--|---|---|----------------------------|---|--|---------|---------|----------|-------|
| | Sydney Sexual Health Centre, NSW | RPA Sexual Health Clinic, NSW ¹ | Brisbane Sexual Health Clinic, QLD ² | Gold Coast Sexual Health Service, QLD | Clinic 275 Adelaide, SA | Melbourne Sexual Health Centre, VIC | Fremantle Sexual Health Service, WA ³ | | | | |
| 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) | |
| 2013 | Women seen | 4 038 | — | — | 1 975 | 2 512 | 8 648 | 690 | — | 17 863 | |
| | Tested | 1 943 | — | — | 471 | 2 127 | 3 460 | 279 | — | 8 280 | |
| | Newly diagnosed (%) | 0 (0.0) | — | — | 0 (0.0) | 1 (0.05) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.01) | |
| | Previously negative (%) | 0 (0.0) | — | — | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | |

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

2 Brisbane Sexual Health Clinic, QLD, closed during 2013.

3 Fremantle Sexual Health Service, Fremantle, WA, joined the network in 2013.

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, 2009 – 2013, 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 | Men who have sex with men ¹ , age < 25 years | | | | | | | 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 | Total | |
| 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) | |
| 2013 | Men seen | 15 028 | 3 344 | 327 | 6 317 | 9 969 | 829 | 32 470 | |
| | Tested | 9 285 | 1 641 | 178 | 3 518 | 4 619 | 96 | 17 696 | |
| | Newly diagnosed (%) | 108 (1.2) | 19 (1.2) | 0 (0.0) | 0 (0.0) | 5 (0.1) | 0 (0.0) | 113 (0.6) | |
| | Previously negative (%) | 87 (1.2) | 12 (1.3) | 0 (0.0) | 0 (0.0) | 1 (0.02) | 0 (0.0) | 88 (0.8) | |

HIV exposure category

| Year | Sex worker ² | Injecting drug use | Heterosexual contact overseas | Heterosexual contact in Australia | Other women | Total |
|-------------|-------------------------|--------------------|-------------------------------|-----------------------------------|-------------|----------|
| 2009 | Women seen | 338 | 2 571 | 8 168 | 965 | 16 287 |
| | Tested | 2 459 | 954 | 2 903 | 259 | 6 768 |
| | Newly diagnosed (%) | 1 (0.04) | 0 (0.0) | 3 (0.1) | 0 (0.0) | 4 (0.06) |
| | Previously negative (%) | 1 (0.04) | 0 (0.0) | 3 (0.17) | 0 (0.0) | 4 (0.08) |
| 2010 | Women seen | 292 | 2 873 | 8 782 | 1 084 | 18 444 |
| | Tested | 3 225 | 1 511 | 3 949 | 247 | 9 124 |
| | Newly diagnosed (%) | 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) |
| 2011 | Women seen | 356 | 3 101 | 8 934 | 1 422 | 18 532 |
| | Tested | 2 799 | 1 577 | 3 942 | 227 | 8 753 |
| | Newly diagnosed (%) | 2 (0.1) | 3 (0.2) | 1 (0.03) | 0 (0.0) | 6 (0.1) |
| | Previously negative (%) | 2 (0.1) | 1 (0.1) | 1 (0.05) | 0 (0.0) | 4 (0.1) |
| 2012 | Women seen | 286 | 3 903 | 9 589 | 1 605 | 19 569 |
| | Tested | 2 619 | 1 870 | 3 852 | 281 | 8 776 |
| | Newly diagnosed (%) | 1 (0.04) | 1 (0.05) | 2 (0.05) | 0 (0.0) | 4 (0.05) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 1 (0.05) | 0 (0.0) | 1 (0.02) |
| 2013 | Women seen | 162 | 4 640 | 8 595 | 699 | 17 863 |
| | Tested | 2 151 | 2 202 | 3 635 | 187 | 8 280 |
| | Newly diagnosed (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.5) | 1 (0.01) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |

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, 2009 – 2013, 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 |
|-------------|-------------------------|-------------------|----------|----------|----------|----------|---------|-----------|
| | | 13 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60+ | |
| 2009 | Men seen | 981 | 11 315 | 6 315 | 3 254 | 1 465 | 703 | 24 033 |
| | Tested | 515 | 6 574 | 3 635 | 1 777 | 783 | 365 | 13 649 |
| | Newly diagnosed (%) | 3 (0.6) | 45 (0.7) | 39 (1.1) | 17 (1.0) | 9 (1.1) | 1 (0.3) | 114 (0.8) |
| | Previously negative (%) | 2 (1.1) | 39 (0.9) | 32 (1.1) | 13 (0.9) | 9 (1.5) | 1 (0.4) | 96 (1.0) |
| 2010 | Men seen | 1 153 | 12 761 | 7 078 | 3 974 | 1 715 | 882 | 27 563 |
| | Tested | 690 | 7 723 | 4 247 | 2 305 | 992 | 473 | 16 430 |
| | Newly diagnosed (%) | 0 (0.0) | 34 (0.4) | 30 (0.7) | 21 (0.9) | 7 (0.7) | 2 (0.7) | 94 (0.6) |
| | Previously negative (%) | 0 (0.0) | 25 (0.5) | 24 (0.7) | 17 (1.0) | 6 (0.9) | 2 (0.6) | 74 (0.7) |
| 2011 | Men seen | 1 283 | 13 997 | 7 869 | 3 990 | 1 799 | 918 | 29 856 |
| | Tested | 722 | 7 833 | 4 453 | 2 091 | 966 | 503 | 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) |
| | Previously negative (%) | 0 (0.0) | 41 (0.9) | 31 (0.9) | 19 (1.2) | 4 (0.6) | 1 (0.3) | 96 (0.9) |
| 2012 | Men seen | 1 516 | 16 434 | 9 057 | 4 641 | 2 020 | 1 099 | 34 768 |
| | Tested | 720 | 8 633 | 4 923 | 2 385 | 1 029 | 633 | 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) |
| | Previously negative (%) | 2 (0.7) | 42 (0.8) | 34 (0.9) | 10 (0.5) | 7 (0.9) | 0 (0.0) | 95 (0.8) |
| 2013 | Men seen | 1 389 | 15 570 | 8 483 | 4 079 | 1 919 | 1 030 | 32 470 |
| | Tested | 706 | 8 591 | 4 620 | 2 164 | 1 031 | 584 | 17 696 |
| | Newly diagnosed (%) | 1 (0.1) | 47 (0.5) | 28 (0.6) | 20 (0.9) | 12 (1.2) | 5 (0.9) | 113 (0.6) |
| | Previously negative (%) | 1 (0.4) | 33 (0.6) | 24 (0.7) | 17 (1.0) | 10 (1.5) | 3 (0.8) | 88 (0.8) |

| Year | Age group (years) | Age group (years) | | | | | | Total |
|------|-------------------------|-------------------|----------|----------|---------|---------|---------|----------|
| | | 13 – 19 | 20 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60+ | |
| 2009 | Women seen | 1 490 | 8 744 | 3 990 | 1 562 | 409 | 92 | 16 287 |
| | Tested | 515 | 3 390 | 1 910 | 772 | 149 | 32 | 6 768 |
| | Newly diagnosed (%) | 0 (0.0) | 3 (0.09) | 0 (0.0) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.06) |
| | Previously negative (%) | 0 (0.0) | 3 (0.1) | 0 (0.0) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.08) |
| 2010 | Women seen | 1 557 | 9 795 | 4 739 | 1 735 | 491 | 127 | 18 444 |
| | Tested | 675 | 4 661 | 2 540 | 934 | 248 | 66 | 9 124 |
| | Newly diagnosed (%) | 0 (0.0) | 1 (0.02) | 1 (0.04) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (0.02) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| 2011 | Women seen | 1 663 | 10 129 | 4 622 | 1 553 | 445 | 120 | 18 532 |
| | Tested | 659 | 4 581 | 2 386 | 859 | 230 | 38 | 8 753 |
| | Newly diagnosed (%) | 0 (0.0) | 3 (0.1) | 2 (0.1) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 6 (0.1) |
| | Previously negative (%) | 0 (0.0) | 2 (0.1) | 1 (0.1) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.1) |
| 2012 | Women seen | 1 876 | 10 873 | 4 556 | 1 631 | 517 | 116 | 19 569 |
| | Tested | 574 | 4 697 | 2 343 | 947 | 263 | 32 | 8 856 |
| | Newly diagnosed (%) | 0 (0.0) | 2 (0.04) | 1 (0.04) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 4 (0.05) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 1 (0.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.02) |
| 2013 | Women seen | 1 623 | 10 300 | 3 964 | 1 426 | 440 | 110 | 17 863 |
| | Tested | 637 | 4 687 | 1 940 | 759 | 201 | 56 | 8 280 |
| | Newly diagnosed (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (0.1) | 0 (0.0) | 0 (0.0) | 1 (0.01) |
| | Previously negative (%) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |

Source: Collaborative group on sentinel surveillance in sexual health clinics

4.2 HIV and hepatitis C seroprevalence among people who inject drugs

Table 4.2.1 Number of participating needle and syringe programs (NSP), 2009 – 2013, 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

2009

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

2010

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

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 | 1 560 | 764 | 2 337 (41) | 21 (1.4) | 7 (0.9) | 29 (1.2) | 826 (54) | 386 (52) | 1 216 (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 | 1 546 | 718 | 2 279 (46) | 18 (1.2) | 9 (1.3) | 28 (1.2) | 794 (52) | 384 (54) | 1 184 (53) |

2013

| 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 | 67 | 32 | 100 (80) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 49 (73) | 18 (56) | 67 (67) |
| NSW | 19 | 456 | 204 | 665 (38) | 20 (4.4) | 0 (0.0) | 21 (3.2) | 232 (51) | 120 (59) | 354 (54) |
| NT | 3 | 47 | 19 | 66 (33) | 2 (4.3) | 0 (0.0) | 2 (3.0) | 21 (46) | 12 (63) | 33 (51) |
| QLD | 8 | 372 | 160 | 533 (45) | 7 (1.9) | 0 (0.0) | 7 (1.3) | 167 (45) | 79 (49) | 247 (46) |
| SA | 7 | 154 | 74 | 229 (56) | 4 (2.6) | 3 (4.1) | 7 (3.1) | 78 (51) | 32 (43) | 111 (49) |
| TAS | 3 | 41 | 28 | 69 (33) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 19 (46) | 18 (64) | 37 (54) |
| VIC | 6 | 300 | 139 | 446 (61) | 5 (1.7) | 1 (0.7) | 6 (1.4) | 199 (67) | 94 (68) | 296 (67) |
| WA | 3 | 126 | 71 | 199 (77) | 3 (2.4) | 2 (2.8) | 5 (2.5) | 66 (54) | 23 (32) | 90 (46) |
| Total | 50 | 1 563 | 727 | 2 307 (44) | 41 (2.6) | 6 (0.8) | 48 (2.1) | 831 (53) | 396 (55) | 1 235 (54) |

