

2004

Annual Surveillance Report

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

Edited by National Centre in HIV Epidemiology and Clinical Research



THE UNIVERSITY OF
NEW SOUTH WALES



Australian Government
Australian Institute of
Health and Welfare

© **National Centre in HIV Epidemiology and Clinical Research 2004**

ISSN 1442-8784

AIHW catalogue number PHE 54

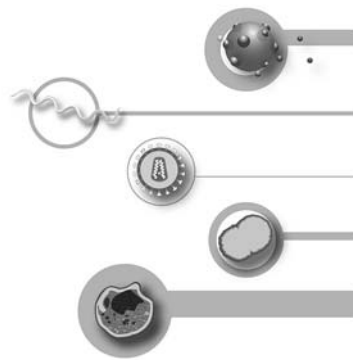
This publication is available at Internet address <http://www.med.unsw.edu.au/nchechr>

Suggested citation:

National Centre in HIV Epidemiology and Clinical Research. HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2004. National Centre in HIV Epidemiology and Clinical Research, Sydney, NSW; Australian Institute of Health and Welfare, Canberra, ACT. 2004

National Centre in HIV Epidemiology and Clinical Research
376 Victoria Street, Darlinghurst NSW 2010 Australia

Telephone: **02 9385 0900** Facsimile: **02 9385 0920** International prefix: 612 E-mail: recept@nchechr.unsw.edu.au



2004

Annual Surveillance Report

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

edited by

Ann McDonald

National Centre in HIV Epidemiology and Clinical Research

in collaboration with

Australian Gonococcal Surveillance Programme

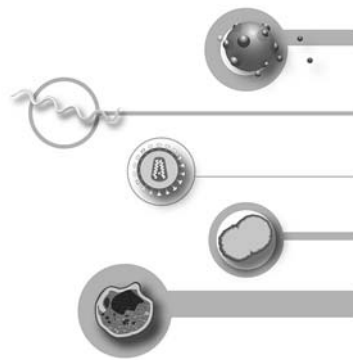
Communicable Diseases Network Australia

National Centre in HIV Social Research

National Serology Reference Laboratory, Australia

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

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



2004

Annual Surveillance Report

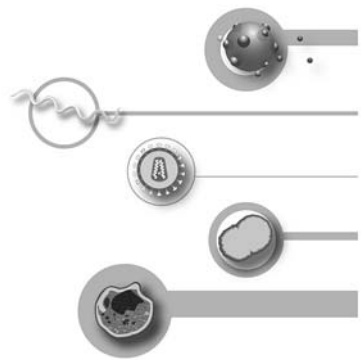
HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia

Contents

Preface	1
Acknowledgments	2
Summary	5
Main Findings	7
HIV/AIDS	7
Viral hepatitis	11
Sexually transmissible infections other than HIV	14
HIV, viral hepatitis and sexually transmissible infections in selected populations	16
Gay and other homosexually active men	16
Indigenous people	18
People who have injected drugs	19
Heterosexual transmission of HIV infection	20
Treatment, illness and mortality in people with HIV infection and viral hepatitis	23
Tables	27
Methodological notes	109
References	117

Tables

1	National surveillance for HIV/AIDS	27
	1.1 National AIDS Registry	29
	1.2 National HIV Database	36
	1.3 National surveillance for HIV/AIDS in Indigenous people	42
	1.4 Assessment of self reported HIV exposure history	44
	1.5 National surveillance for perinatal exposure to HIV	47
	1.6 Global comparisons	49
2	National surveillance for viral hepatitis	51
	2.1 Notification of viral hepatitis to the National Notifiable Diseases Surveillance System	52
	2.2 National surveillance for viral hepatitis in Indigenous people	56
	2.3 Long term outcome among people with chronic viral hepatitis	57
3	National surveillance for sexually transmissible infections	59
	3.1 Notification of specific sexually transmissible infection to the National Notifiable Diseases Surveillance System	60
	3.2 National surveillance for sexually transmissible infection in Indigenous people	63
	3.3 Gonococcal isolates	66
4	HIV, viral hepatitis and sexually transmissible infections in selected populations	67
	4.1 HIV incidence, hepatitis C seroprevalence and incidence of syphilis among homosexually active men	69
	4.2 HIV and hepatitis C seroprevalence among people who have injected drugs	70
	4.3 Incidence of hepatitis C infection among people who have injected drugs	78
	4.4 HIV infection among entrants into Australian prisons	79
	4.5 HIV and hepatitis C seroprevalence among people seen at sexual health clinics	80
	4.6 HIV, hepatitis B surface antigen and hepatitis C antibody in blood donors	89
5	Risk behaviour	93
	5.1 Sexual, injecting and HIV antibody testing behaviour among gay and other homosexually active men	94
	5.2 Sexual and injecting behaviour among people who have injected drugs	96
6	Estimates of the number of people living with HIV and hepatitis C infection	101
	6.1 Estimates of the number of people living with HIV infection	102
	6.2 Estimates of the number of people living with hepatitis C infection	102
7	Uptake of treatment for HIV and hepatitis C infection	103
	7.1 Uptake of antiretroviral treatment for HIV infection	104
	7.2 Monitoring prescriptions for HIV treatments	106
	7.3 Monitoring prescriptions for hepatitis C treatments	107



2004

Annual Surveillance Report

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

Preface

This report is the eighth annual review of available surveillance data pertaining to the occurrence of HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia. It is intended to be a reference document for organisations and individuals interested in the occurrence of these infectious diseases in Australia, drawing together relevant data from many sources into a single comprehensive report. The report is available at Internet address <http://www.med.unsw.edu.au/nchecr>

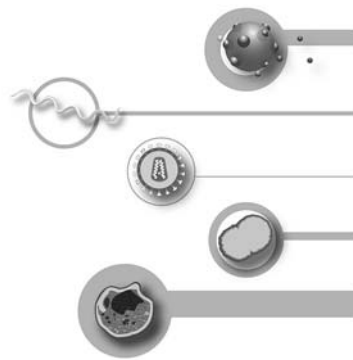
The Australian AIDS Public Access Dataset and the Australian HIV Public Access Dataset, including information on cases of AIDS and HIV infection, respectively, diagnosed in Australia by 31 December 2003 and reported by 31 March 2004, is available through the website <http://www.med.unsw.edu.au/nchecr>

The main findings of the report are presented as text, supported by figures. The underlying data are presented as tables and follow the main report. The tables are provided with no commentary, except for brief explanatory footnotes. A methodological summary follows the tables, along with references to other documents and reports which provide further information.

Some of the information regarding risk behaviour which appears in this report is also published, along with further behavioural data, in the report *HIV/AIDS, Hepatitis C and Related Diseases in Australia Annual Report of Behaviour 2004*, edited by the National Centre in HIV Social Research. Specifically, data reported in Tables 5.1.1, 7.1.2 and 7.1.3 of *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2004* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2003, as reported by 31 March 2004. All data in this report are provisional and subject to future revision.

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



2004

Annual Surveillance Report

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

Acknowledgments

National organisations

- Australasian Society for HIV Medicine, Sydney, NSW
- Australia and New Zealand Liver Transplant Register, Sydney, NSW
- Australian Federation of AIDS Organisations, Sydney, NSW
- Australian Hepatitis Council
- Australian Institute of Health and Welfare, Canberra, ACT
- Australian Paediatric Surveillance Unit and its contributors; Sydney Children's Hospital, Randwick, NSW
- Communicable Diseases Network Australia, Canberra, ACT
- Australian Government Department of Health and Ageing, Canberra, ACT
- Multicultural HIV/AIDS and Hepatitis C Service, Camperdown, NSW
- National Aboriginal Community Controlled Health Organisations
- National Association of People Living with HIV/AIDS
- National Centre in HIV Social Research, The University of New South Wales, NSW
- National Drug and Alcohol Research Centre, The University of New South Wales, Sydney, NSW
- National Serology Reference Laboratory, Australia, Fitzroy, VIC

State/Territory health departments

- Communicable Disease Control Program, ACT Department of Health and Community Care, Canberra, ACT
- Area Public Health Units, NSW Health Department, North Sydney, NSW
- AIDS/STD Program, Disease Control, Department of Health, Darwin, NT
- Queensland Health, Brisbane, QLD
- Sexually Transmitted Diseases (STD) Services, Internal Medicine Service, Royal Adelaide Hospital, SA
- Department of Community and Health Services, Hobart, TAS
- STD/Blood-Borne Virus Program, Infectious Diseases Unit, Department of Human Services, Melbourne, VIC; The Macfarlane Burnet Institute for Medical Research and Public Health Limited, Prahran, VIC
- Communicable Diseases Control Branch, Department of Health, Perth, WA

Australian Gonococcal Surveillance Programme

Reference Laboratories:

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

Collaborative group on sentinel surveillance in sexual health clinics

- Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
- Livingstone Road Sexual Health Centre, Marrickville, NSW
- Brisbane Sexual Health Clinic, Brisbane, QLD
- Gold Coast Sexual Health Clinic, Miami, QLD
- Clinic 275, Adelaide, SA
- Melbourne Sexual Health Centre, Melbourne, VIC

State/Territory Departments of Corrections

- ACT Corrective Services, Woden, ACT
- Corrections Health Service, Matraville, NSW
- Department of Correctional Services, Darwin, NT
- Queensland Corrective Services Commission, Brisbane, QLD
- South Australian Forensic Health Services; Department for Correctional Services (SA), Adelaide, SA
- Corrective Services Division, Department of Justice, Hobart, TAS
- Department of Human Services, Melbourne, VIC
- Strategic and Specialist Services, Ministry of Justice of Western Australia, Perth, WA

Australian Red Cross Blood Services

- Australian Red Cross Blood Service, Fitzroy, VIC
- ACT Red Cross Transfusion Service, ACT
- NSW Red Cross Blood Transfusion Service, NSW
- NT Red Cross Blood Transfusion Service, NT
- Queensland Red Cross Blood Transfusion Service, QLD
- Australian Red Cross Blood Service South Australia, SA
- Red Cross Blood Transfusion Service, TAS
- Red Cross Blood Bank Victoria, VIC
- Australian Red Cross Blood Transfusion Service Western Australia, WA

Australian HIV Observational Database

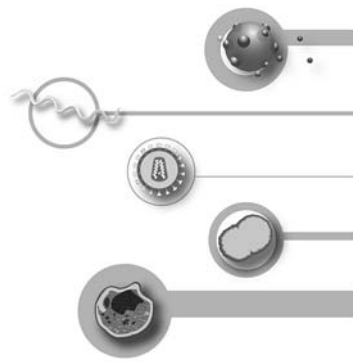
- Bligh Street Clinic, Tamworth; Blue Mountains Sexual Health Clinic, Katoomba; Holdsworth House General Practice, Darlinghurst; Illawarra Sexual Health, Wollongong; Livingstone Road Sexual Health Centre, Marrickville; Macquarie Sexual Health Centre, Dubbo; Nepean Sexual Health and HIV Clinic, Penrith; Sexual Health Clinic, Gosford; SHAIDS, Lismore; St Vincent's Hospital, Darlinghurst, Sydney Sexual Health Centre, Sydney, The Medical and Vein Centre, Coffs Harbour; Taylor Square, Darlinghurst; 407 Bourke Street, Surry Hills; NSW
- Clinic 34, Darwin, NT
- AIDS Medical Unit, North Quay; Blackall Terrace Specialist Group, Nambour; Brunswick Street Medical Centre, New Farm; Gold Coast Sexual Health Clinic, Miami; Sexual Health Program, Cairns Base Hospital, Cairns, QLD
- The Care and Prevention Program, Adelaide University, Adelaide, SA
- The Alfred Hospital, Prahran; Melbourne Sexual Health Centre, Carlton; Monash Medical Centre, Clayton; Prahran Market Clinic, South Yarra; The Centre Clinic, St Kilda; The Carlton Clinic, Carlton, VIC
- Department of Clinical Immunology, Royal Perth Hospital, Perth

Collaboration of Australian Needle and Syringe Programs

- Drug Referral Information Centre, ACT
- Albury Base Hospital and Community Health Centre, Albury; Drug Intervention Services and ICON Street Youth Program, Cabramatta; Kirketon Road Centre and K2, Kings Cross; Northern Rivers Health Service; Port Kembla First Step Program; Resource and Education Program for IDU, Redfern and Canterbury; Royal Newcastle Hospital NSP, Newcastle; St George NSP, Kogarah; Sydney Sexual Health Centre NSP, Sydney; The Exchange, Manly and Ryde; Wentworth HIV and Sexual Health Service; Western Sydney AIDS Prevention Service, Auburn, Blacktown, Mt Druiitt and Parramatta, NSW
- Northern Territory AIDS/Hepatitis C Council, Darwin, NT
- BIALA Community Alcohol and Drug Services and QuilVa, Brisbane; Cairns Base Hospital NSP; DUNE Gold Coast; Ipswich Sexual Health NSP; Kobi House, Toowoomba; Logan Youth NSP; MacKay Sexual Health; SCIVAA, Sunshine Coast, QLD
- Clovelly Park NSP, Clovelly Park; Hindmarsh Centre, Hindmarsh; Lyell McEwin, Adelaide; Noarlunga Community Health Service; Northern Metropolitan Community Health Service NSP and Shopfront; Parks Community Health Service; Port Adelaide Community Health Service NSP; SAVIVE NSP; South Australian Drug and Alcohol Services Council; Warrinilla Clinic, Adelaide, SA
- NuFIT, Glenorchy; Sexual Health NSP, Launceston; Tasmanian AIDS & Related Diseases Council, Hobart; Tasmanian Users Health Support League; The Link, Hobart, TAS
- Melbourne Inner Needle Exchange, Collingwood; South East Alcohol and Drug Service, Dandenong; St Kilda NSP; SHARPS, Frankston; Western Region AIDS and Hepatitis Prevention; VIC
- AIDS Council of Western Australia, Perth; Western Australia Users Association, Perth and Bunbury, WA
- St Vincent's Hospital, Sydney NSW: Alcohol and Drug Service; Centre for Immunology

Risk behaviour and treatment uptake among gay and other homosexually active men

- AIDS Action Council of the Australian Capital Territory, Canberra, ACT
- AIDS Council of New South Wales, Sydney, NSW
- AIDS Council of South Australia, Adelaide, SA
- PLWHA (NSW)
- PLWHA (VIC)
- Queensland AIDS Council, Brisbane, QLD
- Queensland Positive People (QPP), Brisbane, QLD
- Victorian AIDS Council/Gay Men's Health Centre, Melbourne, VIC
- Western Australian AIDS Council, Perth, WA



2004

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

Summary

HIV/AIDS

- After adjustment for reporting delay, 9,380 AIDS cases and 6,372 deaths following AIDS were notified in Australia, cumulative to 31 December 2003. The number of HIV diagnoses, adjusted for multiple reporting, was 20,580 at the end of 2003. An estimated 13,630 people were living with HIV/AIDS in Australia in 2003, including around 1,100 adult/adolescent women with diagnosed HIV infection.
- The annual number of AIDS diagnoses in Australia has dropped from 952 cases in 1994 to 208 cases in 2001 and then increased to an estimated 290 cases in 2003. The decline in AIDS incidence was due to a fall in HIV incidence occurring in the mid 1980s and the effectiveness since mid 1996 of combination antiretroviral therapy in delaying progression to AIDS among people whose HIV infection was diagnosed before AIDS.
- The annual number of new HIV diagnoses, adjusted for multiple reporting, declined from around 930 in 1994 to 690 in 1999 and then increased to around 780 in 2003. Reported diagnoses of newly acquired HIV infection also increased from 170 cases in 1999 to 277 cases in 2003, indicating the lower bound for the number of new HIV infections that have actually occurred in Australia over this time.
- Transmission of HIV infection in Australia continued to be mainly through sexual contact between men, which was reported in more than 85% of cases of newly acquired HIV infection diagnosed in 1999 – 2003. HIV prevalence remained below 1% among people attending needle and syringe programs, prison entrants, and among men and women seen at sexual health clinics reporting a history of heterosexual contact and women with a history of sex work.
- In 1999 – 2003, 185 HIV diagnoses and 71 AIDS diagnoses were notified among Indigenous people. The *per capita* rate of HIV and AIDS diagnosis among Indigenous people was similar to that among non-Indigenous people but a higher proportion of HIV diagnoses in Indigenous people were among women (33.7% vs 10.1%). Exposure to HIV was attributed to male homosexual contact for the majority of diagnoses among non-Indigenous people (67.5%) whereas an almost equal proportion of diagnoses among Indigenous people was attributed to male homosexual contact (38%) and heterosexual contact (37%).
- The rate of AIDS diagnosis among overseas born and Australian born people declined from 3.9 and 3.4 per 100,000 population, respectively, in 1994 – 1998, to 1.3 and 1.1 per 100,000 population in 1999 – 2003.
- AIDS incidence and estimated HIV prevalence in Australia at the end of 2003 were 1.5 and 69 per 100,000 population, respectively. AIDS incidence in Australia in 2003 was similar to that recorded in the United Kingdom and Canada, and was substantially lower than in France (2.2), Spain (3.3) and the United States (15.0 in 2002). Within the Asia-Pacific region, estimated HIV prevalence in Cambodia, Myanmar and Thailand was substantially higher than that in Australia in 2003.
- Survival following AIDS in Australia increased from 16.8 months for cases diagnosed prior to 1995 to 32 months for cases diagnosed in 2000.
- An estimated 50% of all people living with HIV infection in Australia in 2003 were treated with antiretroviral therapy.

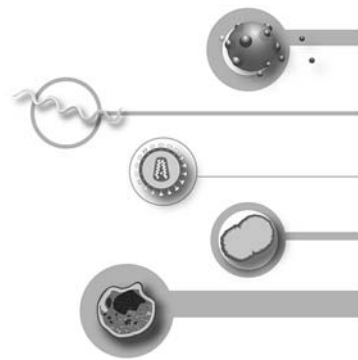
Viral hepatitis

- The *per capita* rate of new diagnoses of hepatitis C infection has declined from a peak of 103.4 (19,487 cases) in 2000 to 74.5 per 100,000 population (14,499 cases) in 2003. The reported number of diagnoses of newly acquired hepatitis C infection has remained stable at around 460 cases per year.
- Hepatitis C transmission continued to occur in Australia predominantly among people with a recent history of injecting drug use. More than 75% of people with newly acquired hepatitis C infection reported a history of injecting drug use.
- Hepatitis C prevalence was 21% among people seen at needle and syringe programs in 2003 who reported having injected drugs for three years or less. In 2003, hepatitis C prevalence was 32% among people aged less than 20 years and was 41% among those aged 20 – 24 years.

- An estimated 242,000 people were living with hepatitis C infection in Australia in 2003, including 143,000 with chronic hepatitis C infection and stage 0/1 liver disease, 31,000 with stage 2/3 liver disease and 7,500 living with hepatitis C related cirrhosis. A further 61,000 had hepatitis C antibodies without chronic infection.
- Around 1,285 people were prescribed ribavirin and interferon combination treatment for hepatitis C infection in 2003.
- The primary cause of liver disease among 144 people who had a liver transplant in 2003 was hepatitis C in 27.1% of cases and hepatitis B in 10.4% of cases.
- The population rate of diagnosis of newly acquired hepatitis B infection declined from 2.2 (412 cases) in 2001 to 1.8 per 100,000 (337 cases) in 2003. Among cases of newly acquired hepatitis B infection diagnosed in 2002 – 2003, exposure was attributed to injecting drug use, sexual contact, or an undetermined exposure in 44%, 37% and 19% of cases, respectively.

Sexually transmissible infections other than HIV

- Chlamydia was the most frequently reported notifiable condition in Australia in 2003 with 30,193 diagnoses. The population rate of diagnosis of chlamydia increased from 76.1 (14,082 cases) in 1999 to 160.7 per 100,000 in 2003.
- The population rate of diagnosis of gonorrhoea increased from 30.0 (5,587 cases) in 1999 to 34.6 per 100,000 population (6,611 cases) in 2003.
- The population rate of diagnosis of syphilis decreased, from 9.6 (1,821 cases) in 1999 to 8.9 per 100,000 population (1,768 cases) in 2003. In New South Wales and Victoria, the rate of diagnosis of newly acquired syphilis among males increased from 1.4 and 0.4 per 100,000 population in 2001 to 6.4 and 2.0 per 100,000 population, respectively, in 2003. Among 450 homosexually active men in Sydney, 7 cases of newly acquired syphilis were diagnosed, giving an incidence of 1.10 per 100 person years in 2002.
- The decline in the number of diagnoses of donovanosis, from 33 in 2001 to 16 in 2002 and 2003, was associated with improved case ascertainment and treatment.
- In the Northern Territory, the population rates of diagnosis of chlamydia, gonorrhoea and syphilis continued to be substantially higher than elsewhere in Australia. Substantially higher rates of diagnosis of chlamydia, gonorrhoea and syphilis were recorded among Indigenous people compared with non-Indigenous people.



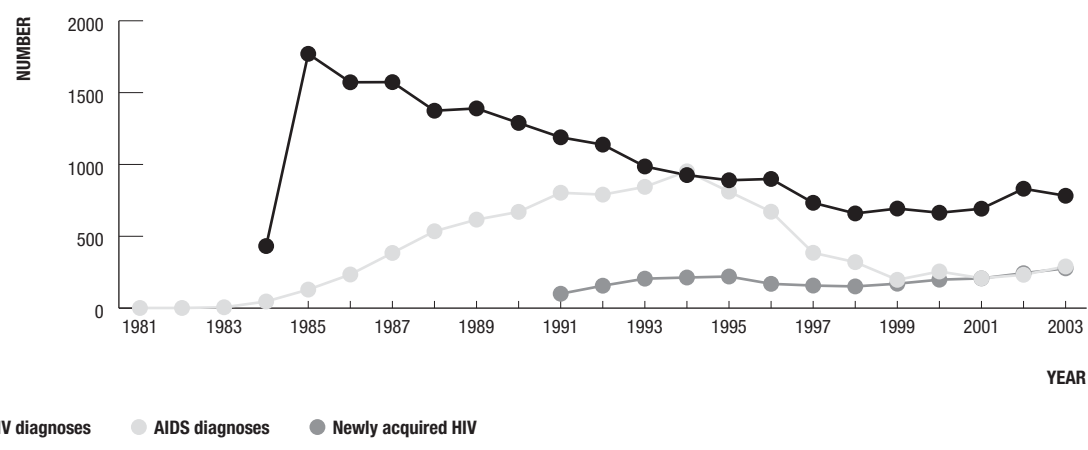
Main Findings

HIV/AIDS

The annual number of AIDS diagnoses in Australia peaked at 952 diagnoses in 1994, declined to an estimated 208 diagnoses in 2001 and then increased to an estimated 290 cases in 2003 (Figure 1). The decrease in the number of AIDS diagnoses in 1994 – 2001 was due to the decline in HIV incidence that took place in the mid 1980s and to the use, since around 1996, of effective antiretroviral treatment of HIV infection. A similar pattern of declining AIDS incidence in 1994 – 2001 followed by relatively stable incidence in 2002 – 2003 has been reported in other industrialised countries such as the United States, Canada and in a number of European countries.

Following a long-term decline, the annual number of new HIV diagnoses in Australia has gradually increased over the past five years, from around 690 cases in 1999 to around 780 in 2003. Among these new diagnoses, an increasing number were in people who had acquired HIV infection within the previous year (Figure 1).

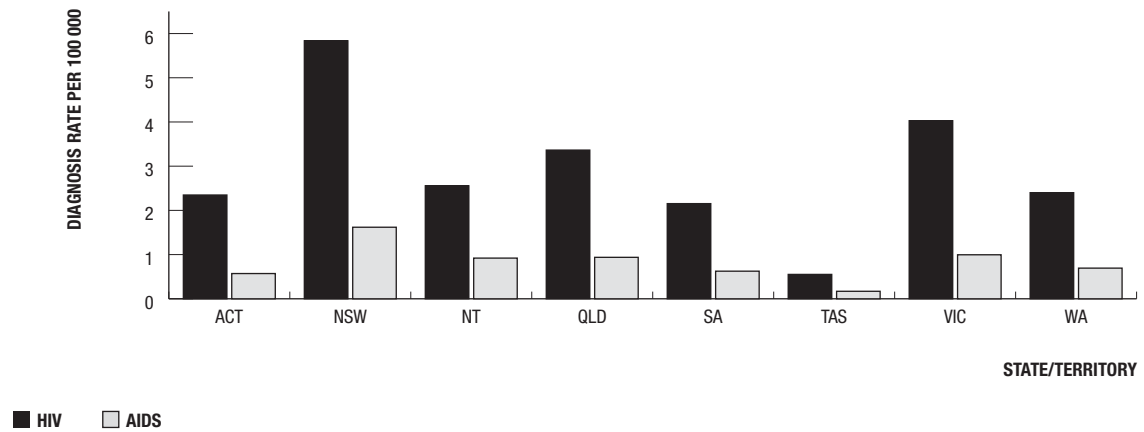
Figure 1 Number of diagnoses of HIV infection¹ and AIDS in Australia



¹ HIV diagnoses adjusted for multiple reporting. AIDS diagnoses adjusted for reporting delays.

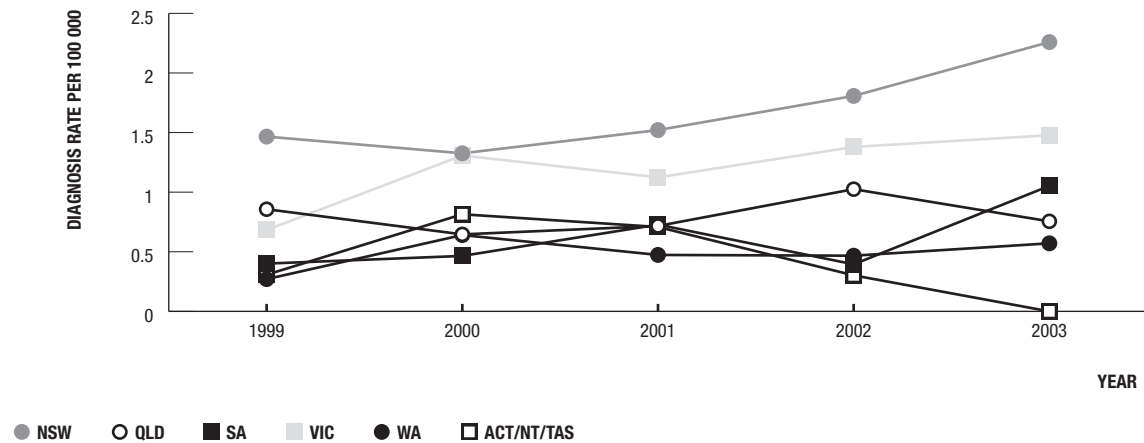
At the end of 2003, the cumulative number of HIV infections that had been diagnosed in Australia was estimated to have been 20,580, and an estimated 13,630 people were living with HIV infection. An estimated 50% of all people living with HIV infection were receiving antiretroviral treatment for HIV infection in 2003, slightly less than the 52% receiving treatment for HIV infection in 2002. The long-term effectiveness of antiretroviral treatment in preventing progression of HIV illness remains unknown.

Figure 2 Average annual incidence of diagnoses of HIV infection and AIDS, 1999 – 2003, by State/Territory



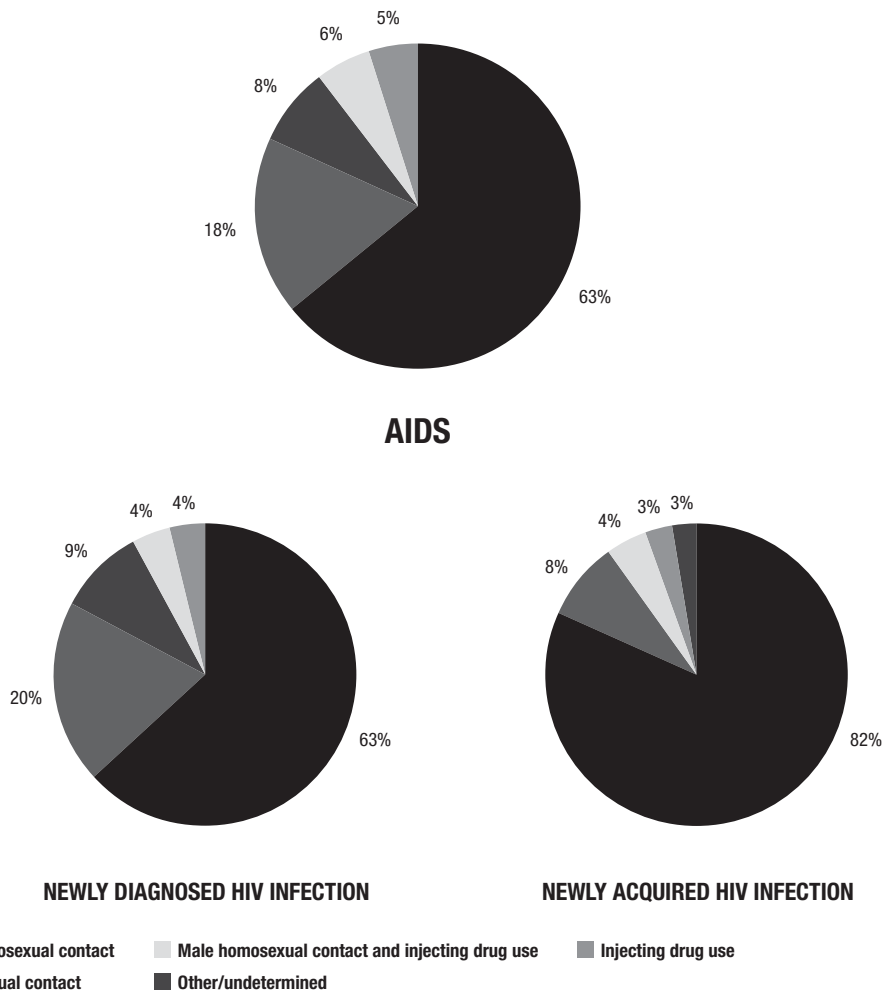
Over the past five years, the rates of diagnoses of AIDS and HIV infection have been highest in New South Wales at 1.6 and 5.8 per 100,000 population, respectively. Victoria recorded the second highest rate of diagnosis of AIDS (1.0) and HIV infection (4.0) in 1999 – 2003. Population rates of AIDS diagnosis were similar in the Northern Territory (0.92) and in Queensland (0.93), and lower rates of AIDS diagnosis were recorded in Western Australia (0.7), South Australia (0.6), the Australian Capital Territory (0.6) and Tasmania (0.2) (Figure 2).

Figure 3 Newly acquired HIV, 1999 – 2003, by year and State/Territory



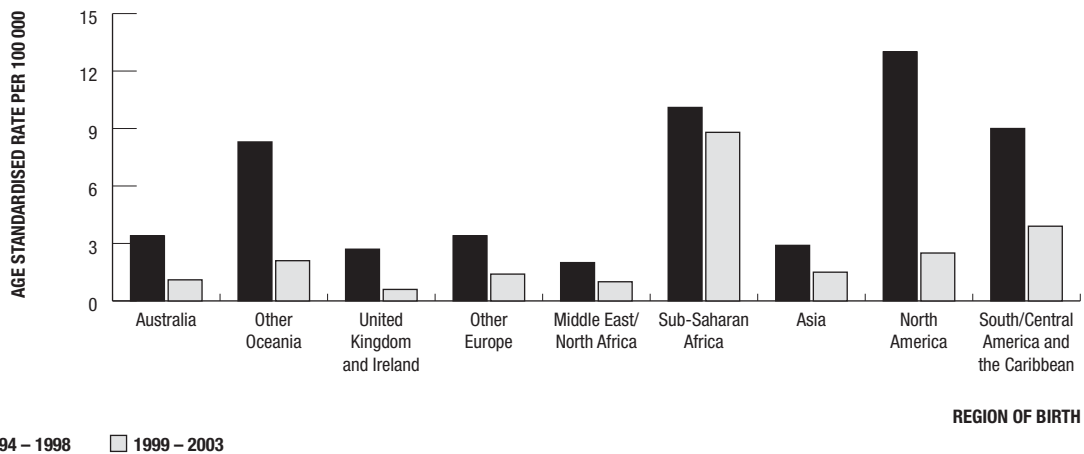
The rate of diagnosis of newly acquired HIV infection increased by around 69% in New South Wales (from 1.3 in 1999 to 2.2 per 100,000 population in 2003), more than doubled in Victoria (from 0.7 in 1999 to 1.5 per 100,000 in 2003) and increased more than 2.6 fold in South Australia, from 0.4 in 2002 to 1.1 in 2003. These reported cases of newly acquired HIV infection represent a lower limit to the number of cases of HIV transmission that have actually occurred in Australia over this time (Figure 3).

Figure 4 AIDS, HIV infection and newly acquired HIV infection, 1999 – 2003, by HIV exposure category



Transmission of HIV in Australia continues to be mainly through sexual contact between men (Figure 4). Among men with newly diagnosed HIV infection in 1999 – 2003, 76% reported a history of homosexual contact. A history of male homosexual contact was also reported in more than 85% of cases of newly acquired HIV infection diagnosed in 1999 – 2003. Smaller percentages of diagnosed cases of newly acquired infection were attributed to injecting drug use among women and heterosexual men (3.0%), and heterosexual contact (8.4%).

Figure 5 AIDS incidence in Australia, 1994 – 2003, by year and region of birth



People born in Australia accounted for 68% of AIDS diagnoses in Australia in 1999 – 2003. AIDS incidence in 1999 – 2003 was highest among people born in countries in sub-Saharan Africa (Figure 5).

In 2003, AIDS incidence in Australia (1.5 per 100,000 population) was similar to that in the United Kingdom (1.4 per 100,000) and Canada (1.5 per 100,000). Substantially higher AIDS incidence rates were reported in a number of other Western countries including France (2.2 per 100,000 population), Spain (3.3 per 100,000 population) and the United States (15.0 per 100,000 population in 2002) (Figure 6).

Figure 6 AIDS incidence in selected industrialised countries by year

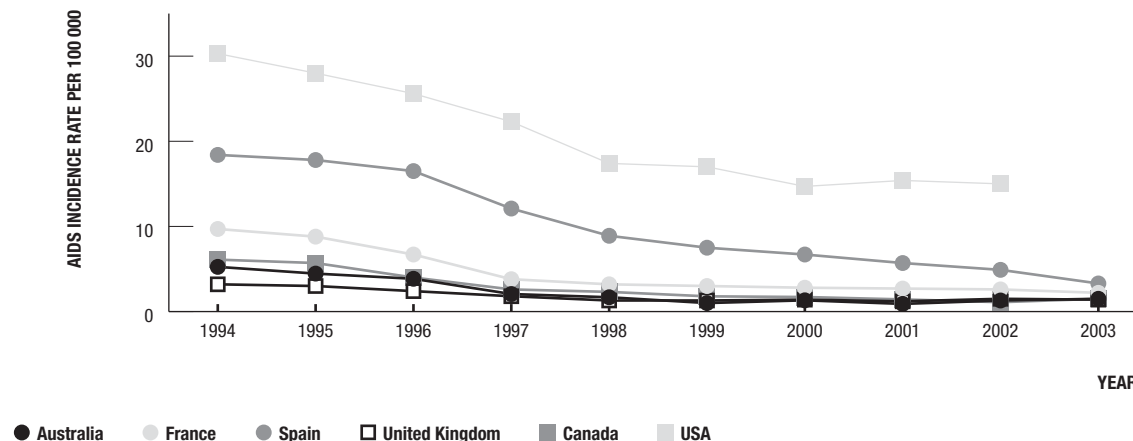
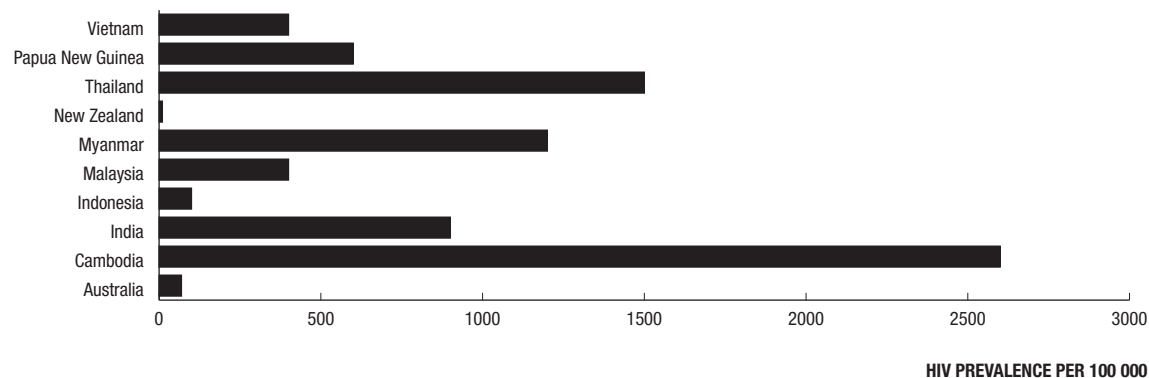


Figure 7 HIV prevalence in selected countries in the Asia-Pacific region in 2003



Among countries in the Asia-Pacific region, estimated HIV prevalence was highest in Cambodia, Thailand and Myanmar (Figure 7). HIV prevalence in India, Indonesia, Malaysia, Papua New Guinea and Vietnam was also higher than that in Australia in 2003.

Viral hepatitis

The population rate of reported diagnoses of hepatitis A infection in Australia declined from 8.3 per 100,000 in 1999 to 2.2 per 100,000 in 2003. New diagnoses of hepatitis A infection declined most among people in the age groups 20 – 29 years and 30 – 39 years.

The population rate of diagnosis of newly acquired hepatitis B infection in Australia has remained stable over the past five years (Figure 8). In Victoria, the reported incidence of newly acquired hepatitis B infection doubled from 1999 to 2001 (from 2.0 to 4.1 per 100,000 population) but declined to 3.1 in 2003.

