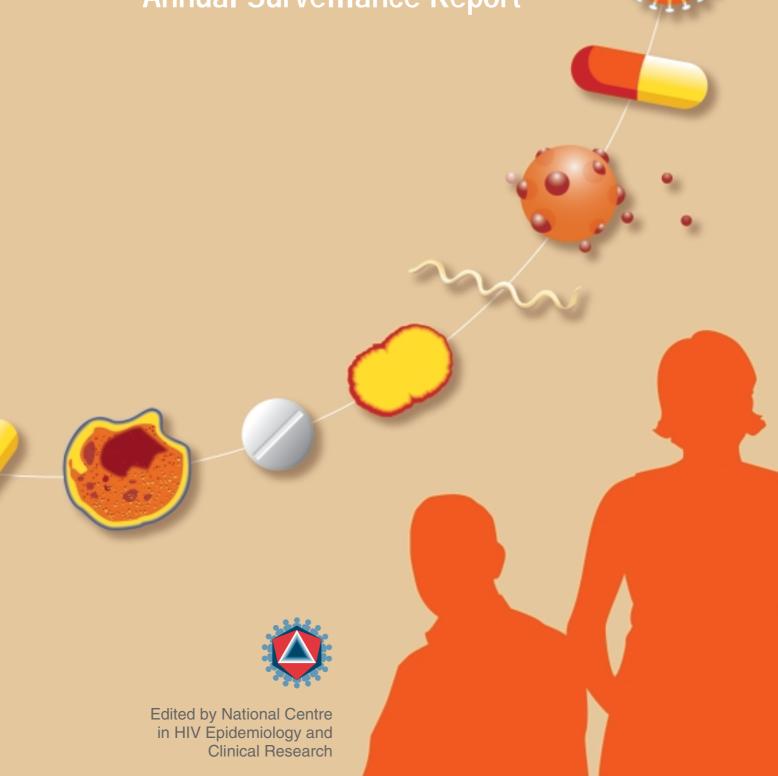




**Annual Surveillance Report** 



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**Annual Surveillance Report** 

edited by
Ann McDonald

#### **National Centre in HIV Epidemiology and Clinical Research**

in collaboration with

Australian Gonococcal Surveillance Programme

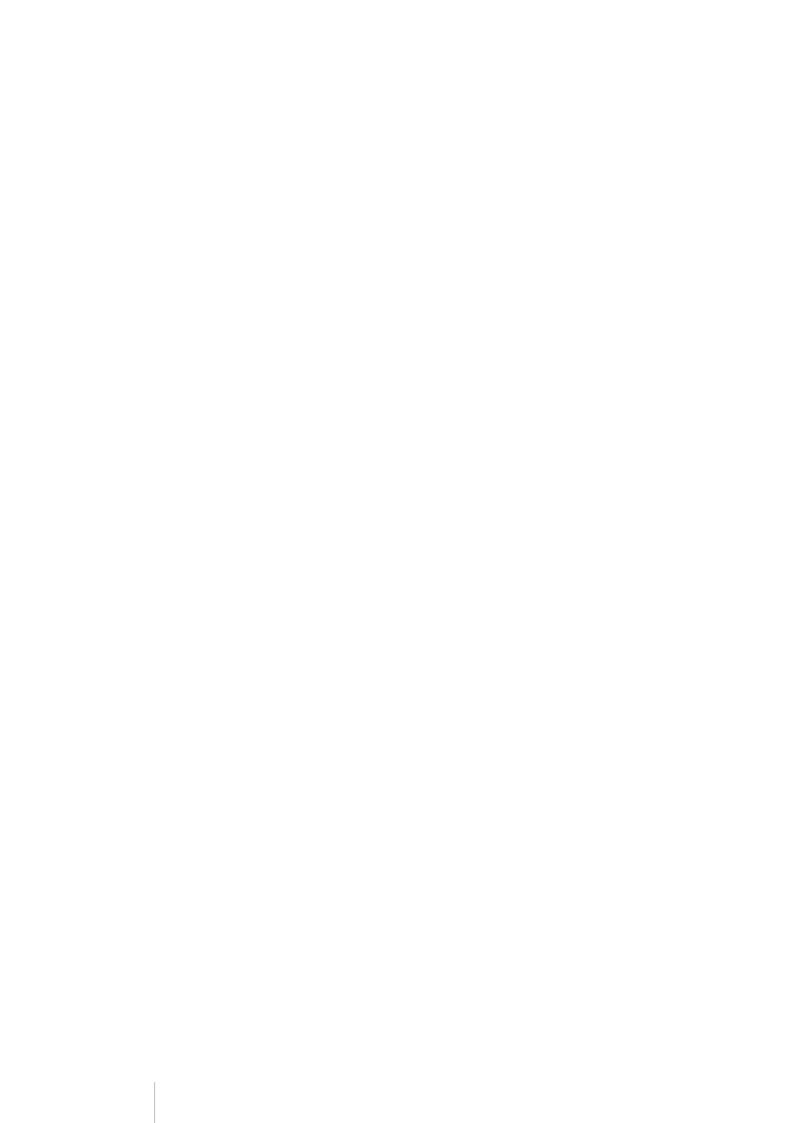
Communicable Diseases Network Australia

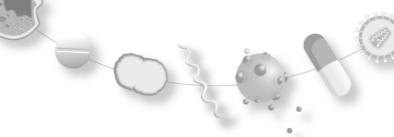
National Centre in HIV Social Research

National Serology Reference Laboratory, Australia

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

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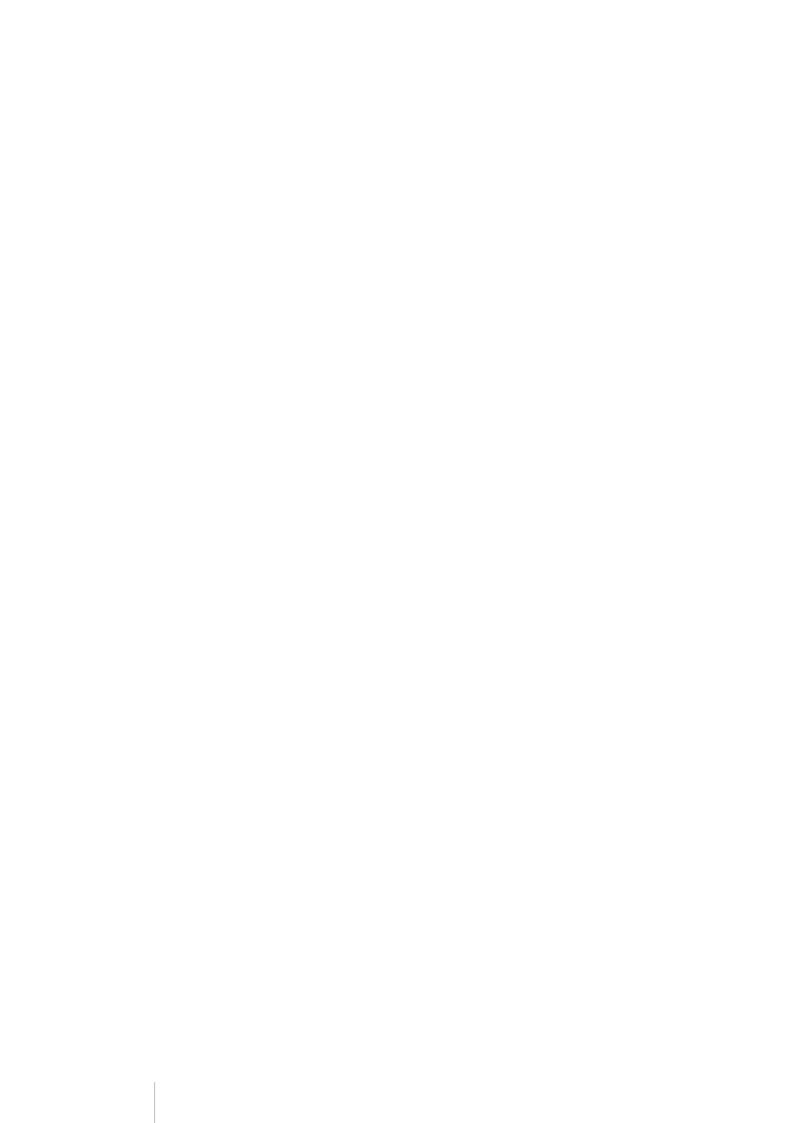


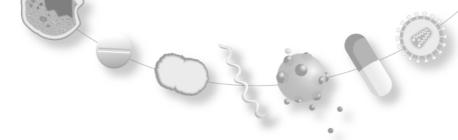
HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia

#### **Annual Surveillance Report**

# **Contents**

Preface	1
Acknowledgments	2
Summary	5
Main findings	7
General patterns	7
HIV/AIDS	7
Viral hepatitis	11
Sexually transmissible infections other than HIV	14
Sentinel populations for monitoring HIV, viral hepatitis and treatment	16
Gay and other homosexually active men	17
Indigenous Australians	18
People who have injected drugs	19
Heterosexual transmission of HIV infection	21
Illness and mortality in people with HIV infection and viral hepatitis	23
Patterns of treatment for HIV and hepatitis C infection	26
Tables	29
National surveillance for HIV/AIDS	29
National surveillance for viral hepatitis	51
National surveillance for sexually transmissible infections	59
Surveillance for HIV and viral hepatitis in sentinel populations	69
Risk behaviour	91
Estimates of HIV and hepatitis C prevalence	99
Uptake of treatment for HIV and hepatitis C infection	103
Methodological notes	109
References	117





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

**Annual Surveillance Report** 

## **Preface**

This report is the sixth 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 <a href="http://www.med.unsw.edu.au/nchecr">http://www.med.unsw.edu.au/nchecr</a>

The Australian AIDS Public Access Dataset, including information on AIDS cases, diagnosed in Australia by 31 December 2001and reported by 31 March 2002, is also available through the website.

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 2002*, 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 2002* also appears in the report on behavioural data.

Unless specifically stated otherwise, all data provided in the report are to the end of 2001, as reported by 31 March 2002.

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.

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

#### **Annual Surveillance Report**

# **Acknowledgments**

#### **National organisations**

- · Australasian Society for HIV Medicine, Sydney, NSW
- Australia and New Zealand Liver Transplant Register, Sydney, NSW
- Australian Defence Force, Department of Defence, Canberra, ACT
- 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
- · Commonwealth Department of Health and Ageing, Canberra, ACT
- Multicultural HIV/AIDS Service
- 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 Centre for Research into the Prevention of Drug Abuse, Perth, WA
- · 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 and Community Services, 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 Unit, Health Department of WA, Perth, WA

### **Australian Gonococcal Surveillance Programme**

#### **Reference Laboratories:**

- Microbiology Department, Canberra Hospital, Woden, ACT
- · Department of Microbiology, Prince of Wales Hospital, Randwick, NSW
- Microbiology Laboratory, Royal Darwin Hospital, Casuarina, NT
- Queensland Health Scientific Services, Coopers Plains, Brisbane, QLD
- Infectious Diseases Laboratories, Institute of Medical and Veterinary Science, Adelaide, SA
- Department of Microbiology and Infectious Diseases, Royal Hobart Hospital, Hobart, TAS
- The Microbiological Diagnostic Unit, University of Melbourne, Melbourne, 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; Nepean Sexual Health and HIV Clinic, Penrith; Sexual Health Clinic, Gosford; SHAIDS, Lismore; St Vincent's Hospital, Darlinghurst; The Medical and Vein Centre, Coffs Harbour; Taylor Square, Darlinghurst; 407 Bourke Street, Surry Hills; NSW
- Royal Darwin Hospital, Darwin, NT
- AIDS Medical Unit, North Quay; Blackall Terrace Specialist Group, Blackall Terrace; Brunswick Street Medical Centre, New Farm; Gold Coast Sexual Health Clinic, Miami; Sexual Health Program, Cairns Base Hospital, Cairns, QLD
- The Alfred Hospital, Prahran, Melbourne Sexual Health Centre, Carlton, 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**

- ACT IV League; Drug Referral Information Centre, ACT
- Drug Intervention Services and Street Youth Program, Cabramatta; Kirketon Road Centre and K2, Kings Cross; Northern Rivers Health Service; Resource and Education Program for IDU, Redfern and Canterbury; St George NSP, Kogarah; The Exchange, Manly and Ryde; Wentworth HIV and Sexual Health Service; Western Sydney AIDS Prevention Service, Auburn, Blacktown and Parramatta, NSW
- AIDS Council of Central Australia, Alice Springs; Northern Territory AIDS Council, Darwin, NT
- Bodyline, Brisbane; Community Alcohol and Drug Services, BIALA; Cairns Base Hospital; Gold Coast AIDS Association & Injectors Newsline (GAIN); Gold Coast Hospital; Kobi House, Toowoomba; QuIVva; SCIVAA, QLD
- Christies Beach National Pharmacy; Clovelly Park NSP; Hindmarsh Centre, Hindmarsh; Lyell McEwin, Adelaide; Midnight Pharmacy, Adelaide; Morphettville Medical Centre Pharmacy, Glenelg East; Noarlunga Community Health Service; Northern Metropolitan Community Health Service NSP and Shopfront; Parks Community Health Service; Port Adelaide Community Health Service; South Australian Drug and Alcohol Services Council; The AIDS Council of South Australia - SAVIVE; Threadgold's Pharmacy; Warrinilla Clinic; William Jelfs Pharmacy, Woodville, SA
- Tasmanian AIDS & Related Diseases Council, Hobart; Tasmanian User's Health Support League, TAS
- Ballarat Community Health Services, Ballarat; Geelong Community Health Services, Geelong; 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 User's Association, Perth; 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
- Queensland AIDS Council, Brisbane, QLD
- AIDS Council of South Australia, Adelaide, SA
- Victorian AIDS Council/Gay Men's Health Centre, Melbourne, VIC
- Western Australian AIDS Council, Perth, WA
- PLWHA (NSW)
- PLWHA (VIC)
- Queensland Positive People (QPP), Brisbane, QLD