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, 2009 – 2013, 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

| 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 | 8 | 17 | 11 |
| 20 to 24 years | 118 | 88 | 207 | 0.9 | 0 | 0.5 | 24 | 43 | 32 |
| 25 to 34 years | 577 | 349 | 930 | 1.2 | 0 | 0.8 | 43 | 53 | 47 |
| 35 to 44 years | 624 | 310 | 939 | 2.1 | 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 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 145 | 113 | 260 | 1.4 | 0 | 0.8 | 17 | 25 | 20 |
| 5 to 9 years | 195 | 145 | 342 | 1.6 | 0 | 0.9 | 30 | 43 | 36 |
| 10 to 14 years | 346 | 234 | 583 | 1.7 | 0 | 1 | 46 | 56 | 50 |
| 15 to 19 years | 378 | 171 | 551 | 2.1 | 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 | 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 | 2 | 0 | 22 | 8 |
| Heroin | 12 | 21 | 33 | 0 | 0 | 0 | 25 | 30 | 28 |
| Other opiates | 14 | 24 | 39 | 0 | 0 | 0 | 7 | 17 | 13 |
| All other drugs | 30 | 2 | 32 | 3.3 | 0 | 3.1 | 7 | 50 | 9 |
| Not reported | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 90 | 67 | 158 | 2.2 | 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 | 11 | 40 | 24 |
| 20 to 24 years | 86 | 75 | 163 | 1.2 | 0 | 0.6 | 18 | 36 | 26 |
| 25 to 34 years | 502 | 263 | 766 | 0.6 | 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 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 132 | 71 | 204 | 1.5 | 0 | 1 | 14 | 27 | 19 |
| 5 to 9 years | 158 | 122 | 281 | 0 | 0 | 0 | 35 | 43 | 38 |
| 10 to 14 years | 298 | 170 | 472 | 2 | 0 | 1.3 | 47 | 52 | 49 |
| 15 to 19 years | 323 | 154 | 480 | 2.2 | 0 | 1.5 | 57 | 55 | 56 |
| 20+ years | 633 | 228 | 865 | 1 | 0.9 | 0.9 | 68 | 66 | 67 |
| Not reported | 36 | 14 | 51 | 0 | 0 | 0 | 50 | 36 | 47 |
| Total | 1 580 | 759 | 2 353 | 1.3 | 0.3 | 1 | 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 | 3 | 6 | 13 | 9 |
| Heroin | 18 | 11 | 29 | 5.6 | 0 | 3.5 | 22 | 45 | 31 |
| Other opiates | 19 | 7 | 26 | 0 | 0 | 0 | 21 | 0 | 15 |
| All other drugs | 33 | 4 | 37 | 0 | 0 | 0 | 7 | 75 | 8 |
| Not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 87 | 37 | 125 | 2.3 | 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 | 5 | 17 | 9 |
| 20 to 24 years | 96 | 44 | 142 | 1 | 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 | 50 | 0 | 44 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 174 | 85 | 261 | 2.3 | 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 | 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 | 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 | 3.5 | 11 | 27 | 17 |
| Heroin | 10 | 18 | 28 | 0 | 0 | 0 | 20 | 35 | 30 |
| Other opiates | 11 | 12 | 24 | 9.1 | 0 | 4.2 | 27 | 25 | 25 |
| All other drugs | 74 | 7 | 81 | 0 | 0 | 0 | 7 | 14 | 7 |
| Not reported | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 114 | 48 | 163 | 1.8 | 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 | 5 | 0 | 4 |
| 20 to 24 years | 108 | 32 | 141 | 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 | 100 | 100 | 100 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 200 | 55 | 257 | 1.5 | 0 | 1.2 | 13 | 31 | 17 |
| 5 to 9 years | 123 | 88 | 212 | 0 | 2.3 | 0.9 | 36 | 41 | 38 |
| 10 to 14 years | 206 | 152 | 361 | 1 | 0.7 | 0.8 | 47 | 54 | 50 |
| 15 to 19 years | 278 | 143 | 425 | 0.7 | 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 | 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 | 3.7 | 20 | 41 | 33 |
| Heroin | 15 | 10 | 26 | 0 | 0 | 0 | 21 | 20 | 24 |
| Other opiates | 8 | 6 | 14 | 0 | 0 | 0 | 50 | 33 | 43 |
| All other drugs | 92 | 3 | 95 | 0 | 0 | 0 | 3 | 0 | 3 |
| Not reported | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 126 | 36 | 163 | 0.8 | 0 | 0.6 | 10 | 31 | 15 |

2013

| | 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 | 14 | 16 | 30 | 0 | 0 | 0 | 7 | 13 | 10 |
| 20 to 24 years | 96 | 44 | 140 | 2.1 | 0 | 1.4 | 11 | 30 | 17 |
| 25 to 34 years | 394 | 215 | 616 | 1.5 | 0.9 | 1.5 | 40 | 49 | 43 |
| 35 to 44 years | 569 | 256 | 828 | 2.6 | 0 | 1.8 | 61 | 58 | 60 |
| 45+ years | 483 | 195 | 684 | 3.7 | 2.1 | 3.2 | 66 | 65 | 66 |
| Not reported | 7 | 1 | 9 | 0 | 0 | 0 | 43 | 100 | 44 |
| <i>Time since first injection</i> | | | | | | | | | |
| Less than 5 years | 177 | 70 | 249 | 3.4 | 0 | 2.4 | 7 | 30 | 14 |
| 5 to 9 years | 131 | 92 | 224 | 4.6 | 0 | 2.7 | 27 | 46 | 35 |
| 10 to 14 years | 200 | 124 | 326 | 4 | 1.6 | 3.1 | 45 | 54 | 48 |
| 15 to 19 years | 277 | 144 | 426 | 1.4 | 0 | 1.2 | 58 | 53 | 56 |
| 20+ years | 713 | 275 | 993 | 2.2 | 1.5 | 2 | 69 | 66 | 68 |
| Not reported | 65 | 22 | 89 | 1.5 | 0 | 1.1 | 69 | 36 | 61 |
| Total | 1 563 | 727 | 2 307 | 2.6 | 0.8 | 2.1 | 53 | 55 | 54 |
| <i>Last drug injected among those reporting less than 3 years since first injection</i> | | | | | | | | | |
| Amphetamines | 21 | 22 | 43 | 14.3 | 0 | 7 | 10 | 23 | 16 |
| Heroin | 5 | 8 | 13 | 0 | 0 | 0 | 20 | 38 | 31 |
| Other opiates | 10 | 5 | 15 | 10 | 0 | 6.7 | 10 | 20 | 13 |
| All other drugs | 81 | 3 | 86 | 1.2 | 0 | 1.2 | 1 | 0 | 2 |
| Not reported | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 120 | 38 | 160 | 4.2 | 0 | 3.1 | 4 | 24 | 9 |

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, 2009 – 2013, 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

| 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 | 1.3 | 46 | 66 | 58 |
| Homosexual | 48 | 37 | 87 | 39.1 | 0 | 21.2 | 27 | 41 | 32 |
| Not reported | 80 | 48 | 134 | 1.3 | 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 | 1.6 | 44 | 68 | 61 |
| Not reported | 68 | 35 | 103 | 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 | 0.3 | 46 | 55 | 48 |
| <i>Other Oceania</i> | 54 | 30 | 84 | 0 | 0 | 0 | 43 | 57 | 48 |
| <i>Asia</i> | 24 | 7 | 32 | 4.2 | 0 | 3.1 | 42 | 43 | 41 |
| <i>United Kingdom and Ireland</i> | 82 | 37 | 120 | 0 | 0 | 0 | 51 | 57 | 53 |
| <i>Other</i> | 64 | 30 | 96 | 0 | 0 | 0 | 42 | 53 | 46 |
| Not reported | 21 | 5 | 26 | 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 | 0.9 | 54 | 45 | 50 |
| Not reported | 25 | 8 | 33 | 0 | 1 | 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 | 1.6 | 55 | 56 | 56 |
| Homosexual | 49 | 36 | 86 | 29.2 | 0 | 16.5 | 22 | 28 | 24 |
| Not reported | 80 | 41 | 125 | 0 | 0 | 0 | 49 | 63 | 54 |
| <i>Sex work last month</i> | | | | | | | | | |
| No | 1 428 | 619 | 2 058 | 1.3 | 0.3 | 1 | 53 | 52 | 53 |
| Yes | 42 | 84 | 127 | 4.8 | 0 | 1.6 | 26 | 54 | 45 |
| Not reported | 110 | 56 | 168 | 0.9 | 0 | 0.6 | 65 | 55 | 61 |
| <i>Country/region of birth</i> | | | | | | | | | |
| Australia | 1 367 | 673 | 2 051 | 1.4 | 0.3 | 1 | 53 | 51 | 53 |
| Overseas born | 187 | 78 | 266 | 1.1 | 0 | 0.8 | 55 | 62 | 56 |
| <i>Other Oceania</i> | 47 | 28 | 76 | 2.1 | 0 | 1.3 | 52 | 68 | 57 |
| <i>Asia</i> | 23 | 6 | 29 | 0 | 0 | 0 | 57 | 83 | 62 |
| <i>United Kingdom and Ireland</i> | 64 | 29 | 93 | 0 | 0 | 0 | 64 | 48 | 59 |
| <i>Other</i> | 53 | 15 | 68 | 1.9 | 0 | 1.5 | 47 | 67 | 52 |
| Not reported | 26 | 8 | 36 | 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 | 53 | 52 | 53 |
| Other language | 75 | 15 | 90 | 0 | 0 | 0 | 49 | 57 | 51 |
| Not reported | 19 | 8 | 28 | 0 | 1 | 0 | 72 | 88 | 78 |
| Total | 1 580 | 759 | 2 353 | 1.3 | 0.3 | 1 | 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 | 44 | 51 | 48 |
| Homosexual | 51 | 38 | 91 | 23.5 | 0 | 13.2 | 39 | 41 | 40 |
| Not reported | 59 | 38 | 100 | 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 | 1.3 | 1.9 | 64 | 56 | 58 |
| Not reported | 79 | 23 | 104 | 2.5 | 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 | 0.3 | 55 | 47 | 53 |
| <i>Other Oceania</i> | 46 | 34 | 80 | 0 | 0 | 0 | 50 | 58 | 53 |
| <i>Asia</i> | 24 | 7 | 31 | 4.2 | 0 | 3.2 | 67 | 14 | 55 |
| <i>United Kingdom and Ireland</i> | 73 | 34 | 108 | 0 | 0 | 0 | 58 | 50 | 55 |
| <i>Other</i> | 77 | 20 | 97 | 0 | 0 | 0 | 55 | 45 | 53 |
| Not reported | 18 | 4 | 22 | 0 | 0 | 0 | 76 | 50 | 71 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| English | 1 444 | 731 | 2 187 | 1.4 | 1 | 1.3 | 53 | 52 | 52 |
| Other language | 100 | 28 | 129 | 1 | 0 | 0.8 | 68 | 41 | 62 |
| Not reported | 16 | 5 | 21 | 0 | 1 | 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 | 1.5 | 47 | 56 | 52 |
| Homosexual | 42 | 31 | 77 | 21.4 | 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 | 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 | 2.1 | 57 | 63 | 58 |
| <i>Other Oceania</i> | 49 | 32 | 81 | 4.1 | 0 | 2.5 | 44 | 65 | 52 |
| <i>Asia</i> | 22 | 3 | 26 | 0 | 0 | 0 | 86 | 100 | 84 |
| <i>United Kingdom and Ireland</i> | 73 | 26 | 99 | 1.4 | 0 | 1 | 57 | 65 | 59 |
| <i>Other</i> | 58 | 24 | 82 | 5.2 | 0 | 3.7 | 56 | 54 | 55 |
| Not reported | 16 | 3 | 19 | 0 | 0 | 0 | 50 | 67 | 53 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| English | 1 446 | 685 | 2 143 | 1 | 1.3 | 1.2 | 52 | 54 | 52 |
| Other language | 96 | 27 | 126 | 3.1 | 0 | 2.4 | 58 | 52 | 56 |
| Not reported | 4 | 6 | 10 | 0 | 0 | 0 | 25 | 83 | 60 |
| Total | 1 546 | 718 | 2 279 | 1.2 | 1.3 | 1.2 | 52 | 54 | 53 |