Diagnoses of newly acquired hepatitis B infection occurred most frequently in the 20 – 29 year age group. The population rate of diagnosis of newly acquired hepatitis B infection in this age group increased from 4.7 per 100,000 population in 1999 to 7.3 in 2001 and then declined to 4.2 in 2003 (Figure 9). Diagnoses of newly acquired hepatitis B infection fell in the 15 – 19 year age group, from 4.8 per 100,000 population in 2000 to 2.5 in 2003.

Information on the reported source of exposure among cases of newly acquired hepatitis B infection diagnosed in 2002 – 2003 and reported through health authorities in South Australia, Tasmania and Victoria, indicated that exposure was attributed to injecting drug use, sexual contact, or an undetermined source in 44%, 37% and 19% of diagnoses, respectively.

Figure 8 Newly acquired hepatitis B infection by year and State/Territory

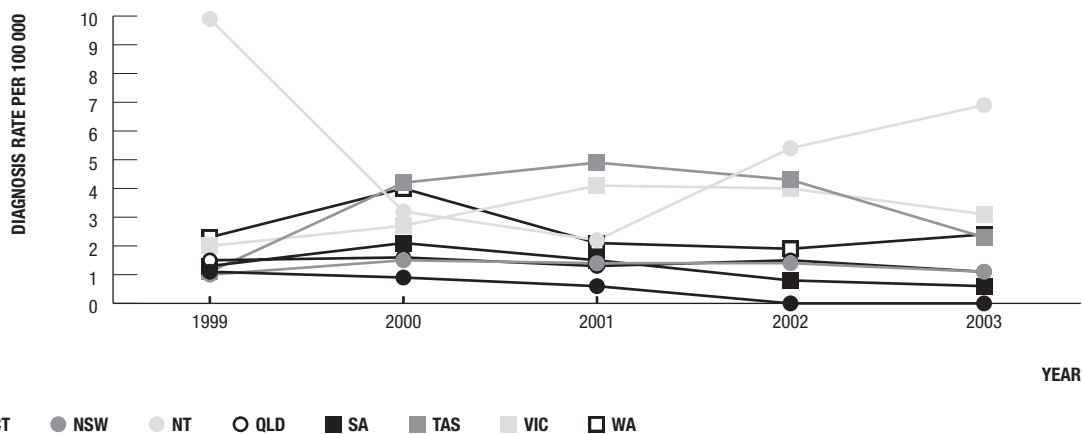
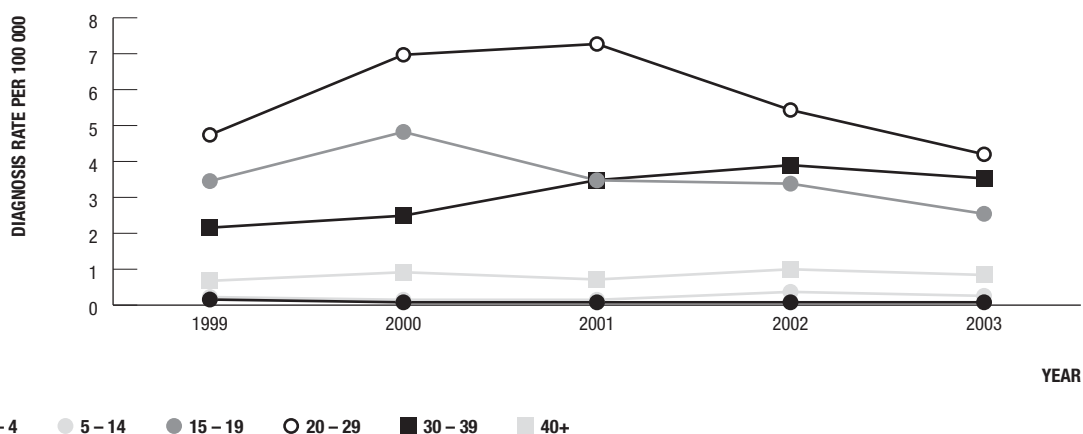
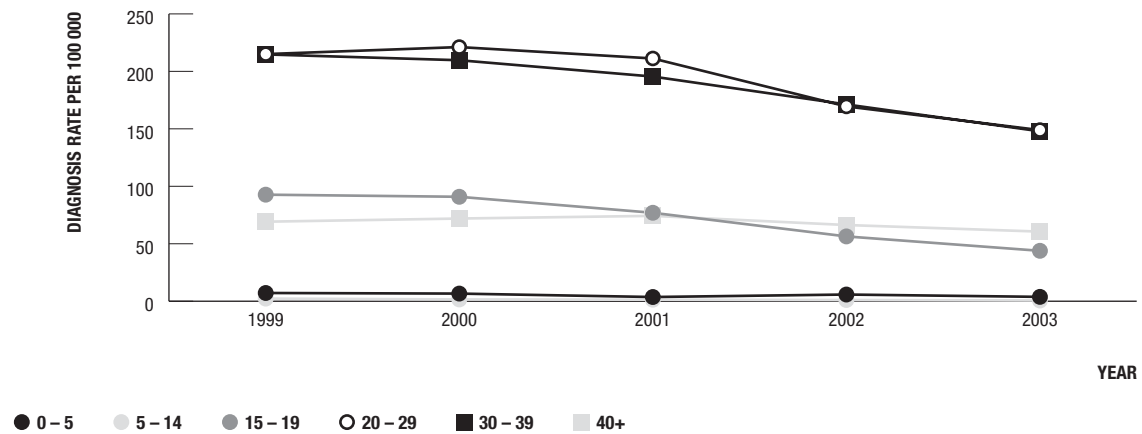


Figure 9 Newly acquired hepatitis B infection by year and age group



The annual number of reported new diagnoses of hepatitis C declined from 19,487 in 2000 to 14,499 in 2003. In 1999 – 2003, the *per capita* rate of diagnosis of hepatitis C infection was highest in the 20 – 29 and 30 – 39 year age groups (Figure 10). New hepatitis C diagnoses declined in 1999 – 2003 by more than 50% in the 15 – 19 year age group compared to 30% or less in other age groups, suggesting declining hepatitis C incidence among young injectors.

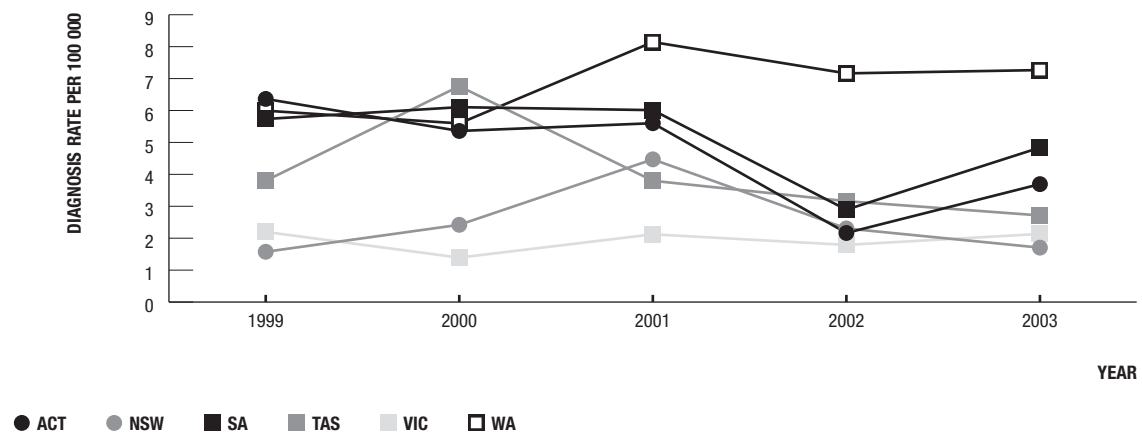
Figure 10 Hepatitis C infection by year and age group



Around 2.7% and 3.2% of cases of hepatitis C infection diagnosed in 2002 and 2003, respectively, were reported as acquired within the previous two years. These diagnosed cases of newly acquired hepatitis C infection are believed to represent a small fraction of the true number of new infections, which was estimated to be 16,000 cases in 2001.

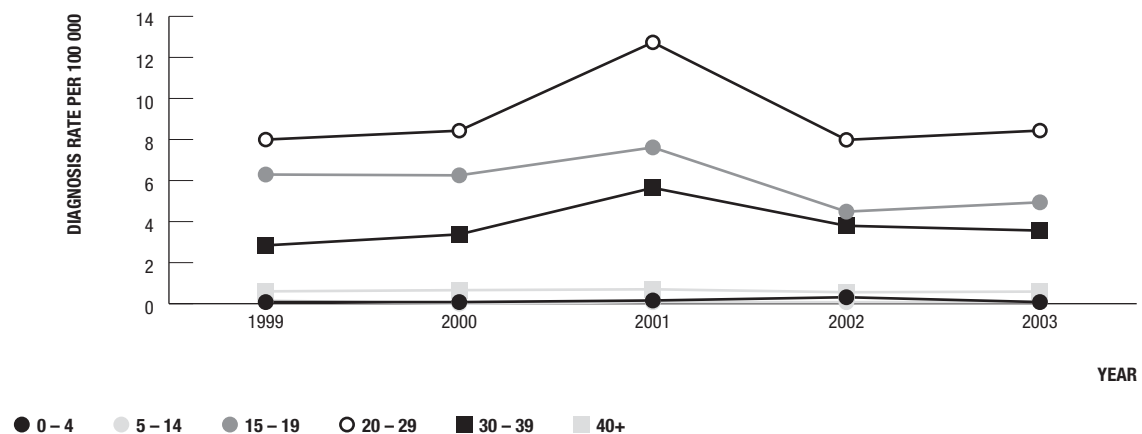
Hepatitis C transmission continued to occur at the highest rate in adults aged less than 30 (Figure 12), primarily among people with a history of injecting drug use. Information on the source of exposure to hepatitis C was not reported for 19% and 15% of cases of newly acquired hepatitis C infection diagnosed in 2002 and 2003, respectively.

Figure 11 Newly acquired hepatitis C infection by year and State/Territory¹



¹ Data not available from NT and QLD.

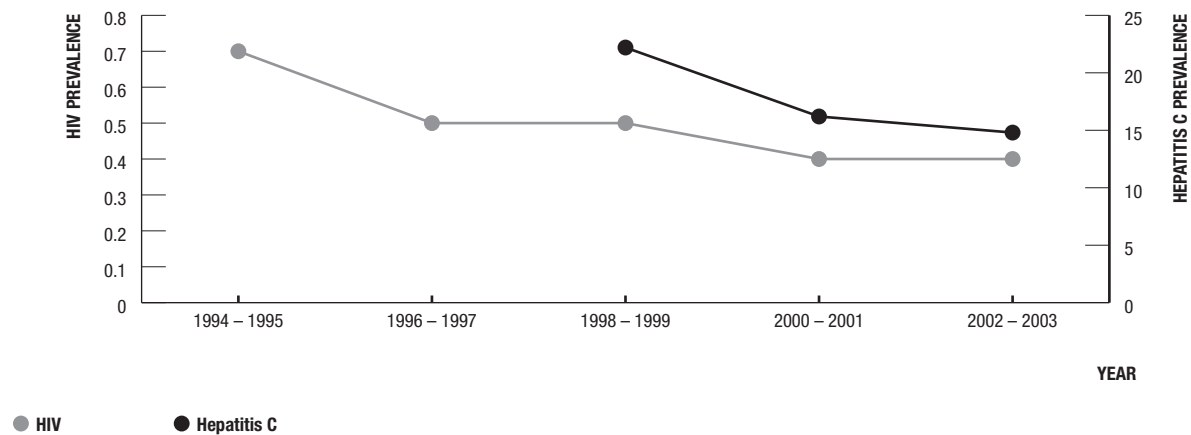
Figure 12 Newly acquired hepatitis C by year and age group



Among people who inject drugs seen at the Kirketon Road Centre in Sydney, hepatitis C incidence was 21 per 100 person years in 2003, and was much higher among those aged less than 20 years (74.1 per 100 person years). The steady increase in hepatitis C prevalence over time among people attending needle and syringe programs who report having injected for three years or less also indicates continuing high levels of hepatitis C transmission in this population. The decline in the number of people reporting having injected drugs for three years or less (from 392 in 1999 to 201 in 2003) and the decline in the number of people aged less than 20 years (from 244 in 1999 to 93 in 2003) among those seen through needle and syringe programs, suggests a decline in the prevalence of injecting drug use among young people (Table 4.2.2).

Among men and women seen at sexual health clinics in 2001 – 2003 who were tested for hepatitis C antibody, the percentage with newly diagnosed hepatitis C infection was highest among those who reported a history of injecting drug use.

Figure 13 HIV and hepatitis C prevalence¹ in blood donors by year



¹ Prevalence per 100 000 donations.

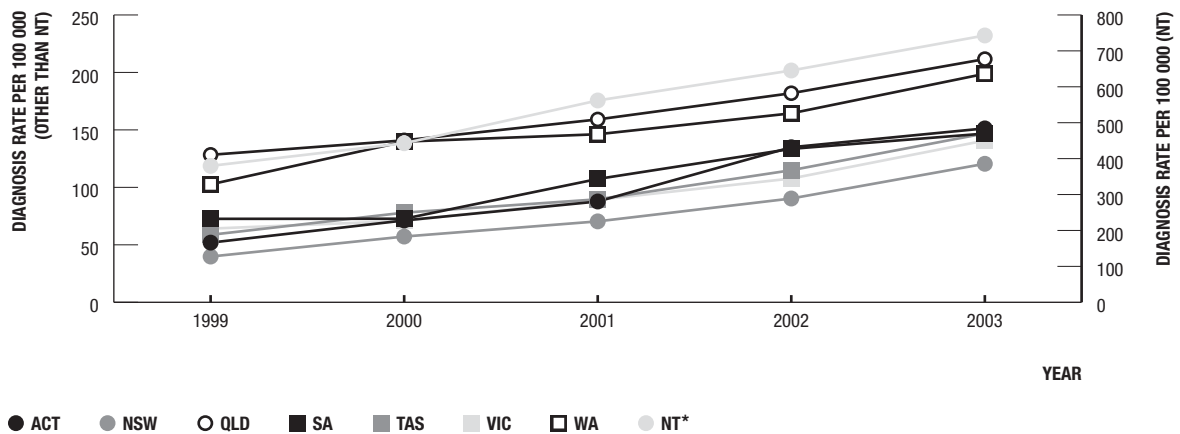
Blood donors are known to be at low risk for hepatitis C infection, based on national donor selection criteria. Hepatitis C prevalence in 2003 was over 80 times lower among blood donors (0.015%) than the estimated prevalence of hepatitis C infection in the Australian population as a whole (1.2%).

In 2003, an estimated 242,000 people living in Australia had been exposed to hepatitis C virus. Of these, 61,000 people were estimated to have cleared their infection, 143,000 had chronic hepatitis C infection and early liver disease (stage 0/1), 31,000 had chronic hepatitis C infection and moderate liver disease (stage 2/3), and 7,500 were living with hepatitis C related cirrhosis.

Sexually transmissible infections other than HIV

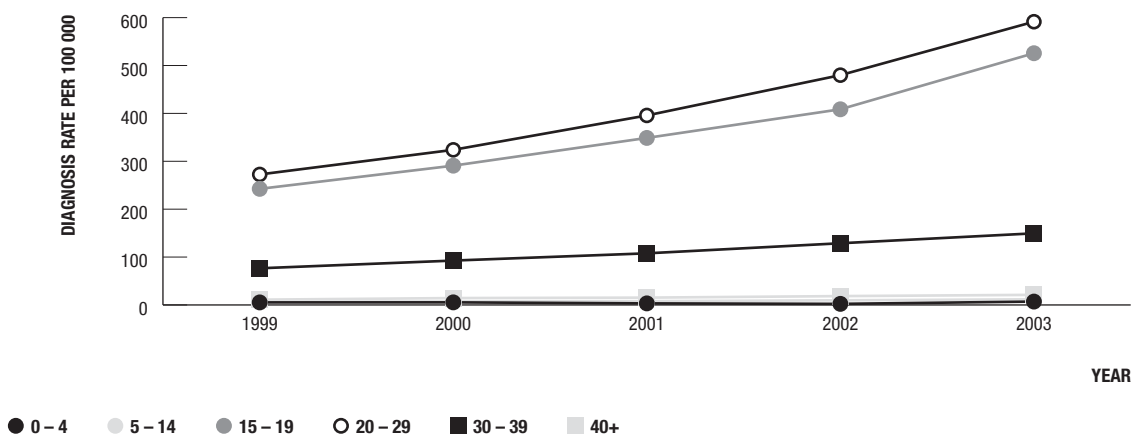
Chlamydia was the most frequently reported infection notified in Australia in 2003, with 30,193 cases. The population rate of reported diagnoses of chlamydia more than doubled over the past five years from 76.1 per 100,000 population in 1999 to 160.7 per 100,000 population in 2003 (Figure 14). Increasing rates of diagnosis of chlamydia were reported in all State/Territory health jurisdictions in 1999 – 2003. The rate of increase was highest in the 15 – 19 and 20 – 29 year age groups (Figure 15).

Figure 14 Chlamydia by year and State/Territory



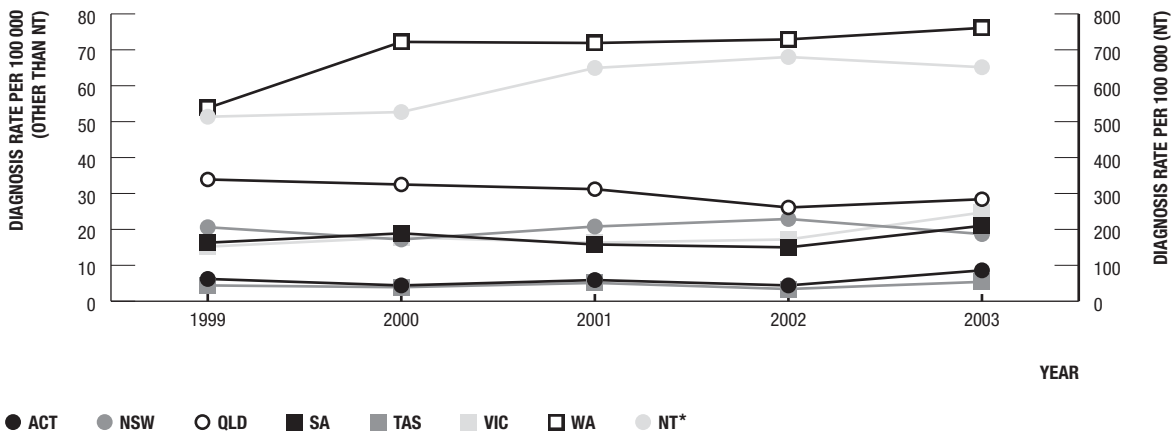
* NT on right axis.

Figure 15 Chlamydia by year and age group



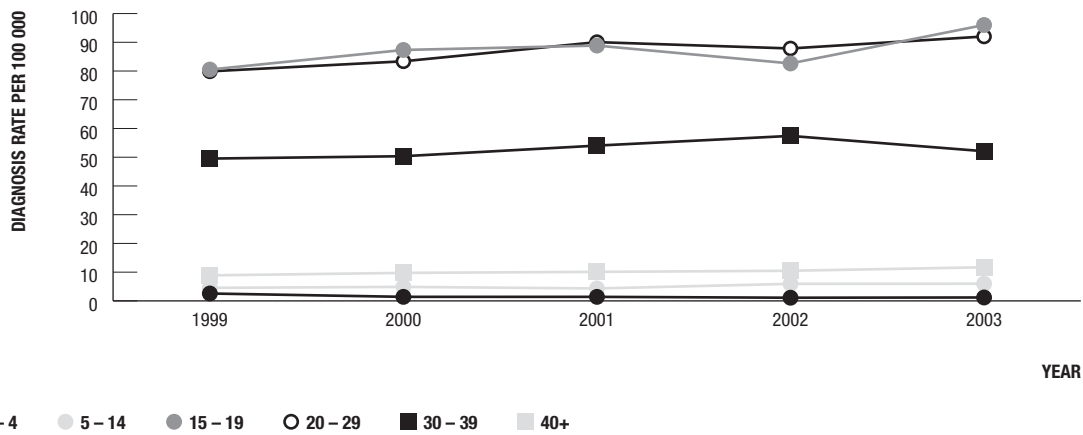
The population rate of diagnosis of gonorrhoea was relatively unchanged between 1999 and 2003, in the range 30.0 – 34.6 per 100,000 (Figure 16). The rate of diagnosis was highest in the age groups 15 – 19 years and 20 – 29 years and was substantially lower in the 30 – 39 year age group (Figure 17).

Figure 16 Gonorrhoea by year and State/Territory



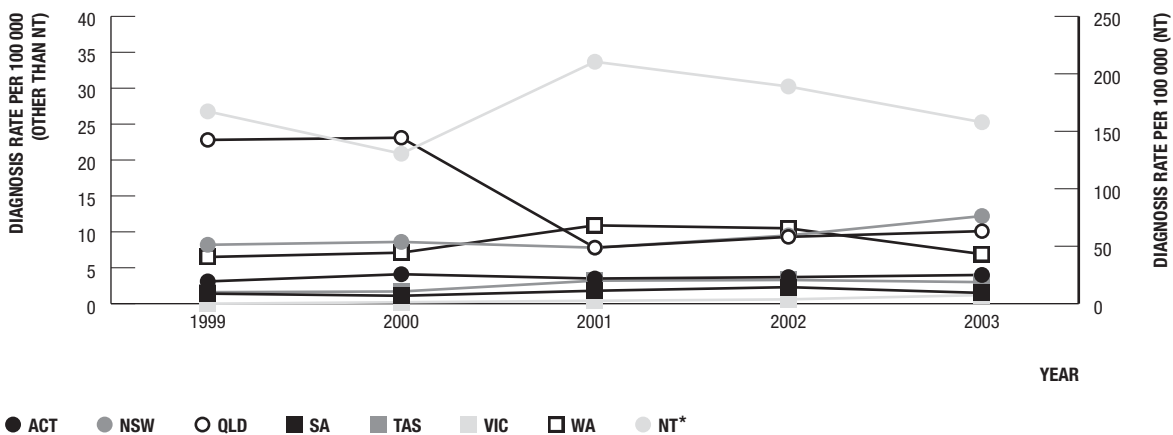
* NT on right axis.

Figure 17 Gonorrhoea by year and age group



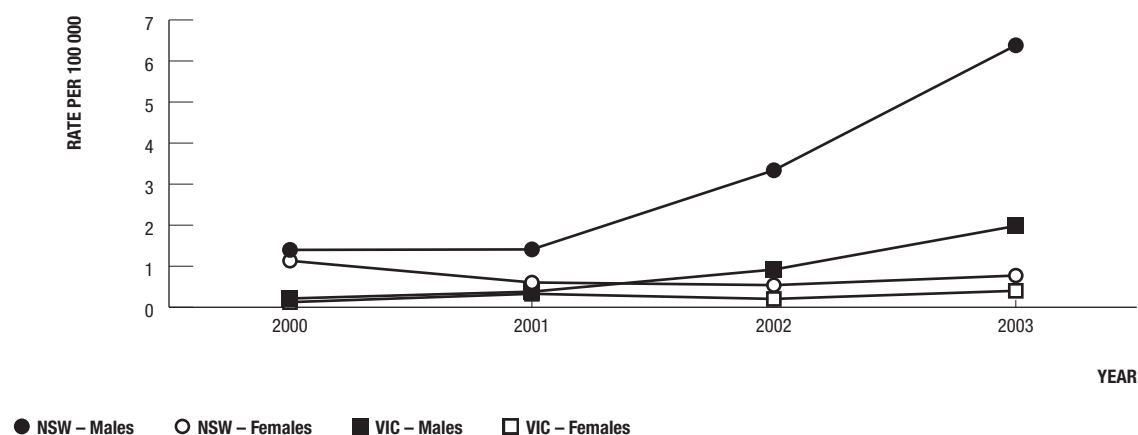
At a national level, the rate of diagnosis of syphilis increased slightly from 7.8 in 2001 to 8.9 per 100,000 population in 2003 (Figure 18). However, the rate of diagnosis of infectious syphilis among males increased more than four fold in New South Wales and more than five fold in Victoria in 2001 to 2003 (Figure 19). In Sydney, newly acquired infections were reported among homosexually active men at levels that had not been seen since the early 1980s. Among 450 men enrolled in the Health in Men (HIM) cohort study in 2001 who were retested for syphilis in 2002, seven were newly diagnosed, giving an incidence rate of 1.10 per 100 person years.

Figure 18 Syphilis by year and State/Territory



* NT on right axis.

Figure 19 Infectious syphilis in NSW and Victoria by year and sex



The rates of notification of chlamydia, gonorrhoea and syphilis in the Northern Territory continue to be substantially higher than those in other State/Territories. Increases in the population rate of diagnoses of chlamydia and gonorrhoea may be partly attributable to increases in testing and the use of diagnostic tests with greater sensitivity in both asymptomatic and symptomatic populations. This explanation is decreasingly plausible for chlamydia as the rise in reported diagnoses continues.

The decline in the number of diagnoses of donovanosis, from 33 in 2001 to 16 in 2002 and 2003, may be attributed to improved case ascertainment and treatment.

HIV, viral hepatitis and sexually transmissible infections in selected populations

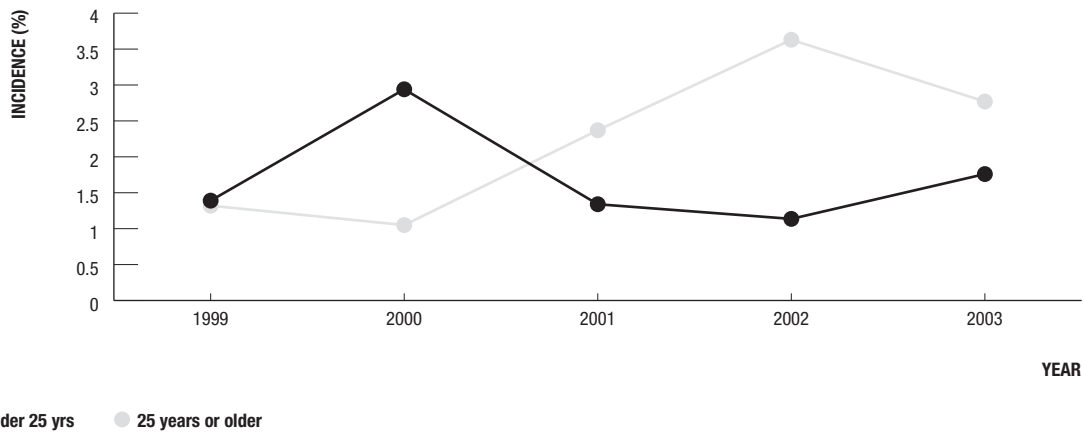
Population groups that are regarded as priorities for prevention and health promotion activities under the national strategies for HIV/AIDS and hepatitis C have included gay and other homosexually active men, Indigenous people and people who have injected drugs. These population groups were identified as priority groups either because of reported ongoing HIV or hepatitis C transmission or the potential for increases in transmission. The pattern of HIV transmission has also been monitored among people potentially at risk of HIV infection through heterosexual contact including female sex workers.

Gay and other homosexually active men

Men with a history of homosexual contact continue to make up the majority of people diagnosed with AIDS and HIV infection in Australia. The overall number of new HIV diagnoses in this category for 1999 – 2003 was 2,629, including 944 diagnoses of newly acquired HIV infection. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (85%) than total HIV diagnoses (67%) in 2003. This difference may be due to greater uptake of HIV antibody testing among gay and other homosexually active men.

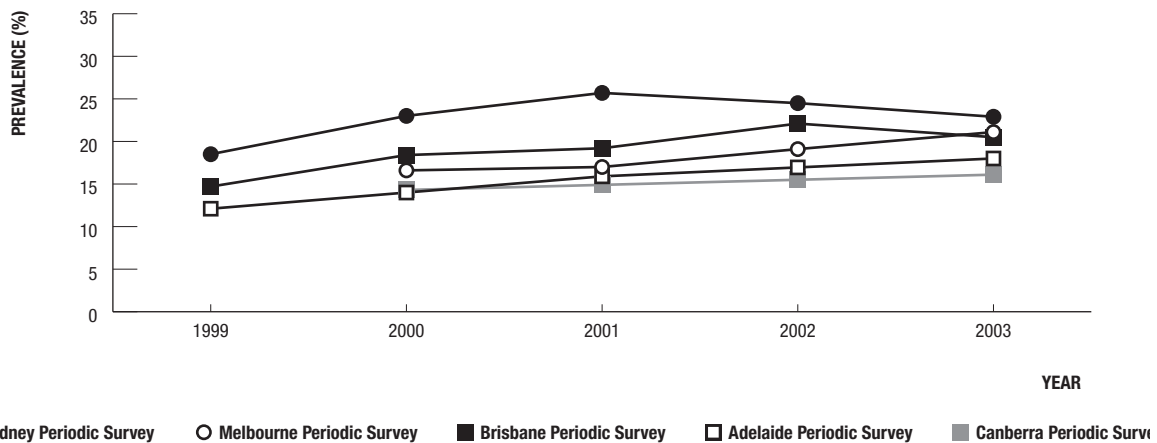
Among gay and other homosexually active men aged 25 years or older who were seen at metropolitan sexual health clinics, HIV incidence increased from 1.3% in 1999 to 2.8% in 2003 (Figure 20). In the Health in Men (HIM) cohort study among homosexually active men in Sydney, 8 cases of newly acquired HIV infection were diagnosed in 2002 among 450 men who were HIV seronegative at enrolment in 2001, giving an incidence of 1.3 per 100 person years.

Figure 20 HIV incidence among gay and other homosexually active men seen at sexual health clinics



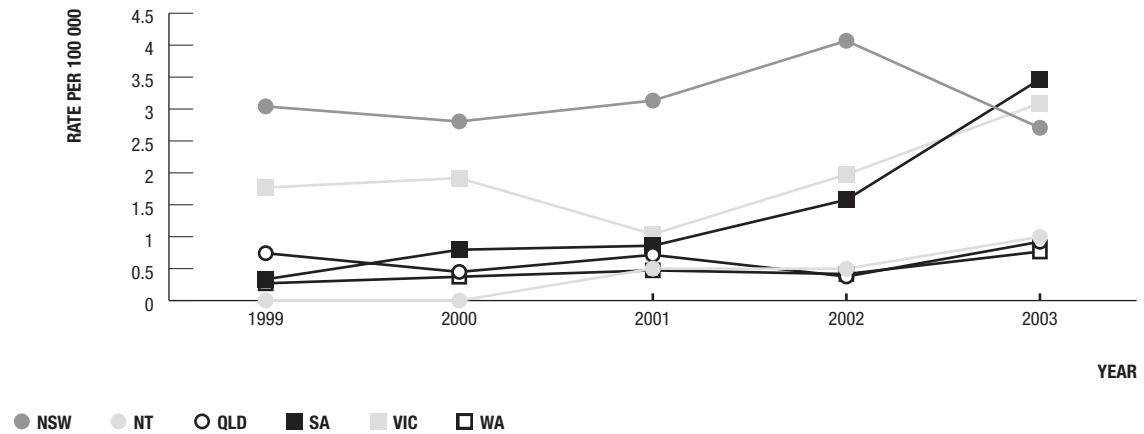
The Gay Community Periodic Survey indicated that the proportion of Sydney respondents who reported unprotected anal sex with casual partners had stabilised over the past two years, after increasing from around 18% in 1999 to 25% in 2001 (Figure 21). Periodic surveys carried out among gay and other homosexually active men in Brisbane and Melbourne also indicated a stable level of reported unsafe sexual behaviour with casual partners in 2002 – 2003 whereas in Adelaide and Canberra, the proportion reporting unsafe sexual behaviour with casual partners increased in 2003 compared with previous years.

Figure 21 Prevalence of unprotected anal intercourse with casual partners reported by gay and other homosexually active men



Surveillance data for gonorrhoea and infectious syphilis also provide an indication of unsafe sexual behaviour among gay and other homosexually active men in Australia. The rate of rectal gonococcal isolates among men increased more than four fold in South Australia and almost three fold in Victoria, following an earlier increase in New South Wales in the late 1990s (Figure 22). The increasing rates of diagnosis of infectious syphilis among gay men in New South Wales and Victoria also suggest increasing levels of unsafe sexual behaviour (Figure 19).

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



Indigenous people

Overall rates of HIV and AIDS diagnoses *per capita* have differed little between Indigenous and non-Indigenous people (Figure 23 and Figure 24). However, in 2002 – 2003, the age standardised rate of HIV diagnosis in the Indigenous population was substantially higher than that in the non-Indigenous population. Furthermore, the rate of decline in AIDS incidence has been slower in the Indigenous population compared with the non-Indigenous population.

Figure 23 Newly diagnosed HIV infection, 1994 – 2003, by Indigenous status and year

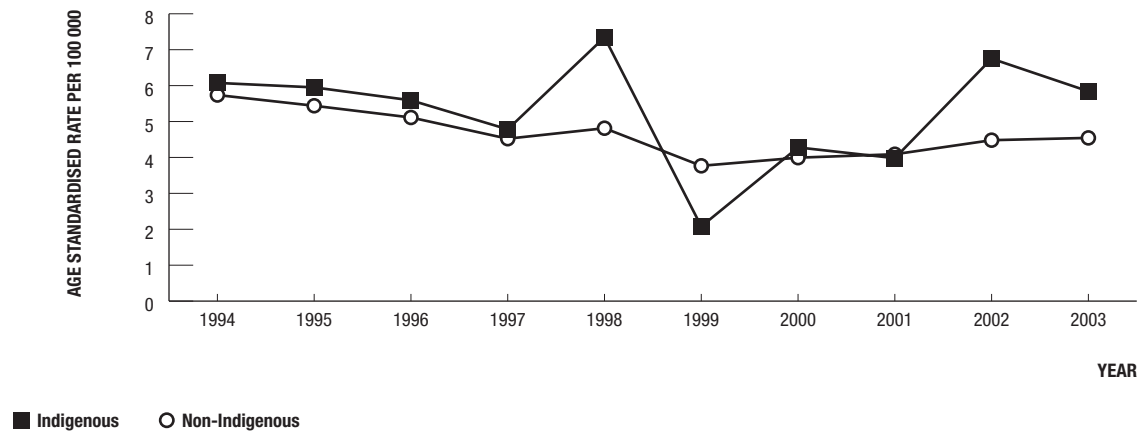
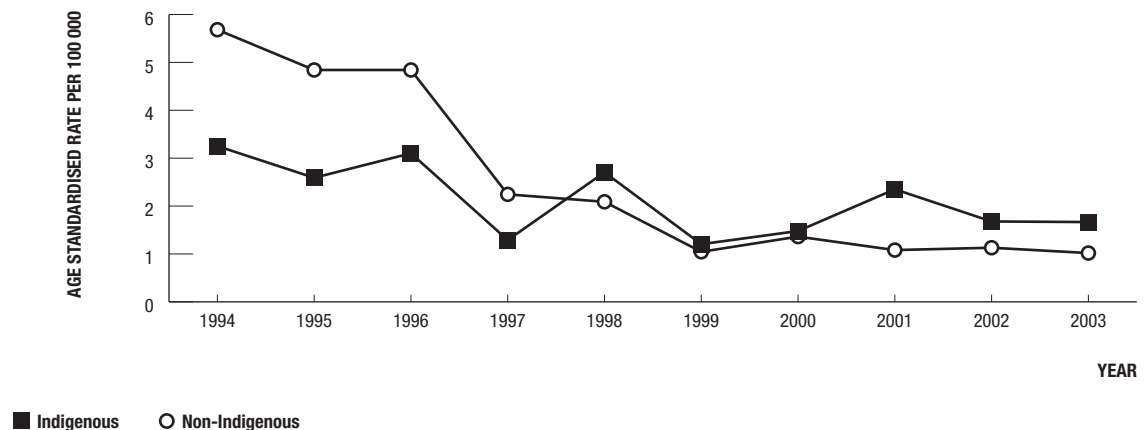
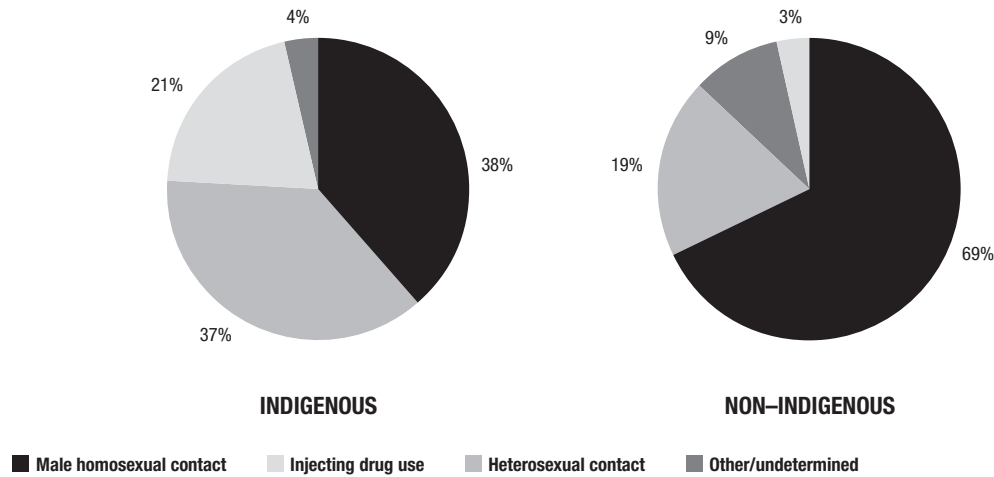


Figure 24 AIDS incidence, 1994 – 2003, by Indigenous status and year



Among new HIV diagnoses in 1999 – 2003, the most frequently reported route of HIV transmission was male homosexual contact in the non-Indigenous population whereas in the Indigenous population, male homosexual contact and heterosexual contact were reported almost equally frequently (Figure 25). Indigenous cases also differed from non-Indigenous cases in that a higher proportion of infections were attributed to injecting drug use, and a higher proportion of infections were among women (34% among Indigenous cases vs 10% for non-Indigenous cases).