**Annual Surveillance Report** 

# **Summary**

#### **HIV/AIDS**

- After adjusting for reporting delay, there were 8,810 AIDS cases and 6,174 deaths following AIDS, in Australia, cumulative to 31 December 2001. The number of HIV diagnoses, adjusted for multiple reporting, was 18,854 at the end of 2001. An estimated 12,730 people were living with HIV/AIDS in Australia in 2001.
- The annual number of AIDS diagnoses in Australia peaked at 954 cases in 1994 and has dropped to 178 cases in 2001. The decline in AIDS incidence from 1994 was due to a sharp drop in HIV incidence occurring in the mid 1980s and to the effectiveness of combination antiretroviral therapy in delaying progression to AIDS among people whose HIV infection was diagnosed before AIDS diagnosis. The number of AIDS cases reported in people whose HIV infection was diagnosed within the preceding three months has remained stable.
- The annual number of cases of newly diagnosed HIV infection has remained relatively stable in 1997 2001 at around 700 cases. The number of diagnoses of newly acquired HIV infection has also remained stable at around 150–200 diagnoses per year, providing a lower bound to the number of new HIV infections that have actually occurred in Australia over this time. An estimated 450 new HIV infections occur in Australia each year.
- Transmission of HIV infection in Australia continues to be mainly through sexual contact between men. A history
  of male homosexual contact was reported in more than 85% of cases of newly acquired HIV infection diagnosed
  in 1997 2001. HIV prevalence remains below 1% among injecting drug users, prison entrants, and among men
  and women with a history of heterosexual contact, both in Australia and overseas, including women with a
  history of sex work.
- In 1992 2001, 167 HIV diagnoses and 69 AIDS diagnoses were notified among Indigenous people. The population
  rate of HIV and AIDS diagnosis among Indigenous people was similar to that among non-Indigenous people.
  However, a higher proportion of HIV diagnoses in Indigenous people were among women, and AIDS incidence has
  declined more slowly in Indigenous people.
- AIDS incidence and estimated HIV prevalence in Australia at the end of 2001 were 0.9 and 66 per 100,000 population, respectively. AIDS incidence in Australia in 2001 was similar to that recorded in the United Kingdom in 2001 and was substantially lower than in France (2.1), Spain (4.8) and the United States (14.3). Within the Asia-Pacific region, estimated HIV prevalence in Cambodia, Myanmar and Thailand was substantially higher than that in Australia in 2001.
- Survival following AIDS in Australia has increased from 19.5 months for diagnoses in 1994 to 46.9 months for cases diagnosed in 1997.
- An estimated 50% of all people living with HIV infection in Australia in 2001 were treated with antiretroviral therapy.

#### Viral hepatitis

- For the first time in five years, the annual number of diagnoses of hepatitis C infection declined in 2001, to 16,734 cases. The number of diagnoses of newly acquired hepatitis C infection continued to increase from 154 in 1997 to 587 in 2001, probably because of improved monitoring.
- Hepatitis C transmission continued to occur predominantly among people with a recent history of injecting drug use. There were estimated to be 16,000 new hepatitis C infections in 2001.
- An estimated 157,000 people were living with hepatitis C infection in Australia in 2001, including, 124,000 with chronic hepatitis C infection and stage 0/1 liver disease, 27,000 with stage 2/3 liver disease and 6,500 living with hepatitis C related cirrhosis. A further 53,000 had hepatitis C antibodies but were not chronically infected.
- Around 1,650 people were prescribed treatments for hepatitis C infection in 2001. Treatment for hepatitis C infection had changed from primarily interferon monotherapy to combination therapy with interferon and ribayirin in 2001.

#### **Sexually transmissible infections**

- Chlamydia was the most frequently reported notifiable condition in Australia in 2001 with 20,107 diagnoses. The population rate of diagnosis of chlamydia increased from 74.2 per 100,000 in 1999 to 105.8 per 100,000 in 2001. The population rate of diagnosis of gonorrhoea and syphilis in 2001 was 33.4 and 7.1 per 100,000 population, respectively. In 2001, the number of diagnoses of donovanosis increased for the first time in the past eight years.
- The population rates of diagnosis of chlamydia, gonorrhoea and syphilis were substantially higher in the Northern Territory than elsewhere in Australia. Substantially higher rates of diagnosis of chlamydia, gonorrhoea and syphilis were recorded among Indigenous people compared with non-Indigenous people.
- Trends in the rates of diagnosis of sexually transmissible infections are affected by changing methods of surveillance, the wider use of diagnostic tests with greater sensitivity in both symptomatic and asymptomatic populations, and the introduction of preventive and clinical approaches for reducing the extent of infection.

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

**Annual Surveillance Report** 

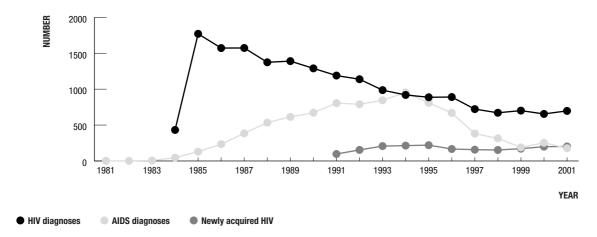
# **Main Findings**

#### **General patterns**

#### **HIV/AIDS**

The annual number of AIDS diagnoses in Australia, after adjustment for reporting delay, peaked in Australia in 1994 with 954 diagnoses, and is estimated to have declined to 178 diagnoses in 2001 (Figure 1). The decrease in the number of AIDS diagnoses has been due to the decline in HIV incidence that took place in the mid 1980s and the use, since around 1996, of effective combination antiretroviral therapy, for the treatment of HIV infection. A similar pattern of declining AIDS incidence has been reported in Western Europe, the United States and Canada.

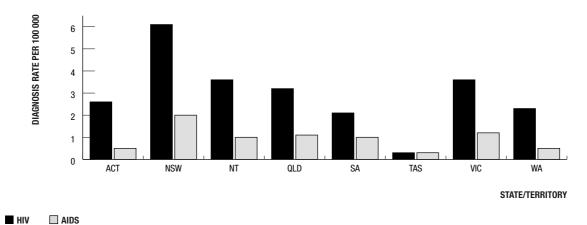
Figure 1 Number of diagnoses of HIV infection<sup>1</sup> and AIDS in Australia



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

At the end of 2001, the cumulative number of HIV infections that had been diagnosed in Australia was estimated to have been 18,854, and an estimated 12,730 people were living with HIV infection. Approximately 50% of all people living with HIV infection were receiving antiretroviral treatment in 2001.

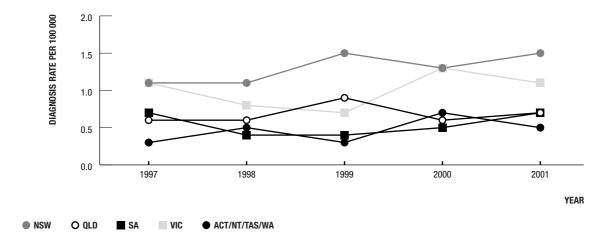
Figure 2 Annual incidence of HIV infection and AIDS, 1997 – 2001, by State/Territory



Over the past five years, the *per capita* number of diagnoses of AIDS and HIV infection has been highest in New South Wales at 2.0 and 6.1 diagnoses, respectively, per 100,000 population. In 1997 – 2001, population rates of HIV diagnosis were similar in the Northern Territory (3.6), Victoria (3.6) and Queensland (3.2). Lower rates of HIV diagnosis were recorded in the Australian Capital Territory (2.6), Western Australia (2.3), South Australia 2.1) and Tasmania (0.3) (Figure 2).

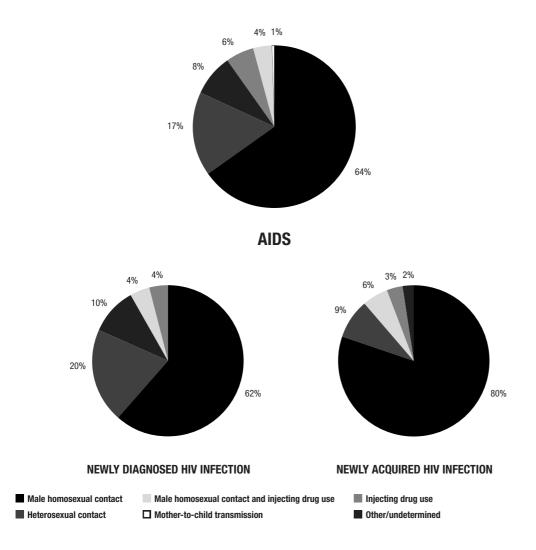
The annual number of HIV diagnoses in Australia has remained relatively stable over the past five years at around 700 diagnoses (Figure 1). However, new HIV infections continue to occur. Within the total number of HIV diagnoses, around 150 - 200 each year have been in people who had acquired HIV infection within the past year (Figure 1). These reported cases give a lower limit to the number of cases of HIV transmission that have actually occurred in Australia over this time.

Figure 3 Newly acquired HIV infection, 1997 – 2001, by year and State/Territory



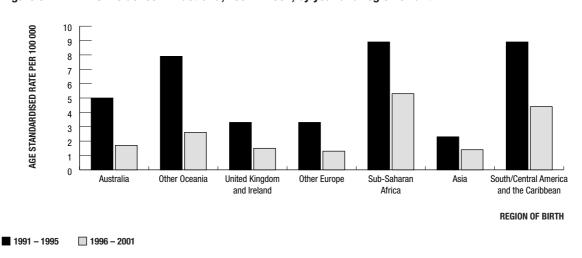
Following a relatively high rate of diagnosis of newly acquired HIV infection in Victoria in 2000 (1.3 per 100,000 population), the diagnosis rate declined in 2001. However, the total number of HIV diagnoses has remained relatively high over the past two years. The rate of diagnosis of newly acquired HIV infection remained relatively stable in New South Wales, Queensland and South Australia in 1997 – 2001 (Figure 3).

Figure 4 AIDS, HIV diagnoses and newly acquired HIV infection, 1997 – 2001, by HIV exposure category



Transmission of HIV in Australia continues to be mainly through sexual contact between men (Figure 4). A history of male homosexual contact was reported in more than 85% of cases of newly acquired HIV infection diagnosed in 1997 – 2001, including 5.4% for which there was also a history of injecting drug use. Relatively small percentages of newly acquired infections were attributed to a history of injecting drug use (3.4%), or heterosexual contact only (8.5%).

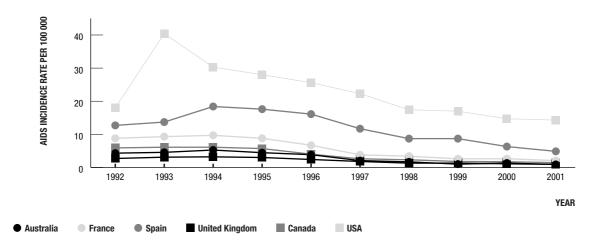
Figure 5 AIDS incidence in Australia, 1991 – 2001, by year and region of birth



People born in Australia accounted for 70% of AIDS diagnoses in Australia in 1997 – 2001. Among people born in countries other than Australia, incidence was highest for sub-Saharan Africa (Figure 5).

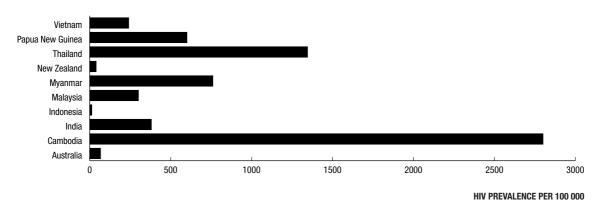
In 2001, AIDS incidence in Australia (0.9 per 100,000 population) was similar to that in the United Kingdom. Substantially higher AIDS rates were reported in a number of other Western countries including Canada (1.4 per 100,000 population), Spain (4.8 per 100,000 population) and the United States (14.3 per 100,000 population) (Figure 6).

Figure 6 AIDS incidence in selected industrialised countries¹ by year



<sup>1</sup> US AIDS case definition changed in 1993 to include people with a CD4+ count of <200

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



In the Asia-Pacific region, HIV prevalence in Cambodia, Thailand and Myanmar was substantially higher than that in Australia (Figure 7). HIV prevalence in India, Malaysia and Vietnam was also higher than that in Australia in 2001 whereas HIV prevalence in the Philippines and New Zealand was lower than that in Australia.

#### **Viral hepatitis**

In Australia, the population rate of reported diagnoses of hepatitis A infection dropped from 16.4 per 100,000 in 1997 to 2.8 per 100,000 in 2001. A similar decline in the rate of diagnosis of hepatitis A infection occurred in New South Wales and Queensland.

Reported diagnoses of newly acquired hepatitis B infection have gradually increased from 1.4 per 100,000 population in 1997 to 2.2 per 100,000 population in 2001. Compared with previous years, the population rate of diagnosis of newly acquired hepatitis B infection in 2001 increased in Victoria and Tasmania in 2001 and declined in the Northern Territory (Figure 8). The rate of diagnosis of newly acquired hepatitis B infection continued to increase in 2001 in the age groups 20 - 29 years (6.9 per 100,000 population) and 30 - 39 years (3.4 per 100,000 population) (Figure 9).

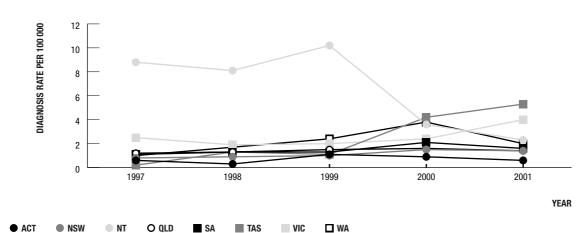
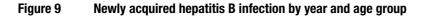
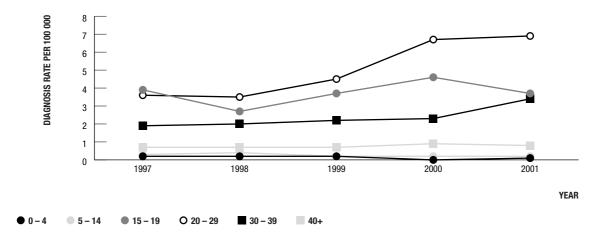


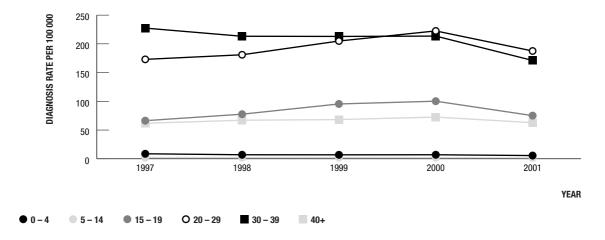
Figure 8 Newly acquired hepatitis B infection by year and State/Territory





For the first time in five years, the annual number of diagnoses of hepatitis C infection declined in 2001, to 16,734 cases. In 1997 - 2001, the male to female ratio of hepatitis C notifications remained stable at 1.7:1. However, in the 15 - 19 year age group, a higher number of cases were reported among females than among males. The *per capita* rate of diagnosis of hepatitis C infection was highest in the 20 - 29 and 30 - 39 year age groups (Figure 10).