2013

| | 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 | 1 322 | 519 | 1 848 | 0.7 | 1.2 | 0.8 | 54 | 55 | 55 |
| Bisexual | 59 | 114 | 175 | 10.2 | 0 | 4 | 50 | 54 | 52 |
| Homosexual | 73 | 26 | 105 | 32.9 | 0 | 22.9 | 26 | 46 | 32 |
| Not reported | 109 | 68 | 179 | 1.8 | 0 | 1.1 | 61 | 59 | 60 |
| <i>Sex work last month</i> | | | | | | | | | |
| No | 1 415 | 624 | 2 052 | 2.5 | 1 | 2 | 53 | 53 | 53 |
| Yes | 36 | 56 | 94 | 11.1 | 0 | 5.3 | 49 | 64 | 58 |
| Not reported | 112 | 47 | 161 | 1.8 | 0 | 1.2 | 65 | 57 | 62 |
| <i>Country/region of birth</i> | | | | | | | | | |
| Australia | 1 329 | 642 | 1 983 | 2.4 | 0.9 | 1.9 | 54 | 55 | 54 |
| Overseas born | 226 | 83 | 313 | 4 | 0 | 3.2 | 53 | 52 | 52 |
| <i>Other Oceania</i> | 50 | 20 | 71 | 4 | 0 | 4.2 | 48 | 60 | 51 |
| <i>Asia</i> | 30 | 5 | 35 | 10 | 0 | 8.6 | 72 | 80 | 74 |
| <i>United Kingdom and Ireland</i> | 70 | 31 | 102 | 1.4 | 0 | 1 | 53 | 52 | 52 |
| <i>Other</i> | 76 | 27 | 105 | 4 | 0 | 2.9 | 49 | 41 | 46 |
| Not reported | 8 | 2 | 11 | 0 | 0 | 0 | 50 | 100 | 55 |
| <i>Main language spoken at home by parents</i> | | | | | | | | | |
| English | 1 441 | 689 | 2 145 | 2.6 | 0.9 | 2.1 | 53 | 54 | 54 |
| Other language | 114 | 38 | 153 | 3.5 | 0 | 2.6 | 58 | 61 | 58 |
| Not reported | 8 | 0 | 9 | 0 | 0 | 0 | 50 | 0 | 44 |
| Total | 1 563 | 727 | 2 307 | 2.6 | 0.8 | 2.1 | 53 | 55 | 54 |

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 Kirkeon Road Centre, Sydney, 2009 – 2013

| Year/ Age group | Person years at risk | Number newly diagnosed | Incidence per 100 person years |
|--------------------|----------------------|------------------------|--------------------------------|
| 2009 | | | |
| Less than 20 years | 2.3 | 1 | 42.7 |
| 20 – 29 years | 22.8 | 2 | 8.8 |
| 30+ years | 49.1 | 1 | 2.0 |
| Total | 74.2 | 4 | 5.4 |
| 2010 | | | |
| Less than 20 years | 0.8 | 0 | 0.0 |
| 20 – 29 years | 22.1 | 4 | 18.1 |
| 30+ years | 49.4 | 2 | 4.1 |
| Total | 72.3 | 6 | 8.3 |
| 2011 | | | |
| Less than 20 years | 0.7 | 2 | 270.6 |
| 20 – 29 years | 16.3 | 4 | 24.6 |
| 30+ years | 44.5 | 2 | 4.5 |
| Total | 61.5 | 8 | 13.0 |
| 2012 | | | |
| Less than 20 years | 0.6 | 1 | 171.7 |
| 20 – 29 years | 13.3 | 1 | 7.5 |
| 30+ years | 37.2 | 0 | 0.0 |
| Total | 51.1 | 2 | 3.9 |
| 2013 | | | |
| Less than 20 years | 0.8 | 0 | 0.0 |
| 20 – 29 years | 9.7 | 3 | 30.8 |
| 30+ years | 20.4 | 1 | 4.9 |
| Total | 30.9 | 4 | 13.0 |

Source: Kirkeon 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 – 2013

| 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 | 35.1 | 4 | 11.4 |
| 30+ years | 19.7 | 1 | 5.1 |
| Total | 59.0 | 6 | 10.2 |
| 2010 | | | |
| Less than 20 years | 3.7 | 0 | 0 |
| 20 – 29 years | 47.0 | 5 | 10.6 |
| 30+ years | 37.5 | 1 | 2.7 |
| Total | 88.2 | 6 | 6.8 |
| 2011 | | | |
| Less than 20 years | 1.9 | 1 | 53.2 |
| 20 – 29 years | 58.3 | 3 | 5.1 |
| 30+ years | 47.8 | 4 | 8.4 |
| Total | 108.0 | 8 | 7.4 |
| 2012 | | | |
| Less than 20 years | 0.7 | 0 | 0 |
| 20 – 29 years | 52.3 | 4 | 7.7 |
| 30+ years | 54.3 | 4 | 7.4 |
| Total | 107.2 | 8 | 7.5 |
| 2013 | | | |
| Less than 20 years | 0.8 | 0 | 0 |
| 20 – 29 years | 43.5 | 1 | 2.3 |
| 30+ years | 57.9 | 3 | 5.2 |
| Total | 102.2 | 4 | 3.9 |

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 antibody¹, 1985 – 2013, by State/Territory and years of donation

| State/ Territory | 1985 ² – 2003 | | | 2004 – 2005 | | | 2006 – 2007 | | | 2008 – 2009 | | |
|----------------------|--------------------------|------------|------------|------------------|----------|------------|------------------|----------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT ³ | 5 688 510 | 44 | 0.8 | 685 767 | 3 | 0.4 | 767 349 | 2 | 0.3 | 812 296 | 2 | 0.2 |
| NT | 162 694 | 1 | 0.6 | 20 939 | 0 | 0.0 | 20 292 | 0 | 0.0 | 24 104 | 0 | 0.0 |
| QLD | 3 344 057 | 32 | 1.0 | 473 053 | 2 | 0.4 | 482 500 | 2 | 0.4 | 527 114 | 6 | 1.1 |
| SA | 1 730 442 | 6 | 0.3 | 204 178 | 1 | 0.5 | 244 895 | 2 | 0.8 | 272 639 | 0 | 0.0 |
| TAS | 434 279 | 1 | 0.2 | 52 805 | 0 | 0.0 | 62 294 | 0 | 0.0 | 78 267 | 0 | 0.0 |
| VIC | 4 665 416 | 17 | 0.4 | 522 699 | 1 | 0.2 | 536 212 | 1 | 0.2 | 600 306 | 5 | 0.8 |
| WA | 1 598 133 | 13 | 0.8 | 232 349 | 0 | 0.0 | 231 209 | 1 | 0.4 | 255 295 | 0 | 0.0 |
| Total | 17 623 531 | 114 | 0.6 | 2 191 790 | 7 | 0.3 | 2 344 751 | 8 | 0.3 | 2 570 021 | 13 | 0.5 |

| State/ Territory | 2010 – 2011 | | | 2012 – 2013 | | | All years | | |
|----------------------|------------------|-----------|------------|------------------|----------|------------|-------------------|------------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT ³ | 870 127 | 3 | 0.3 | 827 730 | 4 | 0.5 | 9 651 779 | 58 | 0.6 |
| NT | 22 823 | 1 | 4.4 | 20 956 | 0 | 0.0 | 271 808 | 2 | 0.7 |
| QLD | 546 748 | 7 | 1.3 | 526 703 | 0 | 0.0 | 5 900 175 | 49 | 0.8 |
| SA | 267 234 | 0 | 0.0 | 255 567 | 0 | 0.0 | 2 974 955 | 9 | 0.3 |
| TAS | 92 954 | 0 | 0.0 | 102 213 | 0 | 0.0 | 822 812 | 1 | 0.1 |
| VIC | 624 088 | 2 | 0.3 | 630 276 | 0 | 0.0 | 7 578 997 | 26 | 0.3 |
| WA | 263 844 | 1 | 0.4 | 259 766 | 0 | 0.0 | 2 840 596 | 15 | 0.5 |
| Total | 2 687 818 | 14 | 0.5 | 2 623 211 | 4 | 0.2 | 30 041 122 | 160 | 0.5 |

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 – 2013, 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 – 2003 | | 2004 – 2005 | | 2006 – 2007 | | 2008 – 2009 | | 2010 – 2011 | | 2012 – 2013 | | All years | | |
|--|-------------|-----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|------------|-----------|------------|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | Total |
| Men who have sex with men ¹ | 22 | 0 | 3 | 0 | 0 | 0 | 6 | 0 | 2 | 0 | 4 | 0 | 37 | 0 | 37 |
| Injecting drug use | 4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| Heterosexual contact | 24 | 26 | 1 | 1 | 3 | 2 | 3 | 3 | 7 | 3 | 2 | 0 | 40 | 35 | 75 |
| Person from a high prevalence country | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 |
| 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 | 0 | 5 |
| Undetermined | 27 | 3 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 32 | 4 | 36 |
| Total | 78 | 36 | 6 | 1 | 6 | 2 | 10 | 3 | 10 | 4 | 7 | 0 | 117 | 46 | 163 |
| New HIV infection² | 35 | 17 | 0 | 2 | 2 | 1 | 4 | 1 | 4 | 2 | 2 | 0 | 47 | 23 | 70 |

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 | 2009 | | | 2010 | | | 2011 | | |
|---------------------|------------------|------------|------------|------------------|------------|------------|------------------|------------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 424 627 | 46 | 10.8 | 428 144 | 44 | 10.3 | 441 983 | 46 | 10.4 |
| NT | 12 123 | 2 | 16.5 | 11 269 | 1 | 8.9 | 11 554 | 3 | 26.0 |
| QLD | 270 890 | 13 | 4.8 | 271 934 | 22 | 8.1 | 274 814 | 16 | 5.8 |
| SA | 138 255 | 9 | 6.5 | 132 871 | 6 | 4.5 | 134 363 | 6 | 4.5 |
| TAS | 41 010 | 0 | 0.0 | 44 706 | 1 | 2.2 | 48 248 | 1 | 2.1 |
| VIC | 310 968 | 35 | 11.3 | 304 717 | 38 | 12.5 | 319 371 | 31 | 9.7 |
| WA | 130 714 | 20 | 15.3 | 131 795 | 11 | 8.3 | 132 049 | 15 | 11.4 |
| Total | 1 328 587 | 125 | 9.4 | 1 325 436 | 123 | 9.3 | 1 362 382 | 118 | 8.7 |

| State/ Territory | 2012 | | | 2013 | | |
|---------------------|------------------|------------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 419 000 | 40 | 9.5 | 408 730 | 31 | 7.6 |
| NT | 10 610 | 1 | 9.4 | 10 346 | 1 | 9.7 |
| QLD | 262 480 | 20 | 7.6 | 264 223 | 18 | 6.8 |
| SA | 129 620 | 7 | 5.4 | 125 947 | 5 | 4.0 |
| TAS | 50 202 | 3 | 6.0 | 52 011 | 1 | 1.9 |
| VIC | 312 886 | 24 | 7.7 | 317 390 | 30 | 9.5 |
| WA | 127 653 | 18 | 14.1 | 132 113 | 13 | 9.8 |
| Total | 1 312 451 | 113 | 8.6 | 1 310 760 | 99 | 7.6 |