Figure 25 HIV diagnoses, 1999 – 2003, by HIV exposure category and Indigenous status

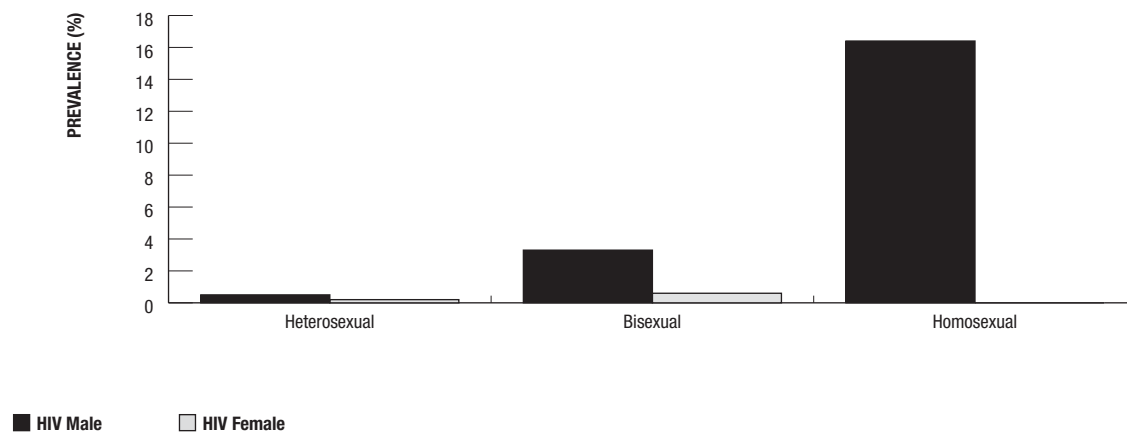


High rates of sexually transmissible infections other than HIV infection were recorded among Indigenous people in the Northern Territory, South Australia and Western Australia. In other States and Territories, interpretation of trends in diagnoses of sexually transmissible infections in Indigenous people was limited by incomplete information on Indigenous status.

People who have injected drugs

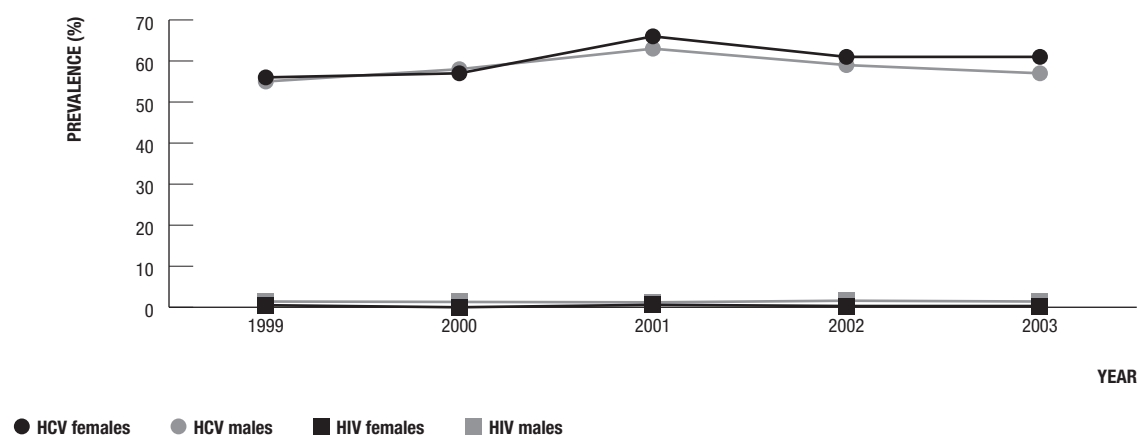
In 1994 – 2003, approximately 8% of HIV diagnoses in Australia have been in people with a history of injecting drug use, of whom more than half were men who also reported a history of homosexual contact.

Figure 26 HIV prevalence in people seen at needle and syringe programs, 2003, by sexual orientation



HIV prevalence among people attending needle and syringe programs has remained generally low (around 1% in 1999 – 2003) but in the subgroup of men who identified themselves as homosexual, it is now around 16% (Figure 26). HIV prevalence has also remained low (less than 0.5%) in both men and women seen at metropolitan sexual health centres who identified themselves as injecting drug users (Figure 34).

Figure 27 HIV and hepatitis C prevalence¹ in needle and syringe programs by year and sex

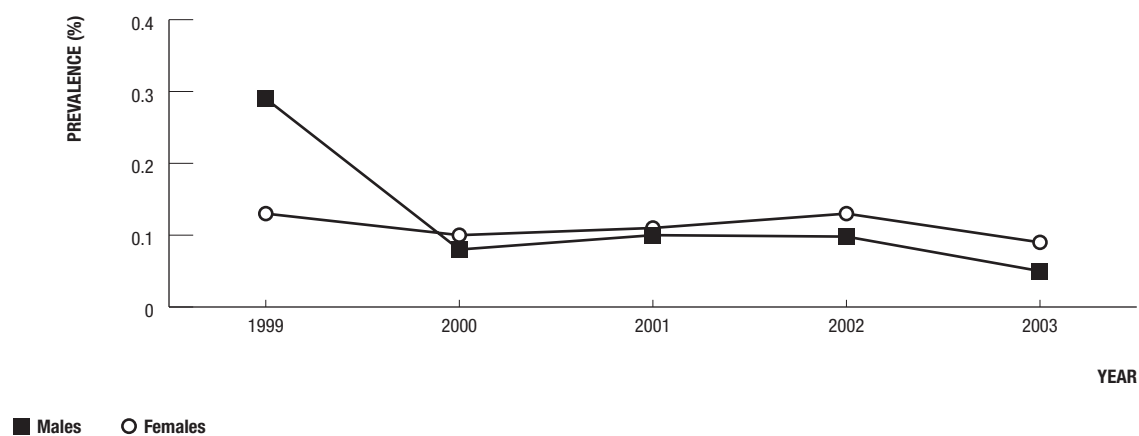


¹ HIV and hepatitis C prevalence adjusted by estimated prevalence of injecting drug use in each State/Territory

In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs continued to be reported at high levels in 2003 (Figure 27). Hepatitis C prevalence among males and females aged less than 20 years increased from 28% in 1999 to 39% in 2001 and then declined slightly to 32% in 2003.

The percentage of injecting drug users seen at needle and syringe programs who reported re-use of a syringe after someone else in the past month declined among women from 23% in 1999 to 14% in 2003 and remained stable among men at 15%.

Figure 28 HIV prevalence in prison entrants by year and sex



HIV prevalence among people entering Australian prisons in 1999 – 2003 has remained low, at levels of less than 0.5% (Figure 28). Prevalence differed little between male and female entrants.

Heterosexual transmission of HIV infection

In 1999 – 2003, transmission was attributed to heterosexual contact in 20% of new HIV diagnoses. Among 529 cases diagnosed in health jurisdictions other than New South Wales for which detailed information on exposure history was available, 33% were in people from the countries of sub-Saharan Africa, or South East Asia, where HIV is transmitted primarily through heterosexual contact (high prevalence countries with an estimated HIV prevalence of above 1%). A further 26% of cases were attributed to heterosexual contact with a partner from a high prevalence country. The sexual partner's history of exposure to HIV was not specified in 18.5% of cases attributed to heterosexual contact (Figure 29). Among heterosexually acquired cases, country of birth of the person was reported as Australia in 40%, South East Asia in 17% and sub-Saharan Africa in 26% (Figure 30). The highest rate of HIV diagnosis, among people living in Australia for at least three months prior to diagnosis, was in people born in countries in sub-Saharan Africa (Figure 31).

Figure 29 HIV infection attributed to heterosexual contact, 1999 – 2003, by exposure category

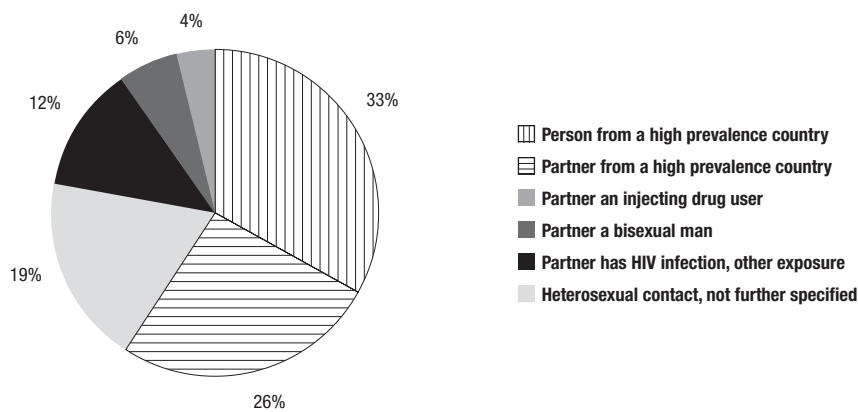


Figure 30 HIV infection attributed to heterosexual contact, 1999 – 2003, by region of birth

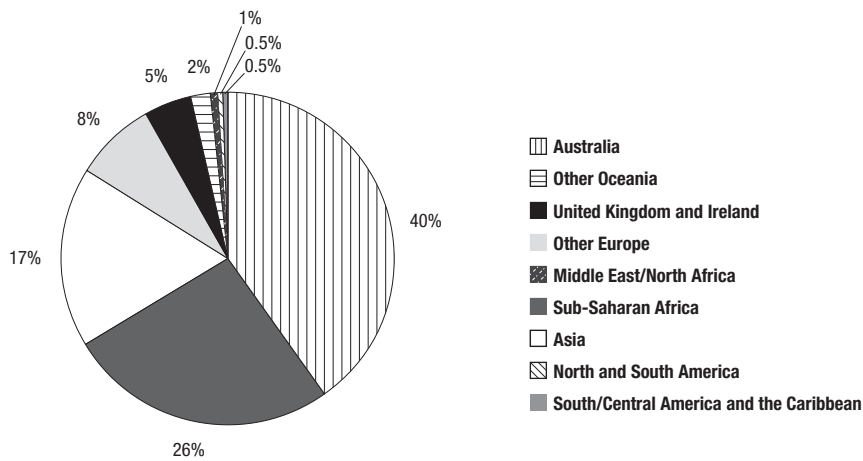
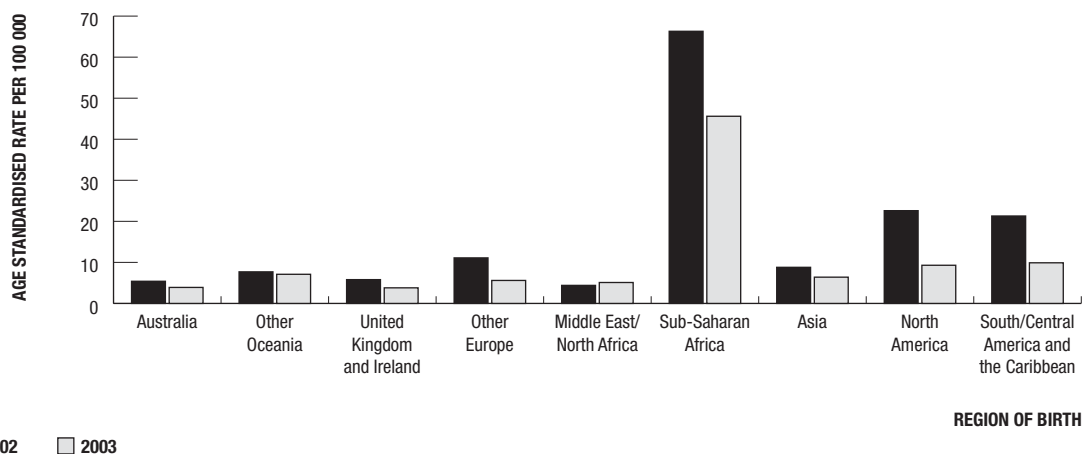
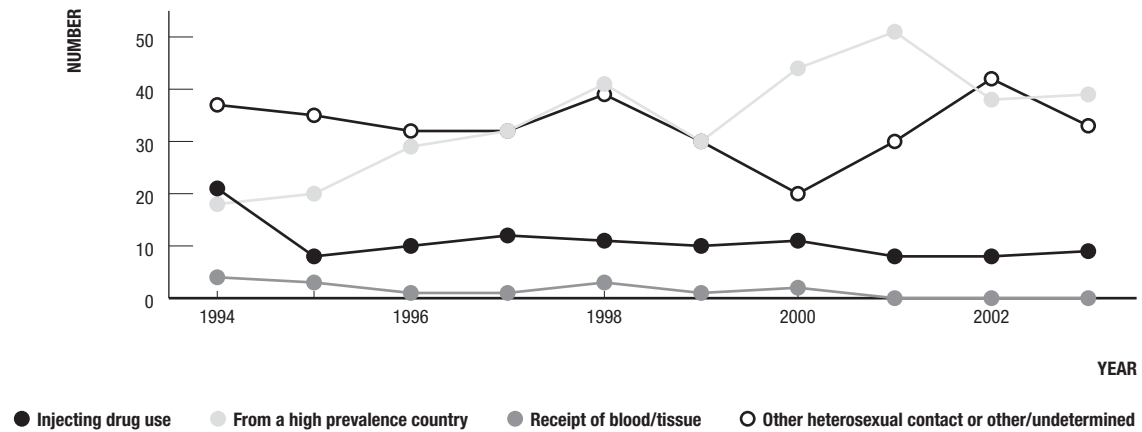


Figure 31 HIV diagnoses, 2002 – 2003, by country/region of birth



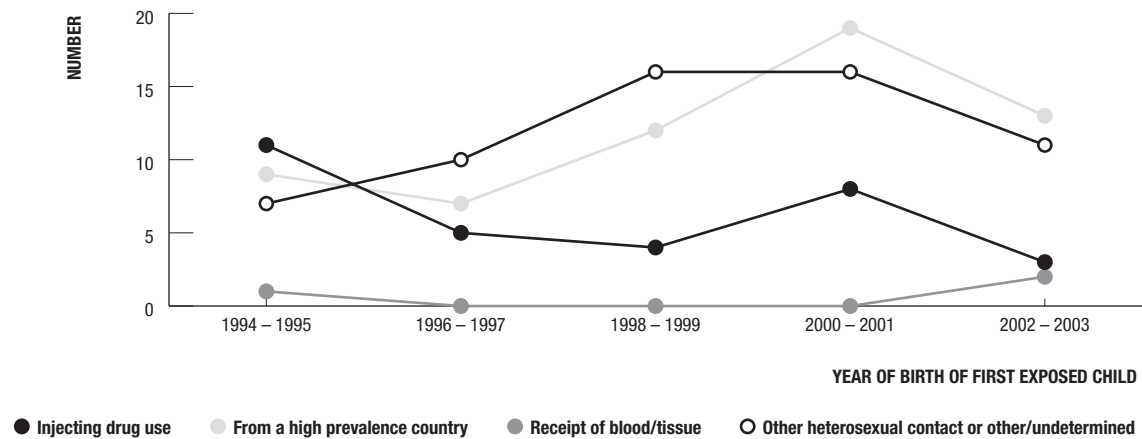
The annual number of HIV diagnoses among women has remained stable over the past 10 years, at around 60 – 90 per year (Figure 32). An increasing number of HIV diagnoses among women, and in the subgroup of women who have had perinatally exposed children (Figure 33), was associated with heterosexual contact in a high prevalence country or heterosexual contact with a partner from a high prevalence country.

Figure 32 HIV diagnoses in women by year and exposure category¹



¹ Includes women who reported heterosexual contact with men with the specific HIV exposure.

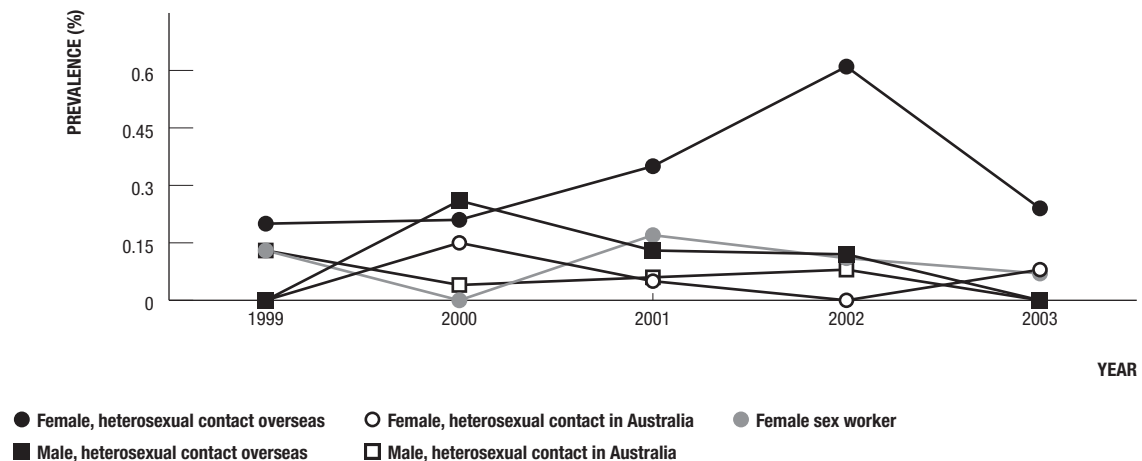
Figure 33 Women with HIV infection who have had children by year and HIV exposure category¹



¹ Includes women who reported heterosexual contact with men with the specific HIV exposure.

Among women seen through a network of sexual health clinics, a modest increase in HIV prevalence (from 0.20 in 1999 to 0.24% in 2003) has recently been documented among women who report a history of heterosexual contact overseas, whereas no increase was found among women with a history of heterosexual contact in Australia only.

Figure 34 HIV prevalence among heterosexually active people seen at sexual health clinics by year, sex and HIV exposure category



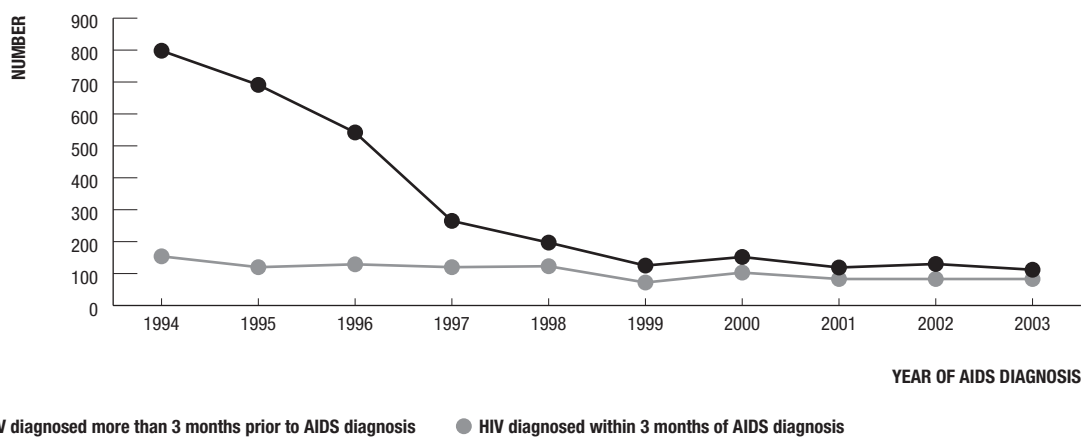
Among men and women attending metropolitan sexual health clinics who reported a history of heterosexual contact only in Australia, HIV prevalence has remained below 0.2%. HIV prevalence has also remained low among women self-identifying as sex workers, with or without a reported history of injecting drug use (Figure 34).

Levels of HIV infection in blood donors, who undergo a screening interview to exclude those with recognised risk factors for HIV infection, have been below 1 per 100,000 donations since 1985, with some evidence of a decline during this period, possibly reflecting increasingly effective donor deferral procedures (Figure 13).

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

The impact of improved HIV therapy in delaying disease progression is demonstrated by the sharp decline in the number of AIDS cases for which HIV diagnosis had taken place at least three months earlier (Figure 35). In comparison, there has been no reduction in the number of cases for which HIV diagnosis occurred within the preceding three months.

Figure 35 AIDS diagnoses, 1994 – 2003, by year and timing of HIV diagnosis



Further evidence of the benefits of improved therapy for HIV infection, introduced in mid-1996, has come from the substantial increases in survival following the diagnosis of AIDS (Figure 36). Median survival among people diagnosed with AIDS increased from 16.8 months prior to 1995 to 32 months in 2000.

Figure 36 Survival following AIDS

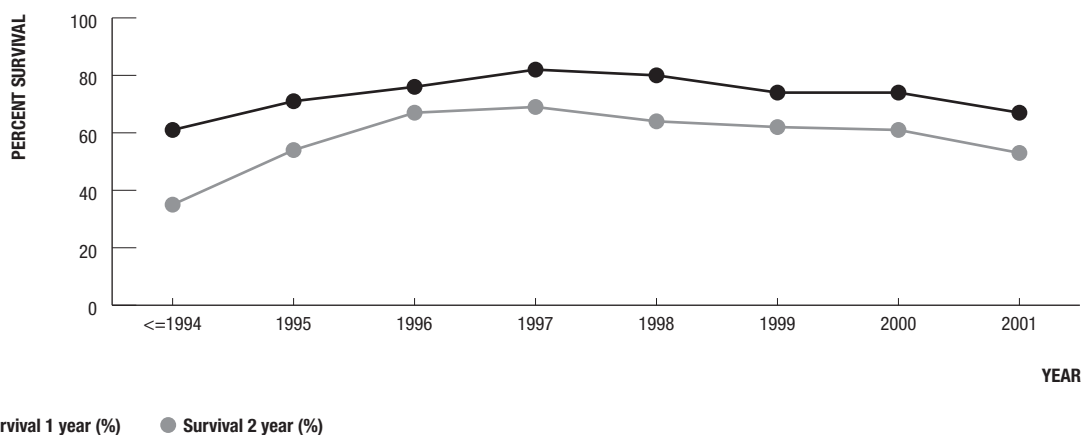
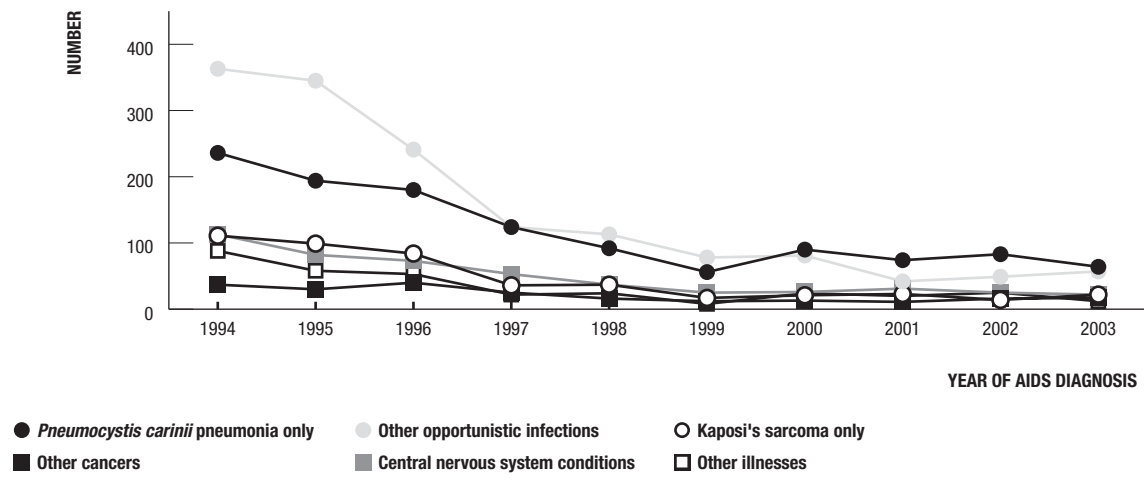


Figure 37 AIDS diagnoses, 1994 – 2003, by AIDS defining illness and year



There has been a doubling since the mid 1990s in the proportion of new AIDS cases in people with late HIV diagnosis, with now 40% of cases having undiagnosed HIV infection until around the time of AIDS diagnosis. *Pneumocystis carinii* pneumonia (PCP) was the most common AIDS defining illness among AIDS cases diagnosed in 2000 – 2003. A reversal of the downward trend in the number of AIDS cases with an opportunistic infection other than PCP has also been documented from 2001 (Figure 37).

Late HIV presentation has disproportionately affected men and women with a history of heterosexual contact and those with an undetermined exposure history (Figure 38). Late HIV presentation was also associated with region of birth. A substantially higher percentage of cases of late presentation occurred among people born in Asia and sub-Saharan Africa and among people born in European countries other than the United Kingdom and Ireland (Figure 39), suggesting differences in awareness of HIV infection or access to health services.

Figure 38 AIDS diagnoses, 1999 – 2003, by late HIV presentation and exposure category

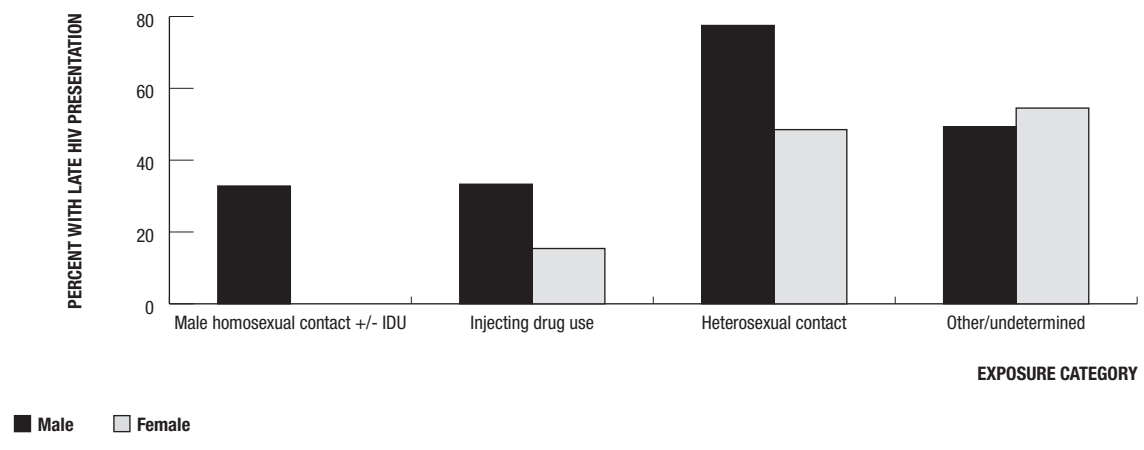
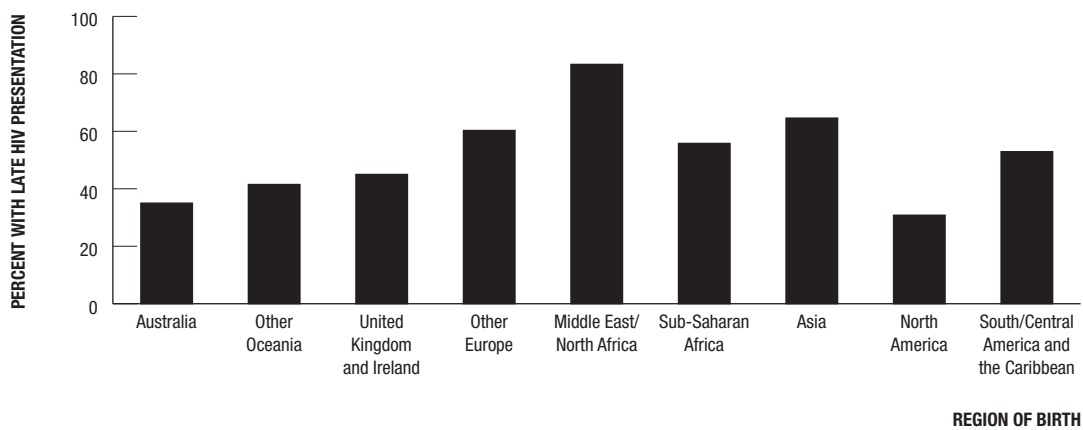


Figure 39 AIDS diagnoses, 1999 - 2003, by late HIV presentation and region of birth

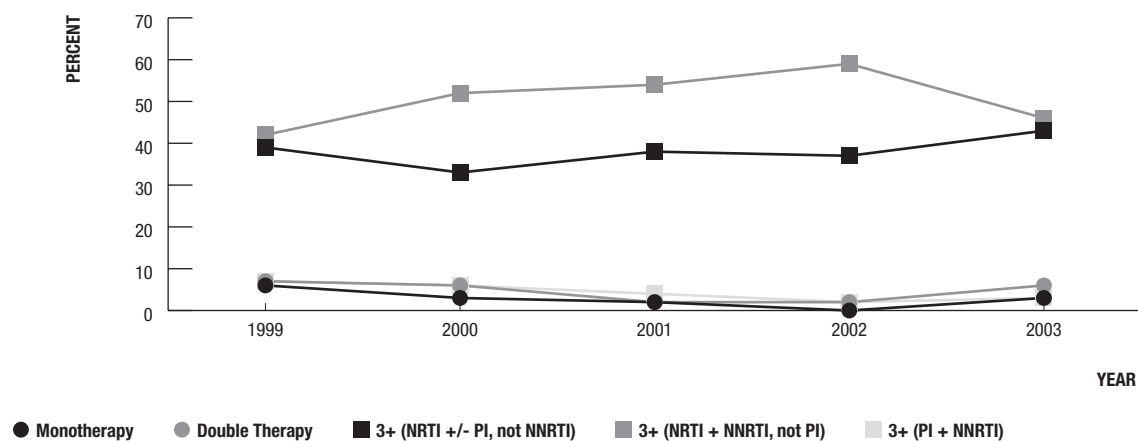


The estimated numbers of people living with AIDS, and the number of people living with a CD4+ cell count of less than 500/ μ l and without AIDS, are projected to gradually increase to around 3,750 and 10,240 by the year 2007. The number of people living with a CD4+ cell count of more than 500/ μ l is expected to remain stable.

There is no comprehensive registry of advanced illness related to hepatitis B and C. One indicator of the extent of illness caused by hepatitis C is the number of liver transplants due to chronic infection. Of 144 people who had a liver transplant in 2003, 39 (27.1%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 15 (10.4%) of people having liver transplants (Table 2.3.1). The number of people living with hepatitis C-related cirrhosis was projected to increase from 7,500 in 2003 to 10,250 in 2007.

The Australian HIV Observational Database indicated that 66% of 1,904 people under follow up in 2003 were receiving triple combination antiretroviral treatment for HIV infection (Figure 40). Viral load was undetectable and median CD4+ cell count was 500 or greater for more than 50% of people reported to the Australian HIV Observational Database from the second half of 2000 (Figure 41).

Figure 40 First treatment among antiretroviral naïve people enrolled on the Australian HIV Observational Database



Use of combination antiretroviral therapy by gay and other homosexually active men participating in the Gay Community Periodic Surveys in Sydney has remained stable in 2001 – 2003 at around 66%. In Melbourne, the proportion reporting use of combination antiretroviral treatment has declined to about 56% in 2003. Around 69% of people enrolled in the Positive Health study in Melbourne and Sydney in 2002 – 2003 reported use of combination antiretroviral treatment for HIV infection.

Figure 41 HIV viral load and CD4+ cell count among people enrolled on the Australian HIV Observational Database

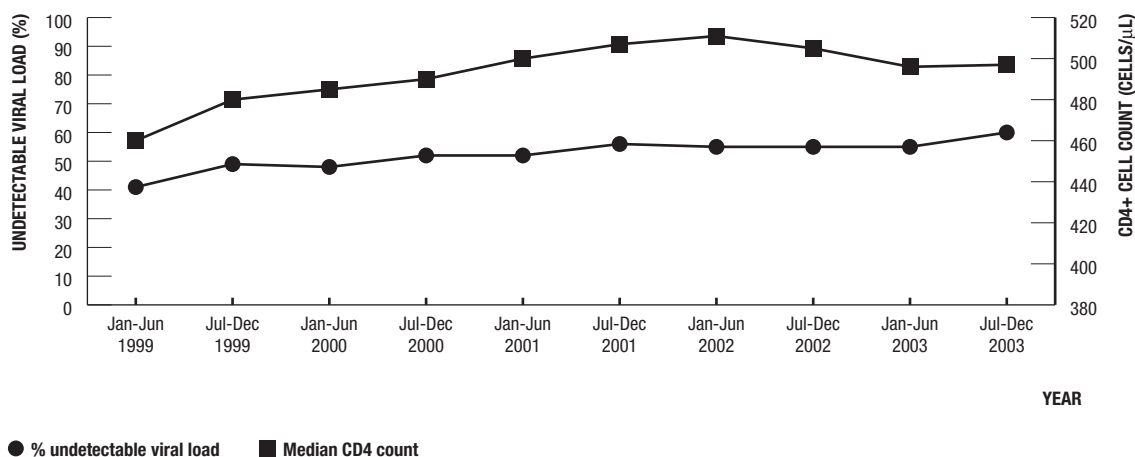


Figure 42 People prescribed reverse transcriptase inhibitors through the Highly Specialised Drugs Program

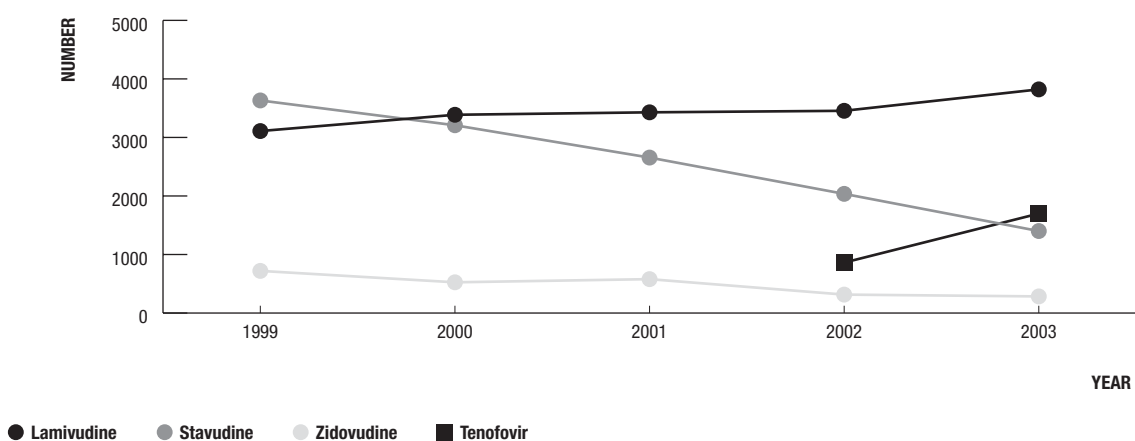
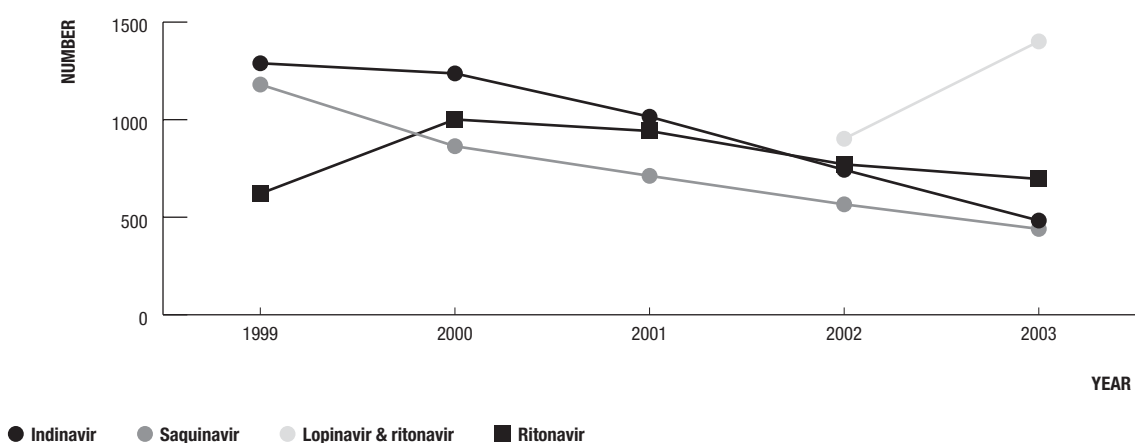


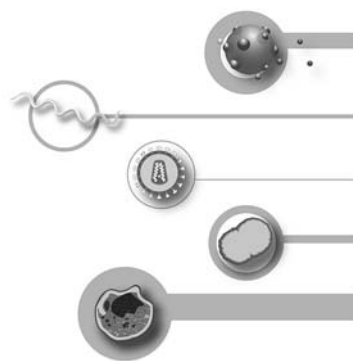
Figure 43 People prescribed protease inhibitors through the Highly Specialised Drugs Program



Based on data collated through the Highly Specialised Drugs Program, it is estimated that the total number of people prescribed antiretroviral treatment for HIV infection increased from 6,114 in 1999 to 6,811 during 2003. Lamivudine and tenofovir were the most frequently prescribed reverse transcriptase inhibitors in 2003 (Figure 42). The most commonly prescribed protease inhibitors in 2003 were lopinavir and ritonavir (1,401 people), and ritonavir (696 people) (Figure 43).

In 2003, combination treatment with ribavirin and interferon was prescribed for 1,285 people with hepatitis C infection.