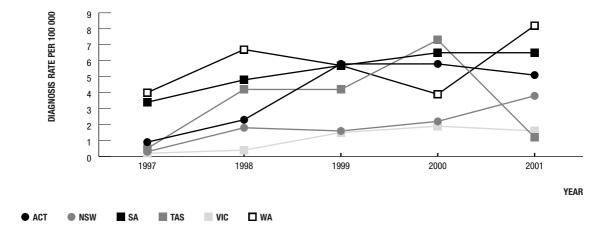
Figure 10 Hepatitis C infection by year and age group



The vast majority of reported hepatitis C cases have been of unknown duration. State/Territory health authorities have increased their efforts to monitor newly acquired hepatitis C infection over the last three years. The number of diagnoses of newly acquired hepatitis C infection continued to increase in 2001, to almost 600 cases, which is still only a small fraction of the estimated 16,000 cases that were estimated to have occurred in Australia in 2001.

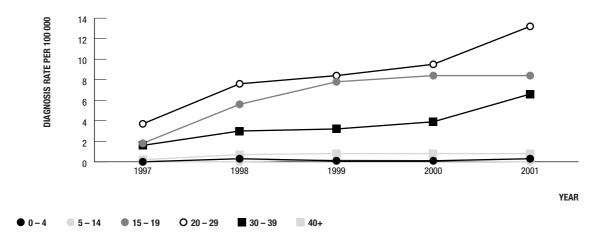
The population rate of diagnosis of newly acquired hepatitis C infection increased substantially in New South Wales in 2001 but remained below the rate recorded by the majority of jurisdictions (Figure 11). The population rate of diagnosis of newly acquired hepatitis C infection was highest among people aged 20 - 29 years and 15 - 19 years (Figure 12).

Figure 11 Newly acquired hepatitis C infection by year and State/Territory<sup>1</sup>



1 Data not available from NT and QLD

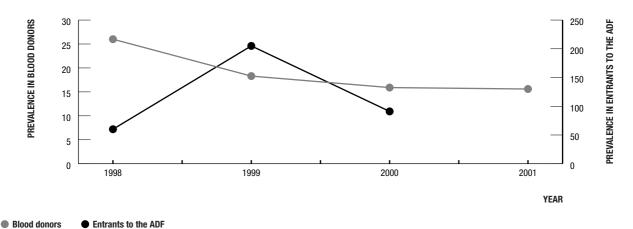
Figure 12 Newly acquired hepatitis C by year and age group



There has been a steady increase in hepatitis C prevalence over time among people who have been injecting for less than three years, indicating continuing hepatitis C transmission (Table 5.2.1). Among people who inject drugs seen at the Kirketon Road Centre in Sydney, the rate of new hepatitis C infections has also increased over time.

Among men and women seen at sexual health clinics in 2001 who were tested for hepatitis C antibody, the percentage with newly diagnosed hepatitis C infection was highest (8.3%) among those who reported a history of injecting drug use and was 2.2% among other clients.

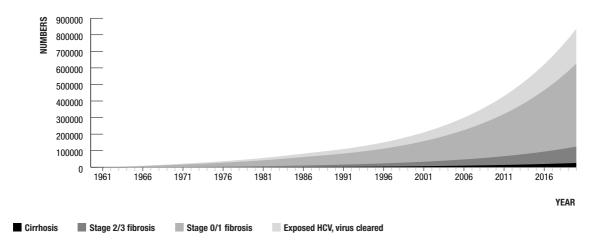
Figure 13 Hepatitis C prevalence<sup>1</sup> in blood donors and entrants to the Australian Defence Force by year



1 Hepatitis C prevalence per 100 000 donations in blood donors; per 100 000 entrants to the ADF

As would be expected on the basis of deferral requirements, hepatitis C prevalence was substantially lower among blood donors (15.6 per 100,000 donations) than the estimated prevalence of hepatitis C infection in the Australian population (1,083 per 100,000 population) (Figure 14).

Figure 14 Estimated number of people living with hepatitis C infection, 1960 – 2020, by disease stage



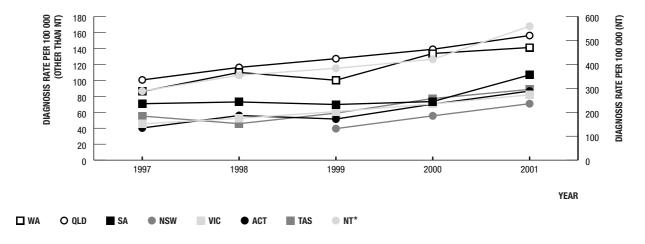
In 2001, an estimated 210,000 people living in Australia had been exposed to hepatitis C virus. Of these, an estimated 53,000 people had cleared their infection and were not chronically infected, 124,000 people had chronic hepatitis C infection and early liver disease (stage 0/1), 27,000 had chronic hepatitis C infection and moderate liver disease (stage 2/3), and 6,500 were living with hepatitis C related cirrhosis.

One indicator of the extent of illness caused by hepatitis C is the number of liver transplants in people whose liver damage was due to chronic infection. Of 215 people who had a liver transplantation in 2000 – 2001, 46 (21%) had hepatitis C infection whereas hepatitis B was the primary cause of liver failure for 14% of people having liver transplantation (Table 2.3.1).

#### Sexually transmissible infections other than HIV

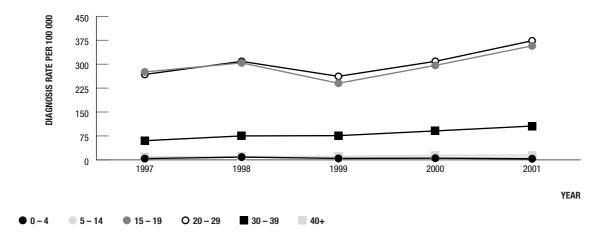
Over the past five years, the population rate of reported diagnoses of chlamydia increased from 74.1 per 100,000 population in 1997 to 105.8 per 100,000 population in 2001. The apparent drop in 1999 in the chlamydia diagnosis rate for the age groups 20 - 29 years and 30 - 39 years was associated with the commencement of surveillance in New South Wales (Figure 16).

Figure 15 Chlamydia by year and State/Territory



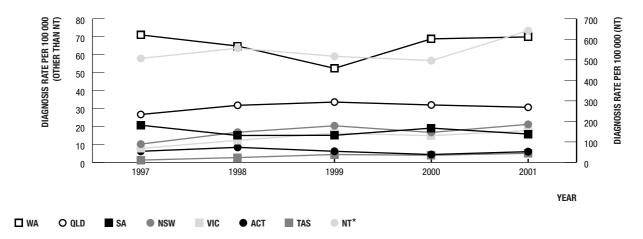
\* NT on right axis.

Figure 16 Chlamydia by year and age group



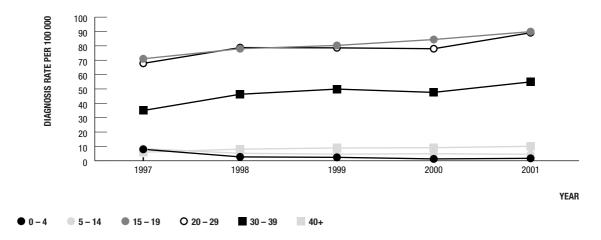
The population rate of diagnosis of gonorrhoea has also increased, from 25.0 in 1997 to 33.4 in 2001 (Figures 17). The rate of diagnosis of gonorrhoea was similar for the age groups 15 – 19 years and 20 – 29 years (Figure 18). There was no change in the national rate of syphilis diagnoses. However, the population rate of syphilis increased in the Northern Territory and in Western Australia in 2001, compared to previous years (Figure 19). The rates of notification of chlamydia, gonorrhoea and syphilis in the Northern Territory were substantially higher than those in other jurisdictions. Increases in the population rate of diagnoses of gonorrhoea and chlamydia may be partly attributable to the wider use of diagnostic tests with greater sensitivity in both asymptomatic and symptomatic populations.

Figure 17 Gonorrhoea by year and State/Territory



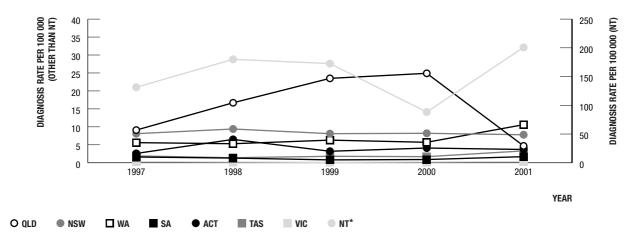
\* NT on right axis.

Figure 18 Gonorrhoea by year and age group



The increased number of diagnoses of donovanosis in 2001 (34), compared to the number diagnosed in 2000 (12) may be attributed to case-finding associated with the recently initiated National Donovanosis Eradication Program.

Figure 19 Syphilis by year and State/Territory



\* NT on right axis

#### Sentinel populations for monitoring HIV, viral hepatitis and treatment

Several population groups at increased risk, compared to the general population in Australia, have been identified in the *National HIV/AIDS Strategy 1999 – 2000 to 2003 – 2004* and the *Australian Hepatitis C Surveillance Strategy* as priority groups for prevention and health promotion initiatives. Gay and other homosexually active men, Indigenous people and people who have injected drugs including people entering prison, were identified as priority groups either because of ongoing HIV or hepatitis C transmission or the potential for increases in transmission of these viruses. The pattern of HIV transmission has also been monitored among people potentially at risk of HIV infection through heterosexual contact including female sex workers. People living with HIV/AIDS, and with hepatitis C infection, are identified as a priority population for monitoring the pattern of use of currently available treatments and the impact of these treatments on patterns of illness and mortality.

#### 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 diagnoses among homosexually active men in 1997 – 2001 was 2,509 and there were 756 diagnoses of newly acquired HIV infection. Sexual transmission between men accounted for a higher proportion of diagnoses of newly acquired HIV infection (86%) than total HIV diagnoses (66%) in 2001. Part of this difference is likely to be due to greater access to and uptake of HIV antibody testing among gay and other homosexually active men.

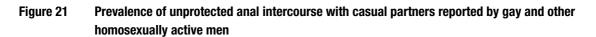
Among gay and other homosexually active men, aged 25 years or older seen at metropolitan sexual health clinics, HIV incidence increased from 1.05 percent in 2000 to 2.39% in 2001 (Figure 20).

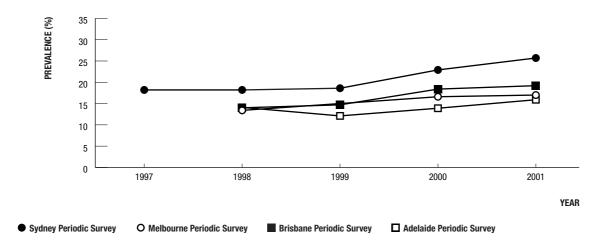
INCIDENCE (%) 3 2.5 2 1.5 0.5 0 1996 1997 1994 1995 1998 1999 2000 2001 YEAR

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

Under 25 yrs25 years or older

The Sydney Gay Community Periodic Survey, a cross sectional survey of gay and other homosexually active men, indicates that an increasing proportion of respondents reported unprotected anal sex with casual partners. The proportion increased from around 18% for respondents with casual partners in 1997 – 1999 to 26% in 2001 (Figure 21). Similar surveys carried out among gay and other homosexually active men in Brisbane, Melbourne and Adelaide also indicated increases in unsafe sexual behaviour with casual partners.





Gonorrhoea surveillance data have provided another indication of a possible increase in sexual risk behaviour among gay and other homosexually active men in Australia. The number of rectal gonococcal isolates in men has increased steadily, from 164 in 1997 to 308 in 2001 (Figure 22).

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



#### **Indigenous Australians**

Overall rates of HIV and AIDS diagnoses *per capita* have differed little between Indigenous and non-Indigenous people (Figure 23 and Figure 24). However, the age standardised 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, 1992 – 2001, by year and Indigenous status

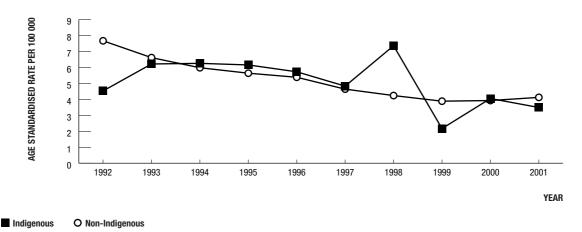
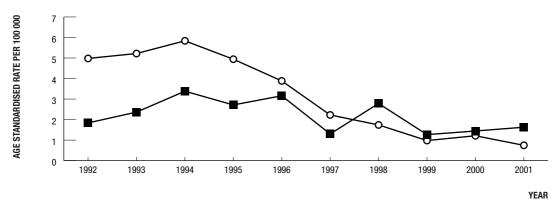


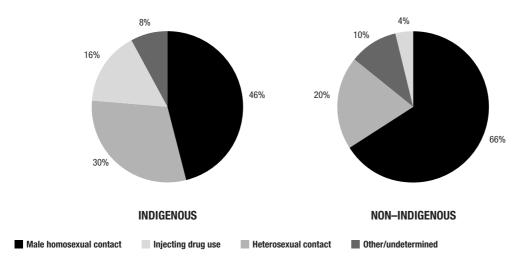
Figure 24 AIDS incidence, 1992 – 2001, by year and Indigenous status



■ Indigenous O Non-Indigenous

In both population groups, the most frequently reported route of HIV transmission was male homosexual contact. However, a higher proportion of cases attributed to heterosexual contact, and injecting drug use, has been reported among Indigenous people (Figure 25). Diagnosed HIV infections among Indigenous people also differ from the pattern in non-Indigenous people in that a higher proportion has occurred in women (27.8%, vs 10.6% for the non-Indigenous cases).