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 | 2009 | | | 2010 | | | 2011 | | |
|---------------------|------------------|------------|------------|------------------|-----------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 424 627 | 52 | 12.2 | 428 144 | 40 | 9.3 | 441 983 | 33 | 7.5 |
| NT | 12 123 | 1 | 8.2 | 11 269 | 1 | 8.9 | 11 554 | 1 | 8.7 |
| QLD | 270 890 | 22 | 8.1 | 271 934 | 16 | 5.9 | 274 814 | 16 | 5.8 |
| SA | 138 255 | 14 | 10.1 | 132 871 | 7 | 5.3 | 134 363 | 5 | 3.7 |
| TAS | 41 010 | 5 | 12.2 | 44 706 | 1 | 2.2 | 48 248 | 1 | 2.1 |
| VIC | 310 968 | 24 | 7.7 | 304 717 | 16 | 5.3 | 319 371 | 14 | 4.4 |
| WA | 130 714 | 10 | 7.7 | 131 795 | 4 | 3.0 | 132 049 | 11 | 8.3 |
| Total | 1 328 587 | 128 | 9.6 | 1 325 436 | 85 | 6.4 | 1 362 382 | 81 | 5.9 |

| State/ Territory | 2012 | | | 2013 | | |
|---------------------|------------------|-----------|------------|------------------|-----------|------------|
| | Tests | Positive | Prevalence | Tests | Positive | Prevalence |
| NSW/ACT | 419 000 | 31 | 7.4 | 408 730 | 23 | 5.6 |
| NT | 10 610 | 1 | 9.4 | 10 346 | 1 | 9.7 |
| QLD | 262 480 | 26 | 9.9 | 264 223 | 19 | 7.2 |
| SA | 129 620 | 5 | 3.9 | 125 947 | 6 | 4.8 |
| TAS | 50 202 | 2 | 4.0 | 52 011 | 2 | 3.8 |
| VIC | 312 886 | 19 | 6.1 | 317 390 | 16 | 5.0 |
| WA | 127 653 | 7 | 5.5 | 132 113 | 3 | 2.3 |
| Total | 1 312 451 | 91 | 6.9 | 1 310 760 | 70 | 5.3 |

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 Warts Surveillance Network, 2004 – 2013, 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 | 847 | 2 030 | 1 443 | | | |
| | No. with warts (%) | 95 (11.2) | 231 (11.4) | 62 (4.3) | | | |
| 2005 | Seen | 773 | 1 650 | 1 171 | | | |
| | No. with warts (%) | 103 (13.3) | 220 (13.3) | 60 (5.1) | | | |
| 2006 | Seen | 810 | 1 656 | 1 079 | | | |
| | No. with warts (%) | 103 (12.7) | 225 (13.6) | 65 (6.0) | | | |
| 2007 | Seen | 783 | 1 642 | 1 044 | | | |
| | No. with warts (%) | 113 (14.4) | 213 (13.0) | 71 (6.8) | | | |
| 2008 | Seen | 876 | 1 437 | 991 | | | |
| | No. with warts (%) | 68 (7.8) | 121 (8.4) | 46 (4.6) | | | |
| 2009 | Seen | 974 | 1 506 | 940 | | | |
| | No. with warts (%) | 43 (4.4) | 118 (7.8) | 59 (6.3) | | | |
| 2010 | Seen | 1 062 | 1 539 | 963 | | | |
| | No. with warts (%) | 22 (2.1) | 73 (4.7) | 62 (6.4) | | | |
| 2011 | Seen | 1 075 | 1 496 | 961 | | | |
| | No. with warts (%) | 10 (.9) | 46 (3.1) | 45 (4.7) | | | |
| 2012 | Seen | 1 127 | 1 715 | 1 114 | | | |
| | No. with warts (%) | 12 (1.1) | 53 (3.1) | 53 (4.8) | | | |
| 2013 | Seen | 1 128 | 1 741 | 1 160 | | | |
| | No. with warts (%) | 6 (.5) | 35 (2.0) | 54 (4.7) | | | |

¹ Data from 6 services in NSW, NT, QLD, 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 – 2013, number (percent) diagnosed with genital warts, by age group 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 > 30 years | Australian born homosexual men | Australian born bisexual men |
| 2004 | | | | | |
| Seen | 273 | 1 590 | 1 760 | 1 026 | 230 |
| No. with warts (%) | 29 (10.6) | 295 (18.6) | 273 (15.5) | 80 (7.8) | 21 (9.1) |
| 2005 | | | | | |
| Seen | 236 | 1 487 | 1 488 | 812 | 219 |
| No. with warts (%) | 19 (8.1) | 291 (19.6) | 216 (14.5) | 67 (8.3) | 20 (9.1) |
| 2006 | | | | | |
| Seen | 274 | 1 460 | 1 427 | 844 | 204 |
| No. with warts (%) | 40 (14.6) | 271 (18.6) | 175 (12.3) | 56 (6.6) | 17 (8.3) |
| 2007 | | | | | |
| Seen | 292 | 1 437 | 1 372 | 829 | 223 |
| No. with warts (%) | 41 (14.0) | 278 (19.4) | 171 (12.5) | 61 (7.4) | 9 (4.0) |
| 2008 | | | | | |
| Seen | 389 | 1 559 | 1 387 | 897 | 204 |
| No. with warts (%) | 31 (8.0) | 274 (17.6) | 149 (10.7) | 62 (6.9) | 15 (7.4) |
| 2009 | | | | | |
| Seen | 561 | 1 690 | 1 342 | 960 | 167 |
| No. with warts (%) | 31 (5.5) | 264 (15.6) | 148 (11.0) | 59 (6.2) | 7 (4.2) |
| 2010 | | | | | |
| Seen | 678 | 1 820 | 1 404 | 1 047 | 219 |
| No. with warts (%) | 16 (2.4) | 219 (12.0) | 146 (10.4) | 82 (7.8) | 10 (4.6) |
| 2011 | | | | | |
| Seen | 627 | 1 749 | 1 354 | 1 039 | 220 |
| No. with warts (%) | 13 (2.1) | 159 (9.1) | 136 (10.0) | 62 (6.0) | 12 (5.5) |
| 2012 | | | | | |
| Seen | 588 | 1 884 | 1 503 | 1 169 | 232 |
| No. with warts (%) | 5 (.9) | 153 (8.1) | 148 (9.9) | 63 (5.4) | 13 (5.6) |
| 2013 | | | | | |
| Seen | 606 | 1 820 | 1 489 | 1 316 | 265 |
| No. with warts (%) | 6 (1.0) | 115 (6.3) | 147 (9.9) | 61 (4.6) | 9 (3.4) |

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 Gay Community Periodic Surveys, 2009 – 2013, 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

| Sample size | Sydney ^{1,2} | | | Queensland ¹ | | | Melbourne ¹ | | | | | | | | |
|---|-----------------------|-------|-------|-------------------------|-------|-------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2009 | 2010 | 2011 | 2012 | 2013 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Unprotected anal intercourse with regular partners ¹ | 2 240 | 2 707 | 3 176 | 2 828 | 2 531 | 1 257 | 1 641 | 1 660 | 1 317 | 1 095 | 2 061 | 2 425 | 1 919 | 2 034 | 2 323 |
| Unprotected anal intercourse with casual partners ¹ | 32.6 | 34 | 27.6 | 29.5 | 28.3 | 33.9 | 30.1 | 28.5 | 39.1 | 33.4 | 32.5 | 35.0 | 34.8 | 28.6 | 29.6 |
| Injecting drug use ^{1,3} | 7.8 | 6.9 | 5.2 | 5.9 | 6.2 | 6.1 | 5.3 | 5.9 | 3.0 | 4.0 | 6.7 | 4.5 | 4.9 | 9.5 | 3.9 |
| Sample size | 1 973 | 2 421 | 2 825 | 2 515 | 2 264 | 1 183 | 1 518 | 1 535 | 1 222 | 959 | 1 916 | 2 211 | 1 757 | 1 877 | 2 166 |
| HIV antibody testing ⁴ | 70.4 | 59.3 | 62.3 | 58.2 | 58.4 | 59.9 | 58 | 58.5 | 63.4 | 60.6 | 67.8 | 62.4 | 61.5 | 68.2 | 64.1 |

| Sample size | Adelaide | | | Canberra | | | Perth | | | |
|---|----------|-------|------|----------|------|------|-------|------|------|------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2009 | 2011 | 2013 | 2010 | 2012 |
| Unprotected anal intercourse with regular partners ¹ | 896 | 1 031 | 697 | 790 | 790 | 289 | 269 | 173 | 912 | 815 |
| Unprotected anal intercourse with casual partners ¹ | 27.5 | 30.9 | 29.5 | 27.3 | 27.3 | 38.9 | 42.2 | 41.7 | 34.8 | 35.9 |
| Injecting drug use ⁵ | — | — | — | — | — | 34.7 | 17.7 | 23.5 | 31.4 | 26.5 |
| Sample size | 858 | 965 | 654 | 755 | 755 | 281 | 259 | 161 | 882 | 787 |
| HIV antibody testing ⁴ | 66.3 | 50.5 | 51.9 | 59.4 | 59.4 | 67.1 | 67.3 | 62.5 | 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, 2009 – 2013, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting injecting drug use (IDU) in the past month, and percent reporting use of a needle and syringe after someone else in the past month by year, time since first injection, last drug injected and sex

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 | 1 580 | 759 | 2 353 | 46 | 51 | 48 | 52 | 56 | 54 | 1 403 | 660 | 2 073 | 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 | 1 560 | 764 | 2 337 | 48 | 51 | 49 | 51 | 58 | 54 | 1 371 | 675 | 2 056 | 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 |

2013

| | 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 | 177 | 70 | 249 | 42 | 57 | 46 | 38 | 61 | 45 | 144 | 58 | 204 | 7 | 20 | 10 |
| 5 to 9 years | 131 | 92 | 224 | 49 | 55 | 52 | 53 | 53 | 54 | 107 | 81 | 188 | 15 | 23 | 18 |
| 10 to 14 years | 200 | 124 | 326 | 54 | 60 | 56 | 57 | 57 | 57 | 182 | 116 | 300 | 15 | 17 | 16 |
| 15 to 19 years | 277 | 144 | 426 | 54 | 56 | 54 | 57 | 55 | 56 | 251 | 132 | 388 | 21 | 17 | 20 |
| 20+ years | 713 | 275 | 993 | 47 | 46 | 47 | 49 | 48 | 49 | 637 | 244 | 885 | 14 | 10 | 13 |
| Not reported | 65 | 22 | 89 | 46 | 41 | 44 | 51 | 55 | 51 | 54 | 13 | 67 | 36 | 0 | 28 |
| <i>Last drug injected</i> | | | | | | | | | | | | | | | |
| Amphetamine | 413 | 249 | 668 | 54 | 52 | 53 | 55 | 54 | 54 | 357 | 221 | 582 | 15 | 15 | 15 |
| Heroin | 449 | 230 | 683 | 50 | 51 | 50 | 55 | 52 | 54 | 411 | 205 | 620 | 17 | 16 | 17 |
| Other opiates | 423 | 177 | 601 | 46 | 53 | 48 | 49 | 53 | 50 | 387 | 164 | 552 | 13 | 12 | 13 |
| All other drugs | 269 | 68 | 342 | 44 | 60 | 48 | 41 | 54 | 44 | 218 | 54 | 276 | 16 | 23 | 18 |
| Not reported | 9 | 3 | 13 | 44 | 67 | 46 | 33 | 33 | 31 | 2 | 0 | 2 | 40 | 0 | 25 |
| Total | 1 563 | 727 | 2 307 | 49 | 53 | 50 | 51 | 53 | 51 | 1 375 | 644 | 2 032 | 16 | 15 | 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 5.2.2 Number of people who inject drugs seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 2009 – 2013, percent reporting HIV and hepatitis C tests within the last twelve months, number reporting sexual intercourse in the past month, and percent reporting condom use at last intercourse by year, age group, sexual identity and sex