Tables



2004

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

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

Table 1.1.1	Characteristics of AIDS cases by year. Number of AIDS diagnoses, median age, and percent of total cases by sex, late HIV diagnosis, State/Territory, HIV exposure category and AIDS defining illness	29
Table 1.1.2	Number of AIDS diagnoses adjusted for reporting delay by State/Territory, sex and year	30
Table 1.1.3	Number of AIDS diagnoses adjusted for reporting delay by HIV exposure category, sex and year	31
Table 1.1.4	Number of deaths following AIDS adjusted for reporting delay by State/Territory, sex and year of death	32
Table 1.1.5	Number of deaths following AIDS adjusted for reporting delay by HIV exposure category, sex and year	33
Table 1.1.6	Number (percent) of AIDS diagnoses in Australia, 1994 – 2003, and age standardised annual incidence per 100 000 population by year of AIDS diagnosis and region of birth	34
Table 1.1.7	Survival following the diagnosis of AIDS by year	34
Table 1.1.8	Number of AIDS diagnoses by AIDS-defining illness, year of diagnosis and sex	35

1.2 National HIV Database

Table 1.2.1	Characteristics of cases of newly diagnosed HIV infection by year. Number of cases, median age, and percent of total cases by sex, State/Territory and HIV exposure category	36
Table 1.2.2	Estimated number of cases of newly diagnosed HIV infection adjusted for multiple reporting by State/Territory, sex and year	37
Table 1.2.3	Number (percent) of new HIV diagnoses in Australia, 2002 – 2003, and age standardised rate of diagnosis per 100 000 population by year and region of birth	38
Table 1.2.4	Characteristics of diagnoses of newly acquired HIV infection, 1994 – 2003, by year. Total number of cases, median age, and number of cases by State/Territory, HIV exposure category, evidence of newly acquired HIV infection, sex and year	39
Table 1.2.5	Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 1999 – 2003, by State/Territory, HIV exposure category, newly acquired infection status, sex and year	40
Table 1.2.6	Number of cases of newly acquired HIV infection, 1993 – 2002, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis	41
Table 1.2.7	Number of specimens tested for HIV antibody in public health laboratories, 1994 – 2003, by State/Territory and year of test	41

1.3 National surveillance for HIV/AIDS in Indigenous people

Table 1.3.1	Characteristics of cases of newly diagnosed HIV infection in Indigenous people, 1994 – 2003, by year. Number of cases, median age and percent (number) of total cases for each year by sex, newly acquired infection, State/Territory and HIV exposure category	42
Table 1.3.2	Characteristics of cases of AIDS in Indigenous people, 1994 – 2003, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis, State/Territory and HIV exposure category	43

1.4	Assessment of self reported HIV exposure history	
Table 1.4.1	Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1999 – 2003, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire by State/Territory and year	44
Table 1.4.2	Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1999 – 2003, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire by year and HIV exposure category reported at HIV notification	45
Table 1.4.3	Number of cases of newly diagnosed HIV infection, 1999 – 2003, by HIV exposure category reported on the questionnaire, year and sex	46
1.5	National surveillance for perinatal exposure to HIV	
Table 1.5.1	Number and population rate of perinatal exposure to HIV, 1994 – 2003, by State/Territory and year of birth	47
Table 1.5.2	Number of women with perinatally HIV exposed children, 1994 – 2003, by time of the woman's HIV diagnosis relative to the first exposed child's birth	47
Table 1.5.3	Number of women with perinatally HIV exposed children, 1994 – 2003, and number of perinatally exposed children, by year of birth of the first exposed child and the woman's HIV exposure category	48
Table 1.5.4	Number of perinatally exposed children, 1994 – 2003, 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	48
1.6	Global comparisons	
Table 1.6.1	Estimated HIV prevalence and AIDS incidence in selected countries	49

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

Table 1.1.1 Characteristics of AIDS cases by year¹. Number of AIDS diagnoses, median age, and percent of total cases by sex, late HIV diagnosis, State/Territory, HIV exposure category and AIDS defining illness

Characteristic	Year of AIDS diagnosis										
	≤94 ²	95	96	97	98	99	00	01	02	03	Total ¹
Total cases	6 011	811	671	385	320	197	255	202	213	195	9 260
Males (%)	95.9	95.3	95.1	91.7	92.8	88.3	90.6	89.1	92.0	94.9	94.9
Median age (years)											
Male	37	37	37	39	39	39	40	40	41	42	38
Female	33	35	34	32	36	34	32.5	37	34.5	38	34
Late HIV diagnosis (%)											
Male	15.6	14.2	19.3	30.3	38.0	37.9	39.8	38.3	38.8	42.7	24.8
Female	28.9	28.6	18.2	41.9	45.4	27.3	45.8	61.9	43.7	44.4	36.0
State/Territory (%)											
ACT	1.2	1.1	1.3	0.0	1.6	0.0	1.2	0.0	0.9	2.0	1.1
NSW	59.0	58.4	54.7	51.9	53.8	57.9	49.0	44.6	41.8	54.9	57.1
NT	0.4	0.4	0.1	0.8	0.9	1.0	0.4	0.5	0.5	2.0	0.4
QLD	9.3	12.5	11.5	15.8	11.9	16.2	16.1	14.4	21.6	9.7	10.9
SA	4.3	3.7	4.8	6.2	5.9	5.1	3.1	5.0	7.0	2.0	4.4
TAS	0.5	0.2	1.0	0.5	0.9	0.0	0.4	0.5	0.9	0.0	0.6
VIC	20.6	20.0	20.9	20.8	20.3	17.3	23.9	25.2	21.1	23.1	20.7
WA	4.6	3.7	5.7	3.9	4.7	2.5	5.9	9.9	6.1	6.2	4.8
HIV exposure category (%)³											
Male homosexual contact	85.0	81.0	80.4	75.8	67.8	64.2	68.6	69.5	70.0	69.4	81.5
Male homosexual contact and injecting drug use	4.3	5.8	6.0	3.6	3.3	6.1	5.4	3.7	6.9	7.1	4.7
Injecting drug use ⁴	2.5	3.6	3.4	4.9	8.1	6.1	6.3	4.2	3.9	5.5	3.2
Heterosexual contact	4.0	6.4	8.1	14.0	18.5	22.3	17.6	20.0	17.7	17.5	7.1
Haemophilia/coagulation disorder	1.6	1.9	1.1	1.1	0.3	0.6	1.2	0.5	1.0	0.5	1.4
Receipt of blood/tissue	2.3	0.8	0.9	0.3	1.3	0.6	0.4	0.5	0.5	0.0	1.8
Mother with/at risk for HIV infection	0.3	0.5	0.0	0.3	0.6	0.0	0.4	1.6	0.0	0.0	0.3
Other/undetermined	2.8	4.1	4.9	5.5	6.9	9.1	6.3	5.9	4.7	6.2	3.7
AIDS defining condition (%)											
<i>Pneumocystis carinii</i> pneumonia (PCP)	29.8	19.9	22.5	25.3	22.2	19.9	28.2	28.3	30.7	24.7	27.6
Kaposi's sarcoma (KS)	12.6	10.9	11.8	8.8	9.7	8.2	7.8	9.9	4.7	9.8	11.6
PCP and other (not KS)	5.6	4.1	4.3	7.0	6.6	8.7	7.1	8.5	8.5	8.2	5.8
Oesophageal candidiasis	8.6	16.3	14.6	9.9	10.3	12.7	11.3	6.0	11.8	9.8	10.0
<i>Mycobacterium avium</i>	4.5	7.1	6.5	3.6	4.4	3.1	4.3	2.5	0.5	2.6	4.7
HIV wasting disease	4.4	8.2	5.1	6.8	10.3	13.2	6.3	4.0	4.7	6.7	5.3
Other conditions	34.5	33.5	35.2	38.5	36.4	34.2	34.9	40.8	39.1	38.1	35.0

1 Not adjusted for reporting delay.

2 Percentage with late HIV diagnosis for 1994 only. Total percentage with late HIV presentation for 1994 – 2003 only.

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

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

Source: State/Territory health authorities

Table 1.1.2 Number of AIDS diagnoses adjusted for reporting delay by State/Territory, sex and year

State/Territory	Sex	Year of AIDS diagnosis										Total
		≤94	95	96	97	98	99	00	01 ¹	02 ¹	03 ¹	
ACT	M	68	7	7	0	4	0	2	0	2	4	94
	F	3	2	2	0	1	0	1	0	0	1	10
NSW	M	3 418	458	349	190	161	99	109	85	93	166	5 128
	F	120	15	18	9	10	15	16	8	4	0	215
NT	M	23	3	1	3	3	2	1	1	1	5	43
	F	0	0	0	0	0	0	0	0	0	1	1
QLD	M	535	96	74	51	36	30	38	28	47	23	958
	F	25	5	3	10	2	2	3	1	3	2	56
SA	M	241	29	31	23	16	8	8	8	14	6	384
	F	17	1	1	1	3	2	0	3	2	0	30
TAS	M	31	2	7	2	2	0	1	1	1	0	47
	F	2	0	0	0	1	0	0	0	1	0	4
VIC	M	1 189	150	134	73	62	30	58	45	46	60	1 847
	F	43	11	6	7	3	3	3	6	3	5	90
WA	M	260	28	35	11	13	5	14	18	11	15	410
	F	16	1	3	4	2	0	1	3	3	1	34
Total²		6 011	811	671	385	320	197	255	208	232	290	9 380

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

2 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.3 Number of AIDS diagnoses adjusted for reporting delay by HIV exposure category, sex and year

HIV exposure category	Sex	Year of AIDS diagnoses										Total
		≤94	95	96	97	98	99	00	01 ¹	02 ¹	03 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact	M	4 965	630	513	276	202	115	164	137	155	193	7 350
Male homosexual contact and injecting drug use	M	251	46	38	13	10	11	13	7	15	19	423
Injecting drug use ²	M	92	20	17	11	18	7	11	5	7	12	200
	F	54	8	5	7	6	4	4	3	0	2	93
Heterosexual contact	M	138	30	31	30	42	24	25	23	25	37	405
	F	96	20	21	21	13	16	17	15	14	9	242
Haemophilia/ coagulation disorder	M	84	15	7	4	1	1	3	1	2	1	119
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	71	3	2	0	2	0	0	0	0	0	78
	F	51	3	4	1	2	1	1	1	1	0	65
Health care setting	M	1	0	0	0	0	0	0	0	0	0	1
	F	2	1	0	0	0	0	0	0	0	0	3
Other/undetermined	M	137	28	30	19	20	16	15	12	10	16	303
	F	8	0	3	1	1	1	1	0	2	0	17
Total adult/adolescents³		5 973	807	671	384	318	197	254	205	232	290	9 331
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	10	1	0	0	2	0	0	1	0	0	14
	F	9	3	0	1	0	0	1	2	0	0	16
Haemophilia/coagulation disorder	M	5	0	0	0	0	0	0	0	0	0	5
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt blood/tissue	M	11	0	0	0	0	0	0	0	0	0	11
	F	3	0	0	0	0	0	0	0	0	0	3
Total children		38	4	0	1	2	0	1	3	0	0	49
Total³		6 011	811	671	385	320	197	255	208	232	290	9 380

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

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

3 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

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

State/Territory	Sex	Year of death following AIDS										Total
		≤94	95	96	97	98	99	00	01 ¹	02 ¹	03 ¹	
ACT	M	53	7	4	1	0	1	3	2	0	1	72
	F	2	0	0	0	0	1	1	0	1	1	6
NSW	M	2 397	338	263	117	67	61	70	40	40	50	3 443
	F	83	19	5	6	1	1	3	3	3	2	126
NT	M	17	3	2	1	1	0	0	1	1	0	26
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	367	70	66	28	24	13	14	13	15	14	624
	F	19	4	4	1	2	1	2	3	1	2	39
SA	M	149	33	25	7	13	4	5	7	8	6	257
	F	11	2	1	0	1	0	1	0	2	2	20
TAS	M	21	2	3	1	2	1	0	0	1	0	31
	F	2	0	0	0	0	0	0	0	0	0	2
VIC	M	890	140	109	60	37	36	27	19	12	20	1 350
	F	21	13	5	6	3	2	1	6	0	1	58
WA	M	190	21	26	12	4	6	6	4	3	4	276
	F	10	1	2	3	1	0	1	2	1	1	22
Total²		4 248	654	515	245	156	128	134	100	88	104	6 372

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

2 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.5 Number of deaths following AIDS adjusted for reporting delay by HIV exposure category, sex and year of death

Exposure category	Sex	Year of death following AIDS										Total
		≤94	95	96	97	98	99	00	01 ¹	02 ¹	03 ¹	
Adults/adolescents (13 years and older at diagnosis of AIDS)												
Male homosexual contact	M	3 559	511	399	183	115	89	93	63	62	64	5 138
Male homosexual contact and injecting drug use	M	162	32	28	17	9	7	6	10	5	12	288
Injecting drug use ²	M	47	17	15	7	5	7	7	5	3	6	119
	F	32	8	4	5	0	0	2	1	2	2	56
Heterosexual contact	M	81	17	25	6	6	9	8	2	6	8	168
	F	53	25	11	8	5	4	6	9	5	5	131
Haemophilia/coagulation disorder	M	59	9	10	4	0	4	3	1	1	0	91
	F	3	0	0	0	0	0	0	0	0	0	3
Receipt of blood/tissue	M	61	4	2	1	0	0	0	0	0	0	68
	F	43	4	1	1	1	1	0	3	1	0	55
Health care setting	M	0	1	0	0	0	0	0	0	0	0	1
	F	1	1	0	0	0	0	0	0	0	0	2
Other/undetermined	M	94	21	19	9	13	6	8	4	3	6	183
	F	7	0	1	1	1	0	1	0	0	1	12
Total adult/adolescents³		4 218	651	515	244	155	128	134	98	88	104	6 335
Children (under 13 years at diagnosis of AIDS)												
Mother with/at risk for HIV infection	M	5	2	0	0	0	0	0	1	0	0	8
	F	7	0	0	1	1	0	0	1	0	0	10
Haemophilia/coagulation disorder	M	5	0	0	0	0	0	0	0	0	0	5
	F	0	0	0	0	0	0	0	0	0	0	0
Receipt blood/tissue	M	11	0	0	0	0	0	0	0	0	0	11
	F	2	1	0	0	0	0	0	0	0	0	3
Total children		30	3	0	1	1	0	0	2	0	0	37
Total³		4 248	654	515	245	156	128	134	100	88	104	6 372

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

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

3 Includes people whose sex was reported as transgender.

Source: State/Territory health authorities

Table 1.1.6 Number (percent) of AIDS diagnoses in Australia, 1994 – 2003, and age standardised annual incidence per 100 000 population¹ by year of AIDS diagnosis and region of birth

Region/ Country of birth	1994 – 1998			1999 – 2003		
	Number	Percent	Age standardised incidence	Number	Percent	Age standardised incidence
Australia	2 254	71.8	3.4	720	67.8	1.1
Overseas born	770	24.5	3.9	320	30.1	1.3
<i>Other Oceania</i>	156	5.0	8.3	55	5.2	2.1
<i>United Kingdom and Ireland</i>	149	4.7	2.7	35	3.3	0.6
<i>Other Europe</i>	184	5.9	3.4	68	6.4	1.4
<i>Middle East/North Africa</i>	19	0.6	2.0	6	0.6	1.0
<i>Sub-Saharan Africa</i>	54	1.7	10.1	44	4.1	8.8
<i>Asia</i>	124	4.0	2.9	81	7.6	1.5
<i>North America</i>	48	1.5	13.0	13	1.2	2.5
<i>South/Central America and the Caribbean</i>	36	1.1	9.0	18	1.7	3.9
Total with a reported country of birth	3 024	96.3	4.0	1 040	97.9	1.2
Not reported	115	3.7		22	2.1	
Total	3 139	100.0		1 062	100.0	

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

Source: State/Territory health authorities

Table 1.1.7 Survival following the diagnosis of AIDS by year

Calendar year of diagnosis	Cases	Deaths to 31 Dec 03 ¹	Alive at 1 Jan 03 ²	Left Australia ³	Median survival (months)		% Survival	
					Other ⁴	Australia ³	1 year	2 year
≤94	6 011	5 298	29	54	630	16.8	61.0	35.0
95	811	437	20	0	354	30.0	71.0	54.0
96	671	247	17	0	407	51.6	76.0	67.0
97	385	96	11	0	278	60.0	82.0	69.0
98	320	93	14	0	213	40.0	80.0	64.0
99	197	36	9	1	151	36.0	74.0	62.0
00	255	53	25	0	177	32.0	74.0	61.0
01	202	35	21	0	146	24.0	67.0	53.0
02	213	32	41	0	140	–	–	–
03	195	21	174	0	–	–	–	–
Total	9 260	6 348	361	55	2 496	18.0	65.0	40.0

1 Deaths occurring prior to 1 January 2004.

2 Last medical contact on or after 1 January 2003.

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

4 Last medical contact prior to 1 January 2003.

Source: State/Territory health authorities

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

AIDS defining condition	Year of AIDS diagnosis										Total ¹	%
	≤94		95 – 97		98 – 00		01 – 03		Cumulative to 31 Dec 03			
	M	F	M	F	M	F	M	F	M	F		
<i>Pneumocystis carinii</i> pneumonia (PCP)	1 735	52	387	22	171	11	160	10	2 453	95	2 555	27.6
Kaposi's sarcoma (KS)	749	4	200	1	67	0	49	0	1 065	5	1 071	11.6
KS and PCP alone	54	0	6	0	1	0	1	0	62	0	62	0.7
KS and other (not PCP)	113	0	18	0	8	0	10	0	149	0	149	1.6
PCP and other (not KS)	318	18	81	8	50	6	45	6	494	38	537	5.8
Oesophageal candidiasis	492	21	256	12	77	10	51	5	876	48	926	10.0
Toxoplasmosis	202	8	49	2	21	1	21	1	293	12	308	3.3
Cryptococcosis	221	7	64	4	28	2	18	1	331	14	347	3.7
Non-Hodgkin's lymphoma	212	10	88	5	39	1	43	1	382	17	399	4.3
<i>Mycobacterium avium</i>	256	17	103	12	29	2	10	1	398	32	432	4.7
Herpes simplex virus	129	12	38	2	7	2	4	0	178	16	195	2.1
HIV encephalopathy	173	5	82	7	33	3	35	2	323	17	340	3.7
Cytomegalovirus	231	3	66	2	12	2	6	1	315	8	326	3.5
HIV wasting disease	239	23	121	5	65	10	29	2	454	40	496	5.3
Cryptosporidiosis	134	4	46	1	8	1	10	0	198	6	204	2.2
<i>Mycobacterium tuberculosis</i>	38	5	6	1	4	2	5	0	53	8	61	0.7
Pulmonary tuberculosis ²	6	0	17	1	19	8	13	4	55	13	68	0.7
Recurrent pneumonia ²	19	2	20	1	14	0	4	3	57	6	64	0.7
Cervical cancer ²	–	2	–	2	–	1	–	0	–	5	5	0.1
Other single diagnoses	66	8	21	2	8	0	18	1	113	11	124	1.3
Other multiple diagnoses	378	25	95	9	41	6	29	8	543	48	591	6.4
Total¹	5 765	226	1 764	99	702	68	561	46	8 792	439	9 260	100.0

1 Includes 29 people whose sex was reported as transgender.

2 Included as an AIDS defining illness in Australia from January 1993.

Source: State/Territory health authorities

1.2 National HIV Database

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

Characteristic	Year of HIV diagnosis										
	≤94	95	96	97	98	99	00	01	02	03	Total ²
Total cases	15 991	928	899	820	752	713	748	761	839	848	23 306
Males (%)	93.4	91.9	91.2	89.4	87.0	89.5	89.2	87.8	88.7	89.0	92.1
Median age (years)											
Males	32	34	34	34	35	35	35	35	35	36	33
Females	29	30	28	30	30	28	30	29	32	31	29
State/Territory (%)											
ACT	1.2	1.9	0.8	1.0	1.1	1.1	1.5	1.0	0.6	0.6	1.2
NSW	59.9	58.0	50.5	52.7	53.0	52.3	48.5	44.7	47.5	49.3	57.0
NT	0.5	0.2	0.6	1.3	1.6	0.7	0.4	0.5	1.0	0.6	0.6
QLD	9.1	11.9	16.1	13.8	13.8	17.3	15.2	13.8	15.6	14.9	10.9
SA	3.5	3.3	5.1	4.3	4.7	3.1	3.1	5.7	3.6	5.2	3.7
TAS	0.4	0.6	0.3	0.0	0.4	0.4	0.0	0.7	0.6	0.0	0.4
VIC	20.5	17.7	20.2	22.0	18.6	19.5	25.1	27.2	25.9	24.0	21.0
WA	4.9	6.4	6.3	4.9	6.8	5.6	6.2	6.4	5.2	5.4	5.2
HIV exposure category (%)³											
Male homosexual contact	81.2	74.0	75.2	72.9	65.4	65.4	68.4	66.5	71.1	74.0	77.3
Male homosexual contact and injecting drug use	3.6	5.3	4.2	4.8	4.8	6.3	3.3	5.1	4.0	4.2	4.2
Injecting drug use ⁴	4.7	4.4	2.7	3.1	3.6	5.4	4.4	5.7	2.5	3.5	4.3
Heterosexual contact	6.1	15.1	16.8	18.1	25.1	21.9	23.4	22.1	22.1	18.0	11.2
<i>Partner with/at risk of HIV infection</i>	<i>42.6</i>	<i>61.2</i>	<i>70.1</i>	<i>67.4</i>	<i>77.6</i>	<i>69.7</i>	<i>81.4</i>	<i>78.8</i>	<i>69.5</i>	<i>78.3</i>	<i>62.7</i>
<i>Not further specified</i>	<i>57.4</i>	<i>38.8</i>	<i>29.9</i>	<i>32.6</i>	<i>22.4</i>	<i>30.3</i>	<i>18.6</i>	<i>21.2</i>	<i>30.5</i>	<i>21.7</i>	<i>37.3</i>
Haemophilia/coagulation disorder	2.4	0.1	0.0	0.0	0.1	0.5	0.0	0.1	0.0	0.0	1.4
Receipt of blood/tissue	1.8	0.3	0.2	0.1	0.6	0.3	0.0	0.0	0.0	0.0	1.2
Mother with/at risk of HIV infection	0.2	0.8	0.9	0.9	0.4	0.2	0.4	0.4	0.3	0.3	0.4
Health care setting	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Other/undetermined	19.6	7.5	9.5	9.0	7.8	9.1	8.2	7.4	10.0	9.6	16.4

1 Not adjusted for multiple reporting.

2 Total includes 7 cases for which the date of HIV diagnosis was not reported.

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

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

Source: State/Territory health authorities

Table 1.2.2 Estimated number of cases of newly diagnosed HIV infection adjusted for multiple reporting by State/Territory, sex and year¹

State/Territory		Year of HIV diagnosis										Total
		≤94	95	96	97	98	99	00	01	02	03	
ACT	M	165	16	6	5	6	5	10	7	5	3	228
	F	14	2	1	3	2	3	1	1	0	1	28
NSW	M	7 867	523	408	334	342	306	313	301	316	354	11 064
	F	343	32	31	27	37	30	29	26	25	30	610
NT	M	71	2	5	7	11	4	2	3	5	4	114
	F	2	0	0	4	1	1	0	0	3	1	12
QLD	M	1 348	104	133	96	88	113	97	87	121	112	2 299
	F	75	9	11	16	12	15	10	15	12	17	192
SA	M	511	29	41	27	28	16	19	37	24	40	772
	F	35	1	4	5	6	3	2	7	5	2	70
TAS	M	63	6	3	2	2	2	0	5	3	0	86
	F	3	0	0	0	1	1	0	0	2	0	7
VIC	M	2 931	146	179	175	121	123	173	182	196	185	4 411
	F	141	10	12	12	9	9	17	23	19	17	269
WA	M	712	45	46	32	32	36	36	37	32	33	1 041
	F	52	14	9	7	17	6	9	10	13	11	148
Total	M	12 918	818	823	652	564	618	583	599	737	698	19 010
	F	776	71	74	80	94	73	78	92	89	83	1 510
Total		13 737	890	899	733	659	693	664	692	831	782	20 580

¹ Numbers given are the estimated number of HIV diagnoses in each year not reported in previous years. Numbers may not sum to totals because of rounding errors, diagnoses in people whose sex was reported as transgender, and diagnoses in more than one State/Territory.

Source: State/Territory health authorities

Table 1.2.3 Number (percent) of new HIV diagnoses in Australia, 2002 – 2003, and age standardised rate per 100 000 population¹ by year of HIV diagnosis and region of birth

Region/ Country of birth	2002			2003		
	Number	Percent	Age standardised rate	Number	Percent	Age standardised rate
Australia	486	57.9	5.4	510	60.1	3.9
Overseas born	255	30.4	10.4	248	29.3	7.1
<i>Other Oceania</i>	28	3.3	7.7	36	4.2	7.1
<i>United Kingdom and Ireland</i>	35	4.2	5.8	39	4.6	3.8
<i>Other Europe</i>	44	5.2	11.1	37	4.4	5.6
<i>Middle East/North Africa</i>	4	0.5	4.4	6	0.7	5.1
<i>Sub-Saharan Africa</i>	45	5.4	66.3	41	4.8	45.6
<i>Asia</i>	65	7.8	8.8	70	8.3	6.4
<i>North America</i>	18	2.1	22.6	10	1.2	9.3
<i>South/Central America and the Caribbean</i>	16	1.9	21.3	9	1.1	9.9
Total with a reported country of birth	741	88.3	6.3	758	89.4	4.4
Not reported	98	11.7		90	10.6	
Total	839	100.0		848	100.0	

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

Source: State/Territory health authorities

Table 1.2.4 Characteristics of diagnoses of newly acquired HIV infection¹, 1994 – 2003, by year. Total number of cases, median age, and number of cases by State/Territory, HIV exposure category, evidence of newly acquired HIV infection, sex and year

Characteristic	Sex	Year of HIV diagnosis										Total ²
		94	95	96	97	98	99	00	01	02	03	
Total cases		213	220	169	157	151	170	198	207	243	277	2 005
Males (%)		92.5	95.5	95.3	94.3	97.4	94.7	93.9	92.3	94.7	95.7	94.6
Median age (years)	M	30	31	31	32	31	32	32	34	34	33	32
	F	27	35	22	32	19	27	25	34	38	34	29
State/Territory												
ACT	M	1	6	1	0	2	1	6	2	1	0	20
	F	1	0	0	0	0	0	0	0	0	0	1
NSW	M	111	123	83	67	70	92	83	93	116	146	984
	F	7	3	2	2	0	2	3	7	2	3	31
NT	M	1	0	0	2	2	1	1	3	1	0	11
	F	0	0	0	1	0	0	1	0	0	0	2
QLD	M	19	26	19	19	21	27	21	23	35	25	235
	F	2	2	2	0	0	3	2	3	3	3	20
SA	M	4	11	6	9	6	6	6	10	6	15	79
	F	0	0	0	2	0	0	1	1	0	1	5
TAS	M	1	1	0	0	0	1	0	2	1	0	6
	F	0	0	0	0	0	0	0	0	0	0	0
VIC	M	57	37	42	47	38	30	59	51	66	69	496
	F	5	3	2	3	1	2	3	3	0	3	25
WA	M	3	6	10	4	8	3	10	7	4	10	65
	F	1	1	2	0	3	1	1	2	5	0	16
HIV exposure category												
Male homosexual/bisexual contact	M	167	183	146	129	124	130	159	164	209	234	1 645
Male homosexual/bisexual contact and injecting drug use	M	16	12	7	11	13	14	5	9	8	12	107
Injecting drug use ³	M	4	5	1	2	1	6	7	5	0	5	36
	F	2	1	1	0	2	2	3	2	0	2	15
Heterosexual contact	M	6	7	6	6	6	9	12	8	8	10	78
	F	11	8	7	6	2	6	8	13	9	8	78
Health care setting ⁴	M	1	0	0	0	0	0	0	0	0	0	1
	F	2	0	0	0	0	0	0	0	1	0	3
Other/undetermined	M	3	3	1	0	3	2	3	5	5	4	29
	F	1	0	0	2	0	0	0	1	0	0	4
Evidence of newly acquired infection												
Testing history only	M	104	94	86	69	70	79	75	90	96	136	899
	F	8	5	5	5	3	2	5	9	1	6	49
Illness only	M	36	56	26	37	35	36	62	45	50	40	423
	F	5	2	2	0	0	5	3	1	3	0	21
Testing history and illness	M	57	60	49	42	42	46	49	56	84	89	574
	F	3	2	1	3	1	1	3	6	6	4	30

1 Newly acquired HIV infection was defined as newly diagnosed HIV infection with a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis.

2 Totals include 8 people whose sex was reported transgender and 1 person whose sex was not reported.

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

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

Source: State/Territory health authorities

Table 1.2.5 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 1999 – 2003, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

Characteristic	Sex	Year of HIV diagnosis				
		1999	2000	2001	2002	2003
State/Territory						
ACT	M	465 (4)	525 (10)	450 (4)	780 (3)	40 (3)
	F	850 (3)	920 (1)	190 (1)	– (0)	4 (1)
NSW	M	409 (180)	420 (215)	473 (179)	490 (206)	425 (226)
	F	281 (18)	372 (22)	174 (16)	430 (18)	390 (21)
NT	M	105 (4)	450 (2)	516 (4)	482 (4)	555 (4)
	F	530 (1)	300 (1)	– (0)	571 (4)	40 (1)
QLD	M	420 (93)	420 (90)	440 (79)	390 (109)	510 (97)
	F	410 (17)	355 (14)	430 (16)	580 (12)	495 (16)
SA	M	432 (17)	446 (19)	383 (32)	435 (22)	470 (37)
	F	121 (3)	207 (2)	157 (8)	370 (6)	325 (3)
TAS	M	543 (2)	– (0)	546 (1)	568 (2)	– (0)
	F	250 (1)	– (0)	– (0)	184 (2)	– (0)
VIC	M	400 (109)	437 (152)	426 (160)	485 (172)	418 (163)
	F	324 (10)	333 (16)	455 (20)	301 (19)	220 (13)
WA	M	334 (24)	324 (33)	255 (35)	390 (29)	410 (29)
	F	568 (5)	440 (9)	496 (10)	425 (13)	336 (9)
Exposure category						
Male homosexual contact ¹	M	462 (323)	445 (406)	486 (399)	490 (451)	480 (473)
Injecting drug use ²	M	300 (19)	380 (19)	297 (18)	432 (9)	320 (13)
	F	275 (3)	595 (2)	550 (3)	– (0)	840 (3)
Heterosexual contact	M	279 (63)	315 (77)	234 (59)	273 (68)	184 (48)
	F	410 (53)	360 (59)	345 (60)	415 (72)	325 (55)
Other/undetermined	M	252 (25)	90 (17)	116 (14)	265 (18)	140 (25)
	F	568 (1)	26 (2)	637 (2)	784 (1)	270 (3)
Newly acquired HIV infection status						
Diagnoses of newly acquired HIV infection ³	M	513 (127)	567 (163)	574 (150)	576 (198)	540 (207)
	F	680 (7)	660 (9)	442 (14)	625 (10)	585 (6)
Other HIV diagnoses	M	344 (306)	281 (358)	370 (344)	380 (349)	357 (352)
	F	320 (51)	335 (56)	336 (57)	358 (64)	320 (58)
Total⁴		401 (492)	415 (589)	440 (565)	451 (625)	440 (626)

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

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

3 Newly acquired HIV infection was defined as newly diagnosed HIV infection with a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis.

4 Total includes people whose sex was reported as transgender and people whose sex was not reported.

Source: State/Territory health authorities

Table 1.2.6 Number of cases of newly acquired HIV infection, 1993 – 2002, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis

	Year of HIV diagnosis										Total
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
Newly acquired HIV infection	205	213	220	169	157	151	171	198	207	243	1 934
AIDS											
Interval between HIV and AIDS diagnosis											
Less than 1 year	5	6	8	2	4	1	3	2	2	1	34
1 – 2 years	6	8	7	2	2	1	2	0	2	0	30
2 – 3 years	8	7	5	1	2	2	4	1	3	0	33
3 – 4 years	9	2	2	1	1	3	5	2	0	–	25
4 – 5 years	4	1	1	3	1	2	2	1	–	–	15
5 or more years	6	15	12	5	2	3	0	–	–	–	43
Total	38	39	35	14	12	12	16	6	7	1	180

Source: State/Territory health authorities

Table 1.2.7 Number of specimens tested for HIV antibody in public health laboratories, 1994 – 2003, by State/Territory and year of test

State/Territory	Year of HIV antibody test									
	1994	1995	1996	1997	1998	1999	2000	2001 ¹	2002 ¹	2003 ¹
ACT	10 300	9 368	7 053	7 044	8 293	6 976	5 762	5 446	5 712	7 978
NSW	344 903	300 944	270 735	286 701	299 434	324 126	311 904	328 295	357 526	358 063
NT	11 283	12 122	13 111	13 424	13 137	15 149	14 835	15 158	15 710	16 407
QLD	137 133	154 992	141 741	156 738	164 388	179 336	183 533	185 028	184 994	188 403
SA	77 628	69 054	76 098	74 640	80 586	76 987	76 275	77 219	75 360	79 409
TAS	14 000	12 628	13 192	11 347	11 883	12 243	13 152	12 714	12 574	12 967
VIC	132 100	108 230	119 360	94 846	113 342	161 600	160 611	177 949	202 682	204 561
WA	76 544	72 317	77 435	73 826	79 308	82 040	89 426	100 225	93 271	100 483
Total	803 891	739 655	718 725	718 566	770 371	858 457	855 498	902 034	947 829	968 271

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

Source: National Serology Reference Laboratory, Australia

1.3 National surveillance for HIV/AIDS in Indigenous people

Table 1.3.1 Characteristics of cases of newly diagnosed HIV infection in Indigenous people¹, 1994 – 2003, by year. Number of cases, median age and percent (number) of total cases by sex, newly acquired infection, State/Territory and HIV exposure category

Characteristic	Year of HIV diagnosis										Total
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Total cases	20	21	19	15	27	9	15	14	24	21	185
Males (%)	75.5	61.9	78.9	73.3	66.7	66.7	86.7	57.1	54.2	71.4	68.6
Median age (years)	29.5	25	29	36	31	28	31	29.5	36.5	34	30
Newly acquired infection	5.0 (1)	33.3 (7)	10.5 (2)	26.7 (4)	18.5 (5)	33.3 (3)	26.7 (4)	14.3 (2)	25.0 (6)	19.0 (4)	20.5(38)
State/Territory											
ACT	–	–	–	–	–	–	–	–	–	–	–
NSW	35.0 (7)	42.9 (9)	21.1 (4)	26.7 (4)	29.6 (8)	55.6 (5)	40.0 (6)	28.6 (4)	25.0 (6)	14.3 (3)	30.3(56)
NT	15.0 (3)	4.7 (1)	5.2 (1)	33.3 (5)	14.8 (4)	0.0 (0)	6.7 (1)	7.1 (1)	8.3 (2)	4.7 (1)	10.3(19)
QLD	10.0 (2)	14.3 (3)	42.1 (8)	20.0 (3)	7.4 (2)	11.1 (1)	13.3 (2)	21.4 (3)	20.8 (5)	28.6 (6)	18.9(35)
SA	5.0 (1)	4.7 (1)	10.5 (2)	0.0 (0)	3.7 (1)	11.1 (1)	6.7 (1)	7.1 (1)	8.3 (2)	9.5 (2)	6.5(12)
TAS	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
VIC	–	–	–	–	0.0 (0)	0.0 (0)	0.0 (0)	14.3 (2)	0.0 (0)	19.1 (4)	3.2 (6)
WA	35.0 (7)	33.3 (7)	21.1 (4)	20.0 (3)	44.4(12)	22.2 (2)	33.3 (5)	21.4 (3)	37.5 (9)	23.8 (5)	30.8(57)
HIV exposure category											
Male homosexual/ bisexual contact	26.3 (5)	28.6 (6)	58.8(10)	60.0 (9)	29.2 (7)	25.0 (2)	46.7 (7)	42.9 (6)	20.8 (5)	35.0 (7)	36.2(64)
Male homosexual/bisexual contact and injecting drug use	26.3 (5)	19.0 (4)	5.9 (1)	6.7 (1)	12.5 (3)	12.5 (1)	6.6 (1)	0.0 (0)	4.2 (1)	10.0 (2)	10.7(19)
Injecting drug use ²	0.0 (0)	0.0 (0)	11.8 (2)	0.0 (0)	12.5 (3)	25.0 (2)	26.7 (4)	28.6 (4)	16.7 (4)	15.0 (3)	12.4(22)
Heterosexual contact	42.1 (8)	52.4(11)	23.5 (4)	33.3 (5)	41.7(10)	37.5 (3)	20.0 (3)	21.4 (3)	58.3(14)	40.0 (8)	39.0(69)
Haemophilia/ coagulation disorder	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Receipt of blood/tissue	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Mother with/at risk for HIV infection	5.3 (1)	0.0 (0)	0.0 (0)	0.0 (0)	4.1 (1)	0.0 (0)	0.0 (0)	7.1 (1)	0.0 (0)	0.0 (0)	1.7 (3)
Other/undetermined ³	5.0 (1)	0.0 (0)	10.5 (2)	0.0 (0)	11.1 (3)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	4.8 (1)	4.3 (8)

1 Information on Indigenous status was not available from ACT at 31 March 2004. Information on Indigenous status was available in VIC from 1 June 1998.