Figure 25 HIV diagnoses, 1997 – 2001, by HIV exposure category and Indigenous status

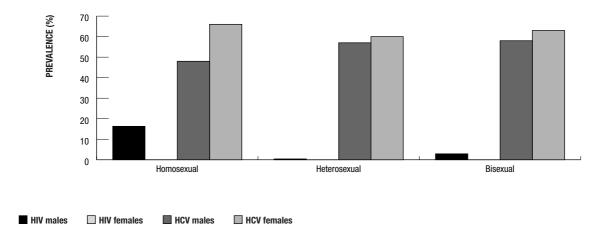


High rates of sexually transmissible infections other than HIV infection were recorded among Indigenous people in the Northern Territory, South Australia and Western Australia. In other States and Territories, interpretation of surveillance data on sexually transmissible infections in Indigenous people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

#### People who have injected drugs

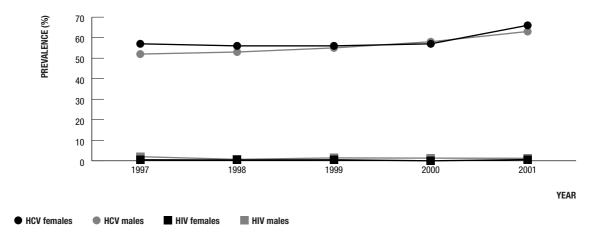
Approximately 8% of HIV diagnoses in Australia have been in people with a history of injecting drug use, of whom about half were men who also reported a history of homosexual contact.

Figure 26 HIV and hepatitis C prevalence in people seen at needle and syringe programs, 2001, by sexual orientation



HIV prevalence among people attending needle and syringe programs has remained low (less than 1% in 2000 and 2001) except among men who identified themselves as homosexual (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 33).

Figure 27 HIV and hepatitis C prevalence<sup>1</sup> in needle and syringe programs by year and sex

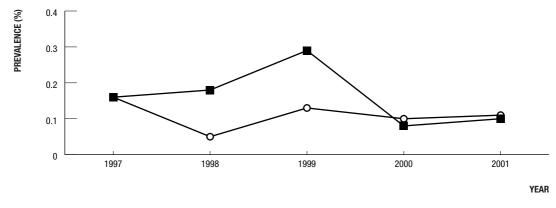


1 HIV and hepatitis C prevalence adjusted by estimated prevalence of injecting drug use in each State/Territory

In contrast to the low HIV prevalence, hepatitis C prevalence among people attending needle and syringe programs remained high in 2001 (Figure 27). Hepatitis C prevalence among males and females reporting less than three years of drug injection has steadily increased from 13% in 1997 to 28% in 2001.

The percentage of injecting drug users seen at needle and syringe programs who reported re-use of a syringe after someone else in the last month declined from 17% in 1997 to 14% in 2001.

Figure 28 HIV prevalence in prison entrants by year and sex

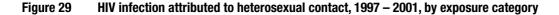


Males O Females

HIV prevalence among people entering Australian prisons in 1997 to 2001 has been steady, at levels of less than 0.5% (Figure 28). Prevalence differed little between male and female entrants but was higher in New South Wales than in other States and Territories.

#### **Heterosexual transmission of HIV infection**

In 1997 – 2001, transmission was attributed to heterosexual contact in 20% of new HIV diagnoses. Among 551 cases attributed to heterosexual contact for which detailed information on exposure history was available, 35% were in people who were from countries with predominantly heterosexual transmission in sub-Saharan Africa, or Cambodia, Myanmar or Thailand, the highest prevalence countries of Asia. Twenty percent of cases were attributed to heterosexual contact with a partner from a high prevalence country (Figure 29). The sexual partner's history of exposure to HIV was not available for 25% of cases attributed to heterosexual contact. Among heterosexually acquired cases, the country of birth of the person was reported as Australia in 35%, South East Asia in 25% and sub-Saharan Africa in 22%.



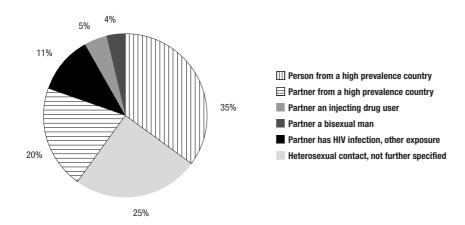
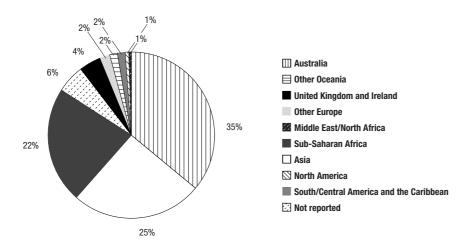
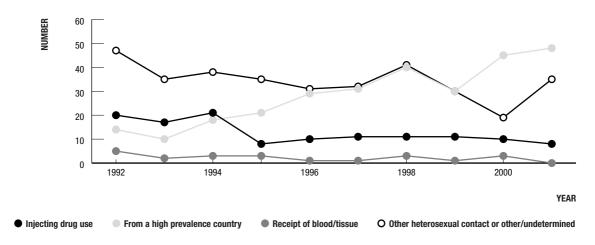


Figure 30 HIV diagnoses attributed to heterosexual contact, 1997 – 2001, by region of birth



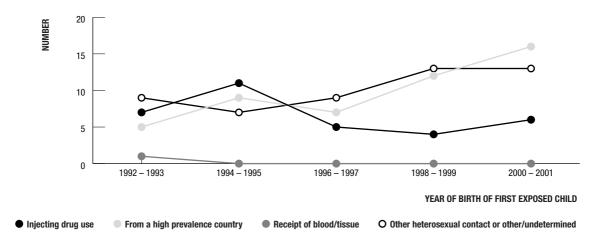
The annual number of HIV diagnoses among women has remained stable over the past 10 years, at around 60 - 90 diagnoses per year (Figure 31). In an increasing number of HIV diagnoses among women, and in the subgroup of women who have had perinatally exposed children (Figure 32), HIV transmission was attributed to heterosexual contact in a high prevalence country or to heterosexual contact with a partner from a high prevalence country.





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

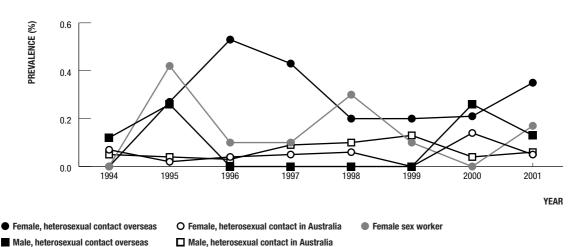
Figure 32 Women with HIV infection who have had children by year and HIV exposure category<sup>1</sup>



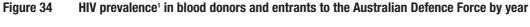
1 Includes women who reported heterosexual contact with men with the specific HIV exposure.

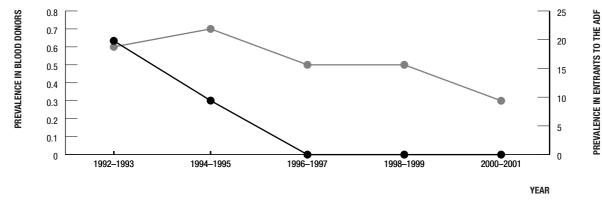
Among men and women reporting a history of heterosexual contact only, either in Australia or overseas, HIV prevalence has remained less than 0.3%, with no evidence of an increase in HIV prevalence over this time (Figure 33). HIV prevalence has also remained low among women self-identifying as sex workers.

Figure 33 HIV prevalence among heterosexually active people seen at sexual health clinics by year, sex and HIV exposure category



Two groups which provide some information on HIV prevalence in the lower risk segment of the population are blood donors and entrants to the Australian Defence Force (Figure 34). In blood donors, who undergo a screening interview to exclude people at higher risk of HIV infection, HIV prevalence has been below 1 per 100,000 donations since 1985, with some evidence of a decline during this period, possibly reflecting increasingly effective screening interview procedures. Entrants to the Australian Defence Force are informed that they will undergo HIV testing, and be excluded if found positive. Prevalence in entrants has been very low, with four HIV infected applicants identified between 1988 and 2001 among more than 61,000 people tested.





1 HIV prevalence per 100 000 donations in blood donors, per 100 000 entrants to the ADF

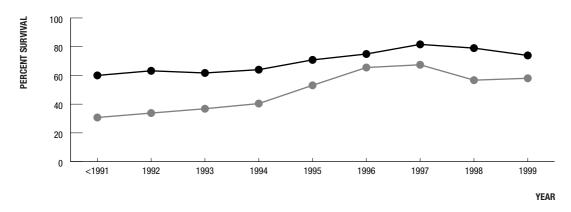
**Entrants to the ADF** 

#### Illness and mortality in people with HIV infection and viral hepatitis

Evidence of the benefits of improved therapy for HIV infection, introduced in mid-1996, has come from the substantial improvement in survival following the diagnosis of AIDS (Figure 35). Median survival among people diagnosed with AIDS has increased from 19.5 months in 1994 to 46.9 months in 1997.

Figure 35 Survival following AIDS

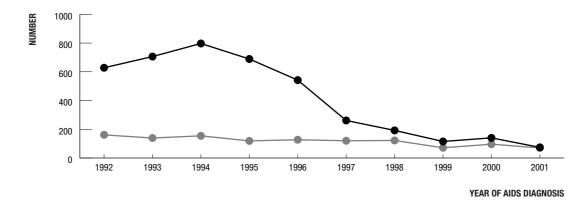
Blood donors



Survival 1 year (%)Survival 2 year (%)

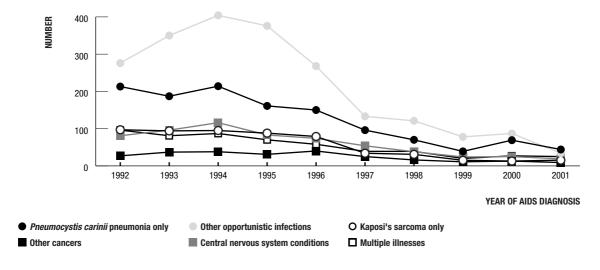
The impact of improved therapy for HIV infection in delaying progression to AIDS is supported by the striking difference in AIDS incidence trends between people whose HIV diagnosis was at least three months prior to their AIDS diagnosis, and those whose HIV diagnosis took place within three months of AIDS (Figure 36). A rapid decline in AIDS incidence has been observed among people diagnosed at least three months prior to AIDS, while no decline in AIDS incidence has occurred among people with late HIV diagnosis, who by definition would have received therapy for HIV infection for at most three months before developing AIDS.

Figure 36 AIDS diagnoses, 1992 – 2001, by year and timing of HIV diagnosis



HIV diagnosed more than 3 months prior to AIDS diagnosis
 HIV diagnosed within 3 months of AIDS diagnosis

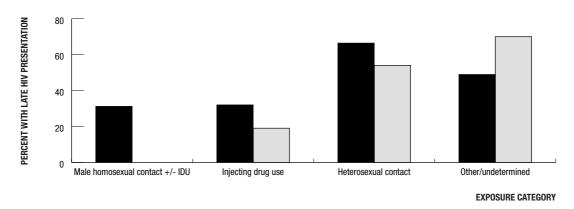
Figure 37 AIDS diagnoses, 1992 – 2001, by AIDS defining illness and year



These trends have led to a doubling in the proportion of new AIDS cases in people with late HIV diagnosis, since the mid 1990s, with now almost one half 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 2001. In 1997 – 2001, at least 50% of cases with PCP were cases of late HIV presentation (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).

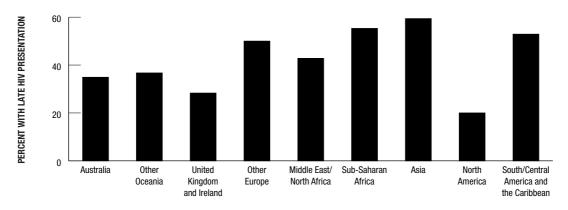
Figure 38 Late HIV presentation<sup>1</sup> among AIDS diagnoses, 1997 – 2001, by exposure category



■ Male □ Female

1 AIDS diagnosed within three months of HIV diagnosis

Figure 39 Late HIV presentation<sup>1</sup> among AIDS diagnoses, 1997 – 2001, by region of birth



REGION OF BIRTH

1 AIDS diagnosed within three months of HIV diagnosis

The estimated numbers of people living with AIDS and the number of people living with a CD4+ cell count of less than  $500/\mu l$  and without AIDS are projected to gradually increase through the year 2005. The number of people living with a CD4+ cell count of more than  $500/\mu l$  is expected to decline slightly.

#### Patterns of treatment for HIV and hepatitis C infection

The Australian HIV Observational Database indicated that 66% of 2,021 people attending selected clinical sites was receiving triple combination antiretroviral treatment in 2000 (Figure 40). A low viral load and relatively high CD4+ cell count was maintained among people enrolled on the Australian HIV Observational Database.

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

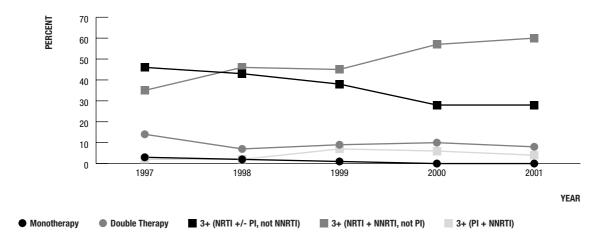
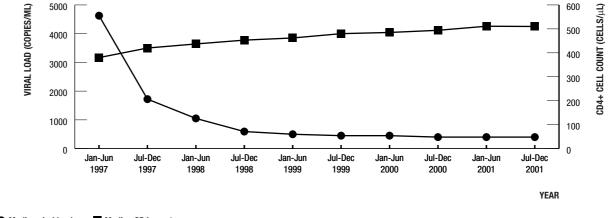


Figure 41 HIV viral load and CD4+cell count among people enrolled on the Australian HIV Observational Database



Median viral load
 Median CD4 count

Use of combination antiretroviral therapy, by gay and other homosexually active men participating in the Sydney Gay Community Periodic Surveys, had declined from around 75% in 1997 to 65% in 2001. A similar trend in treatment use was reported by homosexually active men participating in the Periodic Surveys in Brisbane, Melbourne and Adelaide. Among people enrolled in the Sydney-based pH cohort study, there has also been a gradual decline in reported use of antiretroviral therapy.