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 |

2013

| | 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 | 14 | 16 | 30 | 36 | 56 | 47 | 21 | 63 | 43 | 12 | 13 | 25 | 58 | 31 | 44 |
| 20 to 24 years | 96 | 44 | 140 | 44 | 66 | 51 | 44 | 57 | 48 | 71 | 36 | 107 | 63 | 42 | 56 |
| 25 to 34 years | 394 | 215 | 616 | 53 | 60 | 56 | 54 | 58 | 56 | 267 | 161 | 433 | 40 | 24 | 34 |
| 35 to 44 years | 569 | 256 | 828 | 51 | 54 | 52 | 52 | 54 | 53 | 288 | 169 | 458 | 35 | 21 | 30 |
| 45+ years | 483 | 195 | 684 | 45 | 38 | 43 | 49 | 44 | 47 | 169 | 76 | 247 | 25 | 26 | 26 |
| Not reported | 7 | 1 | 9 | 43 | 100 | 44 | 29 | 100 | 33 | 5 | 1 | 6 | 40 | 0 | 33 |
| <i>Sexual identity</i> | | | | | | | | | | | | | | | |
| Heterosexual | 1 322 | 519 | 1 848 | 48 | 50 | 49 | 50 | 53 | 51 | 690 | 330 | 1 022 | 36 | 22 | 31 |
| Bisexual | 59 | 114 | 175 | 49 | 63 | 58 | 51 | 57 | 55 | 26 | 78 | 106 | 38 | 32 | 34 |
| Homosexual | 73 | 26 | 105 | 68 | 35 | 59 | 70 | 42 | 62 | 46 | 13 | 63 | 59 | 38 | 56 |
| Not reported | 109 | 68 | 179 | 43 | 63 | 51 | 43 | 53 | 47 | 50 | 35 | 85 | 42 | 29 | 36 |
| Total | 1 563 | 727 | 2 307 | 49 | 53 | 50 | 51 | 53 | 51 | 812 | 456 | 1 276 | 38 | 25 | 33 |

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 HIV infection

Table 6.1.1 Estimated number (plausible range) of people living with HIV infection in Australia in 2013, by State/Territory and sex

| State/Territory | Male | Range | Female | Range | Total | Range |
|-----------------|---------------|------------------------|--------------|----------------------|---------------|------------------------|
| ACT | 250 | 200 – 300 | 45 | 40 – 50 | 300 | 250 – 350 |
| NSW | 11 800 | 10 800 – 13 600 | 1 200 | 1 100 – 1 400 | 13 000 | 11 900 – 15 000 |
| NT | 150 | 150 – 190 | 50 | 45 – 60 | 200 | 200 – 250 |
| QLD | 3 400 | 3 100 – 3 900 | 500 | 450 – 600 | 3 900 | 3 600 – 4 500 |
| SA | 1 000 | 900 – 1 150 | 170 | 150 – 200 | 1 150 | 1 050 – 1 350 |
| TAS | 150 | 100 – 200 | 30 | 25 – 35 | 175 | 150 – 200 |
| VIC | 5 700 | 5 200 – 6 500 | 600 | 550 – 700 | 6 300 | 5 700 – 7 200 |
| WA | 1 400 | 1 300 – 1 600 | 400 | 350 – 450 | 1 800 | 1 600 – 2 000 |
| Total | 23 800 | 21 800 – 27 400 | 3 000 | 2 700 – 3 500 | 26 800 | 24 500 – 30 900 |

Source: State/Territory health authorities; The Kirby Institute

6.2 Estimated number of people living with hepatitis B virus infection in 2013

Table 6.2.1 Estimated number of people living with hepatitis B virus infection in 2013

| Characteristic | Number | Plausible range |
|--|---------|-------------------|
| Hepatitis B virus prevalence in 2013 | 210 000 | 172 000 – 249 000 |
| During 2013 | | |
| Deaths attributable to chronic hepatitis B | 389 | 300 – 635 |

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: Hepatitis B Mapping Project, Victorian Infectious Diseases Reference Laboratory & Australasian Society for HIV Medicine, 2014

6.3 Estimates of incidence and number of people living with hepatitis C virus infection

Table 6.3.1 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Australia

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|---------|-------------------|---------|-------------------|---------|-------------------|
| Total HCV antibody positive | 280 000 | 220 000 – 295 000 | 305 000 | 240 000 – 320 000 | 310 000 | 240 000 – 325 000 |
| Total HCV viremic cases | 210 000 | 165 000 – 220 000 | 225 000 | 180 000 – 240 000 | 230 000 | 180 000 – 245 000 |
| Estimated number of incident cases per year | 10 300 | 9 600 – 11 000 | 6 300 | 5 900 – 6 800 | 5 400 | 5 000 – 5 800 |
| Estimated number living with: | | | | | | |
| Chronic hepatitis C infection with stage F0-F1 liver disease | 170 000 | 135 000 – 180 000 | 170 000 | 130 000 – 180 000 | 155 000 | 115 000 – 165 000 |
| Chronic hepatitis C infection with stage F2 liver disease | 19 800 | 14 900 – 23 000 | 28 000 | 21 000 – 33 000 | 36 000 | 26 000 – 41 000 |
| Chronic hepatitis C infection with stage F3 liver disease | 11 300 | 7 800 – 15 600 | 18 400 | 12 100 – 26 000 | 28 000 | 17 700 – 39 000 |
| Living with hepatitis C related cirrhosis F4 | 4 500 | 3 000 – 6 400 | 7 100 | 4 500 – 10 500 | 11 400 | 7 100 – 17 000 |
| Decompensated cirrhosis/HCC/liver transplant eligible | 1 020 | 680 – 1 470 | 1 590 | 1 040 – 2 400 | 2 600 | 1 660 – 3 900 |
| Estimated number of incident cases of HCC | 180 | 120 – 250 | 290 | 190 – 410 | 450 | 290 – 640 |
| Estimated number of incident cases of decompensated cirrhosis | 210 | 130 – 300 | 320 | 200 – 490 | 520 | 310 – 800 |
| Estimated number of incident cases of liver-related death | 250 | 170 – 340 | 390 | 260 – 540 | 630 | 400 – 880 |

Source: Center for Disease Analysis, Kirby Institute

Table 6.3.2 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Australian Capital Territory

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|-------|---------------|-------|---------------|-------|---------------|
| Total HCV antibody positive | 4 400 | 3 500 – 4 700 | 4 800 | 3 800 – 5 100 | 4 900 | 3 800 – 5 200 |
| Total HCV viremic cases | 3 300 | 2 600 – 3 500 | 3 600 | 2 800 – 3 800 | 3 600 | 2 800 – 3 800 |
| Estimated number of incident cases per year | 160 | 150 – 170 | 100 | 90 – 110 | 90 | 80 – 90 |
| Estimated number living with: | | | | | | |
| F0-F1 | 2 700 | 2 100 – 2 900 | 2 700 | 2 100 – 2 900 | 2 400 | 1 810 – 2 600 |
| F2 | 310 | 240 – 360 | 450 | 330 – 520 | 560 | 410 – 650 |
| F3 | 180 | 120 – 250 | 290 | 190 – 410 | 440 | 280 – 610 |
| F4 | 70 | 50 – 100 | 110 | 70 – 170 | 180 | 110 – 270 |
| Decompensated cirrhosis/HCC/liver transplant eligible | 20 | 10 – 20 | 30 | 20 – 40 | 40 | 30 – 60 |
| Estimated number of incident cases of HCC | <10 | | <10 | | <10 | |
| Estimated number of incident cases of decompensated cirrhosis | <10 | | <10 | | <10 | |
| Estimated number of incident cases of liver-related death | <10 | | <10 | | 10 | 0 – 20 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.3 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, New South Wales

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|--------|------------------|---------|------------------|---------|------------------|
| Total HCV antibody positive | 99 000 | 79 000 – 105 000 | 110 000 | 85 000 – 115 000 | 110 000 | 86 000 – 115 000 |
| Total HCV viremic cases | 74 000 | 59 000 – 79 000 | 80 000 | 63 000 – 85 000 | 82 000 | 64 000 – 86 000 |
| Estimated number of incident cases per year | 3 700 | 3 400 – 3 900 | 2 300 | 2 100 – 2 400 | 1 930 | 1 800 – 2 100 |
| Estimated number living with: | | | | | | |
| F0-F1 | 61 000 | 48 000 – 64 000 | 61 000 | 47 000 – 64 000 | 55 000 | 41 000 – 59 000 |
| F2 | 7 100 | 5 300 – 8 200 | 10 100 | 7 400 – 11 700 | 12 700 | 9 200 – 14 500 |
| F3 | 4 000 | 2 800 – 5 600 | 6 500 | 4 300 – 9 100 | 9 900 | 6 300 – 13 700 |
| F4 | 1 600 | 1 050 – 2 300 | 2 500 | 1 600 – 3 700 | 4 100 | 2 500 – 6 100 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 360 | 240 – 520 | 570 | 370 – 840 | 920 | 590 – 1 390 |
| Estimated number of incident cases of HCC | 60 | 40 – 90 | 100 | 70 – 150 | 160 | 100 – 230 |
| Estimated number of incident cases of decompensated cirrhosis | 70 | 50 – 110 | 110 | 70 – 170 | 190 | 110 – 280 |
| Estimated number of incident cases of liver-related death | 90 | 60 – 120 | 140 | 90 – 190 | 220 | 140 – 310 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.4 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Northern Territory

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|-------|---------------|-------|---------------|-------|---------------|
| Total HCV antibody positive | 4 400 | 3 500 – 4 700 | 4 900 | 3 800 – 5 100 | 5 000 | 3 900 – 5 200 |
| Total HCV viremic cases | 3 300 | 2 600 – 3 500 | 3 600 | 2 900 – 3 800 | 3 700 | 2 900 – 3 900 |
| Estimated number of incident cases per year | 160 | 150 – 180 | 100 | 90 – 110 | 90 | 80 – 90 |
| Estimated number living with: | | | | | | |
| F0-F1 | 2 700 | 2 100 – 2 900 | 2 700 | 2 100 – 2 900 | 2 500 | 1 830 – 2 700 |
| F2 | 320 | 240 – 370 | 450 | 330 – 530 | 570 | 420 – 660 |
| F3 | 180 | 120 – 250 | 290 | 190 – 410 | 440 | 280 – 620 |
| F4 | 70 | 50 – 100 | 110 | 70 – 170 | 180 | 110 – 270 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 20 | 10 – 20 | 30 | 20 – 40 | 40 | 30 – 60 |
| Estimated number of incident cases of HCC | <10 | | <10 | | <10 | |
| Estimated number of incident cases of decompensated cirrhosis | <10 | | <10 | | <10 | |
| Estimated number of incident cases of liver-related death | <10 | | <10 | | 10 | 0 – 20 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.5 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Queensland