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

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

Source: State/Territory health authorities

Table 1.3.2 Characteristics of cases of AIDS in Indigenous people¹, 1994 – 2003, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis, State/Territory and HIV exposure category

Characteristic	Year of AIDS diagnosis										Total
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Total cases	11	9	10	4	9	5	5	6	6	6	71
Males (%)	81.8	88.9	80.0	75.0	77.8	100.0	100.0	100.0	50.0	83.3	83.1
Median age (years)	32	31	30	38	34	37	37	40	37	38	34
Late HIV diagnosis	9.1 (1)	11.1 (1)	10.0 (1)	25.0 (1)	44.4 (4)	40.0 (2)	80.0 (4)	16.7 (1)	33.3 (2)	33.3 (2)	26.8(19)
State/Territory											
ACT	–	–	–	–	–	–	–	–	–	–	–
NSW	45.4 (5)	77.8 (7)	20.0 (2)	50.0 (2)	33.3 (3)	60.0 (3)	20.0 (1)	66.6 (4)	33.3 (2)	16.7 (1)	42.2(30)
NT	18.2 (2)	0.0 (0)	10.0 (1)	0.0 (0)	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	16.7 (1)	7.0 (5)
QLD	27.3 (3)	22.2 (2)	50.0 (5)	25.0 (1)	11.1 (1)	0.0 (0)	40.0 (2)	16.7 (1)	33.3 (2)	33.3 (2)	26.8(19)
SA	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	16.7 (1)	2.8 (2)
TAS	0.0 (0)	0.0 (0)	10.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.4 (1)
VIC	–	–	–	–	11.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.4 (1)
WA	9.1 (1)	0.0 (0)	10.0 (1)	25.0 (1)	33.3 (3)	20.0 (1)	40.0 (2)	16.7 (1)	33.3 (2)	16.7 (1)	18.3(13)
HIV exposure category (number)											
Male homosexual/ bisexual contact	54.5 (6)	66.7 (6)	30.0 (3)	33.3 (1)	37.5 (3)	20.0 (1)	100.0 (4)	66.7 (4)	50.0 (3)	50.0 (3)	50.0(34)
Male homosexual/bisexual contact and injecting drug use	9.1 (1)	22.2 (2)	40.0 (4)	0.0 (0)	0.0 (0)	40.0 (2)	0.0 (0)	0.0 (0)	0.0 (0)	16.7 (1)	14.7(10)
Injecting drug use ²	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (2)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	16.7 (1)	5.9 (4)
Heterosexual contact	27.3 (3)	11.1 (1)	30.0 (3)	66.7 (2)	37.5 (3)	20.0 (1)	0.0 (0)	16.7 (1)	50.0 (3)	16.6 (1)	26.5(18)
Haemophilia/ coagulation disorder	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Receipt of blood/tissue	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Mother with/at risk for HIV infection	9.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	16.7 (1)	0.0 (0)	0.0 (0)	2.9 (2)
Other/undetermined ³	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (1)	11.1 (1)	0.0 (0)	20.0 (1)	0.0 (0)	0.0 (0)	0.0 (0)	4.2 (3)

1 Information on Indigenous status was not available from ACT at 31 March 2004. Information on Indigenous status was available in VIC from 1 June 1998.

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

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

Source: State/Territory health authorities

1.4 Assessment of self reported HIV exposure history

Table 1.4.1 Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1999 – 2003, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire¹ by State/Territory² and year

State/Territory	1999 – 2001			2002 – 2003			1999 – 2003		
	Number included	Number with returned questionnaire	Number with additional information	Number included	Number with returned questionnaire	Number with additional information	Number included	Number with returned questionnaire	Number with additional information
ACT	10	8	8	3	1	1	13	9	9
NT	5	5	5	8	8	8	13	13	13
QLD	123	89	87	68	28	28	191	117	115
SA	33	33	32	20	10	10	53	43	42
TAS	2	2	2	2	2	2	4	4	4
VIC	164	162	155	103	101	95	267	263	250
WA	67	63	57	50	40	39	117	103	96
Total	404	362	346	254	190	183	658	552	529

1 Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (9), people whose medical condition limited reporting of an HIV exposure history (4) and people who were reported to have died (10).

2 For States and Territories other than New South Wales.

Source: State/Territory health authorities

Table 1.4.2 Number of cases of newly diagnosed HIV infection included in the assessment of self reported HIV exposure history, 1999 – 2003, number for which the exposure assessment questionnaire was returned and number with additional information on HIV exposure history available on the returned questionnaire¹ by year and HIV exposure category reported at HIV notification

HIV exposure category reported at notification	1999 – 2001			2002 – 2003			1999 – 2003		
	Number included	Number with returned questionnaire	Number with further information	Number included	Number with returned questionnaire	Number with further information	Number included	Number with returned questionnaire	Number with additional information
Injecting drug use	60	51	48	25	16	14	85	67	62
<i>Heterosexual</i>	42	41	39	21	14	14	63	55	53
<i>Not further specified</i>	18	10	9	4	2	0	22	12	9
Heterosexual contact	288	270	266	191	157	157	479	427	423
<i>From a high prevalence country</i>	104	95	95	60	44	44	164	139	139
<i>Partner from a high prevalence country</i>	80	76	74	43	34	34	123	110	108
<i>Other partner with/at risk of HIV infection</i>	54	52	52	47	42	42	101	94	94
<i>Not further specified</i>	50	47	45	41	37	37	91	84	82
Receipt of blood/tissue	4	2	2	0	0	0	4	2	2
Health care setting	0	0	0	1	1	1	1	1	1
Other/Undetermined	52	39	30	37	16	11	89	55	41
Total	404	362	346	254	190	183	658	552	529

¹ Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (9), people whose medical condition limited reporting of an HIV exposure history (4) and people who were reported to have died (10).

Source: State/Territory health authorities

Table 1.4.3 Number of cases of newly diagnosed HIV infection, 1999 – 2003, by HIV exposure category reported on the questionnaire, year and sex

HIV exposure category documented on the questionnaire	1999		2000		2001		2002		2003		1999 – 2003		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Injecting drug use	16	1	10	3	12	3	4	0	6	2	48	9	57
<i>Heterosexual</i>	12	1	9	3	9	3	4	0	5	2	39	9	48
<i>Not further specified</i>	4	0	1	0	3	0	0	0	1	0	9	0	9
Heterosexual contact	42	35	48	38	46	55	49	53	25	30	210	211	421
Sex with injecting drug user	1	1	0	4	1	1	3	3	1	1	6	10	16
Sex with bisexual male	–	3	–	2	–	8	–	7	–	5	–	25	25
From a high prevalence country	15	12	14	15	16	23	11	17	7	9	63	76	139
<i>Sub-Saharan Africa</i>	11	7	9	10	11	18	10	13	5	7	46	55	101
<i>South East Asia</i>	3	5	5	4	5	5	1	4	2	2	16	20	36
<i>Other/not reported</i>	1	0	0	1	0	0	0	0	0	0	1	1	2
Sex with a person from a high prevalence country	10	8	21	9	17	10	12	7	9	7	69	41	110
<i>Sub-Saharan Africa</i>	2	8	4	7	10	7	7	5	1	4	24	31	55
<i>South East Asia</i>	7	0	16	1	6	3	4	1	6	3	39	8	47
<i>Other/not reported</i>	1	0	1	0	1	0	1	1	2	0	6	2	8
Sex with person with medically acquired HIV	0	0	0	1	0	0	0	0	0	0	0	1	1
Sex with HIV infected person, exposure not specified	3	6	1	7	2	9	4	13	1	6	11	41	52
Not further specified	13	5	12	0	10	4	19	6	7	2	61	17	78
Receipt of blood/tissue	0	1	0	0	1	0	0	0	0	0	1	1	2
Health care setting	0	0	0	0	0	0	0	1	0	0	0	1	1
Other/undetermined	15	1	11	0	8	0	7	0	5	1	46	2	48
Total	73	38	69	41	57	58	60	54	36	33	305	224	529

Source: State/Territory health authorities

1.5 National surveillance for perinatal exposure to HIV

Table 1.5.1 Number and population rate¹ of perinatal exposure to HIV, 1994 – 2003, by State/Territory and year of birth

State/ Territory	1994 – 1995		1996 – 1997		1998 – 1999		2000 – 2001		2002 – 2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	3	33.8	1	11.6	1	12.1	1	12.5	0	0.0
NSW	18	10.2	12	6.9	15	8.7	27	15.7	17	9.8
NT	0	0.0	0	0.0	1	13.9	1	13.3	0	0.0
QLD	9	9.7	4	4.2	8	8.6	5	5.3	8	8.4
SA	2	5.2	0	0.0	0	0.0	1	2.8	2	5.7
TAS	0	0.0	1	8.0	1	8.3	0	0.0	0	0.0
VIC	8	6.3	3	2.5	5	4.2	9	7.6	4	3.3
WA	4	8.0	5	10.1	12	24.2	10	20.4	8	16.9
Total	44	8.6	26	5.1	43	8.6	54	10.9	39	7.8

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

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

Table 1.5.2 Number of women with perinatally HIV exposed children, 1994 – 2003, by time of the woman's HIV diagnosis relative to the first exposed child's birth

First exposed child's year of birth	Interval of the woman's HIV diagnosis					Total
	Before the birth (years)				At or after the birth	
	< 1	1 – 2	> 2	Total		
1994 – 1995	9	0	5	14	14	28
1996 – 1997	5	1	6	12	10	22
1998 – 1999	10	4	13	27	5	32
2000 – 2001	18	2	15	35	7	43
2002 – 2003	13	1	14	28	1	29
Total¹	55	8	53	116	37	154

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

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

Table 1.5.3 Number of women with perinatally HIV exposed children, 1994 – 2003, and number of perinatally exposed children, by year of birth of the first exposed child and the woman's HIV exposure category

Year of the first Exposed child's birth/ HIV exposure category	1994 – 1998		1999 – 2003		1994 – 2003	
	Number of women	Total number of exposed children	Number of women	Total number of exposed children	Number of women	Total number of exposed children
Injecting drug use	6	7	6	9	12	16
Heterosexual contact	52	62	83	102	135	164
<i>Sex with an injecting drug user</i>	11	15	8	12	19	27
<i>Sex with bisexual male</i>	4	6	5	7	9	13
<i>From high prevalence country</i>	13	15	26	31	39	46
<i>Sex with person from a high prevalence country</i>	6	6	15	17	21	23
<i>Sex with person with medically acquired HIV</i>	1	1	1	1	2	2
<i>Sex with person with HIV infection, other exposure</i>	9	10	7	11	16	21
<i>Not further specified</i>	8	9	21	23	29	32
Receipt of blood/tissue	0	0	1	1	1	1
Other/undetermined	2	2	4	5	6	7
Total	60	71	94	117	154	188

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

Table 1.5.4 Number of perinatally exposed children, 1994 – 2003, 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 the birth		At or after the birth		Total	
	Number exposed	Number with HIV	Number exposed	Number with HIV	Number exposed ¹	Number with HIV
1994 – 1995	24	7	20	8	44	15
1996 – 1997	16	3	10	7	26	10
1998 – 1999	36	0	7	3	43	3
2000 – 2001	46	0	7	5	54	5
2002 – 2003	38	1	1	0	39	1
Total	160	11	45	23	206	34

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

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

1.6 Global comparisons

Table 1.6.1 Estimated HIV prevalence and AIDS incidence in selected countries

Country	HIV prevalence		AIDS incidence	
	2003	Rate ¹	2003	Rate ¹
Asia Pacific				
Australia	13 630	69	290	1.5
Cambodia ^{2,3}	170 000	2 600	16 053	111
China ^{2,4}	830 000	100	27 000	5
India ^{2,4}	5 000 000	900	12 239	2.4
Indonesia ^{2,5}	110 000	100	411	<1
Japan ²	12 000	20	–	–
Malaysia ^{2,6}	51 000	400	4 000	31
Myanmar ^{2,5}	320 000	1 200	3 817	9
New Zealand ²	1 400	10	33	0.8
Papua New Guinea ²	16 000	600	–	–
Philippines ²	8 900	20	–	–
Republic of Korea ²	8 300	20	–	–
Thailand ^{2,6}	560 000	1 500	156 309	284
Vietnam ^{2,4}	200 000	400	6 500	15
Europe				
France ²	120 000	400	1 365	2.2
Germany ²	43 000	100	353	0.4
Italy ²	140 000	500	1 759	3.1
Spain ^{2,6}	130 000	700	1 363	3.3
United Kingdom ²	47 000	200	838	1.4
North America				
Canada ²	55 000	300	469	1.5
United States ^{2,6}	940 000	600	43 950	15.0

1 Rate per 100 000 population.

2 HIV prevalence estimate for 2003, among people aged 15–49 years.

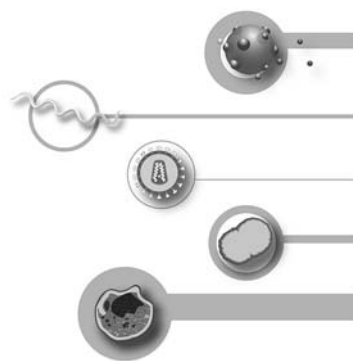
3 AIDS incidence for 2001.

4 AIDS incidence for 2000.

5 AIDS incidence, January to September 2000, with estimated annual rate.

6 Data not adjusted for reporting delays.

Tables



2004

Annual Surveillance Report

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

2	National surveillance for viral hepatitis	
2.1	Notification of viral hepatitis to the National Notifiable Diseases Surveillance System	
Table 2.1.1	Number and rate of diagnosis of hepatitis A infection, 1999 – 2003, by State/Territory and year	52
Table 2.1.2	Number of diagnoses of hepatitis A infection, 1999 – 2003, by age group, year and sex	52
Table 2.1.3	Number and rate of diagnosis of newly acquired hepatitis B infection, 1999 – 2003, by State/Territory and year	53
Table 2.1.4	Number of diagnoses of newly acquired hepatitis B infection, 1999 – 2003, by age group, year and sex	53
Table 2.1.5	Number of diagnoses of newly acquired hepatitis B infection, 2002 – 2003, by exposure category, year and sex	54
Table 2.1.6	Number and rate of diagnosis of hepatitis C infection, 1999 – 2003, by State/Territory and year	54
Table 2.1.7	Number of diagnoses of hepatitis C infection, 1999 – 2003, by age group, year and sex	54
Table 2.1.8	Number of diagnoses of newly acquired hepatitis C infection, 1999 – 2003, by State/Territory and year	55
Table 2.1.9	Number of diagnoses of newly acquired hepatitis C infection, 1999 – 2003, by age group, year and sex	55
Table 2.1.10	Number of diagnoses of newly acquired hepatitis C infection, 1999 – 2003, by exposure category, year and sex	55
2.2	National surveillance for viral hepatitis in Indigenous people	
Table 2.2.1	Number (percent) of diagnoses of hepatitis A infection, 2003, by State/Territory and Indigenous status	56
Table 2.2.2	Number (percent) of diagnoses of newly acquired hepatitis B infection, 2003, by State/Territory and Indigenous status	56
Table 2.2.3	Number (percent) of diagnoses of hepatitis C infection, 2003, by State/Territory and Indigenous status	56
2.3	Long term outcomes among people with chronic viral hepatitis	
Table 2.3.1	Number (percent) of liver transplants, 1985 – 2003, by year and primary cause of liver disease	57

2 National surveillance for viral hepatitis

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

Table 2.1.1 Number and rate¹ of diagnoses of hepatitis A infection, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis									
	1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	8	2.4	5	1.5	14	4.2	4	1.2	5	1.5
NSW	407	6.5	199	3.1	195	3.0	149	2.3	124	1.9
NT	89	39.0	45	20.8	38	16.4	44	20.1	40	18.4
QLD	359	10.4	133	3.8	120	3.4	67	1.8	48	1.3
SA	121	8.5	54	3.7	20	1.4	16	1.1	13	0.8
TAS	5	1.1	3	0.6	3	0.7	4	0.8	14	2.9
VIC	262	5.6	193	4.2	103	2.2	67	1.4	89	1.8
WA	295	15.9	181	9.8	37	1.9	32	1.7	85	4.5
Total	1 546	8.3	813	4.3	530	2.8	383	2.0	418	2.2

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.2 Number of diagnoses of hepatitis A infection, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T	M	F	T ¹	M	F	T	M	F	T ¹
0 – 4	57	56	113	32	20	52	25	10	35	11	11	22	25	10	35
5 – 14	147	157	304	71	65	136	44	23	67	22	20	42	47	27	74
15 – 19	69	69	138	22	28	50	17	4	21	19	5	24	15	19	34
20 – 29	285	188	474	154	76	230	99	36	136	63	30	93	46	32	78
30 – 39	152	113	265	103	60	163	98	30	128	55	30	85	40	24	64
40 – 49	71	48	120	55	34	89	51	23	74	33	19	52	39	26	65
50 – 59	30	24	54	21	22	43	29	9	38	19	10	29	19	16	36
60 +	36	37	73	28	22	50	17	14	31	12	24	36	17	15	32
Not reported	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0
Total	851	693	1 546	486	327	813	380	149	530	234	149	383	248	169	418

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.3 Number and rate¹ of diagnoses of newly acquired hepatitis B infection, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis									
	1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	3	1.1	3	0.9	2	0.6	0	0.0	0	0.0
NSW	65	1.0	96	1.5	91	1.4	87	1.4	70	1.1
NT	19	9.9	5	3.2	3	2.2	12	5.4	15	6.9
QLD	53	1.5	56	1.6	47	1.3	56	1.5	40	1.1
SA	19	1.3	30	2.1	22	1.5	11	0.8	10	0.6
TAS	5	1.1	18	4.2	20	4.9	19	4.3	10	2.3
VIC	94	2.0	126	2.7	188	4.1	186	4.0	147	3.1
WA	43	2.3	74	4.0	39	2.1	35	1.9	45	2.4
Total	301	1.6	408	2.2	412	2.2	406	2.1	337	1.8

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 2.1.4 Number of diagnoses of newly acquired hepatitis B infection, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T	M	F	T	M	F	T	M	F	T ¹
0–4	0	2	2	0	1	1	0	1	1	1	0	1	1	0	1
5–14	2	4	6	3	1	4	3	1	4	4	6	10	4	3	7
15–19	22	23	45	25	39	64	18	29	47	18	28	46	14	21	35
20–29	91	39	131	117	74	191	120	77	197	95	52	147	72	43	115
30–39	42	21	63	53	20	73	72	31	103	87	29	116	79	25	105
40–49	22	8	30	26	10	36	26	8	34	38	11	49	25	8	33
50–59	9	7	16	19	6	25	13	4	17	15	5	20	18	7	25
60+	6	2	8	9	5	14	7	2	9	15	2	17	12	4	16
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	194	106	301	252	156	408	259	153	412	273	133	406	225	111	337

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.5 Number of diagnoses of newly acquired hepatitis B infection¹, 2002 – 2003, by exposure category, year and sex

Exposure category	Year of diagnosis					
	2002			2003		
	M	F	T	M	F	T
Injecting drug use	72	30	102	60	21	81
Sexual contact	46	37	83	47	26	73
<i>Homosexual contact</i>	6	2	8	15	2	17
<i>Heterosexual contact</i>	32	31	63	32	24	56
<i>Not further specified</i>	8	4	12	0	0	0
Other	20	9	29	3	0	3
Undetermined	8	5	13	21	12	33
Total	146	81	227	131	59	190

¹ Diagnoses reported through State/Territory health jurisdictions other than ACT, NSW, NT, QLD and WA.

Source: State/Territory health authorities

Table 2.1.6 Number and rate¹ diagnoses of hepatitis C infection, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis									
	1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	298	90.8	239	72.1	224	66.9	228	68.4	256	75.1
NSW	7 070	112.3	7 801	123.1	7 970	124.2	6 705	103.8	5 254	80.5
NT	187	85.8	191	90.4	212	98.8	193	91.2	216	101.3
QLD	3 056	88.4	3 309	95.0	3 076	87.5	2 815	78.3	2 746	74.4
SA	1 017	70.1	975	67.7	823	57.4	664	45.6	637	43.8
TAS	325	74.0	363	82.0	388	90.6	401	93.9	361	83.4
VIC	6 134	131.0	4 978	105.5	4 831	101.5	4 122	85.2	3 761	78.1
WA	1 081	58.2	1 631	87.3	1 400	74.2	1 181	62.0	1 268	66.1
Total	19 168	102.3	19 487	103.4	18 924	99.6	16 309	84.8	14 499	74.5

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of hepatitis C infection, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	45	40	92	46	36	85	34	13	47	33	37	74	27	18	48
5 – 14	34	25	61	23	18	42	20	15	36	12	17	29	5	12	17
15 – 19	605	595	1 208	584	616	1 206	480	557	1 041	330	433	767	270	329	604
20 – 29	3 781	2 076	5 943	3 899	2 130	6 060	3 391	2 299	5 723	2 713	1 848	4 586	2 447	1 601	4 078
30 – 39	3 998	2 200	6 274	3 938	2 181	6 147	3 662	2 097	5 784	3 241	1 832	5 096	2 762	1 607	4 400
40 – 49	2 785	1 268	4 086	3 012	1 285	4 320	3 136	1 414	4 571	2 796	1 343	4 152	2 513	1 226	3 754
50 – 59	437	248	692	551	279	834	634	293	930	651	299	955	740	315	1 061
60 +	380	360	748	377	354	737	395	341	742	317	277	605	264	251	522
Not reported	33	16	64	22	21	56	31	16	50	22	10	45	7	5	15
Total	12 098	6 828	19 168	12 452	6 920	19 487	11 783	7 045	18 924	10 115	6 096	16 309	9 035	5 364	14 499

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.8 Number of diagnoses of newly acquired hepatitis C infection, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis ¹				
	1999	2000	2001	2002	2003
ACT	20	17	18	7	12
NSW	101	157	294	153	114
NT	–	–	–	–	–
QLD	–	–	–	–	–
SA	86	92	91	44	74
TAS	18	32	18	15	13
VIC	103	66	102	87	105
WA	111	105	155	138	142
Total	439	469	678	444	460

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number of diagnoses of newly acquired hepatitis C infection, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
0 – 4	1	0	1	1	0	1	1	1	2	2	2	4	1	0	1
5 – 14	1	3	4	0	0	0	2	0	2	0	2	2	1	1	2
15 – 19	39	43	82	33	50	83	45	58	103	24	37	61	29	39	68
20 – 29	149	72	221	135	96	231	208	137	345	122	93	216	150	81	231
30 – 39	59	23	83	64	35	99	96	71	167	76	37	113	63	43	106
40 – 49	23	12	35	34	10	44	29	16	45	25	12	37	27	12	39
50 – 59	5	2	7	4	3	7	7	1	8	6	4	10	8	2	10
60 +	2	4	6	1	2	3	5	1	6	1	0	1	1	2	3
Not reported	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Total	279	159	439	272	197	469	393	285	678	256	187	444	280	180	460

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.10 Number of diagnoses of newly acquired hepatitis C infection¹, 1999 – 2003, by year and exposure category

Exposure category	1999	2000	2001	2002	2003	Total
Injecting drug use	254	188	398	268	337	1 445
Sexual transmission	4	2	3	3	7	19
Tattoos	5	5	7	3	5	25
Body piercing/acupuncture	3	0	1	1	2	7
Surgery/dental treatment	1	0	5	4	4	14
Needlestick injury	0	2	5	4	1	12
Household contact	0	0	1	1	2	4
Other	2	1	7	5	6	21
Undetermined	35	16	133	68	62	314
Total	304	214	560	357	426	1 861

1 Diagnoses reported through State/Territory health jurisdictions other than NSW, NT and QLD in 1998 – 2000 and 2003, and diagnoses reported through State/Territory health jurisdictions other than NT, QLD and WA in 2001 – 2002.

Source: State/Territory health authorities

2.2 National surveillance for viral hepatitis in Indigenous people

Table 2.2.1 Number (percent) of diagnoses of hepatitis A infection, 2003, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	0 (0.0)	5 (100.0)	5
NSW	4 (3.2)	105 (84.7)	15 (12.1)	124
NT	21 (52.5)	17 (42.5)	2 (5.0)	40
QLD	4 (8.3)	35 (72.9)	9 (18.8)	48
SA	1 (7.7)	12 (92.3)	0 (0.0)	13
TAS	0 (0.0)	0 (0.0)	14 (100.0)	14
VIC	0 (0.0)	77 (86.5)	12 (13.5)	89
WA	15 (17.6)	64 (75.3)	6 (7.1)	85
Total	45 (10.8)	310 (74.1)	63 (15.1)	418

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly acquired hepatitis B infection, 2003, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	0 (0.0)	0 (0.0)	0
NSW	3 (4.3)	43 (61.4)	24 (34.3)	70
NT	6 (40.0)	9 (60.0)	0 (0.0)	15
QLD	5 (12.5)	19 (47.5)	16 (40.0)	40
SA	1 (10.0)	9 (90.0)	0 (0.0)	10
TAS	0 (0.0)	0 (0.0)	10 (100.0)	10
VIC	1 (0.7)	131 (89.1)	15 (10.2)	147
WA	0 (0.0)	42 (93.3)	3 (6.7)	45
Total	16 (4.7)	253 (75.1)	68 (20.2)	337

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2003, by State/Territory and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	0 (0.0)	1 (0.4)	255 (99.6)	256
NSW	176 (3.3)	1 216 (23.1)	3 862 (73.5)	5 254
NT	22 (10.2)	134 (62.0)	60 (27.8)	216
QLD	105 (3.8)	743 (27.1)	1 898 (69.1)	2 746
SA	52 (8.2)	570 (89.5)	15 (2.4)	637
TAS	0 (0.0)	0 (0.0)	361 (100.0)	361
VIC	30 (0.8)	867 (23.1)	2 864 (76.1)	3 761
WA	98 (7.7)	649 (51.2)	521 (41.1)	1 268
Total	483 (3.3)	4 180 (28.8)	9 836 (67.8)	14 499

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 – 2003, by year and primary cause of liver disease

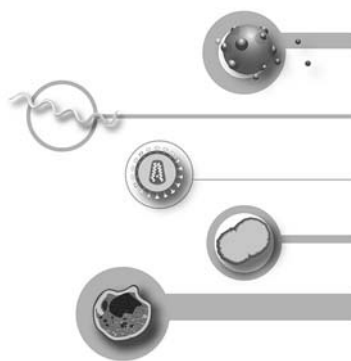
Year	hepatitis B	hepatitis C	hepatitis B and C	hepatocellular carcinoma	other ¹	Total
1985 – 1993	42 (9.5)	25 (5.6)	2 (0.4)	10 (2.3)	364 (82.2)	443
1994	6 (5.8)	15 (14.6)	–	1 (1.0)	81 (78.6)	103
1995	5 (4.8)	21 (20.2)	–	1 (1.0)	77 (74.0)	104
1996	13 (11.9)	18 (16.5)	–	2 (1.8)	76 (69.7)	109
1997	13 (10.6)	20 (16.3)	2 (1.6)	4 (3.2)	84 (68.3)	123
1998	14 (10.5)	29 (21.8)	1 (0.7)	9 (6.8)	80 (60.2)	133
1999	18 (15.3)	21 (17.8)	1 (0.8)	2 (1.7)	76 (64.4)	118
2000	21 (14.4)	32 (21.9)	–	6 (4.1)	87 (59.6)	146
2001	16 (12.8)	22 (17.6)	2 (1.6)	8 (6.4)	77 (61.6)	125
2002	13 (8.6)	37 (24.5)	3 (2.0)	10 (6.6)	88 (58.3)	151
2003 ²	15 (10.4)	39 (27.1)	3 (2.1)	8 (5.6)	79 (54.9)	144
Total	176 (10.4)	279 (16.4)	14 (0.8)	61 (3.6)	1 169 (68.8)	1 699

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

2 Data available to 31 December 2003.

Source: Australia and New Zealand Liver Transplant Register

Tables



2004

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

3 National surveillance for sexually transmissible infections

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

Table 3.1.1	Number and rate of diagnosis of chlamydia, 1999 – 2003, by State/Territory and year	60
Table 3.1.2	Number of diagnoses of chlamydia, 1999 – 2003, by age group, year and sex	60
Table 3.1.3	Number of diagnoses of donovanosis, 1999 – 2003, by State/Territory and year	60
Table 3.1.4	Number of diagnoses of donovanosis, 1999 – 2003, by age group, year and sex	61
Table 3.1.5	Number and rate of diagnosis of gonorrhoea, 1999 – 2003, by State/Territory and year	61
Table 3.1.6	Number of diagnoses of gonorrhoea, 1999 – 2003, by age group, year and sex	61
Table 3.1.7	Number and rate of diagnosis of syphilis, 1999 – 2003, by State/Territory and year	62
Table 3.1.8	Number of diagnoses of syphilis, 1999 – 2003, by age group, year and sex	62

3.2 National surveillance for sexually transmissible infections in Indigenous people

Table 3.2.1	Number and rate of diagnosis of chlamydia, 1999 – 2003, by State/Territory, Indigenous status and year	63
Table 3.2.2	Number (percent) of diagnoses of chlamydia, 2003, by State/Territory and Indigenous status	63
Table 3.2.3	Number and rate of diagnosis of gonorrhoea, 1999 – 2003, by State/Territory, Indigenous status and year	64
Table 3.2.4	Number (percent) of diagnoses of gonorrhoea, 2003, by State/Territory and Indigenous status	64
Table 3.2.5	Number and rate of diagnosis of syphilis, 1999 – 2003, by State/Territory, Indigenous status and year	65
Table 3.2.6	Number (percent) of diagnoses of syphilis, 2003, by State/Territory and Indigenous status	65

3.3 Gonococcal isolates

Table 3.3.1	Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2003 by State/Territory, sex and site, and antibiotic sensitivity by State/Territory	66
Table 3.3.2	Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1999 – 2003, by sex, site and year	66

3 National surveillance for sexually transmissible infections

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

Table 3.1.1 Number and rate¹ of diagnoses of chlamydia, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis									
	1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	177	51.9	244	71.2	301	87.7	465	134.9	523	151.3
NSW	2 461	39.8	3 560	57.2	4 393	70.4	5 658	90.3	7 556	120.5
NT	856	379.8	1 004	442.8	1 255	561.9	1 413	645.4	1 602	742.9
QLD	4 474	128.3	4 931	140.9	5 595	159.1	6 454	181.9	7 661	211.6
SA	1 008	72.6	1 000	72.7	1 455	107.3	1 802	133.5	1 990	146.8
TAS	252	58.7	331	78.0	375	89.6	472	114.9	609	146.9
VIC	2 951	64.1	3 257	70.8	4 114	89.2	4 974	107.7	6 489	140.7
WA	1 903	102.6	2 600	139.8	2 725	146.2	3 056	164.4	3 763	198.8
Total	14 082	76.1	16 927	91.3	20 213	108.9	24 294	130.7	30 193	160.7

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, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	27	41	68	29	40	69	15	27	42	15	14	29	41	48	89
5 – 14	28	153	181	18	180	199	24	189	213	34	227	262	45	276	321
15 – 19	685	2 469	3 159	867	2 989	3 860	1 005	3 705	4 718	1 197	4 353	5 557	1 594	5 629	7 237
20 – 29	2 949	4 573	7 532	3 568	5 296	8 876	4 365	6 343	10 722	5 273	7 703	12 983	6 735	9 421	16 197
30 – 39	1 246	990	2 237	1 539	1 175	2 716	1 759	1 429	3 189	2 226	1 603	3 834	2 474	1 962	4 450
40 – 49	394	230	625	554	322	879	593	332	926	730	412	1 144	868	459	1 334
50 – 59	142	51	193	155	63	218	211	75	287	272	77	351	312	107	421
60 +	44	19	63	59	18	78	56	16	72	73	24	97	78	25	103
Not reported	8	14	24	15	15	32	22	18	44	20	17	37	21	18	41
Total	5 523	8 540	14 082	6 804	10 098	16 927	8 050	12 134	20 213	9 840	14 430	24 294	12 168	17 945	30 193

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, 1999 – 2003, by State/Territory¹ and year

State/Territory	Year of diagnosis				
	1999	2000	2001	2002	2003
NT	6	7	13	9	6
QLD	5	12	10	5	9
WA	7	3	10	2	1
Total	18	22	33	16	16

¹ State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 – 14	0	0	0	0	2	2	0	1	1	0	0	0	0	0	0
15 – 19	1	2	3	0	1	1	0	5	5	4	1	5	0	3	3
20 – 29	0	6	6	3	5	8	3	8	11	1	2	3	1	2	3
30 – 39	0	1	1	1	5	6	3	5	8	1	4	5	3	2	5
40 – 49	1	4	5	3	0	3	1	4	5	0	2	2	1	2	3
50+	0	3	3	0	2	2	2	1	3	1	0	1	1	1	2
NR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	16	18	7	15	22	9	24	33	7	9	16	6	10	16

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate¹ of diagnoses of gonorrhoea, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis											
	1999		2000		2001		2002		2003			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
ACT	20	6.2	14	4.4	20	5.9	15	4.4	30	8.6		
NSW	1 287	20.6	1 082	17.2	1 319	20.8	1 468	22.9	1 194	18.7		
NT	1 140	513.7	1 195	526.7	1 442	649.5	1 482	680.0	1 399	651.5		
QLD	1 183	33.9	1 140	32.5	1 102	31.2	933	26.1	1 042	28.4		
SA	230	16.3	266	18.9	218	15.8	209	15.0	297	21.0		
TAS	19	4.4	17	3.9	21	5.1	14	3.4	23	5.4		
VIC	710	15.2	840	17.8	770	16.3	820	17.2	1 172	24.7		
WA	998	53.8	1 347	72.2	1 346	71.9	1 367	72.9	1 454	76.1		
Total	5 587	30.0	5 901	31.5	6 238	33.2	6 308	33.4	6 611	34.6		

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, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	12	20	33	7	11	18	6	12	18	2	12	14	6	9	15
5 – 14	30	91	121	18	113	131	26	91	117	32	129	161	42	120	162
15 – 19	490	558	1 049	508	651	1 159	511	688	1 202	484	638	1 124	592	729	1 322
20 – 29	1 483	721	2 208	1 540	743	2 285	1 631	807	2 440	1 614	758	2 377	1 709	808	2 520
30 – 39	1 162	276	1 447	1 198	278	1 476	1 289	308	1 599	1 358	351	1 709	1 283	264	1 550
40 – 49	431	71	504	464	80	544	494	80	575	553	85	639	612	90	704
50 – 59	139	18	159	167	29	197	194	24	218	177	31	208	233	26	259
60 +	43	3	46	49	8	57	47	9	56	50	6	56	65	3	68
Not reported	14	6	20	23	11	34	9	3	13	7	12	20	9	2	11
Total	3 804	1 764	5 587	3 974	1 924	5 901	4 207	2 022	6 238	4 277	2 022	6 308	4 551	2 051	6 611

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate¹ of diagnoses of syphilis, 1999 – 2003, by State/Territory and year

State/Territory	Year of diagnosis									
	1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	10	3.1	13	4.1	11	3.5	12	3.7	12	4.0
NSW	537	8.3	571	8.7	520	7.8	640	9.5	827	12.2
NT	328	167.3	270	130.9	447	210.5	402	189.0	324	157.9
QLD	798	22.8	821	23.1	277	7.8	340	9.3	376	10.1
SA	20	1.4	15	1.1	25	1.8	32	2.3	21	1.5
TAS	8	1.6	9	1.7	15	3.2	15	3.3	14	3.0
VIC	2	0.0	8	0.2	17	0.4	27	0.6	58	1.2
WA	121	6.5	134	7.1	207	10.9	200	10.5	136	6.9
Total	1 824	9.6	1 841	9.6	1 519	7.8	1 668	8.6	1 768	8.9

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

Source: National Notifiable Diseases Surveillance System

Table 3.1.8 Number of diagnoses of syphilis, 1999 – 2003, by age group, year and sex

Age group (years)	Year of diagnosis														
	1999			2000			2001			2002			2003		
	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹	M	F	T ¹
0 – 4	7	7	14	4	1	5	8	10	19	8	5	14	5	7	12
5 – 14	7	12	19	7	15	22	5	10	15	8	18	26	1	8	9
15 – 19	75	101	177	71	85	156	91	115	206	70	116	186	73	108	181
20 – 29	230	295	525	175	275	450	205	188	393	199	213	414	190	198	388
30 – 39	216	196	417	209	204	413	188	138	326	238	148	389	315	135	450
40 – 49	180	92	272	176	108	285	125	59	187	176	72	250	251	73	324
50 – 59	113	47	161	170	50	220	108	43	151	137	38	175	150	35	185
60 +	135	92	230	192	91	283	144	62	208	133	78	212	147	71	219
Not reported	4	5	9	3	3	7	6	7	14	1	1	2	0	0	0
Total	967	847	1 824	1 007	832	1 841	880	633	1 519	970	689	1 668	1 132	635	1 768

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

Source: National Notifiable Diseases Surveillance System

3.2 National surveillance for sexually transmissible infections in Indigenous people

Table 3.2.1 Number and rate¹ of diagnosis of chlamydia, 1999 – 2003, by State/Territory², Indigenous status and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1999	Number	527	329	134	874	507	1 396	1 168	2 599
	Rate	862	208	522	65	768	79	761	80
2000	Number	665	339	167	833	666	1 934	1 498	3 106
	Rate	1 100	214	659	63	999	110	979	95
2001	Number	808	447	136	1 319	709	2 016	1 653	3 782
	Rate	1 322	282	516	101	1 050	114	1 065	116
2002	Number	869	544	165	1 637	648	2 408	1 682	4 589
	Rate	1 411	357	625	125	963	136	1 081	141
2003	Number	1 042	560	162	1 828	845	2 918	2 049	5 306
	Rate	1 727	376	610	139	1 241	161	1 323	161

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

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.2 Number (percent) of diagnoses of chlamydia, 2003, by State/Territory¹ and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	519 (99.2)	523
NSW	–	–	6 517 (86.2)	7 556
NT	1 042 (65.0)	419 (26.2)	141 (8.8)	1 602
QLD	–	–	5 078 (66.3)	7 661
SA	162 (8.1)	1 776 (89.2)	52 (2.6)	1 990
TAS	–	–	607 (99.7)	609
VIC	38 (0.6)	3 910 (60.3)	2 541 (39.1)	6 489
WA	845 (22.5)	1 223 (32.5)	1 695 (45.0)	3 763
Total	2 087 (6.9)	7 328 (24.3)	17 150 (56.8)	30 193

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.3 Number and rate¹ of diagnosis of gonorrhoea, 1999 – 2003, by State/Territory², Indigenous status and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1999	Number	914	226	147	83	704	294	1 765	603
	Rate	1 557	142	589	6	1 088	17	1 184	18
2000	Number	1 005	190	174	92	831	516	2 010	798
	Rate	1 631	116	688	7	1 289	29	1 321	24
2001	Number	1 161	281	117	101	1 044	302	2 322	684
	Rate	1 969	171	463	7	1 619	17	1 556	20
2002	Number	1 146	336	96	113	859	508	2 101	957
	Rate	1 919	217	399	8	1 347	28	1 408	29
2003	Number	1 170	229	95	202	886	568	2 151	999
	Rate	1 909	150	386	14	1 344	31	1 403	29

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

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.4 Number (percent) of diagnoses of gonorrhoea, 2003, by State/Territory¹ and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	29 (96.7)	30
NSW	–	–	1 116 (93.5)	1 194
NT	1 170 (83.6)	126 (9.0)	103 (7.4)	1 399
QLD	387 (37.1)	147 (14.1)	508 (48.8)	1 042
SA	95 (32.0)	202 (68.0)	0 (0.0)	297
TAS	–	–	22 (95.7)	23
VIC	6 (0.5)	927 (79.1)	239 (20.4)	1 172
WA	886 (60.9)	319 (21.9)	249 (17.1)	1 454
Total	2 544 (38.5)	1 721 (26.0)	2 266 (34.3)	6 611

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

Source: National Notifiable Diseases Surveillance System

Table 3.2.5 Number and rate¹ of diagnosis of syphilis, 1999 – 2003, by State/Territory², Indigenous status and year

Year		NT		SA		WA		Total	
		Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³	Indigenous	Non-Indigenous ³
1999	Number	297	31	13	7	47	74	357	112
	Rate	661	20	45	1	87	4	305	3
2000	Number	231	39	13	2	73	61	317	102
	Rate	458	25	50	0.2	139	3	249	3
2001	Number	391	56	24	1	122	85	537	142
	Rate	764	38	89	0.1	276	5	435	4
2002	Number	341	61	27	5	132	68	500	134
	Rate	647	39	111	0.3	264	4	388	4
2003	Number	289	35	12	9	80	56	381	100
	Rate	541	24	45	1	188	3	303	3

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

2 State/Territory health jurisdictions in which Indigenous status was reported for more than 50% of diagnoses in each year.