Figure 42 People prescribed antiretroviral treatment through the Highly Specialised Drugs Program

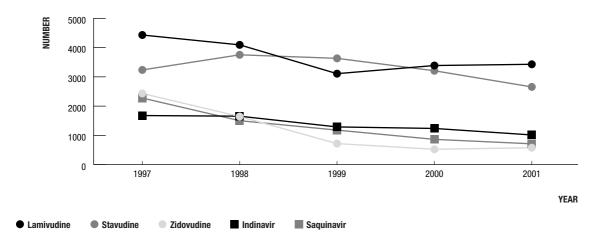
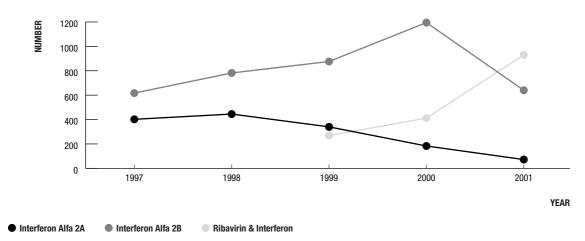
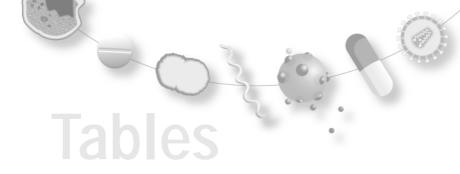


Figure 43 People prescribed treatment for hepatitis C infection through the Highly Specialised Drugs Program



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 has gradually increased from 6,061 in 1997 to 6,771 during 2001. Lamivudine and stavudine were the most frequently prescribed nucleoside analogue reverse transcriptase inhibitors prescribed in 1997 – 2001. The most commonly prescribed protease inhibitors in 2001 were indinavir (1,015 people) and ritonavir (942) (Figure 42).

In 2001, ribavirin and interferon was the most commonly prescribed treatment for hepatitis C infection, reflecting a change to combination treatment from interferon monotherapy (Figure 43).



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

#### **Annual Surveillance Report**

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 condition	31
Table 1.1.2	Number of AIDS diagnoses adjusted for reporting delay by State/Territory, sex and year	32
Table 1.1.3	Number of AIDS diagnoses adjusted for reporting delay by HIV exposure category, sex and year	33
Table 1.1.4	Number of deaths following AIDS adjusted for reporting delay by State/Territory, sex and year of death	34
Table 1.1.5	Number of deaths following AIDS adjusted for reporting delay by HIV exposure category, sex and year	35
Table 1.1.6	Number (percent) of AIDS diagnoses in Australia, 1991 – 2001, and age standardised annual incidence per 100 000 population by year of AIDS diagnosis and region of birth	36
Table 1.1.7	Survival following the diagnosis of AIDS by year	36
Table 1.1.8	Number of AIDS diagnoses by AIDS-defining condition, year of diagnosis and sex	37
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	38
Table 1.2.2	Estimated number of cases of newly diagnosed HIV infection adjusted for multiple reporting by State/Territory, sex and year	39
Table 1.2.3	Characteristics of diagnoses of newly acquired HIV infection, 1992 – 2001, 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	40
Table 1.2.4	Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 1997 – 2001, by State/Territory, HIV exposure category, newly acquired infection status, sex and year	41
Table 1.2.5	Number of cases of newly acquired HIV infection, 1992 – 2000, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis	42
Table 1.2.6	Number of specimens tested for HIV antibody in public health laboratories, $1992-2001$ , by State/Territory and year of test	42
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, 1992 – 2001, by year.  Number of cases, median age and percent (number) of total cases for each year by sex, newly acquired infection and HIV exposure category	43
Table 1.3.2	Number of AIDS diagnoses in Indigenous people, 1992 – 2001, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis and HIV exposure category	44

1.4	Assessment of patient report of exposure to HIV	
Table 1.4.1	Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1997 – 2001, 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	45
Table 1.4.2	Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1997 – 2001, 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	46
Table 1.4.3	Number of cases of newly diagnosed HIV infection, $1997 - 2001$ , by HIV exposure category reported on the questionnaire, year and sex	47
1.5	National surveillance for perinatal exposure to HIV	
Table 1.5.1	Number and population rate of perinatal exposure to HIV, 1992 – 2001, by State/Territory and year of birth	48
Table 1.5.2	Number of women with perinatally HIV exposed children, $1982 - 2001$ , by time of the woman's HIV diagnosis relative to the first exposed child's birth	48
Table 1.5.3	Number of women with perinatally HIV exposed children, 1982 – 2001, and number of perinatally exposed children, by year of birth of the first exposed child and the woman's HIV exposure category	49
Table 1.5.4	Number of perinatally exposed children, 1982 – 2001, 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	49
1.6	Global comparisons	
Table 1.6.1	Estimated HIV prevalence and AIDS incidence in selected countries	50

#### 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 condition

Year of All	)S diag	gnosis
-------------	---------	--------

Characteristic	≤92	93	94	95	96	97	98	99	00	01	Total
Total cases	4 217	845	954	809	669	381	315	186	236	144	8 756
Males (%)	96.4	94.6	94.9	95.3	95.1	91.9	93.3	89.2	90.7	88.2	95.1
Median age (years)											
M	37	37	37	37	37	39	39	39	40	40	37
F	32	37	31	35	34	32	36	34	32	35	33
Late HIV diagnosis (%)											
M	_	16.1	15.6	14.1	19.0	30.6	38.1	39.1	39.2	44.9	21.7
F	-	19.5	28.9	28.6	18.2	41.9	50.0	31.6	54.5	75.0	34.4
State/Territory (%)											
ACT	1.1	1.1	1.5	1.1	1.3	0.0	1.6	0.0	1.3	0.0	1.1
NSW	59.7	56.9	57.8	58.3	54.7	51.7	54.3	57.0	49.2	44.4	57.6
NT	0.4	0.6	0.3	0.4	0.1	0.8	1.0	1.0	0.4	0.7	0.4
QLD	8.9	10.8	10.4	12.5	11.5	15.8	11.7	17.2	17.4	16.0	10.7
SA	3.9	5.3	5.2	3.7	4.8	6.3	6.0	5.4	3.4	6.9	4.5
TAS	0.6	0.1	0.5	0.2	1.0	0.5	1.0	0.0	0.4	0.0	0.5
VIC	20.6	21.4	20.0	20.0	20.8	21.0	19.7	16.7	24.1	29.2	20.7
WA	4.8	3.8	4.3	3.7	5.7	3.9	4.8	2.7	3.8	2.8	4.5
HIV exposure category (%)¹											
Male homosexual contact	86.0	81.0	83.4	81.0	80.2	75.3	67.6	65.3	68.2	70.4	82.1
Male homosexual contact and injecting drug use	3.6	7.0	5.0	5.7	5.8	3.9	3.1	6.0	5.0	2.3	4.5
Injecting drug use <sup>2</sup>	2.2	3.3	3.1	3.6	3.8	5.0	8.2	6.0	6.4	3.8	3.2
Heterosexual contact	3.2	6.3	5.7	6.5	8.2	14.1	18.8	21.5	18.2	22.0	6.5
Haemophilia/coagulation disorder	1.7	1.4	1.1	1.9	1.1	1.1	0.3	0.6	1.4	0.0	1.5
Receipt of blood/tissue	2.9	1.0	1.0	8.0	0.9	0.3	1.3	0.6	0.4	0.0	1.8
Mother with/at risk for HIV infection	0.3	0.0	0.6	0.5	0.0	0.3	0.7	0.0	0.4	1.5	0.3
Other/undetermined	2.5	3.8	3.4	4.3	5.1	5.2	7.0	10.2	6.8	8.3	3.8
AIDS defining condition (%)											
Pneumocystis carini pneumonia (PCP)	33.7	22.1	22.4	19.9	22.4	25.2	22.2	21.0	29.2	30.5	28.0
Kaposi's sarcoma (KS)	13.6	11.1	10.0	10.9	11.8	8.9	9.8	7.5	6.3	9.0	11.8
PCP and other (not KS)	5.3	2.8	2.1	4.0	3.9	6.3	6.0	6.5	5.1	6.9	4.6
Oesophageal candidiasis	6.7	11.8	14.6	16.4	14.5	10.2	10.2	12.4	11.9	6.3	10.1
Mycobacterium avium	4.5	8.8	5.7	7.4	7.0	4.2	5.1	4.3	5.1	2.8	5.5
HIV wasting disease	3.6	6.3	7.4	8.8	5.1	6.8	10.5	13.4	6.8	4.9	5.6
Other conditions	32.6	37.0	37.8	32.6	35.3	38.3	36.2	34.9	35.6	39.6	34.4

 $<sup>1 \</sup>qquad \hbox{The 'Other/undetermined' category was excluded from the percentage of cases attributed to each HIV exposure category.}$ 

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

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

Year of AIDS diagnosis

State/Territory	Sex	≤92	93	94	95	96	97	98	99¹	00¹	01¹	Total
ACT	М	46	9	13	7	7	0	4	0	2	0	88
	F	2	0	1	2	2	0	1	0	1	0	9
NSW	M	2 424	464	529	456	348	188	160	95	110	75	4 849
	F	87	15	20	15	18	9	10	13	16	7	210
NT	M	15	5	3	3	1	3	3	2	1	1	37
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	360	82	96	96	74	50	35	30	40	26	889
	F	14	8	3	5	3	10	2	2	3	1	51
SA	M	154	42	45	29	31	23	16	8	8	8	364
	F	9	3	5	1	1	1	3	2	0	4	29
TAS	M	25	1	5	2	7	2	2	0	1	0	45
	F	2	0	0	0	0	0	1	0	0	0	3
VIC	M	846	166	178	150	133	73	61	29	59	43	1 738
	F	19	13	12	11	6	7	1	2	2	7	80
WA	M	194	30	36	28	35	11	13	5	9	5	366
	F	10	2	4	1	3	4	2	0	1	0	27
Total <sup>2</sup>		4 217	845	954	809	669	381	315	189	253	178	8 810

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

<sup>2</sup> Includes people whose sex was reported as transgender.

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

Year of AIDS diagnosis **HIV** exposure category Sex ≤92 01<sup>1</sup> **Total** Adults/adolescents (13 years and older at diagnosis of AIDS) 3 535 6 957 Male homosexual contact Male homosexual contact and injecting drug use Injecting drug use<sup>2</sup> M F Heterosexual contact M Haemophilia/coagulation disorder M F Receipt of blood/tissue M F Health care setting M F Other/undetermined M F Total adults/adolescents<sup>3</sup> 4 186 8 762 Children (under 13 years at diagnosis of AIDS) Mother with/at risk for HIV infection M F Haemophilia/coagulation disorder M F Receipt of blood/tissue M **Total children** 

4 217

8 810

Source: State/Territory health authorities

Total<sup>3</sup>

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

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

<sup>3</sup> Includes people whose sex was reported as transgender.

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

Year of death following AIDS

State/Territory	Sex	≤92	93	94	95	96	97	98	99¹	00¹	01¹	Total
ACT	М	34	6	13	7	4	1	0	1	3	2	71
	F	2	0	0	0	0	0	0	1	1	0	4
NSW	M	1 630	363	401	338	263	117	67	62	74	40	3 355
	F	54	13	17	20	5	6	1	1	2	4	123
NT	M	6	8	3	3	2	1	1	0	0	1	25
	F	0	0	0	0	0	0	0	0	0	0	0
QLD	M	221	75	72	70	66	28	24	13	13	11	593
	F	9	5	5	4	4	1	2	1	2	2	35
SA	M	90	27	31	33	25	7	13	4	5	8	243
	F	2	5	4	2	1	0	1	0	1	0	16
TAS	M	13	5	3	2	3	1	2	1	0	0	30
	F	1	0	1	0	0	0	0	0	0	0	2
VIC	M	577	157	156	140	109	60	37	34	27	21	1 318
	F	10	4	7	13	5	6	3	2	1	7	57
WA	M	130	29	30	20	26	12	4	6	6	1	264
	F	5	1	4	1	2	3	1	0	1	0	18
Total <sup>2</sup>		2 790	701	753	654	515	245	156	127	136	97	6 174

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

<sup>2</sup> Includes people whose sex was reported as transgender.

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

Year of death following AIDS													
Exposure category	Sex	≤92	93	94	95	96	97	98	99¹	<b>00</b> ¹	01¹	Total	
Adults/adolescents (13 years and older at diagnosis of	AIDS)												
Male homosexual contact		2 385	577	591	510	399	183	115	89	94	61	5 004	
Male homosexual contact													
and injecting drug use		82	37	42	32	28	17	9	7	6	10	270	
Injecting drug use <sup>2</sup>	M	28	11	8	17	15	7	5	7	8	5	111	
	F	17	11	5	8	4	5	0	0	1	1	52	
Heterosexual contact	M	34	21	26	17	25	6	7	7	8	2	153	
	F	20	11	22	26	11	8	5	4	6	9	122	
Haemophilia/coagulation disorder	M	41	5	13	9	10	4	0	4	3	1	90	
	F	1	0	2	0	0	0	0	0	0	0	3	
Receipt of blood/tissue	M	52	5	4	4	2	1	0	0	0	0	68	
•	F	34	4	5	4	1	1	1	1	0	2	53	
Health care setting	М	0	0	0	1	0	0	0	0	0	0	1	
3	F	0	0	1	1	0	0	0	0	0	0	2	
Other/undetermined	М	64	10	23	21	19	9	12	7	9	4	178	
	F	6	1	0	0	1	1	1	0	1	0	11	
Total adults/adolescents <sup>3</sup>		2 770	696	748	651	515	244	155	127	136	95	6 137	
Children (under 13 years at diagnosis of Al	DS)												
Mother with/at risk for HIV infection	M	1	2	2	2	0	0	0	0	0	1	8	
	F	4	1	2	0	0	1	1	0	0	1	10	
Haemophilia/coagulation disorder	M	4	1	0	0	0	0	0	0	0	0	5	
	F	0	0	0	0	0	0	0	0	0	0	0	
Receipt of blood/tissue	M	10	1	0	0	0	0	0	0	0	0	11	
	F	1	0	1	1	0	0	0	0	0	0	3	
Total children		20	5	5	3	0	1	1	0	0	2	37	
Total <sup>3</sup>		2 790	701	753	654	515	245	156	127	136	97	6 174	

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

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

<sup>3</sup> Includes people whose sex was reported as transgender.