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|--------|-----------------|--------|-----------------|--------|-----------------|
| Total HCV antibody positive | 58 000 | 46 000 – 61 000 | 63 000 | 50 000 – 67 000 | 64 000 | 50 000 – 68 000 |
| Total HCV viremic cases | 43 000 | 34 000 – 46 000 | 47 000 | 37 000 – 50 000 | 48 000 | 37 000 – 51 000 |
| Estimated number of incident cases per year | 2 100 | 1 990 – 2 300 | 1 310 | 1 220 – 1 400 | 1 120 | 1 040 – 1 190 |
| Estimated number living with: | | | | | | |
| F0-F1 | 35 000 | 28 000 – 37 000 | 36 000 | 27 000 – 38 000 | 32 000 | 24 000 – 34 000 |
| F2 | 4 100 | 3 100 – 4 800 | 5 900 | 4 400 – 6 900 | 7 400 | 5 400 – 8 500 |
| F3 | 2 300 | 1 620 – 3 200 | 3 800 | 2 500 – 5 300 | 5 800 | 3 700 – 8 000 |
| F4 | 930 | 610 – 1 320 | 1 470 | 930 – 2 200 | 2 400 | 1 480 – 3 500 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 210 | 140 – 300 | 330 | 220 – 490 | 540 | 340 – 810 |
| Estimated number of incident cases of HCC | 40 | 30 – 50 | 60 | 40 – 90 | 90 | 60 – 130 |
| Estimated number of incident cases of decompensated cirrhosis | 40 | 30 – 60 | 70 | 40 – 100 | 110 | 60 – 170 |
| Estimated number of incident cases of liver-related death | 50 | 40 – 70 | 80 | 50 – 110 | 130 | 80 – 180 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.6 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, South Australia

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|--------|-----------------|--------|-----------------|--------|-----------------|
| Total HCV antibody positive | 14 400 | 11 400 – 15 300 | 15 600 | 12 300 – 16 500 | 15 900 | 12 400 – 16 800 |
| Total HCV viremic cases | 10 700 | 8 500 – 11 400 | 11 600 | 9 200 – 12 300 | 11 800 | 9 200 – 12 500 |
| Estimated number of incident cases per year | 530 | 500 – 570 | 330 | 300 – 350 | 280 | 260 – 300 |
| Estimated number living with: | | | | | | |
| F0-F1 | 8 800 | 6 900 – 9 300 | 8 800 | 6 700 – 9 300 | 7 900 | 5 900 – 8 500 |
| F2 | 1 020 | 770 – 1 190 | 1 450 | 1 070 – 1 690 | 1 830 | 1 340 – 2 100 |
| F3 | 580 | 400 – 810 | 940 | 620 – 1 320 | 1 420 | 910 – 1 980 |
| F4 | 230 | 150 – 330 | 360 | 230 – 540 | 590 | 370 – 880 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 50 | 40 – 80 | 80 | 50 – 120 | 130 | 90 – 200 |
| Estimated number of incident cases of HCC | <10 | | 20 | 10 – 20 | 20 | 20 – 30 |
| Estimated number of incident cases of decompensated cirrhosis | 10 | 0 – 20 | 20 | 10 – 30 | 30 | 20 – 40 |
| Estimated number of incident cases of liver-related death | 10 | 0 – 20 | 20 | 10 – 30 | 30 | 20 – 50 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.7 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Tasmania

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|-------|---------------|-------|---------------|-------|---------------|
| Total HCV antibody positive | 6 200 | 4 900 – 6 600 | 6 700 | 5 300 – 7 100 | 6 900 | 5 400 – 7 300 |
| Total HCV viremic cases | 4 600 | 3 700 – 4 900 | 5 000 | 4 000 – 5 300 | 5 100 | 4 000 – 5 400 |
| Estimated number of incident cases per year | 230 | 210 – 250 | 140 | 130 – 150 | 120 | 110 – 130 |
| Estimated number living with: | | | | | | |
| F0-F1 | 3 800 | 3 000 – 4 000 | 3 800 | 2 900 – 4 000 | 3 400 | 2 600 – 3 700 |
| F2 | 440 | 330 – 510 | 630 | 460 – 730 | 790 | 580 – 910 |
| F3 | 250 | 170 – 350 | 410 | 270 – 570 | 620 | 400 – 860 |
| F4 | 100 | 70 – 140 | 160 | 100 – 230 | 250 | 160 – 380 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 20 | 20 – 30 | 40 | 20 – 50 | 60 | 40 – 90 |
| Estimated number of incident cases of HCC | <10 | | <10 | | 10 | 0 – 20 |
| Estimated number of incident cases of decompensated cirrhosis | <10 | | <10 | | 10 | 0 – 20 |
| Estimated number of incident cases of liver-related death | <10 | | <10 | | 10 | 0 – 20 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.8 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Victoria

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|--------|-----------------|--------|-----------------|--------|-----------------|
| Total HCV antibody positive | 67 000 | 54 000 – 72 000 | 73 000 | 58 000 – 78 000 | 75 000 | 58 000 – 79 000 |
| Total HCV viremic cases | 50 000 | 40 000 – 53 000 | 55 000 | 43 000 – 58 000 | 55 000 | 43 000 – 59 000 |
| Estimated number of incident cases per year | 2 500 | 2 300 – 2 700 | 1 530 | 1 430 – 1 640 | 1 310 | 1 220 – 1 400 |
| Estimated number living with: | | | | | | |
| F0-F1 | 41 000 | 32 000 – 44 000 | 41 000 | 32 000 – 44 000 | 37 000 | 28 000 – 40 000 |
| F2 | 4 800 | 3 600 – 5 600 | 6 800 | 5 100 – 8 000 | 8 600 | 6 300 – 9 900 |
| F3 | 2 700 | 1 900 – 3 800 | 4 400 | 2 900 – 6 200 | 6 700 | 4 300 – 9 300 |
| F4 | 1 090 | 720 – 1 540 | 1 710 | 1 090 – 2 500 | 2 800 | 1 720 – 4 100 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 250 | 170 – 360 | 390 | 250 – 570 | 630 | 400 – 940 |
| Estimated number of incident cases of HCC | 40 | 30 – 60 | 70 | 50 – 100 | 110 | 70 – 160 |
| Estimated number of incident cases of decompensated cirrhosis | 50 | 30 – 70 | 80 | 50 – 120 | 130 | 80 – 190 |
| Estimated number of incident cases of liver-related death | 60 | 40 – 80 | 100 | 60 – 130 | 150 | 100 – 210 |

Source: Source: Center for Disease Analysis, Kirby Institute

Table 6.3.9 Estimated incidence and number of people living with hepatitis C virus infection in 2003 – 2013 by stage of liver disease, Western Australia

| | 2003 | Range | 2008 | Range | 2013 | Range |
|---|--------|-----------------|--------|-----------------|--------|-----------------|
| Total HCV antibody positive | 25 000 | 19 600 – 26 000 | 27 000 | 21 000 – 29 000 | 27 000 | 21 000 – 29 000 |
| Total HCV viremic cases | 18 400 | 14 600 – 19 500 | 20 000 | 15 900 – 21 000 | 20 000 | 16 000 – 22 000 |
| Estimated number of incident cases per year | 910 | 850 – 980 | 560 | 520 – 600 | 480 | 450 – 510 |
| Estimated number living with: | | | | | | |
| F0-F1 | 15 200 | 11 900 – 16 000 | 15 200 | 11 700 – 16 100 | 13 600 | 10 200 – 14 700 |
| F2 | 1 760 | 1 320 – 2 000 | 2 500 | 1 860 – 2 900 | 3 200 | 2 300 – 3 600 |
| F3 | 1 000 | 690 – 1 380 | 1 630 | 1 070 – 2 300 | 2 500 | 1 580 – 3 400 |
| F4 | 400 | 260 – 560 | 630 | 400 – 930 | 1 010 | 630 – 1 510 |
| Decompensated cirrhosis/HCC/ liver transplant eligible | 90 | 60 – 130 | 140 | 90 – 210 | 230 | 150 – 350 |
| Estimated number of incident cases of HCC | 20 | 10 – 20 | 30 | 20 – 40 | 40 | 30 – 60 |
| Estimated number of incident cases of decompensated cirrhosis | 20 | 10 – 30 | 30 | 20 – 40 | 50 | 30 – 70 |
| Estimated number of incident cases of liver-related death | 20 | 20 – 30 | 40 | 20 – 50 | 60 | 40 – 80 |

Source: Source: Center for Disease Analysis, Kirby Institute

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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 2013

| Characteristic | Current antiretroviral treatment ¹ | | | | | | Total |
|--|---|-------------------------|--------------------------------|---------------------------------|-----------------------------|---------------------------|--------------|
| | None | Mono and Double therapy | 3+ NRTI±PI (not NNRTI, not II) | 3+ NRTI +NNRTI (not PI, not II) | 3+ NNRTI+PI, ±NRTI (not II) | 3+ II, ±NRTI, ±NNRTI, ±PI | |
| Total number | 134 | 85 | 529 | 1 013 | 66 | 501 | 2 328 |
| Sex | | | | | | | |
| Male (%) | 119 (89) | 82 (96) | 464 (88) | 930 (92) | 62 (94) | 473 (94) | 2 130 |
| Female (%) | 15 (11) | 3 (4) | 65 (12) | 83 (8) | 4 (6) | 28 (6) | 198 |
| Age at enrolment (years) | | | | | | | |
| Less than 30 (%) | 25 (19) | 4 (5) | 58 (11) | 106 (10) | 5 (8) | 39 (8) | 237 |
| 30 – 39 (%) | 62 (46) | 22 (26) | 188 (36) | 343 (34) | 17 (26) | 135 (27) | 767 |
| 40 – 49 (%) | 23 (17) | 35 (41) | 182 (34) | 336 (33) | 29 (44) | 196 (39) | 801 |
| 50+ (%) | 24 (18) | 24 (28) | 101 (19) | 228 (23) | 15 (23) | 131 (26) | 523 |
| Exposure category | | | | | | | |
| Men who have sex with men (%) | 100 (75) | 71 (84) | 392 (74) | 738 (73) | 52 (79) | 406 (81) | 1 759 |
| Other/not reported (%) | 34 (25) | 14 (16) | 137 (26) | 275 (27) | 14 (21) | 95 (19) | 569 |
| Viral load at enrolment (copies/ml) | | | | | | | |
| Less than 400 (%) | 53 (43) | 52 (66) | 324 (64) | 663 (70) | 36 (55) | 296 (63) | 1 424 |
| 400 – 10 000 (%) | 27 (22) | 15 (19) | 91 (18) | 111 (12) | 19 (29) | 71 (15) | 334 |
| 10 000+ (%) | 42 (34) | 12 (15) | 89 (18) | 169 (18) | 10 (15) | 102 (22) | 424 |
| Not reported | 12 | 6 | 25 | 70 | 1 | 32 | 146 |
| CD4+ count at enrolment (cells/µl) | | | | | | | |
| Less than 200 (%) | 6 (5) | 6 (7) | 46 (9) | 68 (7) | 8 (12) | 66 (14) | 200 |
| 200 – 500 (%) | 33 (27) | 43 (52) | 228 (45) | 405 (42) | 30 (46) | 203 (43) | 942 |
| 500+ (%) | 85 (69) | 33 (40) | 232 (46) | 489 (51) | 27 (42) | 207 (43) | 1 073 |
| Not reported | 10 | 3 | 23 | 51 | 1 | 25 | 113 |
| AIDS prior to enrolment | | | | | | | |
| No (%) | 124 (93) | 65 (76) | 461 (87) | 866 (85) | 50 (76) | 377 (75) | 1 943 |
| Yes (%) | 10 (7) | 20 (24) | 68 (13) | 147 (15) | 16 (24) | 124 (25) | 385 |
| Hepatitis C antibody positive | | | | | | | |
| No | 101 (75) | 73 (86) | 421 (80) | 845 (83) | 59 (89) | 400 (80) | 1 899 |
| Yes | 16 (12) | 7 (8) | 58 (11) | 65 (6) | 3 (5) | 62 (12) | 211 |
| Regimen of longest duration in 2011 | | | | | | | |
| None | 92 (83) | 0 (0) | 7 (1) | 19 (2) | 0 (0) | 9 (2) | 127 |
| Mono and Double therapy | 1 (1) | 70 (82) | 3 (1) | 4 (0) | 0 (0) | 4 (1) | 82 |
| 3+ NRTI±PI (not NNRTI, not II) | 5 (5) | 7 (8) | 500 (96) | 22 (2) | 3 (5) | 38 (8) | 575 |
| 3+ NRTI+NNRTI (not PI,not II) | 8 (7) | 4 (5) | 9 (2) | 940 (95) | 0 (0) | 13 (3) | 974 |
| 3+ NNRTI+PI, ±NRTI (not II) | 1 (1) | 0 (0) | 0 (0) | 0 (0) | 62 (94) | 5 (1) | 68 |
| 3+ II, ±NRTI, ±NNRTI, ±PI | 4 (4) | 4 (5) | 2 (0) | 6 (1) | 1 (2) | 425 (86) | 442 |