3 Includes diagnoses in people whose Indigenous status was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.2.6 Number (percent) of diagnoses of syphilis, 2003, by State/Territory¹ and Indigenous status

State/Territory	Indigenous status			Total
	Indigenous	Non-Indigenous	Not reported	
ACT	–	–	12(100.0)	12
NSW	78 (9.4)	488 (59.0)	261 (31.6)	827
NT	289 (89.2)	25 (7.7)	10 (3.1)	324
QLD	209 (55.6)	134 (35.6)	33 (8.8)	376
SA	12 (57.1)	8 (38.1)	1 (4.8)	21
TAS	–	–	14(100.0)	14
VIC	1 (1.7)	55 (94.8)	2 (3.4)	58
WA	80 (58.8)	37 (27.2)	19 (14.0)	136
Total	669 (37.8)	747 (42.3)	352 (19.9)	1 768

1 Data not shown for State/Territory health jurisdictions in which Indigenous status was not reported for more than 50% of diagnoses.

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 2003 by State/Territory, sex and site and antibiotic sensitivity

Sex and Site	State/Territory						Total ¹
	NSW ²	NT ²	QLD	SA	VIC	WA	
Males							
Urethra	720	294	437	131	614	246	2 449
Rectal	181	2	35	53	152	15	440
Pharynx	101	0	12	28	94	5	240
Other/not specified	44	13	13	3	8	4	85
Total	1 046	309	497	215	868	270	3 214
Females							
Cervix	53	188	128	7	47	69	495
Other/not specified	14	17	12	5	5	4	57
Total	67	205	140	12	52	73	552
Antibiotic sensitivity (%)							
PPNG	7.0	2.3	9.1	10.6	8.3	18.2	8.3
RR	11.8	0.8	1.5	4.8	16.1	8.9	9.0
LS	75.7	94.8	85.3	68.3	73.7	71.4	78.4
FS	5.5	2.1	4.3	16.3	1.9	1.5	4.3
Total¹	1 116	517	637	227	920	343	3 772

1 Total includes gonococcal isolates from ACT (3) and TAS (9).

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

PPNG penicillinase producing *N. gonorrhoeae*, RR relatively resistant, LS less sensitive, FS fully sensitive

Source: Australian Gonococcal Surveillance Programme

Table 3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1999 – 2003, by sex, site and year

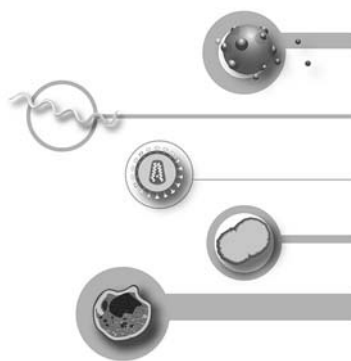
Sex and Site	Year of diagnosis				
	1999	2000	2001	2002 ¹	2003 ²
Males					
Urethra	1 133	892	1 040	1 061	720
Rectal	195	182	206	270	181
Pharynx	80	91	126	145	101
Other/not specified	6	22	34	39	44
Total	1 414	1 187	1 406	1 515	1 046
Females					
Cervix	103	57	87	84	53
Rectal	4	2	1	3	2
Pharynx	4	5	4	7	8
Other/not specified	3	4	7	5	4
Total	114	68	99	99	67
Total	1 528	1 255	1 505	1 625	1 116

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

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

Source: Australian Gonococcal Surveillance Programme

Tables



2004

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

4	HIV, viral hepatitis and sexually transmissible infections in selected populations	
4.1	HIV incidence, hepatitis C prevalence and incidence of syphilis among homosexually active men	
Table 4.1.1	Number of homosexually active men enrolled in the Health in Men (HIM) cohort study, 2001 – 2003, number (incidence) with newly acquired HIV infection, prevalence of hepatitis C antibody and number (incidence) with newly acquired syphilis, by year	69
4.2	HIV and hepatitis C seroprevalence among people who have injected drugs	
Table 4.2.1	Number of participating needle and syringe programs (NSP), 1999 – 2003, number of injecting drug users tested for HIV or hepatitis C antibody (percent of clients seen) and number (percent) with HIV or hepatitis C antibody by year, State/Territory and sex	70
Table 4.2.2	Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1999 – 2003, and percent with HIV or hepatitis C antibody by year, age group, history of injecting drug use, type of drug last injected among those reporting less than 3 years of drug injection, and sex	72
Table 4.2.3	Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1999 – 2003, and percent with HIV or hepatitis C antibody by year, sexual orientation, sex work last month, region of birth (2000 – 2003), main language spoken at home by parents (2003) and sex	75
4.3	Incidence of hepatitis C infection among people who have injected drugs	
Table 4.3.1	Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1999 – 2003	78
4.4	HIV infection among entrants into Australian prisons	
Table 4.4.1	Number of receptions into Australian prisons, 1999 – 2003, proportion tested for HIV antibody at reception and number (percent) with diagnosed HIV infection by year and Corrections jurisdiction of reception	79
4.5	HIV and hepatitis C seroprevalence among people seen at sexual health clinics	
Table 4.5.1	Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, 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	80
Table 4.5.2	Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, HIV exposure category and year	82
Table 4.5.3	Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, age group and year	84
Table 4.5.4	Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and clinic	86
Table 4.5.5	Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and exposure category	87
Table 4.5.6	Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by year, sex and age group	88

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

Table 4.6.1	Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody, 1985 – 2003, by State/Territory and year of donation	89
Table 4.6.2	Number of blood donors in Australia with HIV antibody, 1985 – 2003, by HIV exposure category and sex, and number of new HIV infections in blood donors with a previous donation negative for HIV antibody by year of donation	90
Table 4.6.3	Number of donations tested for hepatitis B surface antigen at blood services, 1999 – 2003, number of donations positive for hepatitis B surface antigen and prevalence of hepatitis B surface antigen, by State/Territory and year of donation	91
Table 4.6.4	Number of donations tested for hepatitis C antibody at blood services, 1999 – 2003, number of donations positive for hepatitis C antibody and prevalence of hepatitis C antibody, by State/Territory and year of donation	92

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

4.1 HIV incidence, hepatitis C prevalence and incidence of syphilis among homosexually active men

Table 4.1.1 Number of homosexually active men enrolled in the Health in Men (HIM) cohort study, 2001 – 2003, number (incidence) with newly acquired HIV infection, prevalence of hepatitis C antibody and number (incidence) with newly acquired syphilis, by year

Characteristic	Year		
	2001	2002	2003
Sample size			
Newly enrolled	450	453	430
HIV			
Number with newly acquired HIV infection	0	8	3
Person years at risk	106.35	637.23	409.33
HIV incidence (per 100 person years)	0	1.26	0.73
Hepatitis C			
Number tested for hepatitis C antibody	–	–	824
Number with hepatitis C antibody	–	–	7
Hepatitis C antibody prevalence (%)	–	–	0.9
Syphilis			
Number with newly acquired syphilis	0	7	2
Person years at risk	105.84	634.81	407.60
Syphilis incidence (per 100 person years)	0	1.10	0.49

Source: National Centre in HIV Epidemiology and Clinical Research

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

Table 4.2.1 Number of participating needle and syringe programs (NSP), 1999 – 2003, number of injecting drug users tested for HIV or hepatitis C antibody (percent of clients seen) and number (percent) with HIV or hepatitis C antibody by year, State/Territory and sex

1999

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	48 (39)	42 (86)	90 (53)	0 (0.0)	1 (2.4)	1 (1.1)	30 (63)	24 (57)	54 (60)
NSW	14	536 (38)	312 (49)	853 (41)	8 (1.5)	1 (0.3)	9 (1.1)	321 (60)	198 (63)	523 (61)
NT	1	64 (59)	15 (45)	79 (55)	3 (4.7)	0 (0.0)	3 (3.8)	36 (56)	3 (20)	39 (49)
QLD	6	531 (47)	268 (58)	804 (51)	11 (2.1)	2 (0.8)	13 (1.6)	191 (36)	115 (43)	307 (38)
SA	6	142 (67)	96 (83)	238 (70)	2 (1.4)	4 (4.2)	6 (2.5)	61 (43)	37 (39)	98 (41)
TAS	1	18 (30)	6 (35)	24 (28)	0 (0.0)	0 (0.0)	0 (0.0)	7 (39)	4 (67)	11 (46)
VIC	3	135 (23)	69 (36)	205 (26)	2 (1.5)	0 (0.0)	2 (1.0)	81 (60)	40 (58)	122 (60)
WA	2	53 (40)	32 (51)	85 (43)	0 (0.0)	0 (0.0)	0 (0.0)	28 (53)	15 (47)	43 (51)
Total	34	1 527 (42)	840 (55)	2 378 (45)	26 (1.7)	8 (1.0)	34 (1.4)	755 (49)	436 (52)	1 197 (50)

2000

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	120 (57)	42 (52)	162 (55)	0 (0.0)	0 (0.0)	0 (0.0)	65 (54)	27 (64)	92 (57)
NSW	13	535 (42)	325 (45)	865 (43)	11 (2.1)	0 (0.0)	11 (1.3)	347 (65)	223 (69)	574 (66)
NT	2	70 (64)	19 (67)	90 (65)	1 (1.4)	0 (0.0)	1 (1.1)	32 (46)	6 (32)	38 (42)
QLD	6	464 (56)	250 (58)	720 (57)	7 (1.5)	0 (0.0)	8 (1.1)	170 (37)	109 (44)	282 (39)
SA	7	200 (62)	92 (66)	294 (64)	0 (0.0)	0 (0.0)	0 (0.0)	96 (48)	42 (46)	138 (47)
TAS	1	17 (24)	8 (47)	25 (27)	1 (5.9)	0 (0.0)	1 (4.0)	9 (53)	1 (13)	10 (40)
VIC	3	177 (33)	115 (78)	293 (43)	1 (0.6)	0 (0.0)	1 (0.3)	114 (64)	68 (59)	183 (62)
WA	2	56 (72)	19 (62)	75 (68)	0 (0.0)	0 (0.0)	0 (0.0)	26 (46)	5 (26)	31 (41)
Total	35	1 639 (48)	870 (55)	2 524 (50)	21 (1.3)	0 (0.0)	22 (0.9)	859 (52)	481 (55)	1 348 (53)

2001

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	33 (42)	8(34)	41 (40)	0 (0.0)	0 (0.0)	0 (0.0)	20 (61)	5 (63)	25 (61)
NSW	14	406 (39)	241 (51)	656 (40)	6 (1.5)	0 (0.0)	6 (0.9)	284 (70)	180 (75)	470 (72)
NT	2	60 (59)	18 (60)	79 (57)	0 (0.0)	0 (0.0)	0 (0.0)	36 (60)	8 (44)	45 (57)
QLD ³	6	550 (46)	240 (59)	798 (50)	8 (1.5)	0 (0.0)	8 (1.0)	237 (43)	118 (49)	359 (45)
SA	7	173 (55)	99 (69)	274 (60)	3 (1.7)	1 (1.0)	4 (1.5)	88 (51)	51 (52)	141 (51)
TAS	1	21 (29)	6 (27)	27 (27)	1 (4.8)	0 (0.0)	1 (3.7)	8 (38)	2 (33)	10 (37)
VIC	4	214 (35)	117 (46)	333 (39)	2 (0.9)	0 (0.0)	2 (0.6)	146 (68)	85 (73)	231 (69)
WA	3	83 (55)	49 (64)	134 (57)	0 (0.0)	0 (0.0)	0 (0.0)	48 (58)	23 (47)	73 (54)
Total	38	1 540 (44)	778 (52)	2 342 (46)	20 (1.3)	1 (0.1)	21 (0.9)	867 (56)	472 (61)	1 354 (58)

2002

State/ Territory	Number of NSP	Number of clients tested (% of clients seen) ¹			Number (%) with HIV antibody			Number (%) with hepatitis C antibody		
		Male	Female	Total ²	Male	Female	Total ²	Male	Female	Total ²
ACT	1	40 (27)	21 (36)	61 (29)	0 (0.0)	0 (0.0)	0 (0.0)	30 (75)	18 (86)	48 (79)
NSW	18	470 (39)	261 (45)	739 (37)	13 (2.8)	1 (0.4)	15 (2.0)	333 (71)	181 (69)	521 (71)
NT	1	35 (49)	11 (31)	47 (42)	0 (0.0)	0 (0.0)	0 (0.0)	24 (69)	5 (45)	29 (62)
QLD	9	478 (48)	198 (50)	682 (48)	10 (2.1)	2 (1.0)	13 (1.9)	230 (48)	93 (47)	328 (48)
SA	6	192 (45)	115 (55)	309 (49)	1 (0.5)	1 (0.9)	2 (0.7)	90 (47)	43 (37)	133 (43)
TAS	4	96 (57)	50 (69)	148 (58)	0 (0.0)	0 (0.0)	0 (0.0)	47 (49)	18 (36)	66 (45)
VIC	4	151 (18)	91 (40)	244 (23)	1 (0.7)	0 (0.0)	1 (0.4)	84 (56)	57 (63)	143 (59)
WA	3	87 (100)	36 (100)	123 (99)	0 (0.0)	0 (0.0)	0 (0.0)	34 (39)	19 (53)	53 (43)
Total	46	1 549 (39)	783 (49)	2 353 (42)	25 (1.6)	4 (0.5)	31 (1.3)	872 (56)	434 (55)	1 321 (56)

2003

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

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 Additional sites surveyed in Queensland in 2001 were not included to facilitate comparison with previous years.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.2 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1999 – 2003, and percent with HIV or hepatitis C antibody by year, age group, history of injecting drug use, type of drug last injected among those reporting less than three years of drug injection, and sex

1999									
	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	130	114	244	0.8	0.9	0.8	19	39	28
20 to 24 years	324	201	527	0.3	0.5	0.4	30	29	29
25 to 29 years	380	192	575	0.3	0.5	0.3	38	45	40
30 to 34 years	285	139	425	3.9	2.2	3.3	58	70	62
35+ years	406	193	601	3.0	1.0	2.3	80	77	79
Not reported	2	1	6	0.0	0.0	0.0	–	–	50
<i>History of injecting drug use</i>									
Less than 3 years	238	154	392	0.8	0.7	0.8	16	27	20
3 to 5 years	297	178	476	0.7	2.3	1.3	29	33	30
6 to 10 years	360	211	575	1.4	0.0	0.9	43	48	45
10 or more years	591	280	873	2.7	1.1	2.2	78	80	78
Not reported	41	17	62	2.4	0.0	1.6	49	59	52
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	110	57	167	1.8	1.8	1.8	4	9	5
Heroin/opiates	89	88	177	0.0	0.0	0.0	31	38	34
Combination	15	5	20	0.0	0.0	0.0	33	40	35
Other/not reported	24	4	28	0.0	0.0	0.0	0	50	7
Total	238	154	392	0.9	0.7	0.8	16	27	20
2000									
	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	111	111	222	0.0	0.0	0.0	24	44	34
20 to 24 years	330	235	569	0.3	0.0	0.2	34	46	39
25 to 29 years	390	190	581	1.5	0.0	1.0	43	48	45
30 to 34 years	298	143	445	2.0	0.0	1.4	56	72	61
35+ years	509	191	705	1.6	0.0	1.3	75	68	73
Not reported	1	0	2	0.0	–	0.0	0	–	0
<i>History of injecting drug use</i>									
Less than 3 years	208	128	336	1.9	0.0	1.2	25	28	26
3 to 5 years	303	214	519	1.3	0.0	0.8	33	48	39
6 to 10 years	400	235	639	0.5	0.0	0.3	47	54	50
10 or more years	691	276	971	1.6	0.0	1.2	73	74	73
Not reported	37	17	59	0.0	0.0	0.0	40	61	47
Total	1 639	870	2 524	1.3	0.0	0.9	52	55	53
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	68	39	107	1.5	0.0	1.0	12	8	10
Heroin/opiates	101	73	174	3.0	0.0	1.7	35	34	34
Combination	20	11	31	0.0	0.0	0.0	40	64	48
Other/not reported	19	5	24	0.0	0.0	0.0	10	20	13
Total	208	128	336	1.9	0.0	1.2	25	28	26

2001

	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	92	74	168	0.0	0.0	0.0	40	39	39
20 to 24 years	289	191	484	0.0	0.0	0.0	36	51	41
25 to 29 years	362	160	525	0.6	0.0	0.4	45	54	48
30 to 34 years	266	147	415	2.6	0.0	1.7	58	67	61
35+ years	529	205	746	2.1	0.5	1.6	77	78	77
Not reported	2	1	4	0.0	0.0	0.0	50	100	75
<i>History of injecting drug use</i>									
Less than 3 years	169	110	282	1.8	0.0	1.1	23	35	28
3 to 5 years	258	151	412	1.6	0.0	1.0	38	51	42
6 to 10 years	383	223	607	1.0	0.0	0.7	49	63	54
10 or more years	683	277	972	1.2	0.0	0.9	77	76	77
Not reported	47	17	69	2.1	0.0	1.5	43	35	42
Total	1 540	778	2 342	1.3	0.1	0.9	56	61	58
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	86	59	146	3.5	0.0	2.1	14	27	19
Heroin/opiates	40	37	78	0.0	0.0	0.0	43	41	41
Combination	10	4	14	0.0	0.0	0.0	30	50	36
Other/not reported	33	10	44	0.0	0.0	0.0	21	60	30
Total	169	110	282	1.8	0.0	1.1	23	35	28

2002

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total ¹	Male	Female	Total ¹
<i>Age group</i>									
Less than 20 years	72	67	140	0.0	0.0	0.0	32	45	38
20 to 24 years	271	179	452	0.0	0.6	0.2	45	47	46
25 to 29 years	369	176	547	1.9	0.6	1.5	47	48	48
30 to 34 years	298	145	447	2.7	0.0	2.0	59	57	59
35+ years	535	215	762	1.9	0.9	1.7	70	70	70
Not reported	4	1	5	0.0	0.0	0.0	50	0	40
<i>History of injecting drug use</i>									
Less than 3 years	149	74	226	1.3	0.0	0.9	38	38	38
3 to 5 years	220	151	375	0.9	1.3	1.1	46	43	45
6 to 10 years	389	218	610	0.8	0.0	0.7	47	55	50
10 or more years	750	315	1 073	2.3	0.6	1.9	69	67	69
Not reported	41	25	69	2.4	0.0	1.5	41	44	43
Total	1 549	783	2 353	1.6	0.5	1.3	56	55	56
<i>Last drug injected among those reporting less than 3 years of drug injection</i>									
Amphetamines	65	36	101	1.5	0.0	1.0	37	33	36
Heroin/opiates	46	29	76	0.0	0.0	0.0	39	45	41
Combination	11	5	17	9.1	0.0	5.9	45	20	41
Other/not reported	27	4	32	0.0	0.0	0.0	33	50	34
Total	149	74	226	1.3	0.0	0.9	38	38	38

2003

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

¹ Totals include people whose sex was reported as transgender, people whose sex was not reported, and people tested for HIV or HCV antibody.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.2.3 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1999 – 2003, and percent with HIV or hepatitis C antibody by year, sexual orientation, sex work last month, region of birth (2000 – 2003), main language spoken at home by parents (2003), and sex

1999

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 242	553	1 795	0.8	1.3	1.0	51	51	51
Bisexual	104	187	297	1.9	0.5	1.0	41	55	51
Homosexual	70	52	124	17.1	0.0	9.7	34	38	35
Not reported	111	48	162	1.8	0.0	1.2	52	60	54
<i>Sex work last month</i>									
No	1 435	664	2 104	1.5	0.9	1.3	49	50	50
Yes	55	152	211	3.6	1.3	1.9	44	59	55
Not reported	37	24	63	5.4	0.0	3.2	59	54	57
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50

2000

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 374	557	1 934	0.5	0.0	0.4	54	57	55
Bisexual	77	196	275	2.6	0.0	0.7	49	56	54
Homosexual	84	71	160	14.3	0.0	8.1	36	45	41
Not reported	104	46	155	0.0	0.0	0.0	45	50	47
<i>Sex work last month</i>									
No	1 519	676	2 199	1.3	0.0	0.9	53	52	53
Yes	69	174	249	1.5	0.0	0.4	59	67	65
Not reported	51	20	76	2.0	0.0	1.3	35	55	42
<i>Country/region of birth</i>									
Australia	1 143	633	1 787	1.3	0.0	0.9	52	56	53
Overseas born	241	123	365	1.2	0.0	0.8	57	61	58
<i>Other Oceania</i>	59	36	95	0.0	0.0	0.0	59	44	54
<i>Asia</i>	53	27	80	1.9	0.0	1.3	58	70	63
<i>United Kingdom and Ireland</i>	73	32	105	2.7	0.0	1.9	55	65	58
<i>Other</i>	56	28	85	0.0	0.0	0.0	55	68	59
Not reported	255	114	372	1.2	0.0	0.8	51	46	49
Total	1 639	870	2 524	1.3	0.0	0.9	52	55	53

2001

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 268	529	1 808	0.4	0.2	0.3	57	60	58
Bisexual	69	154	227	2.9	0.0	0.9	58	62	62
Homosexual	80	47	129	16.3	0.0	10.1	49	66	56
Not reported	123	48	178	0.0	0.0	0.0	50	58	52
<i>Sex work last month</i>									
No	1 419	608	2 039	1.3	0.2	0.9	56	58	57
Yes	61	141	212	3.3	0.0	0.9	61	75	70
Not reported	60	29	91	0.0	0.0	0.0	50	55	53
<i>Country/region of birth</i>									
Australia	1 152	577	1 742	1.3	0.2	0.9	54	59	56
Overseas born	245	119	365	0.0	0.0	0.0	67	64	66
<i>Other Oceania</i>	65	27	93	0.0	0.0	0.0	55	56	56
<i>Asia</i>	64	22	86	0.0	0.0	0.0	80	82	80
<i>United Kingdom and Ireland</i>	54	42	96	0.0	0.0	0.0	63	57	60
<i>Other</i>	62	28	90	0.0	0.0	0.0	68	68	68
Not reported	143	82	235	3.5	0.0	2.1	61	65	63
Total	1 540	778	2 342	1.3	0.1	0.9	56	61	58

2002

	Number tested			Percent with HIV antibody			Percent with hepatitis C antibody		
	Male	Female	Total ¹	Male	Female	Total	Male	Female	Total
<i>Sexual orientation</i>									
Heterosexual	1 267	524	1 797	0.6	0.6	0.6	58	56	57
Bisexual	71	171	248	2.8	0.6	1.6	54	56	56
Homosexual	58	32	92	24.1	0.0	16.3	38	53	45
Not reported	153	56	216	1.3	0.0	0.9	52	54	51
<i>Sex work last month</i>									
No	1 442	633	2 090	1.7	0.6	1.4	57	54	56
Yes	59	131	194	1.7	0.0	1.0	51	64	60
Not reported	48	19	69	0.0	0.0	0.0	54	53	54
<i>Country/region of birth</i>									
Australia	1 223	635	1 874	2.0	0.6	1.6	55	55	55
Overseas born	273	117	395	0.0	0.0	0.0	64	57	62
<i>Other Oceania</i>	40	30	70	0.0	0.0	0.0	55	57	56
<i>Asia</i>	94	15	110	0.0	0.0	0.0	73	73	74
<i>United Kingdom and Ireland</i>	75	38	115	0.0	0.0	0.0	61	61	61
<i>Other</i>	64	34	100	0.0	0.0	0.0	58	47	55
Not reported	53	31	84	1.9	0.0	1.2	58	58	58
Total	1 549	783	2 353	1.6	0.5	1.3	56	55	56

2003

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

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

Source: Collaboration of Australian Needle and Syringe Programs

4.3 Incidence of hepatitis C infection among injecting drug users

Table 4.3.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1999 – 2003

Year/Age group	Person years at risk	Number newly diagnosed	Incidence per 100 person years
1999			
less than 20 years	12.8	2	15.6
20 – 29 years	68.6	10	14.6
30+ years	25.5	3	11.8
Total	106.9	15	14.0
2000			
less than 20 years	8.1	2	24.7
20 – 29 years	52.0	12	23.1
30+ years	24.5	2	8.2
Total	84.6	16	18.9
2001			
less than 20 years	6.9	4	58.0
20 – 29 years	38.2	7	18.3
30+ years	21.7	2	9.2
Total	66.8	13	19.5
2002			
less than 20 years	3.6	3	83.3
20 – 29 years	29.6	6	20.3
30+ years	15.4	0	0
Total	48.6	9	18.5
2003			
less than 20 years	2.7	2	74.1
20 – 29 years	16.6	2	12.0
30+ years	9.7	2	20.6
Total	29.0	6	20.7

Source: Kirketon Road Centre

4.4 National monitoring of HIV infection among entrants into Australian prisons

Table 4.4.1 Number of receptions into Australian prisons, 1999 – 2003, proportion tested for HIV antibody at reception and number (%) with diagnosed HIV infection by year and Corrections jurisdiction of reception

Year of reception	State/Territory Corrections jurisdiction								Total
	ACT ¹	NSW	NT	QLD	SA	TAS	VIC ²	WA	
1999									
Number of receptions	254	15 206	2 587	10 975	4 016	2 233	1 994	5 958	43 223
Number (%) male	223 (88)	13 504 (89)	2 287 (88)	9 778 (89)	3 544 (88)	2 084 (93)	1 994 (100)	5 105 (86)	38 519 (89)
Tested for HIV antibody (%)	5.5	28.9	100.0	100.0	28.5	58.1	68.5	55.5	58.0
% males tested	6.3	30.3	100.0	100.0	30.5	55.8	72.0	57.0	59.2
Number (%) with HIV	0 (0.0)	38 (0.9)	4 (0.2)	16 (0.1)	3 (0.3)	0 (0.0)	7 (0.5)	0 (0.0)	68 (0.3)
Number (%) male	0 (0.0)	36 (0.9)	4 (0.2)	16 (0.2)	2 (0.2)	0 (0.0)	7 (0.5)	0 (0.0)	65 (0.3)
2000									
Number of receptions	137	11 087	2 067	9 148	3 446	1 403	–	6 555	33 843
Number (%) male	125 (91)	9 978 (90)	1 921 (93)	8 088 (88)	3 098 (90)	1 333 (95)	–	5 659 (86)	30 202 (89)
Tested for HIV antibody (%)	15.3	34.9	97.4	100.0	26.1	42.2	–	47.7	58.1
% males tested	16.8	36.1	96.8	100.0	27.4	42.2	–	48.3	58.1
Number (%) with HIV	0 (0.0)	5 (0.1)	2 (0.1)	7 (0.1)	2 (0.2)	0 (0.0)	–	1 (0.0)	17 (0.1)
Number (%) male	0 (0.0)	4 (0.1)	2 (0.1)	6 (0.1)	2 (0.2)	0 (0.0)	–	1 (0.0)	15 (0.1)
2001									
Number of receptions	–	11 767	2 063	8 880	3 563	1 272	–	6 577	34 122
Number (%) male	–	10 443 (89)	1 917 (93)	8 099 (91)	3 190 (90)	1 144 (90)	–	5 770 (88)	30 563 (90)
Tested for HIV antibody (%)	–	35.6	100.0	100.0	24.0	48.6	–	46.2	57.6
% males tested	–	35.6	100.0	100.0	25.1	49.6	–	46.8	58.2
Number (%) with HIV	–	9 (0.2)	1 (0.05)	3 (0.03)	5 (0.6)	0 (0.0)	–	2 (0.07)	20 (0.1)
Number (%) male	–	7 (0.2)	1 (0.05)	3 (0.04)	5 (0.6)	0 (0.0)	–	2 (0.07)	18 (0.1)
2002									
Number of receptions	108	11 433	1 751	11 108	2 643	1 520	–	6 207	34 770
Number (%) male	99 (92)	10 115 (88)	1 655 (95)	9 701 (87)	2 579 (98)	1 343 (88)	–	5 328 (86)	30 820 (89)
Tested for HIV antibody (%)	25.9	35.6	100.0	100.0	24.8	30.6	–	40.9	59.3
% males tested	28.3	36.2	100.0	100.0	23.4	32.2	–	42.4	59.5
Number (%) with HIV	0 (0.0)	4 (0.1)	2 (0.1)	7 (0.06)	3 (0.5)	1 (0.2)	–	4 (0.2)	21 (0.1)
Number (%) male	0 (0.0)	3 (0.08)	2 (0.1)	6 (0.06)	2 (0.3)	1 (0.2)	–	4 (0.2)	18 (0.1)
2003									
Number of receptions	–	12 406	2 104	10 605	3 501	1 399	–	6 145	36 160
Number (%) male	–	10 925 (88)	1 993 (95)	9 321 (88)	3 141 (90)	1 236 (88)	–	5 207 (85)	31 823 (88)
Tested for HIV antibody (%)	–	41.0	91.7	100.0	26.2	15.9	–	41.0	58.9
% males tested	–	43.8	91.3	100.0	26.4	15.8	–	41.7	60.1
Number (%) with HIV	–	2 (0.04)	3 (0.2)	2 (0.2)	2 (0.2)	1 (0.4)	–	2 (0.07)	12 (0.05)
Number (%) male	–	2 (0.04)	3 (0.2)	1 (0.2)	1 (0.1)	1 (0.5)	–	2 (0.1)	10 (0.05)

1 The corrections centre in the ACT is a remand centre only. HIV antibody testing is carried out on prisoner request. Data only available for the last six months of 1999 and 2000, and the last two months of 2002.

2 Data available from VIC on males only in the interval 1 January – 31 December 1998 and 1 January 1999 – 30 June 1999. Information on number of HIV diagnoses not available in 1998. Data not yet available for 2000, 2001, 2002 and 2003.

Source: State/Territory Departments of Corrections

4.5 HIV and hepatitis C seroprevalence among people seen at sexual health clinics

Table 4.5.1 Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, clinic and year

Males		Sexual Health Clinic							Total
		Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA ¹	Melbourne Sexual Health Centre, VIC ²		
1999	Seen	3 465	761	2 662	1 076	3 211	5 620	16 795	
	Tested	1 682	399	1 156	489	2 435	3 453	9 614	
	Newly diagnosed (%)	19 (1.1)	2 (0.5)	4 (0.3)	6 (1.2)	4 (0.2)	16 (0.5)	51 (0.5)	
	Previously negative (%)	8 (0.8)	0 (0.0)	4 (0.6)	1 (0.8)	3 (0.2)	3 (0.2)	19 (0.4)	
2000	Seen	3 601	942	2 835	1 033	2 907	5 178	16 496	
	Tested	1 791	506	1 071	470	2 321	3 405	9 564	
	Newly diagnosed (%)	14 (0.8)	0 (0.0)	2 (0.2)	6 (1.3)	6 (0.3)	6 (0.2)	34 (0.4)	
	Previously negative (%)	6 (0.6)	0 (0.0)	1 (0.3)	1 (0.8)	6 (0.4)	3 (0.2)	17 (0.4)	
2001	Seen	4 181	993	2 881	1 148	3 061	5 434	17 698	
	Tested	2 165	535	1 201	516	2 362	2 149	8 928	
	Newly diagnosed (%)	20 (0.9)	1 (0.2)	1 (0.1)	3 (0.6)	4 (0.2)	21 (1.0)	50 (0.6)	
	Previously negative (%)	12 (0.9)	1 (0.9)	1 (0.2)	2 (1.6)	4 (0.3)	0 (0.0)	20 (0.5)	
2002	Seen	4 417	1 265	2 907	1 164	3 459	–	13 212	
	Tested	2 485	755	1 179	540	2 734	–	7 693	
	Newly diagnosed (%)	26 (1.1)	0 (0.0)	7 (0.6)	2 (0.4)	5 (0.2)	–	40 (0.5)	
	Previously negative (%)	16 (1.1)	0 (0.0)	7 (1.4)	0 (0.0)	4 (0.2)	–	27 (0.7)	
2003	Seen	4 637	1 227	2 879	1 023	–	3 334	13 100	
	Tested	2 574	724	1 437	463	–	1 517	6 715	
	Newly diagnosed (%)	18 (0.7)	2 (0.3)	3 (0.2)	6 (1.3)	–	6 (0.4)	35 (0.5)	
	Previously negative (%)	11 (0.7)	0 (0.0)	3 (0.8)	2 (1.6)	–	–	16 (0.7)	

Sexual Health Clinic

Females	Sexual Health Clinic							Total
	Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA ¹	Melbourne Sexual Health Centre, VIC ²		
1999								
Seen	2 196	869	1 773	1 302	2 289	4 542	12 971	
Tested	1 011	402	632	636	1 645	2 968	7 294	
Newly diagnosed (%)	1 (0.1)	1 (0.2)	0 (0.0)	1 (0.2)	0 (0.0)	2 (0.1)	5 (0.1)	
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
2000								
Seen	2 350	1 085	1 737	1 359	2 051	4 123	12 705	
Tested	1 079	529	623	661	1 530	2 937	7 359	
Newly diagnosed (%)	2 (0.2)	2 (0.4)	0 (0.0)	1 (0.2)	0 (0.0)	5 (0.2)	10 (0.1)	
Previously negative (%)	1 (0.2)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.1)	
2001								
Seen	2 973	980	2 242	1 517	2 267	4 513	14 492	
Tested	1 509	440	878	693	1 577	1 661	6 758	
Newly diagnosed (%)	3 (0.2)	0 (0.0)	0 (0.0)	2 (0.3)	0 (0.0)	3 (0.2)	8 (0.1)	
Previously negative (%)	2 (0.3)	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	3 (0.1)	
2002								
Seen	2 989	1 317	2 406	1 598	2 585	-	10 895	
Tested	1 467	595	918	789	1 800	-	5 569	
Newly diagnosed (%)	3 (0.2)	1 (0.2)	0 (0.0)	0 (0.0)	1 (0.1)	-	5 (0.1)	
Previously negative (%)	2 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	-	3 (0.1)	
2003								
Seen	3 271	1 221	2 497	1 383	-	4 307	12 679	
Tested	1 528	495	951	630	-	1 488	5 092	
Newly diagnosed (%)	3 (0.2)	1 (0.2)	0 (0.0)	1 (0.2)	-	0 (0.0)	5 (0.1)	
Previously negative (%)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	-	0 (0.0)	1 (0.03)	

1 Clinic 275, Adelaide, SA, data not yet available for 2003.

2 Melbourne Sexual Health Centre, VIC, data not available for 2002 and for January – June 2003.

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.2 Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, HIV exposure category and year

Males	HIV exposure category							Total
	Male homosexual contact ¹	Male homosexual contact ¹ , age < 25 years	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males		
1999	Seen	3 844	680	921	1 245	9 336	1 449	16 795
	Tested	2 346	503	642	776	5 334	516	9 614
	Newly diagnosed (%)	41 (1.7)	5 (1.0)	1 (0.2)	0 (0.0)	7 (0.1)	2 (0.4)	51 (0.5)
	Previously negative (%)	17 (1.1)	3 (1.2)	1 (0.3)	0 (0.0)	1 (0.04)	0 (0.0)	19 (0.4)
2000	Seen	3 489	595	778	1 104	9 512	1 613	16 496
	Tested	2 218	447	544	768	5 340	694	9 564
	Newly diagnosed (%)	29 (1.3)	3 (0.7)	1 (0.2)	2 (0.2)	2 (0.04)	0 (0.0)	34 (0.4)
	Previously negative (%)	15 (1.1)	3 (1.5)	0 (0.0)	1 (0.3)	1 (0.04)	0 (0.0)	17 (0.4)
2001	Seen	4 275	699	762	1 193	9 752	1 716	17 698
	Tested	2 448	509	481	745	4 780	474	8 928
	Newly diagnosed (%)	37 (1.5)	8 (1.6)	1 (0.2)	1 (0.1)	3 (0.1)	8 (1.7)	50 (0.6)
	Previously negative (%)	20 (0.5)	5 (3.3)	0 (0.0)	0 (0.3)	0 (0.0)	0 (0.0)	20 (0.5)
2002	Seen	3 661	714	625	1 251	7 055	620	13 212
	Tested	2 386	562	412	849	3 895	151	7 693
	Newly diagnosed (%)	35 (1.5)	7 (1.2)	0 (0.0)	1 (0.1)	3 (0.1)	1 (0.7)	40 (0.5)
	Previously negative (%)	25 (0.7)	3 (1.1)	0 (0.0)	1 (0.3)	1 (0.1)	0 (0.0)	27 (0.7)
2003	Seen	4 049	817	495	1 752	6 193	611	13 100
	Tested	2 546	609	268	1 048	2 742	111	6 715
	Newly diagnosed (%)	34 (1.3)	4 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.9)	35 (0.5)
	Previously negative (%)	15 (1.3)	2 (0.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.9)	16 (0.7)