Table 1.1.6 Number (percent) of AIDS diagnoses in Australia, 1991 – 2001, and age standardised annual incidence per 100 000 population¹ by year of AIDS diagnosis and region of birth

		1991 – 1995			1996 – 2001				
Region/		Ag	e standardised		Ag	e standardised			
Country of birth	Number	Percent	incidence	Number	Percent	incidence			
Australia	3 107	73.9	5.0	1 340	69.4	1.7			
Overseas born	981	23.4	4.0	530	27.4	1.7			
Oceania	185	4.4	7.9	100	5.2	2.6			
United Kingdom and Ireland	253	6.0	3.3	83	4.3	1.5			
Other Europe	221	5.3	3.3	111	5.7	1.3			
Middle East/North Africa	32	0.8	2.2	12	0.6	0.6			
Sub-Saharan Africa	43	1.0	8.9	56	2.9	5.3			
Asia	113	2.7	2.3	114	5.9	1.4			
North America	85	2.0	16.1	24	1.2	2.8			
South/Central America and the Caribbean	49	1.2	8.9	30	1.6	4.4			
Total with a reported country of birth	4 088	97.2	4.7	1 870	96.8	1.6			
Not reported	115	2.7		61	3.2				
Total	4 203	100.0	4.8	1 931	100.0	1.7			

<sup>1</sup> 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		Deaths to	Alive at	Left	Me	edian survival	% Sı	urvival
of diagnosis	Cases	31 Dec 20011	1 Jan 2001 <sup>2</sup>	Australia <sup>3</sup>	Other⁴	(months)	1 year	2 year
≤1991	3 427	3 222	9	35	161	15.7	60.0	30.7
1992	790	692	6	13	79	16.8	63.2	33.8
1993	845	691	3	4	147	17.1	61.7	36.8
1994	954	651	12	4	287	19.5	64.0	40.4
1995	809	421	19	0	369	27.6	70.8	53.1
1996	669	228	16	0	425	47.9	74.9	65.5
1997	381	88	15	0	278	46.9	81.6	67.4
1998	315	78	9	0	228	33.0	79.0	56.7
1999	186	30	11	1	144	24.1	73.9	58.0
2000	236	37	42	0	157	_	_	_
2001	144	14	130	0	-	-	_	-
Total	8 756	6 152	272	57	2 278	18.0	64.1	38.4

<sup>1</sup> Deaths occurring prior to 1 January 2002.

<sup>2</sup> Last medical contact on or after 1 January 2001.

<sup>3</sup> Reported as having permanently left Australia with no subsequent report of status.

<sup>4</sup> Last medical contact prior to 1 January 2001.

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

Year of AIDS diagnosis

	<u> </u>	⊴92	93	93 – 95		96 - 98		- 01	Total <sup>1</sup>
AIDS defining condition	M	F	M	F	M	F	M	F	
Pneumocystis carinii pneumonia (PCP)	1 386	31	528	32	300	16	140	12	2 451
Kaposi's sarcoma (KS)	568	4	277	0	143	1	42	0	1 036
KS and PCP alone	40	0	18	0	2	0	2	0	62
KS and other (not PCP)	75	0	42	0	13	0	4	0	134
PCP and other (not KS)	244	13	81	5	69	8	35	8	468
Oesophageal candidiasis	272	12	358	13	156	12	55	5	884
Toxoplasmosis	150	8	76	4	41	1	18	1	301
Cryptococcosis	150	4	102	4	41	5	23	1	332
Non-Hodgkin's lymphoma	146	7	97	6	76	3	31	1	367
Mycobacterium avium	152	8	155	17	68	5	20	0	425
Herpes simplex virus	103	10	49	3	22	3	4	1	196
HIV encephalopathy	115	3	98	4	70	7	22	3	323
Cytomegalovirus	147	0	117	4	43	1	7	3	324
HIV wasting disease	133	19	185	8	87	6	40	7	487
Cryptosporidiosis	88	3	76	1	24	2	4	0	198
Mycobacterium tuberculosis	27	3	13	2	5	1	2	2	56
Pulmonary tuberculosis <sup>2</sup>	0	0	9	0	21	3	15	7	55
Recurrent pneumonia <sup>2</sup>	0	0	30	2	15	1	8	0	57
Cervical cancer <sup>2</sup>	_	0	_	3	_	2	_	1	6
Other single diagnoses	46	5	31	4	13	1	8	1	109
Other multiple diagnoses	222	13	133	9	71	6	27	4	485
Total¹	4 064	143	2 475	121	1 280	84	507	57	8 756

<sup>1</sup> Includes 25 people whose sex was reported as transgender.

<sup>2</sup> Included as an AIDS defining illness in Australia from January 1993.

#### 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

		nosis

Characteristic	≤92	93	94	95	96	97	98	99	00	01	Total <sup>2</sup>	
Total cases	13 953	1 078	1 015	930	915	815	760	725	746	777	21 725	
Males (%)	93.6	92.5	90.7	91.8	91.6	89.4	87.0	89.5	89.0	87.5	92.3	
Median age (years)												
Males	32	33	32	33	34	34	35	34	35	35	32	
Females	29	31	30	28	31	30	30	28	29	30	29	
State/Territory (%)												
ACT	1.2	0.6	1.3	1.9	8.0	1.0	1.0	1.1	1.3	8.0	1.2	
NSW	60.7	55.4	49.7	57.9	50.0	52.8	53.6	53.1	48.4	47.6	57.6	
NT	0.5	0.9	0.5	0.2	0.5	1.3	1.6	0.7	0.4	0.5	0.6	
QLD	8.7	12.4	16.0	12.1	16.8	14.0	13.8	17.1	15.4	13.1	10.7	
SA	3.4	5.1	3.7	3.3	5.0	4.2	4.6	3.0	3.1	5.4	3.7	
TAS	0.4	0.2	0.2	0.6	0.3	0.0	0.4	0.4	0.0	0.3	0.4	
VIC	20.4	20.6	21.3	17.6	20.4	22.1	18.4	19.2	25.2	26.5	20.7	
WA	4.7	4.7	7.3	6.3	6.1	4.6	6.6	5.4	6.2	5.8	5.1	
HIV exposure category (%)³												
Male homosexual contact	81.4	79.1	74.3	73.9	75.5	72.8	65.2	65.0	68.2	67.2	77.6	
Male homosexual contact and injecting drug use	4.3	3.6	6.3	4.9	4.0	4.6	4.6	6.1	3.4	4.6	4.0	
Injecting drug use⁴	4.8	3.5	3.4	4.6	2.8	3.1	3.4	5.8	4.4	5.5	4.5	
Heterosexual contact	5.6	12.8	13.7	15.3	16.6	18.4	25.6	22.2	23.6	22.1	10.6	
Partner with/at risk of HIV infection	41.4	50.4	59.1	61.8	70.8	67.6	76.4	69.7	82.1	77.8	60.5	
Not further specified	58.6	49.6	40.9	38.2	29.2	32.4	23.6	30.3	17.9	22.2	39.5	
Haemophilia/coagulation disorder	2.6	0.0	0.0	0.1	0.0	0.0	0.1	0.5	0.0	0.1	1.6	
Receipt of blood/tissue	1.9	0.3	0.8	0.3	0.2	0.1	0.6	0.3	0.0	0.0	1.3	
Mother with/at risk of HIV infection	0.2	0.5	1.0	8.0	0.9	1.0	0.4	0.1	0.4	0.4	0.4	
Health care setting	0.0	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other/undetermined	22.1	9.3	5.2	7.9	9.8	9.4	8.6	9.8	8.2	10.8	17.3	

Not adjusted for multiple reporting.

<sup>2</sup> Total includes 11 cases for which the date of HIV diagnosis was not reported.

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

<sup>4</sup> Excludes males who also reported a history of homosexual contact.

Table 1.2.2 Estimated number of cases of newly diagnosed HIV infection adjusted for multiple reporting by State/Territory, sex and year<sup>1</sup>

State/Territory	Sex	≤92	93	94	95	96	97	98	99	00	01	Total
ACT	M	147	6	12	16	6	5	6	5	9	5	217
	F	12	1	2	2	1	3	2	3	1	1	28
NSW	M	6 733	556	470	520	404	335	340	316	307	305	10 286
	F	365	36	35	35	34	27	43	31	31	35	672
NT	M	57	10	5	2	5	7	11	4	1	3	105
	F	3	0	0	0	0	4	1	1	1	0	10
QLD	M	1 119	121	149	103	141	93	88	111	96	86	2 106
	F	64	5	10	10	11	19	13	17	14	17	180
SA	M	425	53	35	29	41	27	28	16	19	34	707
	F	35	2	4	1	4	6	6	3	2	9	72
TAS	M	62	2	1	6	3	0	2	2	0	2	80
	F	2	0	1	0	0	0	1	1	0	0	5
VIC	M	2 545	185	183	146	179	171	122	121	169	180	4 001
	F	111	20	18	10	14	13	9	12	20	23	250
WA	M	599	48	57	45	45	32	28	35	37	34	959
	F	41	3	15	14	9	6	20	6	9	9	132
Total	M	11 061	912	832	814	816	643	575	625	574	602	17 454
	F	633	67	85	72	73	78	95	74	78	94	1 349
Total		11 726	986	919	887	890	722	671	701	655	697	18 854

<sup>1</sup> 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.

Table 1.2.3 Characteristics of diagnoses of newly acquired HIV infection¹, 1992 – 2001, 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	92	93	94	95	96	97	98	99	00	01	Total <sup>2</sup>
Total cases		154	207	214	220	167	157	153	171	199	202	1 844
Males (%)		94.2	95.7	92.5	95.5	95.2	94.3	97.4	94.7	94.0	93.1	94.6
Median age (years)	М	29	29	29	31	31	32	31	32	32	34	31
	F	28	27	27	32	22	31	19	29	25	34	28
State/Territory												
ACT	M	2	1	1	6	1	0	2	1	6	2	22
	F	0	0	1	0	0	0	0	0	0	0	1
NSW	M	93	137	111	123	83	67	72	93	84	93	956
	F	5	5	7	3	2	2	0	2	2	6	34
NT	M	0	2	1	0	0	2	2	1	1	3	12
0.5	F	0	0	0	0	0	1	0	0	1	0	2
QLD	M	5	5	18	26	19	19	21	27	21	23	184
	F	1	1	2	2	2	0	0	3	2	2	15
SA	M F	3 1	20	4	11 0	6 0	9 2	6 0	6	6	9 1	80
TAC			0	0					0	1		5
TAS	M F	2	0 0	1 0	1 0	0 0	0 0	0 0	1 0	0 0	1 0	6 0
VIIC	-											
VIC	M F	37 2	29 2	59 5	37 3	40 2	47 3	38 1	30 2	59 3	50 3	426 26
WA	M	3	4	3	6	10	4	8	3	10	7	58
WA	F	0	0	1	1	2	0	3	1	1	2	11
HIV exposure category												
Male homosexual contact	M	126	174	168	183	145	131	125	129	159	164	1 504
Male homosexual contact												
and injecting drug use	M	10	6	16	11	5	9	13	14	5	7	96
Injecting drug use <sup>3</sup>	М	4	4	4	6	2	2	1	6	7	5	41
, , ,	F	4	2	2	1	1	0	2	2	2	2	18
Heterosexual contact	M	3	11	6	7	6	6	7	10	11	8	75
	F	4	6	11	8	7	6	2	6	8	11	69
Health care setting⁴	M	0	0	1	0	0	0	0	0	0	0	1
	F	1	0	2	0	0	0	0	0	0	0	3
Other/undetermined	M	2	3	3	3	1	0	3	3	5	4	27
	F	0	0	1	0	0	2	0	0	0	1	4
Evidence of newly acquired inf	ection											
Testing history only	M	99	120	105	92	84	69	70	79	76	87	881
	F	5	7	8	5	5	5	3	2	5	8	53
Illness only	M	24	22	36	59	26	37	36	37	62	45	384
	F	1	0	5	2	2	0	0	5	2	1	18
Testing history and illness	M	22	56	57	59	49	42	43	46	49	56	479
	F	3	1	3	2	1	3	1	1	3	5	23

<sup>1</sup> 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.

<sup>2</sup> Totals include 5 people whose sex was reported as transgender and one person whose sex was not reported.

<sup>3</sup> Excludes males who also reported a history of homosexual contact.

<sup>4 &#</sup>x27;Health care setting' includes 4 cases of occupationally acquired HIV infection.