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

Table 7.1.2 Number of men with diagnosed HIV infection participating in the Gay Community Periodic Surveys, 2009 – 2013, and proportion¹ reporting use of antiretroviral treatment for HIV infection by city and year

| City | Year of survey | | | | |
|--|----------------|------|------|------|------|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| Melbourne | | | | | |
| Sample size | 145 | 214 | 162 | 157 | 157 |
| Proportion reporting use of antiretroviral therapy | 61.3 | 69.7 | 72.6 | 77.7 | 65.7 |
| Queensland | | | | | |
| Sample size | 74 | 123 | 125 | 95 | 136 |
| Proportion reporting use of antiretroviral therapy | 61.5 | 68.5 | 69.7 | 69.8 | 86.3 |
| Sydney² | | | | | |
| Sample size | 267 | 286 | 351 | 313 | 267 |
| Proportion reporting use of antiretroviral therapy | 73.5 | 68.9 | 70.6 | 80.2 | 76.6 |
| Adelaide, Canberra & Perth (combined) | | | | | |
| Sample size | 46 | 96 | 53 | 63 | 12 |
| Proportion reporting use of antiretroviral therapy | 62.9 | 76.4 | 89.1 | 83.3 | 46.5 |

1 Age standardised and venue adjusted prevalence.

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

3 2009 data from Adelaide and Canberra; 2010 data from Adelaide and Perth; 2011 data from Adelaide and Canberra; 2012 data from Adelaide and Perth; 2013 data from Canberra.

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 for HIV infection through the Highly Specialised Drugs (S100) Program by antiretroviral agent and year

| Antiretroviral agent | Year of prescription ^{1,2} | | | | |
|---|-------------------------------------|----------------|----------------|----------------|----------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| Nucleoside analogue reverse transcriptase inhibitors | | | | | |
| Abacavir | 544 | 492 | 473 | 425 | 400 |
| Didanosine | 229 | 163 | 117 | 84 | 60 |
| Emtricitabine | 131 | 211 | 146 | 157 | 60 |
| Lamivudine | 921 | 822 | 718 | 609 | 540 |
| Stavudine | 104 | 77 | 48 | 36 | 20 |
| Zidovudine | 156 | 128 | 98 | 70 | 60 |
| Lamivudine & Zidovudine | 846 | 719 | 602 | 461 | 400 |
| Abacavir & Lamivudine | 2 243 | 2 220 | 2 179 | 2 041 | 2 500 |
| Abacavir, Lamivudine & Zidovudine | 240 | 163 | 133 | 103 | 100 |
| Tenofovir | 1 294 | 1 586 | 1 967 | 2 039 | 2 480 |
| Tenofovir & Emtricitabine | 5 246 | 4 772 | 4 510 | 4 404 | 4 340 |
| Non-nucleoside analogue reverse transcriptase inhibitors | | | | | |
| Delavirdine | 7 | 6 | - | - | - |
| Efavirenz | 2 996 | 2 003 | 973 | 738 | 700 |
| Nevirapine | 2 791 | 2 809 | 2 728 | 2 376 | 2 260 |
| Etravirine | 155 | 403 | 456 | 454 | 520 |
| Rilpivirine | - | - | - | 18 | 40 |
| Protease inhibitors | | | | | |
| Atazanavir | 2 609 | 2 879 | 2 906 | 2 582 | 2 380 |
| Darunavir | 685 | 887 | 1 058 | 1 131 | 1 140 |
| Fosamprenavir | 219 | 181 | 148 | 111 | 80 |
| Indinavir | 52 | 31 | 21 | 18 | 20 |
| Lopinavir & ritonavir | 1 871 | 1 734 | 1 581 | 1 341 | 960 |
| Ritonavir | 2 850 | 3 181 | 3 098 | 2 652 | 3 180 |
| Saquinavir | 148 | 121 | 95 | 72 | 40 |
| Tipranavir | 27 | 20 | 15 | 11 | <5 |
| Fusion inhibitors | | | | | |
| Enfuvirtide | 60 | 37 | 22 | 13 | 20 |
| Maraviroc | - | 55 | 118 | 122 | 160 |
| Integrase inhibitor | | | | | |
| Raltegravir | 821 | 1 250 | 1 848 | 2 250 | 2 740 |
| Combination Class Agents | | | | | |
| Tenofovir, Emtricitabine & Efavirenz | - | 2 013 | 2 873 | 2 786 | 3 100 |
| Tenofovir, Emtricitabine & Rilpivirine | - | - | - | 217 | 1 040 |
| Total patients³ | 10 900 | 12 400 | 12 700 | 12 800 | 13 700 |
| Total cost⁴ (\$'000s) | 156 810 | 181 508 | 200 165 | 210 005 | 229 000 |

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 to December 2012 estimated from the HSD Program Public Hospital Dispensed National Pack Number Report because of changes to S100 data collection methodology. Number of person years for January 2013 onwards estimated from the PBS item reports on services and benefits.

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 B infection¹ through the Highly Specialised Drugs (S100) Program, by year

| Quarter/Year | Lamivudine | Adefovir | Entacavir | Telbivudine ² | Pegylated interferon ³ | Total cost (\$'000s) ⁴ |
|-------------------------|------------|----------|-----------|--------------------------|-----------------------------------|-----------------------------------|
| 2009⁵ | | | | | | |
| January – March | 1 154 | 732 | 1 415 | 17 | 165 | 3 947 |
| April – June | 1 233 | 817 | 1 600 | 15 | 223 | 4 418 |
| July – September | 1 233 | 817 | 1 752 | 19 | 207 | 4 630 |
| October – December | 1 226 | 767 | 1 864 | 17 | 184 | 4 695 |
| 2010⁵ | | | | | | |
| January – March | 1 184 | 704 | 1 775 | 16 | 163 | 4 439 |
| April – June | 1 125 | 661 | 1 802 | 19 | 144 | 4 377 |
| July – September | 1 156 | 644 | 1 911 | 10 | 151 | 4 513 |
| October – December | 1 167 | 616 | 2 015 | 13 | 134 | 4 606 |
| 2011⁵ | | | | | | |
| January – March | 1 059 | 551 | 1 878 | 7 | 106 | 4 255 |
| April – June | 1 031 | 510 | 1 902 | 13 | 109 | 4 425 |
| July – September | 964 | 460 | 1 853 | 6 | 104 | 4 359 |
| October – December | 872 | 425 | 1 705 | 6 | 114 | 4 368 |
| 2012⁵ | | | | | | |
| January – March | 828 | 353 | 1 754 | 9 | 141 | 4 284 |
| April – June | 734 | 319 | 1 556 | 9 | 92 | 3 732 |
| July – September | 771 | 347 | 1 783 | 8 | 82 | 4 432 |
| October – December | 777 | 355 | 1 891 | 11 | 81 | 4 703 |
| 2013⁶ | | | | | | |
| January – March | - | - | - | - | - | - |
| April – June | 710 | 480 | 2 200 | <5 | 110 | 5 075 |
| July – September | 700 | 440 | 2 170 | <5 | 110 | 4 976 |
| October – December | 690 | 390 | 2 170 | <5 | 110 | 4 925 |

1 Tenofovir is not included in the table due to an inability to separate tenofovir treatment for hepatitis B infection from tenofovir treatment for HIV infection.

2 Telbivudine included in S100 program from July 2008.

3 Includes any hepatitis C monotherapy.

4 Public hospital expenditure only.

5 Number of person years estimated (July 2008 to December 2012) from the HSD Program Public Hospital Dispensed National Pack Number Report because of changes to S100 data collection methodology.

6 Estimates from April 2013 based on PBS item reports. Patient numbers estimated from monthly services reports. Total cost estimated from monthly benefit reports and rounded to nearest 10 patients.

Source: Highly Specialised Drugs (S100) Program

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

| Year | Pegylated Interferon and Ribavirin | Total cost (\$'000s) ² |
|-------------------------|------------------------------------|-----------------------------------|
| 2009³ | | |
| January – March | 2 235 | 10 124 |
| April – June | 2 497 | 11 346 |
| July – September | 2 673 | 11 983 |
| October – December | 2 632 | 11 777 |
| 2010³ | | |
| January – March | 2 387 | 10 702 |
| April – June | 2 500 | 11 205 |
| July – September | 2 605 | 11 969 |
| October – December | 2 366 | 10 937 |
| 2011³ | | |
| January – March | 2 061 | 9 712 |
| April – June | 2 103 | 10 176 |
| July – September | 2 020 | 10 098 |
| October – December | 1 746 | 9 170 |
| 2012³ | | |
| January – March | 1 564 | 8 399 |
| April – June | 1 627 | 8 471 |
| July – September | 2 024 | 10 977 |
| October – December | 1 865 | 10 477 |
| 2013⁴ | | |
| January – March | - | - |
| April – June | 2 120 | 9 293 |
| July – September | 2 130 | 9 564 |
| October – December | 2 060 | 9 457 |

1 An estimated 3397, 3286, 2643, 2360 and 2808 people were receiving treatment throughout 2009 to 2013, 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 estimated (January 2009 to December 2012) from the HSD Program Public Hospital Dispensed National Pack Number Report.

4 Estimates from April 2013 based on PBS item reports; this is a change in methodology due to a change in data reporting from PBS and therefore caution should be taken in comparing trends between 2013 and pre-2013 data. Patient numbers estimated from monthly services reports and total cost estimated from monthly benefit reports.