HIV exposure category

Females	Sex worker ²	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females	Total
1999						
Seen	956	665	904	8 991	1 455	12 971
Tested	773	408	493	5 019	601	7 294
Newly diagnosed (%)	1 (0.1)	2 (0.5)	1 (0.2)	0 (0.0)	1 (0.2)	5 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2000						
Seen	1 277	514	809	8 592	1 513	12 705
Tested	1 071	342	487	4 803	656	7 359
Newly diagnosed (%)	0 (0.0)	0 (0.0)	1 (0.2)	7 (0.1)	2 (0.3)	10 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.1)	0 (0.0)	2 (0.1)
2001						
Seen	1 497	594	988	9 671	1 742	14 492
Tested	1 147	359	574	4 139	539	6 758
Newly diagnosed (%)	2 (0.2)	0 (0.0)	2 (0.3)	2 (0.1)	2 (0.1)	8 (0.1)
Previously negative (%)	1 (0.1)	0 (0.0)	1 (0.4)	1 (0.1)	0 (0.0)	3 (0.1)
2002						
Seen	1 145	434	1 021	7 580	715	10 895
Tested	892	261	655	3 533	228	5 569
Newly diagnosed (%)	1 (0.1)	0 (0.0)	4 (0.6)	0 (0.0)	0 (0.0)	5 (0.1)
Previously negative (%)	1 (0.2)	0 (0.0)	2 (0.8)	0 (0.0)	0 (0.0)	3 (0.1)
2003						
Seen	1 993	1 531	1 549	7 002	604	12 679
Tested	1 342	357	836	2 469	88	5 092
Newly diagnosed (%)	1 (0.1)	0 (0.0)	2 (0.2)	2 (0.1)	0 (0.0)	5 (0.1)
Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	1 (0.1)

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

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

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.3 Number of people seen at selected metropolitan sexual health clinics in Australia, 1999 – 2003, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, age group and year

Males		Age group (years)							Total
		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported	
1999	Seen	592	6 954	5 349	2 411	1 024	460	5	16 795
	Tested	378	4 268	2 945	1 260	539	224	0	9 614
	Newly diagnosed (%)	1 (0.3)	17 (0.4)	22 (0.7)	7 (0.6)	3 (0.6)	1 (0.4)	–	51 (0.5)
	Previously negative (%)	1 (1.1)	7 (0.4)	8 (0.4)	2 (0.3)	1 (0.3)	0 (0.0)	–	19 (0.4)
2000	Seen	538	6 535	5 569	2 327	1 051	474	2	16 496
	Tested	332	4 116	2 995	1 273	585	263	0	9 564
	Newly diagnosed (%)	0 (0.0)	13 (0.3)	16 (0.5)	3 (0.2)	2 (0.3)	0 (0.0)	–	34 (0.4)
	Previously negative (%)	0 (0.0)	8 (0.5)	5 (0.3)	3 (0.4)	1 (0.3)	0 (0.0)	–	17 (0.4)
2001	Seen	606	6 918	5 749	2 677	1 223	525	–	17 698
	Tested	330	3 899	2 772	1 192	523	212	–	8 928
	Newly diagnosed (%)	2 (0.6)	18 (0.5)	17 (0.6)	11 (0.9)	1 (0.2)	1 (0.5)	–	50 (0.6)
	Previously negative (%)	1 (1.2)	8 (0.5)	8 (0.6)	1 (0.2)	1 (0.4)	1 (0.9)	–	20 (0.5)
2002	Seen	547	5 365	4 074	1 963	892	371	0	13 212
	Tested	357	3 450	2 280	990	449	167	0	7 693
	Newly diagnosed (%)	0 (0.0)	17 (0.5)	12 (0.5)	9 (0.9)	1 (0.2)	1 (0.6)	–	40 (0.5)
	Previously negative (%)	0 (0.0)	12 (0.8)	9 (0.6)	5 (0.9)	1 (0.4)	0 (0.0)	–	27 (0.7)
2003	Seen	446	5 176	4 264	1 930	887	397	0	13 100
	Tested	228	3 002	2 092	856	378	159	0	6 715
	Newly diagnosed (%)	0 (0.0)	11 (0.4)	18 (0.9)	3 (0.4)	2 (0.5)	1 (0.6)	–	35 (0.5)
	Previously negative (%)	0 (0.0)	7 (0.8)	6 (0.7)	2 (0.6)	1 (0.7)	0 (0.0)	–	16 (0.7)

Age group (years)

Females	Age group (years)							Total	
	13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported		
1999	Seen	1 485	7 043	2 897	1 147	314	82	3	12 971
	Tested	746	4 012	1 692	656	158	29	1	7 294
	Newly diagnosed (%)	0 (0.0)	1 (0.02)	4 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (0.1)
	Previously negative (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	–	0 (0.0)
2000	Seen	1 156	6 049	3 731	1 007	340	420	2	12 705
	Tested	701	4 117	1 665	655	182	39	0	7 359
	Newly diagnosed (%)	0 (0.0)	4 (0.1)	5 (0.3)	1 (0.2)	0 (0.0)	0 (0.0)	–	10 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.05)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	2 (0.1)
2001	Seen	1 571	7 715	3 376	1 289	427	112	2	14 492
	Tested	682	3 638	1 591	640	175	31	1	6 758
	Newly diagnosed (%)	1 (0.1)	2 (0.1)	5 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (0.1)
	Previously negative (%)	1 (0.6)	1 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	3 (0.1)
2002	Seen	1 463	5 693	2 469	894	299	77	0	10 895
	Tested	636	3 020	1 284	470	135	24	0	5 569
	Newly diagnosed (%)	0 (0.0)	4 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	5 (0.1)
	Previously negative (%)	0 (0.0)	2 (0.2)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	–	3 (0.1)
2003	Seen	1 261	6 569	3 227	1 200	329	93	0	12 679
	Tested	397	2 636	1 421	512	116	10	0	5 092
	Newly diagnosed (%)	0 (0.0)	5 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	–	5 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	–	1 (0.1)

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.4 Number of people seen at selected metropolitan sexual health clinics in Australia, 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and clinic

	Sexual Health Clinic							Total
	Sydney Sexual Health Centre, NSW	Livingstone Road Sexual Health Centre, NSW	Brisbane Sexual Health Clinic, QLD	Gold Coast Sexual Health Clinic, QLD	Clinic 275 Adelaide, SA ¹	Melbourne Sexual Health Centre, VIC ²		
Males								
2001	Seen 4 184	993	2 881	1 148	3 061	5 434	17 701	
	Tested 243	199	494	183	2 412	367	3 898	
	Newly diagnosed (%) 12 (4.9)	11 (5.5)	12 (2.4)	23 (12.6)	21 (0.9)	20 (5.4)	99 (2.5)	
2002	Seen 4 330	1 265	2 907	1 164	3 459	–	13 125	
	Tested 251	280	537	205	2 742	–	4 015	
	Newly diagnosed (%) 1 (0.4)	45 (16.1)	24 (4.5)	18 (8.8)	63 (2.3)	–	151 (3.8)	
2003	Seen 3 069	1 227	2 879	1 023	–	–	8 198	
	Tested 118	357	547	163	–	–	1 185	
	Newly diagnosed (%) 0 (0.0)	69 (19.3)	23 (4.2)	8 (4.9)	–	–	100 (8.4)	
Females								
2001	Seen 2 972	980	2 242	1 517	2 268	4 513	14 492	
	Tested 132	243	388	296	1 594	326	2 979	
	Newly diagnosed (%) 4 (3.0)	35 (14.4)	8 (2.1)	22 (7.4)	5 (0.3)	29 (8.9)	103 (3.5)	
2002	Seen 2 924	1 317	2 406	1 598	2 585	–	10 830	
	Tested 115	343	405	337	1 785	–	2 985	
	Newly diagnosed (%) 0 (0.0)	87 (25.4)	18 (4.4)	20 (5.9)	49 (2.7)	–	174 (5.8)	
2003	Seen 2 231	1 221	2 497	1 383	–	–	7 332	
	Tested 55	277	457	209	–	–	998	
	Newly diagnosed (%) 0 (0.0)	51 (18.4)	17 (3.7)	20 (9.6)	–	–	88 (8.8)	

¹ Data not available from Clinic 275, Adelaide, SA, in 2003.

² Data not available from the Melbourne Sexual Health Centre, VIC, in 2002 and 2003.

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.5 Number of people seen at selected metropolitan sexual health clinics in Australia in 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and exposure category

Males	Exposure category							Total
	Male homosexual contact	Male homosexual contact and injecting drug use	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males		
2001	Seen	3 960	318	762	1 193	9 752	1 716	17 701
	Tested	840	139	416	277	2 029	197	3 898
	Newly diagnosed (%)	13 (1.5)	10 (7.2)	37 (8.9)	3 (1.1)	31 (1.5)	5 (2.5)	99 (2.5)
2002	Seen	3 330	318	623	1 251	7 008	595	13 125
	Tested	882	166	360	363	2 139	105	4 015
	Newly diagnosed (%)	18 (2.0)	14 (8.4)	67 (18.6)	5 (1.4)	28 (1.3)	19 (18.1)	151 (3.8)
2003	Seen	2 360	171	250	1 010	3 871	536	8 198
	Tested	338	46	122	138	487	54	1 185
	Newly diagnosed (%)	11 (3.3)	4 (8.7)	40 (32.8)	9 (6.5)	22 (4.5)	14 (25.9)	100 (8.4)

Females	Exposure category							Total
	Sex worker ¹	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other females			
2001	Seen	1 497	594	989	9 671	1 741	14 492	
	Tested	445	276	222	1 783	253	2 979	
	Newly diagnosed (%)	27 (6.1)	22 (8.0)	0 (0.0)	38 (2.1)	16 (6.3)	103 (3.5)	
2002	Seen	1 150	430	1 023	7 520	707	10 830	
	Tested	423	218	287	1 881	176	2 985	
	Newly diagnosed (%)	34 (8.0)	63 (28.9)	3 (1.0)	68 (3.6)	6 (3.4)	174 (5.8)	
2003	Seen	1 001	205	1 005	4 613	508	7 332	
	Tested	258	67	157	466	50	998	
	Newly diagnosed (%)	18 (7.0)	25 (37.3)	9 (5.7)	24 (5.1)	12 (24.0)	88 (8.8)	

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

Source: Collaborative group on sentinel surveillance in sexual health clinics

Table 4.5.6 Number of people seen at selected metropolitan sexual health clinics in Australia in 2001 – 2003, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and age group

	Age group (years)							Total ¹
	13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+		
Males								
2001								
Seen	606	6 919	5 751	2 677	1 223	525	17 701	
Tested	190	1 690	1 155	550	233	80	3 898	
Newly diagnosed (%)	4 (2.1)	36 (2.1)	31 (2.7)	22 (4.0)	6 (2.6)	0 (0.0)	99 (2.5)	
2002								
Seen	548	5 342	4 030	1 948	889	368	13 125	
Tested	205	1 757	1 178	555	234	86	4 015	
Newly diagnosed (%)	1 (0.5)	36 (2.0)	64 (5.4)	34 (6.1)	12 (5.1)	4 (4.6)	151 (3.8)	
2003								
Seen	293	3 137	2 632	1 239	620	277	8 198	
Tested	33	460	399	189	77	27	1 185	
Newly diagnosed (%)	2 (6.1)	26 (5.6)	38 (9.5)	30 (15.9)	4 (5.2)	0 (0.0)	100 (8.4)	
Females								
2001								
Seen ¹	1 571	7 716	3 376	1 288	427	112	14 492	
Tested	422	1 494	673	303	78	9	2 979	
Newly diagnosed (%)	4 (0.9)	49 (3.3)	32 (4.8)	17 (5.6)	0 (0.0)	1 (11.1)	103 (3.5)	
2002								
Seen	1 466	5 670	2 435	885	297	77	10 830	
Tested	430	1 572	618	266	79	20	2 985	
Newly diagnosed (%)	18 (4.2)	43 (2.7)	78 (12.6)	33 (12.4)	2 (2.5)	0 (0.0)	174 (5.8)	
2003								
Seen	826	3 732	1 829	696	191	58	7 332	
Tested	91	454	293	123	35	2	998	
Newly diagnosed (%)	4 (4.4)	34 (7.5)	33 (11.3)	16 (13.0)	1 (2.9)	0 (0.0)	88 (8.8)	

¹ Total includes 2 women whose age was not reported.

Source: Collaborative group on sentinel surveillance in sexual health clinics

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

4.6.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody¹, 1985 – 2003, by State/Territory and years of donation

State/Territory	1985 ² – 1993			1994 – 1995			1996 – 1997			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT	150 410	1	0.7	31 766	0	0.0	4 377	0	0.0	—	—	—
NSW	2 579 181	31	1.2	556 337	4	0.7	562 880	2	0.4	5 492 877	43	0.8
NT	78 371	0	0.0	17 621	0	0.0	15 064	1	6.6	162 694	1	0.6
QLD	1 485 783	15	1.0	349 888	7	2.0	313 840	1	0.3	3 344 057	32	1.0
SA	852 948	3	0.4	180 769	0	0.0	162 406	1	0.6	1 730 442	6	0.3
TAS	220 602	0	0.0	50 659	0	0.0	48 483	1	2.1	434 279	1	0.2
VIC	2 298 322	12	0.5	462 582	2	0.4	410 157	2	0.5	4 665 416	17	0.4
WA	665 520	6	0.9	159 153	0	0.0	169 445	1	0.6	1 598 133	13	0.8
Total	8 331 137	68	0.8	1 808 775	13	0.7	1 686 652	9	0.5	17 623 531	114	0.6

State/Territory	1998 – 1999			2000 – 2001			2002 – 2003			All years		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
ACT ³	9 080	0	0.0	—	—	—	—	—	—	195 633	1	0.5
NSW	540 888	0	0.0	609 047	3	0.5	644 544	3	0.5	5 492 877	43	0.8
NT	18 854	0	0.0	15 834	0	0.0	16 950	0	0.0	162 694	1	0.6
QLD	381 527	4	1.0	386 060	3	0.8	426 959	2	0.5	3 344 057	32	1.0
SA	175 752	2	1.1	176 018	0	0.0	182 549	0	0.0	1 730 442	6	0.3
TAS	39 232	0	0.0	25 849	0	0.0	49 454	0	0.0	434 279	1	0.2
VIC	475 212	1	0.2	505 937	0	0.0	513 206	0	0.0	4 665 416	17	0.4
WA	192 380	2	1.0	196 489	1	0.5	215 146	3	1.4	1 598 133	13	0.8
Total	1 832 925	9	0.5	1 915 234	7	0.4	2 048 808	8	0.4	17 623 531	114	0.6

1 Prevalence per 100 000 donations.

2 From 1 May 1985.

3 HIV antibody testing of blood donors in the ACT carried out in NSW from 1 July 1998.

Source: Australian Red Cross Blood Service; National Serology Reference Laboratory, Australia

4.6.2 Number of blood donors in Australia with HIV antibody, 1985 – 2003, 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 – 1993		1994 – 1995		1996 – 1997		1998 – 1999		2000 – 2001		2002 – 2003		All years		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Male homosexual contact	16 ¹	–	1	–	2 ¹	–	0	–	1	–	2	–	22	–	22
Injecting drug use	1	0	0	0	1	0	1	0	1	0	0	0	4	0	4
Heterosexual contact	16	13	3	2	2	1	0	4	2	2	1	4	24	26	50
Person from a high prevalence country	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Receipt of blood/tissue	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Other	0	2	0	1	0	1	0	1	0	0	0	0	0	0	5
Undetermined	16	2	6	0	2	0	1	1	1	0	1	0	27	3	30
Total	50	18	10	3	7	2	2	7	5	2	4	4	78	36	114
New HIV infection²	20	8	3	4	1	1	1	1	4	2	3	0	32	16	48

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

2 Year of HIV infection was estimated as the midpoint between the date of last HIV negative donation and the date of HIV positive donation.

Source: Australian Red Cross Blood Service

4.6.3 Number of donations tested for hepatitis B surface antigen at blood services, number of donations positive for hepatitis B surface antigen and prevalence of hepatitis B surface antigen¹, by State/Territory and year of donation

State/Territory	1999			2000			2001		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW ²	271 622	52	19.1	305 769	39	12.8	303 278	48	15.8
NT	9 714	0	0.0	8 715	2	22.9	7 119	3	42.1
QLD	189 468	26	13.7	195 940	22	11.2	190 120	21	11.0
SA	88 529	4	4.5	87 828	1	1.1	88 190	5	5.7
TAS ³	13 013	0	0.0	—	—	—	25 849	2	7.7
VIC	242 543	27	11.1	258 014	24	9.3	247 923	35	14.1
WA	100 379	16	15.9	99 718	17	17.0	96 771	9	9.3
Total	915 268	125	13.7	955 984	105	11.0	959 250	123	12.8

State/Territory	2002			2003		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW ²	316 309	50	15.8	328 235	35	10.7
NT	7 847	2	25.5	9 103	3	33.0
QLD	205 121	22	10.7	221 838	20	9.0
SA	93 890	5	5.3	88 659	4	4.5
TAS ³	23 870	0	0.0	25 584	0	0.0
VIC	254 521	33	13.0	258 685	31	12.0
WA	103 505	14	13.5	111 641	9	8.1
Total	1 005 063	126	12.5	1 043 745	102	9.8

1 Prevalence per 100 000 donations.

2 Hepatitis B surface antigen tests of blood donors in the ACT carried out in NSW from 1 July 1998.

3 Hepatitis B surface antigen tests of blood donors in TAS counted with VIC from 1 July 1999 to 31 December 2000.

Source: Australian Red Cross Blood Service

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

State/Territory	1999			2000			2001		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW ²	271 662	61	22.5	305 769	40	13.1	303 278	36	11.9
NT	9 714	0	0.0	8 715	6	68.8	7 119	1	14.0
QLD	189 392	53	28.0	195 940	41	20.9	190 120	49	25.8
SA	88 549	6	6.8	87 828	7	8.0	88 190	9	10.2
TAS ³	13 013	0	0.0	—	—	—	25 849	6	23.2
VIC	243 126	27	11.1	258 014	39	15.1	247 923	45	18.2
WA	100 379	21	20.9	99 718	19	19.0	96 771	13	13.4
Total	915 835	168	18.3	955 984	152	15.9	959 250	159	16.6

State/Territory	2002			2003		
	Tests	Positive	Prevalence	Tests	Positive	Prevalence
NSW ²	316 309	53	16.8	328 235	34	10.4
NT	7 847	1	12.7	9 103	3	33.0
QLD	205 121	48	23.4	221 838	43	19.4
SA	93 890	12	12.8	88 659	3	3.4
TAS ³	23 870	4	16.8	25 584	1	3.9
VIC	254 521	35	13.8	258 685	31	12.0
WA	103 505	20	19.3	111 641	15	13.4
Total	1 005 063	173	17.2	1 043 745	130	12.5

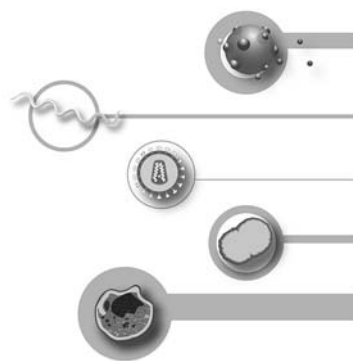
¹ Prevalence per 100 000 donations.

² Hepatitis C antibody testing of blood donors in the ACT carried out in NSW from 1 July 1998.

³ Hepatitis C antibody tests of blood donors in TAS counted with VIC from 1 July 1999 to 31 December 2000.

Source: Australian Red Cross Blood Service

Tables



2004

Annual Surveillance Report

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

5 Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 1999 – 2003, 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 94

5.2 Sexual and injecting behaviour among people who have injected drugs

Table 5.2.1 Number of injecting drug users participating in surveys carried out at needle and syringe programs, 1999 – 2003, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting drug injection in the past month, and percent reporting use of a needle and syringe after someone else in the past month by year, sex, history of injecting drug use and last drug injected 96

Table 5.2.2 Number of injecting drug users participating in surveys carried out at needle and syringe programs, 1999 – 2003, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting sexual intercourse in the past month, and percent reporting condom use at last intercourse by year, age group and sexual identity and sex 98

5 Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 1999 – 2003, prevalence of anal intercourse by partner type, city and year of survey, and prevalence of injecting drug use and HIV antibody testing by city and year of survey

	Sydney			Brisbane			Melbourne								
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003					
Sample size	3 343	2 916	2 862	2 884	2 541	1 225	1 285	1 570	1 787	1 510	1 578	1 830	1 887	2 064	
Anal intercourse with regular partners															
Men with regular partners	66.6	64.0	64.2	63.0	59.6	62.2	62.5	61.7	59.3	59.4	63.8	65.5	63.6	62.9	
Unprotected anal intercourse	34.0	35.0	35.8	36.9	33.4	29.9	34.2	33.4	33.1	34.6	33.2	37.5	34.9	33.4	
Anal intercourse with casual partners															
Men with casual partners	70.3	72.8	73.3	71.5	70.0	73.6	70.8	71.6	69.8	69.9	71.2	66.1	67.6	69.2	
Unprotected anal intercourse	18.5	23.0	25.7	24.5	22.9	14.7	18.4	19.2	22.1	21.1	16.6	17.0	19.1	20.5	
Injecting drug use¹	7.6	7.2	7.0	5.4	6.5	9.1	8.6	9.6	10.1	6.6	5.0	4.0	4.8	4.7	
HIV antibody testing²	47.8	47.0	44.4	50.3	50.1	50.0	50.2	51.0	50.5	48.9	41.5	40.3	39.4	42.1	
<hr/>															
	Adelaide			Canberra											
	1999	2001	2003	2000	2003	2000	2003	2003							
Sample size	463	565	834	350	255										
Anal intercourse with regular partners															
Men with regular partners	63.5	65.7	61.3	61.4	62.7										
Unprotected anal intercourse	33.0	34.7	31.8	34.0	32.9										
Anal intercourse with casual partners															
Men with casual partners	61.8	66.4	72.4	64.3	70.6										
Unprotected anal intercourse	12.1	15.9	18.0	14.3	16.1										
Injecting drug use¹	7.5	4.1	4.6	-	1.6										
HIV antibody testing²	43.3	45.5	49.6	33.7	39.6										

1 Injecting drug use in the previous 6 months.

2 HIV antibody testing in the previous 6 months among men not diagnosed with HIV infection.

Page left blank intentionally

5.2 Sexual and injecting behaviour among people who have injected drugs

Table 5.2.1 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1999 – 2003, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting drug injection in the past month, and percent reporting use of a needle and syringe after someone else in the past month by year, sex, history of injecting drug use and last drug injected

1999

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
<i>History of drug injection</i>															
Less than 3 years	238	154	392	52	66	57	52	66	57	218	145	363	20	24	21
3 to 5 years	297	178	476	59	68	62	59	68	62	271	170	442	17	26	21
6 to 10 years	360	211	575	65	66	66	65	66	66	333	195	532	25	22	24
11 or more years	591	280	873	65	66	65	65	66	65	551	261	814	19	20	20
Not reported	41	17	62	49	71	53	49	71	53	29	11	40	24	36	28
<i>Last drug injected</i>															
Amphetamine	401	212	614	52	60	55	52	60	55	363	190	554	19	16	18
Heroin/opiates	900	524	1 430	67	69	68	67	73	69	852	502	1 360	20	23	21
Combination	122	70	193	61	74	66	66	71	68	115	66	181	30	41	34
Other/not reported	104	34	141	46	56	48	52	62	54	72	24	96	18	25	20
Total	1 527	840	2 378	61	67	63	62	69	65	1 402	782	2 191	21	23	21

2000

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
<i>History of drug injection</i>															
Less than 3 years	208	128	336	52	65	57	58	68	62	187	119	306	12	23	16
3 to 5 years	303	214	519	68	67	67	71	80	75	284	205	491	14	21	17
6 to 10 years	400	235	639	67	73	69	68	75	71	375	219	598	16	28	21
11 or more years	691	276	971	66	68	67	68	73	69	645	255	903	14	15	14
Not reported	37	17	59	51	53	49	57	47	51	28	13	41	11	23	15
<i>Last drug injected</i>															
Amphetamine	373	162	538	55	58	56	57	58	57	332	141	476	7	13	9
Heroin/opiates	1 005	608	1 616	67	69	68	70	77	73	964	581	1 548	16	22	18
Combination	182	73	256	73	75	74	77	78	78	170	68	239	23	29	25
Other/not reported	79	27	114	53	89	64	56	81	61	53	21	76	8	14	11
Total	1 639	870	2 524	64	68	66	67	74	69	1 519	811	2 339	14	21	17

2001

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>History of drug injection</i>															
Less than 3 years	169	110	282	41	61	49	46	68	55	146	98	246	12	19	15
3 to 5 years	258	151	412	55	65	59	59	71	64	236	135	374	8	20	12
6 to 10 years	383	223	607	63	70	66	66	62	68	347	199	547	20	14	18
11 or more years	683	277	972	64	62	63	68	67	68	625	251	887	16	11	14
Not reported	47	17	69	57	53	58	49	47	49	25	8	34	8	13	9
<i>Last drug injected</i>															
Amphetamine	591	263	865	54	60	56	57	63	59	536	239	785	13	10	12
Heroin/opiates	636	350	991	61	67	63	66	73	69	580	319	903	15	15	15
Combination	166	78	244	74	74	74	75	78	76	148	70	218	24	24	24
Other/not reported	147	87	242	56	61	59	63	62	63	115	63	182	14	22	16
Total	1 540	778	2 342	59	64	61	63	69	65	1 379	691	2 088	15	15	15

2002

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting IDU last month			% using after someone else		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>History of drug injection</i>															
Less than 3 years	149	74	226	52	65	57	45	62	51	128	65	196	15	28	19
3 to 5 years	220	151	375	61	77	68	60	75	66	196	137	336	16	18	17
6 to 10 years	389	218	610	66	77	70	70	75	72	354	200	556	21	16	19
11 or more years	750	315	1 073	62	67	64	66	65	66	697	287	991	15	13	14
Not reported	41	25	69	59	68	59	59	68	59	30	16	46	27	25	26
<i>Last drug injected</i>															
Amphetamine	742	381	1 130	61	70	64	63	68	64	449	232	685	15	16	15
Heroin/opiates	551	300	855	62	72	66	65	73	68	738	387	1 130	16	16	16
Combination	168	63	235	70	81	73	74	71	74	157	57	217	27	26	27
Other/not reported	88	39	133	51	67	56	52	62	54	61	29	93	10	7	9
Total	1 549	783	2 353	62	71	65	64	70	66	1 405	705	2 125	17	16	16

2003

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

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

Source: Collaboration of Australian Needle and Syringe Programs

Table 5.2.2 Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1999 – 2003, percent reporting HIV and hepatitis C tests within the past twelve months, and number reporting sexual intercourse in the last month, and percent reporting condom use at last intercourse by year, age group, sexual identity and sex

1999

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T'	M	F	T	M	F	T	M	F	T'	M	F	T
<i>Age group</i>															
Less than 20 years	130	114	244	48	67	57	50	75	62	90	90	180	55	45	50
20 to 24 years	324	201	527	59	70	63	61	68	64	245	166	412	42	27	36
25 to 34 years	665	331	1 000	64	68	66	64	68	66	443	237	684	33	32	33
35 or more years	406	193	601	63	61	62	63	68	65	201	126	328	36	27	33
Not reported	2	1	6	0	100	17	0	100	33	2	0	3	50	0	17
<i>Sexual identity</i>															
Heterosexual	1 243	553	1 796	60	63	61	62	66	63	778	410	1 188	35	28	33
Bisexual	104	187	297	66	77	74	61	77	71	74	145	224	41	44	43
Homosexual	70	52	124	74	75	75	61	77	69	49	33	83	63	19	44
Not reported	110	48	161	65	56	61	63	60	61	80	31	112	44	29	39
Total	1 527	840	2 378	61	67	63	62	69	65	981	619	1 607	37	31	35

2000

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T'	M	F	T	M	F	T	M	F	T'	M	F	T
<i>Age group</i>															
Less than 20 years	111	111	222	44	65	55	56	77	66	78	88	166	47	41	44
20 to 24 years	330	235	569	68	76	72	71	77	74	235	183	421	43	34	39
25 to 34 years	688	333	1 026	67	70	68	68	76	70	452	237	691	35	30	34
35 or more years	509	191	705	63	58	62	66	64	65	259	114	375	34	33	34
Not reported	1	0	2	0	–	0	0	–	0	1	0	1	0	–	0
<i>Sexual identity</i>															
Heterosexual	1 374	557	1 934	64	66	64	66	72	68	851	392	1 243	35	31	34
Bisexual	77	196	275	75	82	80	71	84	81	53	148	203	49	45	46
Homosexual	84	71	160	65	54	61	63	65	64	58	50	112	61	20	42
Not reported	104	46	155	63	67	63	73	72	71	63	32	96	38	28	34
Total	1 639	870	2 524	64	68	66	67	74	69	1 025	622	1 654	37	33	36

2001

	Number of participants			% reporting recent HIV test			% reporting recent hepatitis C test			Number reporting sexual intercourse			% using condoms at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>Age group</i>															
Less than 20 years	92	74	168	46	77	60	53	74	63	65	58	125	57	28	45
20 to 24 years	289	191	484	57	68	62	60	73	66	208	151	362	41	30	37
25 to 34 years	628	307	940	64	64	64	65	68	66	435	243	683	33	25	30
35 or more years	529	205	746	57	57	58	64	64	64	305	132	447	30	23	28
Not reported	2	1	4	100	100	75	50	100	50	1	1	2	50	0	25
<i>Sexual identity</i>															
Heterosexual	1 268	529	1 808	58	63	60	62	69	64	828	399	1 237	33	23	30
Bisexual	69	154	227	70	70	70	68	71	70	49	120	172	38	42	41
Homosexual	80	47	129	68	60	65	66	72	69	58	30	90	54	13	38
Not reported	123	48	178	58	65	61	69	58	66	79	36	120	37	29	35
Total	1 540	778	2 342	59	64	61	63	69	65	1 014	585	1 619	35	26	32

2002

Number of	% reporting participants			% reporting recent HIV test			Number reporting hepatitis C test			% using condoms sexual intercourse			at last intercourse		
	M	F	T ¹	M	F	T	M	F	T	M	F	T ¹	M	F	T
<i>Age group</i>															
Less than 20 years	72	67	140	63	76	69	56	73	64	53	61	115	54	33	44
20 to 24 years	271	179	452	65	78	70	65	75	69	205	143	349	42	35	39
25 to 34 years	667	321	994	64	72	67	68	71	69	470	245	719	34	29	32
35 or more years	535	215	762	59	64	60	60	62	61	318	131	455	29	27	29
Not reported	4	1	5	25	100	40	0	100	20	2	1	3	50	100	60
<i>Sexual identity</i>															
Heterosexual	1 267	524	1 797	62	69	64	63	67	64	844	392	1 239	33	28	32
Bisexual	71	171	248	69	77	75	69	75	73	52	131	188	37	36	38
Homosexual	58	32	92	76	75	75	79	66	74	43	24	69	55	34	48
Not reported	153	56	216	58	75	62	66	79	69	109	34	145	39	25	35
Total	1 549	783	2 353	62	71	65	64	70	66	1 048	581	1 641	35	30	33

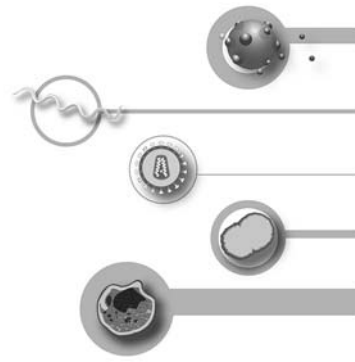
2003

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

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

Source: Collaboration of Australian Needle and Syringe Programs

Tables



2004

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

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

6.1 Estimates of the number of people living with HIV infection

Table 6.1.1 Estimated number of people living with HIV infection by HIV disease stage, 2003 – 2007 102

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

Table 6.2.1 Estimated number of people living with hepatitis C infection in 2003 by stage of liver disease 102

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

6.1 Estimates of the number of people living with HIV infection

Table 6.1.1 Estimated number of people living with HIV¹ by HIV disease stage, 2003 – 2007

Year	Estimated number of people			
	Living with HIV ²	CD4> 500 cells/µl	CD4<500 cells/µl without AIDS	Living with AIDS ³
2003	13 630	2 030	8 590	3 010
2004	14 970	2 030	9 750	3 190
2005	15 320	2 020	9 920	3 380
2006	15 670	2 020	10 080	3 570
2007	16 010	2 020	10 240	3 750

1 The estimated number of people living with HIV is imprecise, due to limitations of current methods for estimating HIV incidence from 1995.

2 Estimated numbers based on back-projection analyses, including people with diagnosed and undiagnosed HIV infection, and assuming 450 new infections per year since 2003.

3 In 2003, based on reported AIDS diagnoses and deaths following AIDS adjusted for reporting delay. In other years, AIDS incidence and deaths assumed to continue at same rate as in 2003.

Source: State/Territory health authorities

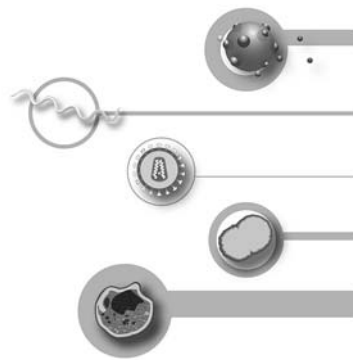
6.2 Estimates of the number of people living with hepatitis C infection

Table 6.2.1 Estimated number of people living with hepatitis C virus infection in 2003 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2003	242 000	(176 000 – 290 000)
<i>Exposed to hepatitis C virus but not chronically infected</i>	61 000	(44 000 – 73 000)
<i>Chronic hepatitis C infection with stage 0/1 liver disease</i>	143 000	(103 000 – 171 000)
<i>Chronic hepatitis C infection with stage 2/3 liver disease</i>	31 000	(23 000 – 37 000)
<i>Living with hepatitis C-related cirrhosis</i>	7 500	(5 700 – 9 100)
During 2003		
Hepatitis C-related liver failure	204	(154 – 245)
Hepatitis C-related hepatocellular carcinoma	59	(45 – 71)

Source: Hepatitis C Virus Projections Working Group 2002

Tables



2004

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

7	Uptake of treatment for HIV and hepatitis C infection	
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 2003	104
Table 7.1.2	Number of gay and other homosexually active men with diagnosed HIV infection participating in the Periodic Surveys, 1999 – 2003, and percent reporting use of combination antiretroviral therapy for HIV infection, by city and year of survey	105
Table 7.1.3	Number of people enrolled in Positive Health and percent reporting use of combination antiretroviral therapy, by year and city	105
7.2	Monitoring prescriptions for HIV treatments	
Table 7.2.1	Number of people prescribed antiretroviral treatment through the Highly Specialised Drugs (S100) Program by year and antiretroviral agent	106
Table 7.2.2	Number of people prescribed drugs for HIV/AIDS related conditions through the Highly Specialised Drugs (S100) Program, by year	106
7.3	Monitoring prescriptions for hepatitis C treatments	
Table 7.3.1	Number of people prescribed drugs for hepatitis C infection through the Highly Specialised Drugs (S100) Program, by quarter	107

7 Uptake of treatment for HIV and hepatitis C infection

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 2003

	Current antiretroviral treatment ¹					Total
	None	Mono/Double	3+ (NRTI +/- PI, no NNRTI)	3+ (NRTI + NNRTI, no PI)	3+ (NNRTI + PI, +/- NRTI)	
Total	463 (24%)	177 (9%)	563 (30%)	585 (31%)	116 (6%)	1 904
Sex						
Male	430 (24%)	170 (10%)	524 (29%)	549 (31%)	114 (6%)	1 787
Female	33 (28%)	7 (6%)	39 (33%)	36 (31%)	2 (2%)	117
Age at enrolment (years)						
Less than 30	44 (31%)	13 (9%)	39 (28%)	41 (29%)	3 (2%)	140
30 – 39	205 (28%)	61 (8%)	211 (29%)	223 (30%)	35 (5%)	735
40 – 49	148 (23%)	60 (9%)	197 (30%)	195 (30%)	50 (8%)	650
50+	66 (17%)	43 (11%)	116 (31%)	126 (33%)	28 (7%)	379
Exposure category						
Male homosexual contact	315 (23%)	140 (10%)	408 (30%)	429 (31%)	89 (6%)	1 381
Other/not reported	148 (28%)	37 (7%)	155 (30%)	156 (30%)	27 (5%)	523
Viral load (copies/ml)						
Less than 400	142 (14%)	91 (9%)	296 (29%)	435 (43%)	59 (6%)	1 023
400 – 10 000	113 (32%)	46 (13%)	117 (33%)	52 (15%)	27 (8%)	355
10 000+	141 (37%)	30 (8%)	115 (31%)	70 (19%)	21 (6%)	377
Not reported	67	10	35	28	9	149
CD4+ count (cells/μl)						
Less than 200	23 (10%)	31 (14%)	97 (43%)	55 (24%)	22 (10%)	228
200 – 500	144 (20%)	67 (9%)	242 (33%)	227 (31%)	50 (7%)	730
500+	233 (29%)	69 (8%)	192 (24%)	285 (35%)	36 (4%)	815
Not reported	63	10	32	18	8	131
AIDS prior to enrolment						
No	422 (28%)	124 (8%)	432 (28%)	480 (31%)	70 (5%)	1 528
Yes	41 (11%)	53 (14%)	131 (35%)	105 (28%)	46 (12%)	376
Previous treatment						
None	365 (77%)	13 (3%)	48 (10%)	44 (9%)	7 (1%)	477
Mono/Double	16 (9%)	126 (72%)	22 (12%)	9 (5%)	3 (2%)	176
3 + (NRTI +/- PI, not NNRTI)	40 (7%)	20 (4%)	444 (81%)	29 (5%)	13 (2%)	546
3 + (NRTI + NNRTI, not PI)	29 (5%)	17 (3%)	40 (7%)	503 (84%)	6 (1%)	595
3 + (PI + NNRTI, +/- NRTI)	13 (12%)	1 (1%)	9 (8%)	0 (0%)	87 (79%)	110

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

Source: Australian HIV Observational Database

Table 7.1.2 Number of gay and other homosexually active men with diagnosed HIV infection participating in the Periodic Surveys, 1999 – 2003, and proportion reporting use of combination antiretroviral therapy for HIV infection, by city and year of survey

City	1999	2000	2001	2002	2003
Adelaide					
Sample size	34		33		42
Proportion reporting use of antiretroviral therapy	73.5		57.6		59.5
Brisbane					
Sample size	99	77	88	121	94
Proportion reporting use of antiretroviral therapy	67.7	66.2	59.1	48.8	55.3
Canberra					
Sample size		17			13
Proportion reporting use of antiretroviral therapy		70.6			92.3
Melbourne					
Sample size		138	151	150	177
Proportion reporting use of antiretroviral therapy		78.3	66.9	70.0	55.9
Perth					
Sample size		50		27	
Proportion reporting use of antiretroviral therapy		74.0		74.1	
Sydney					
Sample size	597	504	443	420	330
Proportion reporting use of antiretroviral therapy	71.9	75.2	65.5	68.1	66.7

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; State AIDS Councils, State-based People living with HIV/AIDS organisations

Table 7.1.3 Number of people enrolled in Positive Health and percent reporting use of antiretroviral therapy by year and city

	Sydney			Melbourne		
	1998 – 1999	2000 – 2001	2002 – 2003	1998 – 1999	2000 – 2001	2002 – 2003
Sample size	362	260	292	56	105	83
Proportion reporting use of any antiretroviral therapy	80.7	72.6	69.2	87.5	73.3	69.9
Treatment combinations Mono/Double	8.6	6.2	8.9	7.2	6.7	10.8
3+ (NRTI +/- PI, no NNRTI)	35.9	28.4	27.1	44.6	28.6	37.3
3+ (NRTI + NNRTI, no PI)	24.0	29.1	23.3	23.2	25.7	18.1
3+ (NNRTI + PI, no NRTI)	0.3	1.0	1.7	–	1.9	1.2
3+ (NNRTI + NRTI + PI)	11.9	6.8	7.9	12.5	8.6	2.4

Source: National Centre in HIV Social Research; National Centre in HIV Epidemiology and Clinical Research; Australian Federation of AIDS Organisations; National Association of People living with HIV/AIDS

7.2 Monitoring prescriptions for HIV treatments

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

Antiretroviral agent	1999	2000	2001	2002	2003
Nucleoside analogue reverse transcriptase inhibitors					
Abacavir	709	1 090	1 421	1 355	1 425
Didanosine	1 464	1 283	1 219	1 319	1 250
Lamivudine ¹	3 109	3 387	3 429	3 455	3 821
Stavudine	3 632	3 208	2 656	2 036	1 401
Zalcitabine	150	117	108	64	34
Zidovudine	720	525	579	315	284
Lamivudine & Zidovudine	1 120	1 640	1 910	1 849	1 893
Abacavir, Lamivudine & Zidovudine ²	–	–	177	756	713
Tenofovir ²	–	–	–	862	1 699
Non-nucleoside analogue reverse transcriptase inhibitors					
Delavirdine	86	59	70	49	38
Efavirenz	710	1 020	1 119	1 208	1 416
Nevirapine	2 120	2 250	2 389	2 334	2 311
Protease inhibitors					
Amprenavir ²	–	–	–	145	144
Indinavir	1 289	1 237	1 015	743	483
Lopinavir & ritonavir ²	–	–	–	902	1 401
Nelfinavir	1 353	1 112	864	621	461
Ritonavir	621	1 001	942	771	696
Saquinavir	1 180	864	712	566	440
Total patients³	6 114	6 233	6 771	6 823	6 811
Total cost⁴ (\$'000s)	67 623	69 321	67 085	89 449	78 712

1 Includes patients treated with Lamivudine for hepatitis B infection.

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

3 Total patients calculated as (Stavudine + Zidovudine + Combivir (Lamivudine & Zidovudine)+Trizivir (Abacavir, Lamivudine & Zidovudine))/the proportion of patients in the Australian HIV Observational Database receiving either Stavudine or Zidovudine combinations in each year.