Table 1.2.4 Median CD4+ cell count at diagnosis of HIV infection (number of HIV diagnoses with CD4+ cell count), 1997 – 2001, by State/Territory, HIV exposure category, newly acquired infection status, sex and year

Characteristic	Sex	1997	1998	1999	2000	2001
State/Territory						
ACT	M	290 (5)	90 (6)	465 (4)	550 (9)	450 (4)
	F	265 (2)	195 (2)	850 (3)	920 (1)	190 (1)
NSW	M	410 (214)	364 (178)	430 (183)	420 (214)	465 (187)
	F	250 (18)	323 (31)	486 (17)	330 (23)	178 (15)
NT	M	440 (7)	465 (10)	105 (4)	450 (2)	516 (4)
	F	399 (4)	520 (1)	530 (1)	300 (1)	- (0)
QLD	M	400 (92)	410 (84)	420 (95)	420 (91)	440 (76)
	F	300 (19)	310 (13)	440 (17)	355 (14)	430 (16)
SA	M	350 (28)	334 (27)	432 (17)	446 (19)	383 (32)
	F	600 (6)	233 (6)	121 (3)	208 (2)	180 (8)
TAS	M	- (0)	867 (2)	543 (2)	- (0)	- (0)
	F	- (0)	12 (1)	250 (1)	- (0)	- (0)
VIC	M	350 (143)	360 (117)	400 (109)	435 (152)	426 (157)
	F	254 (13)	500 (9)	325 (10)	333 (16)	455 (20)
WA	M	390 (28)	400 (27)	334 (24)	324 (33)	248 (31)
	F	276 (5)	344 (19)	624 (4)	377 (9)	496 (8)
Exposure category						
Male homosexual contact <sup>1</sup>	M	410 (427)	432 (349)	475 (327)	446 (409)	480 (396)
Injecting drug use <sup>2</sup>	M	450 (13)	435 (10)	300 (19)	380 (20)	375 (20)
	F	303 (4)	344 (7)	275 (3)	940 (3)	534 (6)
Heterosexual contact	M	270 (56)	238 (74)	280 (64)	300 (75)	234 (56)
	F	295 (58)	352 (69)	400 (51)	355 (58)	350 (59)
Other/undetermined	M	160 (21)	127 (18)	269 (29)	119 (19)	130 (19)
	F	350 (5)	73 (6)	343 (2)	52 (3)	830 (3)
Newly acquired HIV infection stat	us					
Diagnoses of newly	M	610 (125)	528 (130)	513 (127)	567 (164)	585 (146)
acquired HIV infection <sup>3</sup>	F	637 (8)	610 (4)	650 (7)	660 (9)	490 (11)
Other HIV diagnoses	M	320 (392)	294 (321)	350 (311)	284 (356)	365 (345)
	F	276 (59)	315 (78)	320 (49)	330 (57)	338 (57)
Total <sup>4</sup>		370 (584)	370 (534)	409 (495)	420 (589)	440 (559)

<sup>1</sup> Includes males who also reported a history of injecting drug use.

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

<sup>3</sup> 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.

<sup>4</sup> Total includes people whose sex was reported as transgender and people whose sex was not reported.

Table 1.2.5 Number of cases of newly acquired HIV infection, 1992 – 2000, and number diagnosed with AIDS by year of, and number of years following, HIV diagnosis

	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Newly acquired HIV infection	154	207	214	220	167	157	153	171	199	1 642
AIDS										
Interval between HIV and AIDS diagnosis										
Less than 1 year	5	4	5	8	2	4	1	3	1	33
1 – 2 years	3	7	8	7	2	2	1	1	0	31
2 – 3 years	8	8	7	4	1	2	2	1	_	33
3 – 4 years	5	7	1	1	0	1	2	_	_	17
4 – 5 years	4	4	1	0	2	0	_	-	_	11
5 or more years	8	3	10	2	3	-	_	-	-	26
Total	33	33	32	22	10	9	6	5	1	151

Source: State/Territory health authorities

Table 1.2.6 Number of specimens tested for HIV antibody in public health laboratories, 1992 – 2001, by State/Territory and year of test

Year of HIV antibody test

	ioui o	i iliv ulitibi	Juy toot							
State/Territory	1992	1993	1994	1995	1996	1997	1998	1999¹	2000¹	2001¹
ACT	10 284	10 767	10 300	9 368	7 053	7 044	8 293	6 976	5 653	5 343
NSW	352 391	346 652	344 903	300 944	270 735	286 701	299 434	324 126	334 295	322 508
NT	8 992	10 002	11 283	12 122	13 111	13 424	13 137	15 149	14 555	14 872
QLD	141 896	147 329	137 133	154 992	141 741	156 738	164 388	179 336	199 994	181 557
SA	78 233	82 521	77 628	69 054	60 295	58 363	15 848	87 927	76 134	74 796
TAS	12 617	12 873	14 000	12 628	13 192	11 347	11 883	12 243	12 903	12 475
VIC	163 443	163 497	132 100	108 230	119 360	94 846	113 342	161 600	163 433	174 590
WA	67 257	70 733	76 544	72 317	77 435	73 826	79 308	82 040	87 740	98 337
Total	835 113	844 374	803 891	739 655	702 922	702 289	705 633	869 397	894 707	884 478

<sup>1</sup> 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 people<sup>1</sup>, 1992 – 2001, by year. Number of cases, median age and percent (number) of total cases for each year by sex, newly acquired infection and HIV exposure category

			••	
Voor	Λt	HIV	diaqı	ากดเด
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Characteristic	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Total cases	13	18	20	21	19	15	26	9	14	12	167
Males (%)	84.6	77.8	75.0	61.9	78.9	73.3	65.4	66.7	92.9	58.3	73.1
Median age (years)	30	29	29	25	29	36	31	28	34	26	30
Newly acquired infection (%)	15.4 (2)	16.7 (3)	5.0 (1)	33.3 (7)	10.5 (2)	26.7 (4)	19.2 (5)	33.3 (3)	21.4 (3)	16.7 (2)	19.2(32)
HIV exposure category (number)											
Male homosexual contact	66.7 (8)	64.7(11)	26.3 (5)	28.6 (6)	58.8(10)	60.0 (9)	26.1 (6)	25.0 (2)	50.0 (7)	41.7 (5)	43.7(69)
Male homosexual contact	22 (1)	0.0 (0)		100 (1)	(1)		100 (0)			0.0 (0)	
and injecting drug use	8.3 (1)	0.0 (0)	26.3 (5)	19.0 (4)	5.9 (1)	6.7 (1)	13.0 (3)	12.5 (1)	7.1 (1)	0.0 (0)	10.7(17)
Injecting drug use <sup>2</sup>	0.0 (0)	5.9 (1)	0.0 (0)	0.0 (0)	11.8 (2)	0.0 (0)	13.0 (3)	25.0 (2)	21.4 (3)	33.3 (4)	9.5(15)
Heterosexual contact	25.0 (3)	29.4 (5)	42.1 (8)	52.4(11)	23.5 (4)	33.3 (5)	43.5(10)	37.5 (3)	21.4 (3)	16.7 (2)	34.2(54)
Haemophilia/											
coagulation disorder	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Receipt of blood/tissue	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Mother with/at risk											
for HIV infection	0.0 (0)	0.0 (0)	5.3 (1)	0.0 (0)	0.0 (0)	0.0 (0)	4.3 (1)	0.0 (0)	0.0 (0)	8.3 (1)	1.9 (3)
Other/undetermined <sup>3</sup>	7.7 (1)	5.5 (1)	5.0 (1)	0.0 (0)	10.5 (2)	0.0 (0)	11.5 (3)	11.1 (1)	0.0 (0)	0.0 (0)	5.4 (9)

<sup>1</sup> Information on Indigenous status was not available from ACT at 31 March 2002. Information on Indigenous status was available in VIC from 1 June 1998.

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

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

Table 1.3.2 Number of AIDS diagnoses in Indigenous people<sup>1</sup>, 1992 – 2001, by year. Number of AIDS diagnoses, median age, and percent (number) of total cases by sex, late HIV diagnosis and HIV exposure category

Year	οf	Δ	ınς	dia	an	neie

Characteristic	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Total cases	6	7	11	9	10	4	9	5	5	3	69
Males (%)	83.3	57.1	81.8	88.9	80.0	75.0	77.8	100.0	100.0	100.0	82.6
Median age (years)	26	36	32	31	30	38	34	37	37	47	32
Late HIV diagnosis (number)	33.3 (2)	28.6 (2)	9.1 (1)	11.1 (1)	10.0 (1)	25.0 (1)	44.4 (4)	40.0 (2)	80.0 (4)	33.3 (1)	27.5(19)
HIV exposure category (number)											
Male homosexual contact	66.7 (4)	42.9 (3)	54.5 (6)	66.7 (6)	30.0 (3)	33.3 (1)	37.5 (3)	20.0 (1)	100.0 (4)	66.7 (2)	50.0(33)
Male homosexual contact											
and injecting drug use	0.0 (0)	14.2 (1)	9.1 (1)	22.2 (2)	40.0 (4)	0.0 (0)	0.0 (0)	40.0 (2)	0.0 (0)	0.0 (0)	15.2(10)
Injecting drug use <sup>2</sup>	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (2)	20.0 (1)	0.0 (0)	0.0 (0)	4.5 (3)
Heterosexual contact	33.3 (2)	42.9 (3)	27.3 (3)	11.1 (1)	30.0 (3)	66.7 (2)	37.5 (3)	20.0 (1)	0.0 (0)	33.3 (1)	28.8(19)
Haemophilia/											
coagulation disorder	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Receipt of blood/tissue	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Mother with/at risk											
for HIV infection	0.0 (0)	0.0 (0)	9.1 (1)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	1.5 (1)
Other/undetermined <sup>3</sup>	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	25.0 (1)	11.1 (1)	0.0 (0)	20.0 (1)	0.0 (0)	4.4 (3)

<sup>1</sup> Information on Indigenous status was not available from ACT at 31 March 2002. Information on Indigenous status was available in VIC from 1 June 1998.

<sup>2</sup> Excludes males who also reported a history of homosexual contact.

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

#### 1.4 Assessment of patient report of exposure to HIV

Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1997 – 2001, 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

		1997 – 1999			2000 - 2001		1997 – 2001				
State/Territory	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	12	12	12	5	5	5	17	17	17		
NSW	400	174	137	254	78	63	654	252	200		
NT	15	15	15	3	2	2	18	17	17		
QLD	106	88	85	77	47	46	183	135	131		
SA	33	33	31	21	21	20	54	54	51		
TAS	2	2	2	0	0	0	2	2	2		
VIC	125	123	114	118	118	112	243	241	226		
WA	67	60	59	47	35	32	114	95	91		
Total	760	507	455	525	306	280	1 285	813	735		

<sup>1</sup> Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (51), people whose medical condition limited reporting of an HIV exposure history (8) and people who were reported to have died (19).

Number of cases of newly diagnosed HIV infection included in the assessment of patient reported HIV exposure history, 1997 – 2001, 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

		1997 – 1999			2000 – 2001			1997 – 2001	
HIV exposure category reported at notification	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	85	65	58	68	46	41	153	111	99
Heterosexual	58	55	50	48	37	36	106	92	86
Not further specified	27	10	8	20	9	5	47	19	13
Heterosexual contact	459	355	345	315	220	216	774	575	561
From a high prevalence country	149	123	121	122	82	82	271	205	203
Partner from a high prevalence country	80	62	60	78	60	58	158	122	118
Other partner with/at risk of HIV infection	100	71	69	52	43	42	152	114	111
Not further specified	130	99	95	63	35	34	193	134	129
Receipt of blood/tissue	9	5	5	1	1	1	10	6	6
Health care setting	0	0	0	0	0	0	0	0	0
Other/undetermined	207	82	47	141	39	22	348	121	69
Total	760	507	455	525	306	280	1 285	813	735

<sup>1</sup> Excludes people reported on the returned exposure assessment questionnaire to have been lost to follow up (51), people whose medical condition limited reporting of an HIV exposure history (8) and people who were reported to have died (19).

Table 1.4.3 Number of cases of newly diagnosed HIV infection, 1997 – 2001, by HIV exposure category reported on the questionnaire, year and sex

HIV exposure category documented		1997		1998		1999		2000		2001	1997	- 2001	
on the questionnaire	М	F	M	F	М	F	М	F	М	F	М	F	Total <sup>1</sup>
Injecting drug use	12	4	12	4	20	4	14	3	15	6	73	21	94
Heterosexual	10	2	10	3	14	4	13	3	12	6	59	18	77
Not further specified	2	2	2	1	6	0	1	0	3	0	14	3	17
Heterosexual contact	54	55	59	62	55	49	66	54	45	51	279	271	551
Sex with injecting drug user	1	7	0	4	1	2	0	6	1	0	3	19	22
Sex with bisexual male	_	3	_	6	_	5	-	2	_	6	_	22	22
From a high prevalence country	14	20	21	25	22	15	22	23	17	21	96	104	200
Sub-Saharan Africa	11	10	16	9	12	8	12	13	12	16	63	56	119
South East Asia	3	10	4	16	10	7	10	10	5	5	32	48	80
Other/not reported	0	0	1	0	0	0	0	0	0	0	1	0	1
Sex with a person from a high prevalence country	11	2	14	7	12	11	25	11	13	9	75	40	115
Sub-Saharan Africa	2	1	2	7	2	10	5	8	5	6	16	32	48
South East Asia	9	1	12	0	10	1	20	2	8	3	59	7	66
Other/not reported	0	0	0	0	0	0	0	1	0	0	0	1	1
Sex with person with medically acquired HIV	0	0	0	0	0	0	0	2	0	0	0	2	2
Sex with HIV infected person, exposure not specified	0	14	3	15	3	7	4	9	2	9	12	54	67
Not further specified	28	9	21	5	17	9	15	1	12	6	93	30	123
Receipt of blood/tissue	0	1	1	2	0	1	0	0	1	0	2	4	6
Health care setting	0	0	0	0	0	0	0	0	0	0	0	0	0
Other/undetermined	15	4	12	1	26	1	17	1	7	0	77	7	84
Total'	81	64	84	69	101	55	97	58	68	57	431	303	735

<sup>1</sup> Totals include 1 person whose sex was not reported.