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 health jurisdictions in New South Wales, Victoria and Queensland for cases of HIV infection newly diagnosed from 1 January 2004 and by all jurisdictions from 2008. Reporting of a previous HIV diagnosis overseas was introduced for cases of HIV infection newly diagnosed in Australia from 1 January 2007 (Table 1.1.3). Advanced HIV diagnosis 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 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 Vandenberg 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 transmitted drug resistance in Australian HIV-1 isolates

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

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

Information on Aboriginal and Torres Strait Islander status was routinely sought at diagnosis of HIV infection in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia from 1985. Information on Aboriginal and Torres Strait Islander status was available for cases of HIV infection newly diagnosed in the Australian Capital Territory and in New South Wales from January 1992 and from June 1998 in Victoria. 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 2004 – 2013, Aboriginal and Torres Strait Islander status was reported at HIV diagnosis in 98% of Australian born cases. Further information is available in Guthrie *et al* (2000).

Population rates of newly diagnosed HIV infection by Aboriginal and Torres Strait Islander status were calculated using the 2011 census population distribution available through the Australian Bureau of Statistics. The Australian-born non-Indigenous population was used to compare rates with those in the Aboriginal and Torres Strait Islander population. The area of residence by Aboriginal and Torres Strait Islander status was calculated using the 2011 census population distribution, based on the Australian Standard Geographical Classification.

1.4 National surveillance for perinatal exposure to HIV

Cases of perinatal exposure to HIV were reported to the national HIV surveillance centre by paediatricians, through the Australian Paediatric Surveillance Unit, and through assessment of perinatal exposure in children born to women with diagnosed HIV infection. Diagnoses of HIV infection in women and their exposed children were notified through national HIV surveillance procedures. Further details are given in McDonald *et al* (1997), McDonald *et al* (2001) and McDonald *et al* (2009).

1.5 Global comparisons

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

Centers for Disease Control and Prevention. *HIV Surveillance Report 2011*; vol 23. Published February 2013.

Public Health England. HIV in the United Kingdom: 2013 Report: data to end 2012. November 2013. Public Health England, London

Joint United Nations Programme on HIV/AIDS (UNAIDS). Report on the global AIDS epidemic 2014. UNAIDS, 2014. <http://www.unaids.org>

2 National surveillance for viral hepatitis

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

New diagnoses of hepatitis A, new diagnoses of hepatitis B, newly acquired hepatitis B and prevalent cases of hepatitis C infection were notifiable conditions in all State/Territory health jurisdictions in Australia. Cases were notified by the diagnosing laboratory, medical practitioner, hospital or a combination of these sources, through State/Territory health authorities, to the National Notifiable Diseases Surveillance System. Population rates of diagnosis of viral hepatitis were calculated for each State/Territory using yearly population estimates, provided by the Australian Bureau of Statistics.

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

Information on self-report of exposure to hepatitis B and hepatitis C is reported in a subset of diagnoses of newly acquired infection in the health jurisdictions which monitor incident hepatitis B and C. Exposure to hepatitis C was categorised into a hierarchy of risk for infection. For example, if injecting drug use was reported as well as a history of surgery, blood transfusion or tattoos, exposure was categorised as injecting drug use. Exposure to hepatitis C was categorised as household transmission when a case reported sharing items such as a toothbrush or razor with a person with documented hepatitis C infection, in the absence of other exposures to hepatitis C.

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

Information was sought on Aboriginal and Torres Strait Islander status for diagnoses of hepatitis A, prevalent and newly acquired hepatitis B, and prevalent and newly acquired hepatitis C cases notified to the National Notifiable Diseases Surveillance System. Population rates of diagnoses of viral hepatitis were calculated by year and State/Territory of diagnosis (in those jurisdictions for which Aboriginal and Torres Strait Islander status was reported in more than 50% of diagnoses in each year 2009 -- 2013) using the 2011 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.

Information on the prevalence of hepatitis B infection by country of birth was compiled 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. 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 sought information on Aboriginal and Torres Strait Islander status through doctor notification of infectious syphilis, and through a statewide pilot project of enhanced surveillance for gonorrhoea during the last 5 months of 2013. Tasmania 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 2014).

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 2009 (51 sites), 2010 (53 sites), 2011 (53 sites), 2012 (52 sites) and 2013 (50 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 NCHECR. Further details of the national data collection on HIV infection in blood donors are given in NCHECR (1996), and Kaldor *et al* (1991).

4.5 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 CSL Biotherapies. 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 (Donovan B *et al*. 2011).

Routinely collected data at sexual health services includes data on demographics, sexual behavior, residency status, wart diagnosis and HPV vaccination status. These data are extracted directly from patient management information systems at each site and are collated at the Kirby Institute. For this analysis, only the patients seen for the first time at sexual health services were included. Genital warts diagnosis rates were calculated by dividing the 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 2009, 53 in 2010, 53 in 2011, 52 in 2012 and 50 in 2013. 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 the 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 by the Hepatitis B Program, Epidemiology Unit, Victorian Infectious Diseases Reference Laboratory. These estimates 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 by country of birth, Aboriginal and Torres Strait Islander status, and other risk status applied to the Australian population data provided in the 2011 Census.

The model was parameterised using a wide range of data sources including the Australian Bureau of Statistics, 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 hepatitis B infection and the impact of vaccination were all incorporated.

Model construction included sensitivity analyses around critical parameters such as the force of infection (Fol) and migration estimates. Both static and dynamic Fol models were created, the latter using novel techniques for deriving the Fol over time. Model outcomes have been validated using a range of external data, particularly national and Victorian serosurvey results. These were not used to parameterise the model to allow independent comparison with modelled outcomes. The plausible range around estimates of hepatitis B prevalence was generated using the range of uncertainty inherent in original prevalence estimates applied in the Census-based methodology described above, with the range in estimated attributable deaths derived by adopting low and high mortality estimates directly in the model.

There has been a substantial increase in the estimated number of Australians living with hepatitis B since the last Annual Surveillance Report. This is due to the impact of much higher net overseas migration figures than were previously estimated, with a resultant additional 500,000 migrants than were projected as of 2011. As a result there is a significant estimated increase in the number of Australians born in areas with a high population prevalence of chronic hepatitis B. The re-calculations are based on a provisional analysis of these new data and will be subject to modification following refinement of the modelled outcomes. This re-calculation and a comparison between methods is presented in MacLachlan *et al*.

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 using a difference equation mathematical model produced collaboratively between the Center for Disease Analysis and the Kirby Institute. The model uses estimates of the number of people who had injected drugs in Australia over the last three decades, the pattern of injecting drug use and estimates of hepatitis C incidence among people who inject drugs derived from cohort studies, to determine hepatitis C incidence as a result of injecting drug use. 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 nosocomial infection in migrants. 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 2013 were adjusted to allow for mortality related to hepatitis C infection, injecting drug use and unrelated to hepatitis C infection or injecting. Further information about the methods can be obtained by contacting the Center for Disease Analysis <http://www.centerforda.com/>

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 2014, 29 participating clinical sites enrolled over 3 800 people into the AHOD.

Data from all 29 participating clinical sites were included in the analysis in Table 7.1.1. A person with HIV infection was classified as not on treatment if they were under active follow up in 2013 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 2013, 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.

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.

Prior to July 2009 the number of people dispensed each antiretroviral drug was estimated from the HSD Program Public Hospital Dispensed Patient Numbers Report by calculating the average of the total number of people dispensed each drug for each quarter of the corresponding financial year. The number of people dispensed lamivudine for this period was 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 for this period was for people treated in the 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.

From July 2009 until December 2012 the number of people dispensed each antiretroviral drug was estimated from the HSD Program Public Hospital Dispensed Pack Numbers Report because of changes in S100 data collection methodology. The proportional quarterly change in total allocated dose was 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 to estimate patient numbers for each successive quarter. 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 for this period.

From January 2013 onwards the number of people dispensed each antiretroviral drug was estimated from the online PBS item statistics reports using monthly services per PBS item available online (https://www.medicareaustralia.gov.au/statistics/pbs_item.shtml) because of provision of complete online reporting by the Department of Human Services. Queries include PBS and RPBS data. Completeness of reporting was assessed by comparison of reported numbers and benefits with prior HSD data. Reporting from January 2013 to April 2013 was assessed as incomplete based on this, but complete thereafter. Patients numbers were estimated based on the assumption that patients receive, on average, 2 months supply of drug per service. Fluctuations in monthly reported services were smoothed using a moving average filter incorporating the previous 3 months, current month and following 3 months. Tabulated patient numbers were taken as those at June 2013 rounded to the nearest 10 patients.

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.

Reported expenditure for 2013 was based on PBS contribution to service cost. Because data was incomplete for the interval from January 2013 to April 2013 inclusive, the expenditure for this period was estimated using average expenditure in the immediately following 5 months.

7.3 Monitoring prescriptions for treatment of viral hepatitis

Reporting of patient numbers and expenditure for viral hepatitis is based on analogous methodology to that described in detail above for HIV. Briefly, prior to July 2009 the number of people dispensed each drug was estimated from the HSD Program Public Hospital Dispensed Patient Numbers Report by calculating the average of the total number of people dispensed each drug for each quarter of the corresponding financial year. The number of people dispensed lamivudine for this period was 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.

From July 2009 until December 2012 the number of people dispensed each antiretroviral drug was estimated from the HSD Program Public Hospital Dispensed Pack Numbers Report because of changes in S100 data collection methodology. From January 2013 onwards the number of people dispensed each antiretroviral drug was estimated from the online PBS item statistics reports using monthly services per PBS item available online (https://www.medicareaustralia.gov.au/statistics/pbs_item.shtml) because of provision of complete online reporting by the Department of Human Services. PBS codes queried based on prior HSD report indications were 5606C, 5711N, 5712P, 5770Q, 5771R, 6450L, 9515T, 9516W, 9517X, 9518Y, 9520C, 9521D, 9522E, 9524G, 9525H, 9526J, 9527K, 9528L, 9529M, 9530N, 9531P, 9532Q, 9533R, 9534T, 9535W, 9536X, 9537Y, 9538B, 9539C, 9540D, 9562G. Tabulated patient numbers for each quarter were taken as the average of twice the number of services for each month of that quarter rounded to the nearest 10 patients. This may not be appropriate for hepatitis related treatment which may be of shorter and intermittent duration and caution should be made in comparing trends between 2013 and pre-2013 data.

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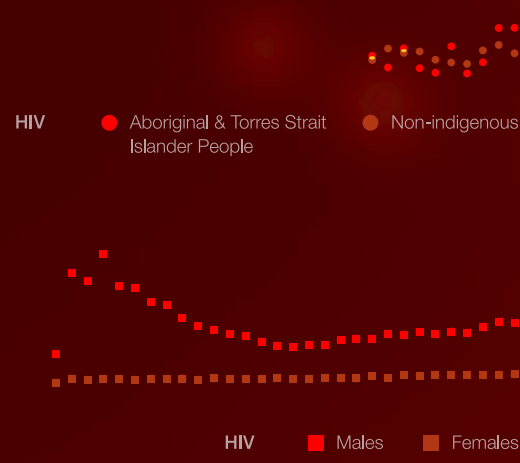
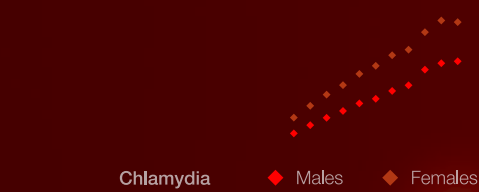
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