4 Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

Source: Highly Specialised Drugs (S100) Program

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

Treatment	1999	2000	2001	2002	2003
Azithromycin	285	255	200	188	202
Cidofovir	6	4	2	2	1
Clarithromycin	153	227	246	268	242
Doxorubicin	10	16	13	11	7
Foscarnet	13	7	8	8	5
Ganciclovir	79	145	188	260	245
Rifabutin	64	65	64	41	44
Valaciclovir	n/a	145	142	194	220
Valganciclovir	n/a	n/a	n/a	14	24
Total cost^{1,2} (\$'000s)	2 125	2 528	3 615	4 735	4 378

1 Private hospital expenditure is included with public hospital expenditure until 1 November 2000.

2 Expenditure in 2003 calculated based on January-March 2003 data.

Source: Highly Specialised Drugs (S100) Program

7.3 Monitoring prescriptions for hepatitis C treatments

Table 7.3.1 Number of people prescribed drugs for hepatitis C infection through the Highly Specialised Drugs (S100) Program, by quarter¹

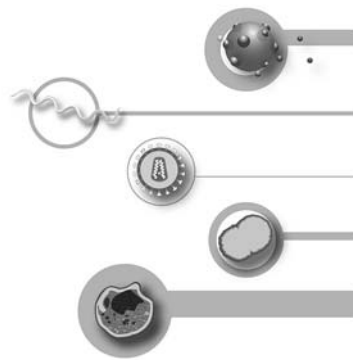
Year	Ribavirin and Interferon	Pegylated Interferon and Ribavirin ³	Total cost ² (\$'000s)
2001			
January – March	207	–	718
April – June	1 024	–	3 059
July – September	1 314	–	5 481
October – December	1 165	–	4 290
2002			
January – March	1 123	–	4 213
April – June	1 142	–	4 515
July – September	1 133	–	4 488
October – December	976	–	3 912
2003			
January – March	903	–	3 132
April – June	844	–	3 111
July – September	660	–	2 556
October – December ³	371	648	3 805

1 An estimated 1,391, 1,640, and 1,285 people were receiving treatment throughout 2001, 2002 and 2003, 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 Pegylated Interferon and Ribavirin included in S100 Program from 1 November 2003.

Source: Highly Specialised Drugs (S100) Program



2004

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

Methodological notes

1 National surveillance for HIV/AIDS

1.1 National AIDS Registry

National surveillance for AIDS diagnoses

AIDS is a notifiable condition in all State/Territory health jurisdictions in Australia. AIDS cases are notified by the diagnosing doctor through State/Territory health authorities to the national HIV surveillance centre. Information sought at AIDS notification includes State/Territory of diagnosis, name code (based on the first two letters of the family name and given name), sex, date of birth, country of birth, date of AIDS diagnosis, AIDS defining illness, CD4+ cell count at AIDS diagnosis, date of first HIV diagnosis, and source of exposure to HIV. Late HIV diagnosis in adults/adolescents was defined as HIV infection newly diagnosed within three months of AIDS diagnosis (Kaldor and French 1993, McDonald *et al* 2003). Further information on the AIDS surveillance system in Australia is available in Kaldor *et al* (1993).

Prior to 1993, the US Centers for Disease Control and Prevention AIDS surveillance definition was used in Australia (Centers for Disease Control 1987). From 1993, three additional conditions, recurrent pneumonia, pulmonary tuberculosis and cervical cancer, were included as AIDS defining illnesses in Australia (Communicable Diseases Network Australia 2004).

Adjusting AIDS incidence for reporting delay

Reporting delay, the interval between the date of AIDS diagnosis and date of entry of the AIDS notification onto the *National AIDS Registry*, was calculated for AIDS cases diagnosed from 1 January 2001 to 31 December 2003 and notified by 31 March 2004. It was assumed that AIDS cases were completely reported within three years of diagnosis. The number of AIDS diagnoses in each quarter from the second quarter of 2001 was adjusted for reporting delay using the methods of Brookmeyer and Liao (1990) and Law and Kaldor (1997).

The reporting delay distribution varied between State/Territory health authorities, and AIDS cases diagnosed in the fourth quarter of a year were reported more quickly than cases diagnosed in other quarters. These factors were considered in the adjustment of the number of AIDS diagnoses. There was no significant difference in reporting delay due to sex or age. Similar methods were used for adjusting the number of deaths following AIDS for reporting delay.

Survival following AIDS

The analysis was based on AIDS cases diagnosed by 31 December 2003 and reported to the *National AIDS Registry* by 31 March 2004. Cases without any follow-up information after AIDS diagnosis were excluded from the analysis. Survival following AIDS was calculated as the interval from the date of AIDS diagnosis to the date of death if the person had died; otherwise to the date of last medical contact or 31 December 2003, whichever came first. Survival rates at 1 and 2 years following AIDS diagnosis, and median survival, were estimated by the Kaplan-Meier method. Further information on survival following AIDS is available in Li *et al* (2000).

1.2 National HIV Database

National surveillance for newly diagnosed HIV infection

Newly diagnosed HIV infection, as well as AIDS, is a notifiable condition in all State/Territory health jurisdictions in Australia. Cases of 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, name code (based on the first two letters of the family name and the first two letters of the given name), sex, date of birth, Indigenous 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 collected for cases of HIV infection newly diagnosed from 1 January 2002.

Newly acquired HIV infection was defined as newly diagnosed HIV infection with evidence of a negative or indeterminate HIV antibody test result, or a diagnosis of HIV seroconversion illness, within one year of HIV diagnosis. Cases of newly acquired HIV infection which had progressed to AIDS were identified by matching HIV diagnoses, notified to the *National HIV Database*, to AIDS diagnoses, notified to the *National AIDS Registry*. HIV and AIDS diagnoses were matched by name code, sex and date of birth.

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

Adjusting the number of HIV diagnoses for multiple reports

The number of diagnoses of HIV infection reported to the *National HIV Database* was adjusted for multiple reporting, based on the reported dates of birth of each case. By assuming that all dates of birth were equally likely, and that all diagnoses of HIV infection were reported with the correct date of birth, it was possible to estimate the number of distinct HIV diagnoses. Further details of the methods used are described in Law *et al* (1996).

The total number of distinct HIV diagnoses was estimated for each State/Territory and year of diagnosis. Because adult/adolescent women and people whose sex was reported as transgender are a relatively small proportion of all HIV diagnoses, and also because diagnoses in women are thought to be almost completely accurate, their numbers of HIV diagnoses were simply enumerated, assuming that there was no multiple reporting (McDonald and Cui 1997). The number of men diagnosed with HIV infection adjusted for multiple reporting was then estimated for each State/Territory by subtracting the appropriate number of women and transgender from the corresponding State/Territory total.

1.3 National surveillance for HIV/AIDS in Indigenous people

Information on Indigenous status was routinely sought at diagnosis of HIV infection and AIDS in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia. Information on Indigenous status was sought for cases of HIV infection and AIDS newly diagnosed in New South Wales from January 1992 and from June 1998 in Victoria. Information on Indigenous status was not available for cases of HIV/AIDS diagnosed in the Australian Capital Territory by the end of March 2004. Nationally, information on Indigenous status at HIV/AIDS diagnosis was sought prospectively from May 1995. For HIV/AIDS diagnoses prior to 1995, Indigenous status was obtained retrospectively through State/Territory health authorities. In 1994 – 2003, 95% of HIV notifications from State/Territory health authorities other than the Australian Capital Territory and Victoria prior to June 1998 included information on Indigenous status. Further information is available in Guthrie *et al* (2000).

1.4 Assessment of self reported HIV exposure history

The basis for HIV exposure category classification was documented in cases of newly diagnosed HIV infection in adults/adolescents, for which the person reported a source of exposure to HIV other than male homosexual/bisexual contact. The medical practitioner involved in the person's HIV diagnosis was asked to complete a questionnaire which sought specific information on the person's reported history of receipt of blood, injecting drug use and heterosexual contact, both in Australia and overseas. The medical practitioner was also asked to indicate whether he/she was generally satisfied with the person's reported HIV exposure history. Further information is available in McDonald *et al* (1994c), McDonald (1995) and Raman *et al* (1996).

1.5 National surveillance for perinatal exposure to HIV

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

1.6 Global comparisons

The data in Table 1.6.1 were obtained from the following sources:

- Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report 2002*; 14.
- Hamers F. European Centre of the Epidemiological Monitoring of AIDS. Paris, France. *Personal Communication*, 2004.
- Health Canada. *HIV and AIDS in Canada. Surveillance report to December 31, 2003*. Division of HIV/AIDS Epidemiology and Surveillance, Centre for Infectious Disease Prevention and Control, Health Canada, 2004.
- Institute of Environmental Science and Research (ESR). *Notifiable and other diseases in New Zealand: Annual Report 2003*. Population and Environment Health Group, ESR, 2004.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). 2004 Report on the global HIV/AIDS epidemic: 4th global report. UNAIDS, 2004. <http://www.unaids.org>
- Semaille C. Institut de Veille Sanitaire. Paris, France. *Personal Communication*, 2004.
- WHO South-East Asia Region. Report of the Regional Director – 1 July 2000 – 30 June 2001.
- WHO Western Pacific Region. Report of the Regional Director – 1 July 2000 – 30 June 2001 .

2 National surveillance for viral hepatitis

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

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

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

Information was sought on Indigenous status for diagnoses of hepatitis A, newly acquired hepatitis B and hepatitis C (both newly acquired and prevalent cases) notified to the National Notifiable Diseases Surveillance System. Population rates of diagnoses of viral hepatitis were calculated by year and State/Territory of diagnosis (in those jurisdictions for which Indigenous status was reported in more than 50% of diagnoses) using 2001 census data, provided by the Australian Bureau of Statistics.

2.3 Long term outcomes among people with chronic viral hepatitis

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

3 National surveillance for sexually transmissible infections

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

Diagnoses of specific sexually transmissible infections were notified by State/Territory health authorities to the National Notifiable Disease Surveillance System, maintained by the Australian Government Department of Health and Ageing. Chlamydia was notifiable in all health jurisdictions except New South Wales prior to 1998; chlamydia was made notifiable in New South Wales in 1998. Gonorrhoea and syphilis were notifiable conditions in all health jurisdictions. 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). In Western Australia, a parent or guardian, household co-occupant, local government or employer can also notify a diagnosis.

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	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Other ¹
Syphilis	Doctor	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Other ¹
Chlamydia	Doctor Laboratory Hospital	Not notifiable	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor Other ¹
Donovanosis	Not notifiable	Not notifiable	Doctor Laboratory	Doctor Laboratory Hospital	Not notifiable	Laboratory	Doctor Laboratory	Doctor ¹ Laboratory

¹ Parent or guardian, occupier of household, local government, or employer.

3.2 National surveillance for sexually transmissible infections in Indigenous people

Information on Indigenous status in diagnosed cases of chlamydia, gonorrhoea and syphilis was sought through doctor notification in the Australian Capital Territory, the Northern Territory, South Australia, Victoria and Western Australia. New South Wales and Tasmania were the only health authorities that sought information on Indigenous status through laboratory notification. In Queensland, information on Indigenous status was not sought at notification of sexually transmissible infections other than HIV, by 31 March 2004.

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

3.3 Gonococcal isolates

The Australian Gonococcal Surveillance Programme (AGSP) is a collaborative project involving gonococcal reference laboratories in each State/Territory and is coordinated by the NSW Gonococcal Reference Laboratory at the Prince of Wales Hospital, Sydney. The primary objective of the programme is to monitor the antibiotic susceptibility of isolates of *Neisseria gonorrhoeae*, to assist in the effective treatment of gonorrhoea. Information on sex and site of isolation of gonococcal strains was also collected (AGSP 2003).

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

4.1 HIV incidence, hepatitis C prevalence and incidence of syphilis among homosexually active men

The Health in Men (HIM) study is a cohort study of HIV negative homosexually active men in Sydney. The study commenced in 2001 and recruited men through a variety of community-based settings. The men are tested annually for HIV antibody as part of the study, and more than 95% have also consented to syphilis testing. The date of HIV acquisition was calculated as the midpoint between the date of the last negative HIV test in HIM and the date of diagnosis of HIV infection, recorded either in HIM or the *National HIV Database*, whichever was the earliest. Date of acquisition for syphilis was calculated as the midpoint between the date of last negative and the date of first positive test in HIM. Person years at risk was calculated from the date of study entry to the date of acquisition, or for those who did not acquire infection, to the date of the last negative test in HIM. Incidence of infection in the most recent year is subject to revision.

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

All clients attending needle and syringe program (NSP) sites during one week in March 1995 (20 fixed sites and one mobile site), June 1996 (19 fixed sites and one mobile site), October 1997 (21 fixed sites and one mobile site), 1998 (30 fixed sites and two mobile sites), 1999 (32 fixed sites and 2 mobile sites), 2000 (35 sites), 2001 (38 sites), 2002 (46 sites) and 2003 (48 sites) were asked to complete a brief, self-administered questionnaire and to provide a finger prick blood spot sample for HIV and hepatitis C antibody testing. NSP sites were selected on the basis of large numbers of clients and representation from all State/Territory health jurisdictions. Further information is available in MacDonald *et al* (1997 and 2000).

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

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

4.4 HIV infection among entrants into Australian prisons

From 1991, State/Territory Departments of Corrections have forwarded to the national HIV surveillance centre tabulations of the number of people received into prisons in the jurisdiction in each calendar quarter, the number tested for HIV antibody at reception and the number newly diagnosed with HIV infection, broken down by sex. Further information is available in McDonald *et al* (1999).

4.5 HIV and hepatitis C seroprevalence among people seen at sexual health clinics

A network of selected metropolitan sexual health clinics provided, at the end of each quarter and annually, tabulations of the number of people seen, the number tested for HIV antibody and the number newly diagnosed with HIV infection, broken down by sex, age group, HIV exposure category and HIV antibody testing history. Potential exposure to HIV was categorised according to the person's reported sexual behaviour in the 12 months prior to being seen at the clinic and any history of injecting drug use. HIV antibody testing history was subdivided into two categories: any history of HIV antibody testing prior to being seen at the clinic and HIV antibody testing in the 12 months prior to being seen. Estimates of HIV incidence among gay and other homosexually active men were based on the number of men seen at the clinic during the year who had a negative HIV antibody test within 12 months of their last HIV antibody test. Further information is available in McDonald *et al* (2001). Data was not available for people seen through Clinic 275 in Adelaide, SA, in 2003. Data was available for people seen at the Melbourne Sexual Health Centre, VIC, over the six month interval, July – December 2003, without information on HIV antibody testing history.

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

All blood donations in Australia have been screened for HIV-1 antibodies since May 1985, for HIV-2 antibodies since April 1992 and for hepatitis C antibody from 1990. Prior to donation, all donors are required to sign a declaration that they do not have a history of any specified factors associated with a higher risk of HIV infection and other blood-borne infections. In all State/Territory health jurisdictions, detailed information is routinely sought on donors found to have antibody to HIV-1, HIV-2 or hepatitis C, and reports are routinely forwarded to the NCHECR. Further details of the national data collection on HIV infection in blood donors are given in NCHECR (1996), and Kaldor *et al* (1991).

5 Risk behaviour

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

The Sydney Gay Community Periodic Survey commenced in 1996, with the objective of providing information on sexual behaviour in a broad cross section of Sydney gay men. In February of each year from 1996, gay and other homosexually active men were recruited at the Sydney Gay and Lesbian Mardi Gras fair day or at one of several gay community venues or medical clinics during the subsequent week. In August/September of each year, the sample was available only for the venues. Results from the two surveys in each year have been combined. The questionnaire was self-completed and takes approximately 5 minutes to answer. Information was sought on participant demographics, sexual practices with men and women, injecting drug use, HIV tests and results, and antiretroviral use for respondents with HIV infection.

The Adelaide, Brisbane, Melbourne and Perth Gay Community Periodic Surveys commenced in 1998 and the Canberra Gay Community Periodic Survey commenced in 2000. The Brisbane (including small numbers of men recruited in Cairns and on the Sunshine and Gold Coasts) and Melbourne surveys were carried out annually (June and January/February, respectively); the Adelaide and Perth surveys were carried out every two years (in October/November) and the Canberra survey is conducted every three years (in November). The surveys used similar recruitment strategies and a compatible survey instrument. Gay and other homosexually active men were recruited at the local equivalent of Sydney's Mardi Gras Fair Day (the Pride Fair in Brisbane and Picnic in the Park in Adelaide) or at one of a small number of community venues or medical clinics during the subsequent week. The sites were selected to be comparable with the range of sites used in the Sydney surveys.

5.2 Sexual, injecting and blood borne virus testing behaviour among people who have injected drugs

Information on sexual behaviour, history of injecting drug use and HIV and hepatitis C testing history was obtained by client completion of a questionnaire administered at 34 needle and syringe programs in 1999, 35 in 2000, 38 in 2001, 46 in 2002 and 48 sites in 2003. Further information is available in MacDonald *et al* (1997 and 2000).

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

6.1 Estimates of the number of people living with HIV infection

Estimates of the number of people living with HIV infection by disease stage (a CD4+ cell count of more than 500/ μ l, a CD4+ cell count of less than 500/ μ l and AIDS free, or living with AIDS) between 2003 and 2007 were based on the estimated pattern of past HIV incidence given by back-projection analyses (see *Annual Surveillance Report 2000* for details of methods). HIV incidence was assumed to continue at a constant rate of 450 new infections per year from 2003 onwards. The rate of progression to a CD4+ cell count of fewer than 500/ μ l was modelled using a Weibull-with-levelling distribution (Rosenberg *et al* 1992) corresponding to a median time from HIV infection to a CD4+ cell count of 500/ μ l of 4 years, with 95% below 500/ μ l by 10 years. The number of AIDS diagnoses and deaths in 2003 were based on reported numbers of cases adjusted for reporting delays. From 2004 onwards, AIDS incidence and deaths were assumed to continue at the same rate as 2003.

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

Estimates of the number of people living with hepatitis C virus were derived by the Hepatitis C Virus Projections Working Group, a collaborative group formed under the auspices of ANCAHRD's Hepatitis C Sub-Committee. Estimates were derived from mathematical models in the following way. First, the number of people who had injecting drugs in Australia over the last three decades was estimated. Based on this pattern of injecting drug use, and estimates of hepatitis C incidence among injecting drug users derived from cohort studies, hepatitis C incidence as a result of injecting drug use was estimated. These estimates of hepatitis C incidence due to injecting drug use were then adjusted in accordance with epidemiological data to allow for hepatitis C infections through other transmission routes, including receipt of blood or blood products. Estimates of the number of people experiencing long-term sequelae of hepatitis C infection were then obtained from the estimated pattern of hepatitis C incidence using rates of progression derived from cohort studies. Estimates of the numbers of people living with hepatitis C in 2003 were adjusted to allow for mortality related to hepatitis C infection, injecting drug use and unrelated to hepatitis C infection or injecting. Further details are given in the Working Group's Report (ANCAHRD, 2002).

7 Uptake of treatment for HIV and hepatitis C infection

7.1 Uptake of antiretroviral treatment for HIV infection

The Australian HIV Observational Database (AHOD) is a collaborative study, recording observational data on the natural history of HIV infection and its treatment. The primary objective of the AHOD is to monitor the pattern of antiretroviral and prophylactic treatment use by demographic factors and markers of HIV infection stage. Other objectives are to monitor how often people with HIV infection change antiretroviral treatments and the reasons for treatment change.

Information is collected from hospitals, general practitioner sites and sexual health centres throughout Australia. Participating sites contribute data biannually from established computerised patient management systems. Core variables from these patient management systems are transferred electronically to the National Centre in HIV Epidemiology and Clinical Research (NCHECR), where the data are collated and analysed. By March 2004, 28 participating clinical sites enrolled a total of 2,329 people into the AHOD.

A detailed summary of treatments data from the AHOD is published in the *Australian HIV Observational Database Biannual Report* (NCHECR 2003; Australian HIV Observational Database 2002).

Self-reported use of antiretroviral therapy for the treatment of HIV infection was monitored, from 1997, among gay and other homosexually active men with HIV infection participating in the Periodic Surveys in Adelaide, Brisbane, Canberra, Melbourne, Perth and Canberra, and among people enrolled in Positive Health in Sydney and Melbourne.

7.2 Monitoring prescriptions for HIV treatments

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

The reported number of people prescribed each treatment was for people treated in community and day services only. Hospital in-patients, and people treated in pharmaceutical company-sponsored clinical trials or expanded access schemes, were excluded. The Australian Government covers the cost of antiretroviral treatment for people seen in community or day services. State/Territory health authorities meet the cost of in-patient supply and costs associated with the management of these drugs.

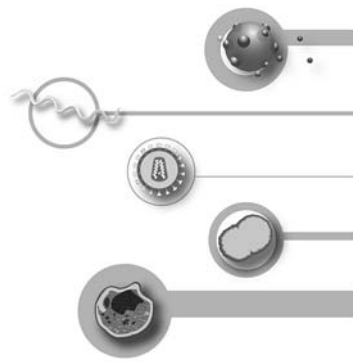
Data on the HSDs Program were initially provided by financial year until the 1995/1996 financial year, thereafter quarterly reporting became a requirement. Quarterly reporting, from 1996/1997, ensured that the reported number reflected the number of people being prescribed each antiretroviral treatment rather than the number of treatment prescriptions.

Data on drugs for HIV/AIDS related conditions restricted to the HSDs program primarily include drugs for the treatment of the HIV/AIDS. There were, however, two exceptions. Rifabutin has both treatment and prophylactic uses, while azithromycin was prescribed for prophylactic use only.

Based on results from the Australian HIV Observational Database, the proportion of people who were taking zidovudine or stavudine as part of their antiretroviral treatment in any six month period ranged from approximately 90% in 1997 to 63% in 2003. Therefore, the total number of people receiving antiretroviral treatment through the HSDs program was estimated as the number receiving either stavudine or zidovudine divided by the proportion of AHOD patients receiving zidovudine and stavudine.

7.3 Monitoring prescriptions for hepatitis C treatments

The number of prescriptions for interferon and ribavirin combination therapy and more recently pegylated interferon and ribavirin combination therapy was monitored through the Highly Specialised Drugs (HSDs) Program, a joint Australian Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Australian Government Department of Health and Ageing. The estimated number of people who were previously hepatitis C treatment-naïve and received combination interferon and ribavirin for hepatitis C infection increased from 1,391 in 2001 to approximately 1,640 in 2002. In 2003 this estimated figure dropped to 1,285 possibly due to the expected inclusion of pegylated interferon and ribavirin into the HSD program in late 2003. The estimates were based on the assumption that 50% of patients were receiving treatment for 6 months, and the remaining were receiving treatment for 12 months.



References

- Australian Bureau of Statistics. *Australian Demographic Statistics*, December Quarter 2003. Canberra: Australian Bureau of Statistics, 2004
- Australian Bureau of Statistics. *Births, Australia* (Catalogue No 3301.0) (various issues).
- Australian Bureau of Statistics. *Population Distribution, Indigenous Australians*. Canberra: Australian Bureau of Statistics, 2003.
- Australian Bureau of Statistics. *Migration, Australia* (Catalogue No 3412.0) (various issues).
- Australian Bureau of Statistics. *Experimental projections of the Aboriginal and Torres Strait Islander Population. 30 June 1996 – 30 June 2006*. (Catalogue No 3231.0). Canberra: Australian Bureau of Statistics, July 1998
- Australian Gonococcal Surveillance Programme. Annual report of the Australian Gonococcal Surveillance Programme, 2003. *Communicable Diseases Intelligence* 2004; 285 (2): 187-193
- Australian HIV Observational Database. Time trends in antiretroviral treatment use in Australia, 1997-2000. *Venereology* 2001; 14(4): 162-168.
- Australian HIV Observational Database. Rates of combinations antiretroviral treatment change in Australia, 1997-2000. *HIV Medicine* 2002; 3: 28-36
- Australian National Council on AIDS and Related Diseases. Hepatitis C Sub-Committee. Hepatitis C virus projections Working Group: Estimates and Projections of the hepatitis C virus epidemic in Australia. National Centre in HIV Epidemiology and Clinical Research, Sydney. August 1998
- Brookmeyer R and Liao J. The analysis of delays in disease reporting: methods and results for the acquired immune deficiency syndrome. *Am J Epidemiol* 1990; 132: 355-365
- Centers for Disease Control. Revision of the CDC Surveillance Case Definition for Acquired Immunodeficiency Syndrome. *MMWR* 1987; 36 (suppl no. 1S): 1S-15S
- Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report* 2002; 14.
- Commonwealth of Australia 1997. The National Indigenous Australians' Sexual Health Strategy 1996-97 to 1998-99 – a Report of the ANCARD Working Party on Indigenous Australians' Sexual Health. Australian Government Publishing Service, Canberra, March 1997
- Communicable Diseases Network Australia. Interim surveillance case definitions for the Australian National Notifiable Diseases Surveillance System. Version 1, 1 January 2004. www.cda.gov.au/surveil/nndss/casedefs
- Concorde Coordinating Committee. Concorde: MRC/ANRS randomised double-blind controlled trial of immediate and deferred zidovudine in symptom-free HIV infection. *Lancet* 1994; 343: 871-881
- Dax EM and Vandenbelt TA. HIV antibody testing in Australia. *J Acquir Immune Defic Syndr* 1993; 6 (suppl 1) S24-S28
- Dore GJ, Li Y, McDonald A, Ree H and Kaldor JM for the National HIV Surveillance Committee. Impact of highly active antiretroviral therapy on individual AIDS-defining illness incidence and survival in Australia. *JAIDS* 2002; 29: 388-395
- European Centre for the Epidemiological Monitoring of AIDS. *HIV/AIDS in Europe: end-year report 2003*. Saint-Maurice, Institut de Veille Sanitaire, 2004 (in press).
- Guthrie JA, Dore GJ, McDonald AM and Kaldor JM for the National HIV Surveillance Committee. HIV and AIDS in Aboriginal and Torres Strait Islander Australians: 1992 – 1998. *Medical Journal of Australia* 2000; 172: 266-269
- Health Canada. *HIV and AIDS in Canada. Surveillance report to December 31, 2003*. Division of HIV/AIDS Epidemiology and Surveillance, Centre for Infectious Disease Prevention and Control, Health Canada, 2004

- Institute of Environmental Science and Research (ESR). *Notifiable and other diseases in New Zealand: Annual Report 2003*. Population and Environment Health Group, ESR, 2004.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). 2004 Report on the global HIV/AIDS epidemic: 4th global report. UNAIDS, 2004. <http://www.unaids.org>
- Kaldor JM and French MAH. When do patients present with HIV infection? *Medical Journal of Australia* 1993; 158: 37-39
- Kaldor J, McDonald AM, Blumer CE, Gertig DM, Patten JJ, Roberts M, Walker CC, Mullins SE, Bailey KA and Chuah JCP. The acquired immunodeficiency syndrome in Australia: incidence 1982 – 1991. *Medical Journal of Australia* 1993; 158: 10-17
- Kaldor JM, Whyte B, Archer G, Hay J, Keller A, Kennedy T, Mackenzie I, Pembrey R, Way B, Whyte G, Woodford P, Young I and Vandenberg T. Human immunodeficiency virus antibodies in sera of Australian blood donors: 1985 – 1990. *Medical Journal of Australia* 1991; 155: 297-300
- Law MG, Cui J, Duncombe C, Mallal S, Roth N and Anderson J. Observational Database Pilot Study: Summary Report. Report to CTTAC, National Centre in HIV Epidemiology and Clinical Research, Sydney, 1998
- Law MG and Kaldor JM. A note on the grouping of surveillance data when adjusting for reporting delays. *Am J Epidemiol* 1997; 146: 592-595
- Law MG, McDonald AM and Kaldor JM. Estimation of cumulative HIV incidence in Australia based on national case reporting. *Australian and New Zealand Journal of Public Health* 1996; 20: 215-217
- Li Y, McDonald AM, Dore GJ and Kaldor JM for the National HIV Surveillance Committee. Improving survival following AIDS in Australia, 1991 – 1996. *AIDS* 2000; 14: 2349-2354
- MacDonald M and Wodak A on behalf of the participating clinics. National surveillance for HIV, hepatitis C and hepatitis B infection among injecting drug users attending methadone clinics. *Australian HIV Surveillance Report* 1996; 12(2): 6-10
- MacDonald M, Wodak A, Ali R, Crofts N, Cunningham P, Dolan K, Kelahe M, Loxley W, van Beek I and Kaldor J on behalf of the Collaboration of Australian Needle Exchanges. HIV prevalence and risk behaviour in needle exchange attendees: a national study. *Medical Journal of Australia* 1997; 166: 237-240
- MacDonald MA, Wodak AD, Dolan KA, van Beek I, Cunningham PH and Kaldor J on behalf of the Collaboration of Australian NSPs. Hepatitis C virus antibody prevalence among injecting drug users at selected needle and syringe programs in Australia, 1995-1997. *Medical Journal of Australia* 2000; 172(2): 57-61
- McDonald A for the National HIV Surveillance Committee. Assessment of reported exposure to HIV for HIV infection newly diagnosed in Australia in 1994. *Australian HIV Surveillance Report* 1995; 11(2): 9-13
- McDonald AM, Crofts N, Blumer CE, Gertig DM, Patten JJ, Roberts M, Davey T, Mullins SE, Chuah JCP, Bailey KA and Kaldor JM. The pattern of diagnosed HIV infection in Australia, 1984 – 1992. *AIDS* 1994a; 8: 513-519
- McDonald AM, Cruickshank M, Ziegler JB, Elliott E and Kaldor JM. Perinatal exposure to HIV in Australia, 1982 – 1994. *Medical Journal of Australia* 1997; 166: 77-80
- McDonald A and Cui J. The pattern of diagnosed HIV infection and AIDS in women in Australia, 1984 – 1996. *Australian HIV Surveillance Report* 1997; 12 (2): 1-7
- McDonald A, Donovan B, O'Connor C, Packham D, Patten JJ, Chuah J, Waddell R, Fairley C and Kaldor JM. Time trends in HIV incidence among homosexually active men seen at sexual health clinics in Australia, 1993 – 1999. *Journal of Clinical Virology* 2001; 22 (3 Special Issue SI): 297 – 303
- McDonald AM, Gertig DM, Crofts N and Kaldor JM for the National HIV Surveillance Committee. A national surveillance system for newly acquired HIV infection in Australia. *American Journal of Public Health* 1994b; 84(12): 1923-1928
- McDonald AM, Imrie A, Neilsen G, Downie J, Gertig DM, Robertson P, Guinan J, Mullins S and Kaldor JM. Assessment of self-report in HIV surveillance: a pilot study. *Australian Journal of Public Health* 1994c: 18: 429-432
- McDonald AM, Li Y, Cruickshank MA, Elliott EJ, Kaldor JM and Ziegler JB. Use of interventions for reducing mother-to-child transmission of HIV in Australia. *Medical Journal of Australia* 2001; 174: 449-452

McDonald AM, Ryan JW, Brown PR, Manners CJ, Falconer AD, Kinnear RC, Harvey WJ, Hearne PR, Banaszczyk M and Kaldor JM. HIV prevalence at reception into Australian prisons, 1991 – 1997. *Medical Journal of Australia* 1999; 171: 18-21

McDonald AM, Li Y, Dore GJ, Ree H and Kaldor JM for the National HIV Surveillance Committee. Late HIV presentation among AIDS cases in Australia, 1992 – 2001. *Aust N Z J Public Health* 2003; 27 (6): 608 – 613

National Centre in HIV Epidemiology and Clinical Research. Australian HIV Observational Database Biannual Report 2003; 4(1)

National Centre in HIV Epidemiology and Clinical Research. An epidemiological assessment of the HIV epidemic in Australia. Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96 Technical Appendix 1. Commonwealth Department of Health and Family Services 1996.

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS and related diseases in Australia Annual Surveillance Report 1997*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2000. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS and related diseases in Australia Annual Surveillance Report 1998*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2000. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS, Hepatitis C and Sexually Transmissible Infections in Australia Annual Surveillance Report 1999*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2000. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS, Hepatitis C and Sexually Transmissible Infections in Australia Annual Surveillance Report 2000*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2000. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2001*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2001. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2002*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2002. <http://www.med.unsw.edu.au/nchecr>

National Centre in HIV Epidemiology and Clinical Research. *HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2003*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2003. <http://www.med.unsw.edu.au/nchecr>

Raman S, Menzies R, McDonald A, Griggs E and Levy M. Validation of reported risk exposure in persons with newly diagnosed HIV infection. *Communicable Diseases Intelligence* 1996; 20(1): 2-5

Rosenberg PS, Gail MH and Carroll RJ. Estimating HIV prevalence and projecting AIDS incidence in the United States: a model that accounts for therapy and changes in the surveillance definition of AIDS. *Statistics in Medicine* 1992; 11: 1633-1655

Sexually Transmitted Diseases in South Australia in 2003. Epidemiologic Report No. 19, 2003. Sexually Transmitted Diseases (STD) Services, Internal Medicine Service, Royal Adelaide Hospital, South Australia.

Van Beek I, Dwyer R, Dore GJ, Luo K and Kaldor JM. Infection with HIV and hepatitis C virus among injecting drug users in a prevention setting: retrospective cohort study. *British Medical Journal* 1998; 317: 433-437

WHO South-East Asia Region. Report of the Regional Director – 1 July 2000 – 30 June 2001.

WHO Western Pacific Region. Report of the Regional Director – 1 July 2000 – 30 June 2001 .

Yohannes K, Roche P, Blumer C, Spencer J, Milton A, Bunn C, Gidding H, Kirk M, Della-Porta T. Australia's notifiable diseases status, 2002: annual report of the National Notifiable Diseases Surveillance System. *Communicable Diseases Intelligence* 2004; 28 (1): 6-68