## 1.5 National surveillance for perinatal exposure to HIV

Table 1.5.1 Number and population rate¹ of perinatal exposure to HIV, 1992 – 2001, by State/Territory and year of birth

State/	1992 –	1993	1994 –	1995	1996 –	1997	1998 –	1999	2000 -	2001
Territory	Number	Rate								
ACT	1	22.6	2	45.1	2	46.5	1	24.3	2	49.2
NSW	14	15.4	17	19.3	11	12.7	13	15.1	23	26.5
NT	0	0.0	0	0.0	1	28.0	1	27.7	0	0.0
QLD	3	6.4	11	23.6	4	8.4	10	21.4	6	12.7
SA	0	0.0	3	15.5	0	0.0	0	0.0	1	5.6
TAS	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
VIC	2	3.1	4	6.3	2	3.3	5	8.4	6	8.5
WA	3	12.0	5	19.9	5	20.2	9	36.3	6	23.9
Total	23	8.8	42	16.3	25	9.9	39	15.6	44	17.2

<sup>1</sup> 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, 1982 – 2001, by time of the woman's HIV diagnosis relative to the first exposed child's birth

Interval of the woman's HIV diagnosis

First exposed	Ве	fore the	birth (yea	ars)	At or after		
child's year of birth	<1	1-2	> 2	Total	the birth	Total	
1982 – 1991	12	5	4	21	48	69	
1992 – 1993	6	1	5	12	10	22	
1994 – 1995	8	0	5	13	14	27	
1996 – 1997	5	1	6	12	9	21	
1998 – 1999	10	4	11	25	4	29	
2000 – 2001	17	2	12	31	4	35	
Total	58	13	43	114	89	203	

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

Table 1.5.3 Number of women with perinatally HIV exposed children, 1982 – 2001, and number of perinatally exposed children, by year of birth of the first exposed child and the woman's HIV exposure category

	1982 –	1991	1992 -	- 2001	1982 – 2001			
Year of the first		Total number		Total number		Total number		
Exposed child's birth/ HIV exposure category	Number of women	of exposed children	Number of women	of exposed children	Number of women	of exposed children		
Injecting drug use	16	23	14	18	30	41		
Heterosexual contact	30	40	117	142	147	182		
Sex with IDU	8	8	19	25	27	33		
Sex with bisexual male	5	7	9	11	14	18		
From high prevalence country	9	11	30	35	39	46		
Sex with person from a high prevalence country	1	2	19	23	20	25		
Sex with person with medically acquired HIV	3	4	1	1	4	5		
Sex with person with HIV infection, other exposu	re 2	5	14	17	16	22		
Not further specified	2	3	25	30	27	33		
Receipt of blood/tissue	20	24	0	0	20	24		
Other/undetermined	3	5	3	3	6	8		
Total	69	92	134	163	203	255		

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

Table 1.5.4 Number of perinatally exposed children, 1982 – 2001, and number with diagnosed HIV infection by year of the child's birth and time of the woman's HIV diagnosis relative to the child's birth

Interval of the woman's HIV diagnosis

	Before	the birth	At or afte	r the birth	To	ital
Child's year of birth	Number exposed	Number with HIV	Number exposed	Number with HIV	Number exposed	Number with HIV
1982 – 1991	27	7	55	25	82	32
1992 – 1993	13	2	10	5	23	7
1994 – 1995	23	7	19	7	42	14
1996 – 1997	16	3	9	7	25	10
1998 – 1999	34	0	5	3	39	3
2000 – 2001	40	0	4	3	44	3
Total	153	19	102	50	255	69

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

	HIV pr	evalence	AIDS in	cidence
Country	2001	Rate <sup>1</sup>	2001	Rate <sup>1</sup>
Asia Pacific				
Australia	12 730	66	178	0.9
Cambodia <sup>2</sup>	169 000	2 800	14 000	232
China <sup>2</sup>	600 000	100	27 000	5
India <sup>2,4</sup>	3 860 000	380	12 239	2.4
Indonesia <sup>2,5</sup>	52 000	12	411	<1
Japan <sup>2</sup>	8 100	<100	-	-
Malaysia <sup>2</sup>	39 000	300	4 000	31
Myanmar <sup>2,5</sup>	510 000	760	3 817	9
New Zealand⁴	1 513	39	22	1
Papua New Guinea <sup>2</sup>	15 000	600	_	-
Philippines <sup>2</sup>	13 000	<100	_	_
Republic of Korea <sup>2</sup>	3 800	<100	_	-
Thailand <sup>2</sup>	740 000	1 345	156 309	284
Vietnam <sup>2</sup>	107 000	240	6 500	15
Europe				
France <sup>6</sup>	-	_	628	2.1
Germany <sup>6</sup>	_	_	161	0.4
Italy <sup>6</sup>	-	_	861	3.0
Spain <sup>6</sup>	-	_	966	4.8
United Kingdom <sup>6,7</sup>	33 200	57	322	0.9
North America				
Canada	49 800	162	452	1.4
United States <sup>4</sup>	850 000	308	40 894	14.3

<sup>1</sup> Rate per 100 000 population.

<sup>2</sup> HIV prevalence estimate for 2000, among people aged 15–49 years.

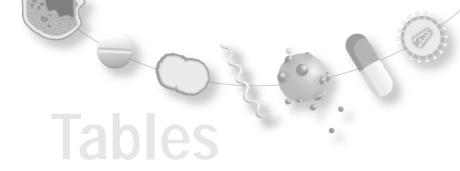
<sup>3</sup> For the 12 months July 2000 to June 2001.

<sup>4</sup> January to June 2000, with estimated annual rate.

<sup>5</sup> AIDS incidence, January to September 2000, with estimated annual rate.

<sup>6</sup> AIDS incidence, January to June 2001, with annual rate adjusted for reporting delays

<sup>7</sup> HIV prevalence estimate for 1999, among people aged 15–59 years.



2002

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

# **Annual Surveillance Report**

2	National surveillance for viral hepatitis	
2.1	Notification of viral hepatitis to the National Notifiable Diseases Surveillance Syste	em
Table 2.1.1	Number and rate of diagnosis of hepatitis A infection, 1997 – 2001, by State/Territory and year	52
Table 2.1.2	Number of diagnoses of hepatitis A infection, 1997 – 2001, by age group, year and sex	52
Table 2.1.3	Number and rate of diagnosis of newly acquired hepatitis B infection, 1997 – 2001, by State/Territory and year	53
Table 2.1.4	Number of diagnoses of newly acquired hepatitis B infection, 1997 – 2001, by age group, year and sex	53
Table 2.1.5	Number and rate of diagnosis of hepatitis C infection, 1997 – 2001, by State/Territory and year	54
Table 2.1.6	Number of diagnoses of hepatitis C infection, 1997 – 2001, by age group, year and sex	54
Table 2.1.7	Number of diagnoses of newly acquired hepatitis C infection, 1997 – 2001, by State/Territory and year	54
Table 2.1.8	Number of diagnoses of newly acquired hepatitis C infection, 1998 – 2001, by age group, year and sex	55
Table 2.1.9	Number of diagnoses of newly acquired hepatitis C infection, 1997 – 2000, by year and exposure category	55
2.2	National surveillance for viral hepatitis in Indigenous people	
Table 2.2.1	Number (percent) of diagnoses of hepatitis A infection, 2001, by State/Territory and Indigenous status	56
Table 2.2.2	Number (percent) of diagnoses of newly acquired hepatitis B infection, 2001, by State/Territory and Indigenous status	56
Table 2.2.3	Number (percent) of diagnoses of hepatitis C infection, 2001, 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 – 2001, 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, 1997 – 2001, by State/Territory and year

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	19	97	19	98	19	99	20	00	20	01
State/Territory	Number	Rate								
ACT	52	15.5	53	15.4	8	2.4	5	1.6	14	4.2
NSW	1 427	22.9	927	14.8	407	6.4	200	3.2	199	3.1
NT	95	42.3	45	19.8	89	38.1	44	20.0	38	16.4
QLD	917	26.6	1 049	30.0	360	10.3	133	3.7	120	3.4
SA	92	6.4	97	6.8	121	8.5	54	3.7	20	1.4
TAS	3	0.7	8	1.8	5	1.1	3	0.6	4	1.0
VIC	339	7.4	168	3.6	265	5.7	192	4.1	102	2.1
WA	116	6.3	145	7.8	295	15.8	180	9.6	37	1.9
Total	3 041	16.4	2 492	13.3	1 550	8.3	811	4.3	534	2.8

<sup>1</sup> 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, 1997 – 2001, by age group, year and sex

.,		••	
Voor	nt	dian	ınosis
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Age group		1997	7		1998	3		1999	)		2000			2001	
(years)	M	F	T¹	M	F	T¹	M	F	T¹	M	F	T	M	F	T¹
0 – 4	86	64	150	85	60	145	58	56	114	33	21	54	25	10	35
5 – 14	248	239	488	208	220	428	148	156	304	70	64	134	44	23	67
15 – 19	142	96	238	111	92	204	72	71	143	26	27	53	19	3	22
20 - 29	558	304	864	488	270	758	282	191	475	155	76	231	102	38	141
30 - 39	418	217	637	316	143	460	150	111	262	99	58	157	97	28	126
40 – 49	222	140	363	183	83	266	73	50	124	53	34	87	51	24	75
50 – 59	110	60	170	86	48	134	29	24	53	21	23	44	29	9	38
60+	59	62	121	44	43	87	36	37	73	29	22	51	17	13	30
Not reported	6	4	10	8	2	10	0	2	2	0	0	0	0	0	0
Total	1 849	1 186	3 041	1 529	961	2 492	848	698	1 550	486	325	811	384	148	534

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

Table 2.1.3 Number and rate¹ of diagnoses of newly acquired hepatitis B infection, 1997 – 2001, by State/Territory and year

	19	97	19	98	19	99	20	00	20	01
State/Territory	Number	Rate								
ACT	2	0.6	1	0.3	3	1.1	3	0.9	2	0.6
NSW	52	0.8	55	0.9	64	1.0	96	1.5	88	1.4
NT	20	8.8	18	8.1	20	10.2	6	3.6	3	2.3
QLD	42	1.2	47	1.3	54	1.5	56	1.6	49	1.4
SA	16	1.1	18	1.3	19	1.3	30	2.1	23	1.6
TAS	1	0.2	6	1.3	5	1.1	18	4.2	22	5.3
VIC	116	2.5	88	1.9	93	2.0	114	2.4	194	4.0
WA	19	1.0	31	1.7	45	2.4	72	3.8	39	2.0
Total	268	1.4	264	1.4	303	1.6	395	2.1	420	2.2

<sup>1</sup> 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, 1997 – 2001, by age group, year and sex

Year	nt	dia	anc	CIC

Age group		1997			1998			1999			2000			2001	
(years)	M	F	T	M	F	T¹	M	F	T¹	M	F	T	M	F	T¹
0 – 4	1	1	2	2	0	2	0	2	2	0	0	0	0	1	1
5 – 14	5	2	7	5	6	11	2	3	5	4	2	6	3	1	4
15 – 19	25	25	50	18	17	35	23	26	49	23	39	62	23	28	51
20 – 29	62	39	101	61	39	100	88	37	126	115	76	191	123	71	196
30 - 39	36	20	56	39	18	58	43	22	65	51	15	66	66	35	101
40 – 49	23	3	26	20	8	28	24	8	32	23	9	32	28	11	39
50 – 59	10	5	15	11	3	14	8	7	15	18	6	24	13	5	18
60+	2	9	11	9	5	14	7	2	9	9	5	14	8	2	10
Not reported	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0
Total	164	104	268	166	97	264	195	107	303	243	152	395	264	154	420

 $<sup>1 \</sup>qquad \hbox{Totals include diagnoses in people whose sex was not reported.}$ 

Table 2.1.5 Number and rate¹ diagnoses of hepatitis C infection, 1997 – 2001, by State/Territory and year

	19	97	19	98	19	99	20	000	20	001
State/Territory	Number	Rate								
ACT	318	97.2	298	90.2	302	92.8	232	70.4	233	70.1
NSW	6 794	107.9	6 868	109.2	6 876	108.6	7 403	116.2	5 127	79.5
NT	281	134.6	223	108.2	185	88.2	178	86.1	219	101.5
QLD	2 843	83.1	2 921	84.5	3 045	87.4	3 395	96.4	3 167	88.8
SA	882	60.6	859	59.1	933	64.5	877	60.9	866	60.3
TAS	232	51.3	291	65.3	328	74.4	361	82.6	387	90.3
VIC	4 790	103.3	5 491	107.4	6 040	128.3	5 767	121.2	5 248	108.8
WA	1 121	61.4	1 231	66.3	1 131	60.1	1 732	91.0	1 487	77.2
Total	17 261	92.8	18 182	94.8	18 840	100.2	19 945	105.2	16 734	87.3

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

Source: National Notifiable Diseases Surveillance System

Table 2.1.6 Number of diagnoses of hepatitis C infection, 1997 – 2001, by age group, year and sex

Year of diagnosis

			•												
Age group		1997	7		199	8		199	9		200	0		200	1
(years)	M	F	T¹	M	F	T¹	M	F	T¹	M	F	Τ¹	M	F	T¹
0 - 4	57	53	112	49	39	90	44	40	88	46	39	89	42	24	71
5 – 14	30	25	58	31	22	55	33	24	59	27	24	52	17	21	39
15 – 19	424	427	858	476	525	1 019	646	603	1 270	670	675	1 352	486	529	1 023
20 - 29	3 091	1 758	4 887	3 074	1 967	5 119	3 662	2 032	5 795	4 040	2 232	6 311	3 186	2 100	5 321
30 - 39	4 224	2 321	6 600	3 871	2 268	6 194	3 950	2 161	6 201	3 995	2 197	6 231	3 184	1 817	5 028
40 - 49	2 313	977	3 310	2 552	1 151	3 742	2 710	1 240	3 988	3 032	1 289	4 347	2 628	1 200	3 850
50 - 59	338	216	555	404	240	653	432	252	693	541	271	818	517	227	750
60+	429	376	820	435	366	815	376	352	737	373	359	742	326	295	629
Not reported	l 41	13	61	294	200	495	2	3	9	2	1	3	12	10	23
Total	10 947	6 166	17 261	11 186	6 778	18 182	11 855	6 707	18 840	12 726	7 087	19 945	10 398	6 223	16 734

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.7 Number of diagnoses of newly acquired hepatitis C infection, 1997 – 2001, by State/Territory and year

Year of diagnosis<sup>1</sup>

State/Territory	1997	1998	1999	2000	2001
ACT	3	8	20	20	18
NSW	19	110	100	139	240
NT	_	_	_	_	_
QLD	_	_	_	_	-
SA	48	67	80	89	89
TAS	2	18	18	31	5
VIC	9	21	70	87	78
WA	73	125	108	75	157
Total	154	349	396	441	587

<sup>1</sup> Dashes (-) indicate that data were not available.

Table 2.1.8 Number of newly acquired hepatitis C infection, 1997 – 2001, by age group, year and sex

Age group		1997			1998			1999			2000			2001	
(years)	M	F	T	M	F	T¹	M	F	T	M	F	T	M	F	T
0 – 4	0	0	0	3	0	3	1	0	1	1	0	1	2	1	3
5 – 14	0	1	1	0	0	0	1	3	4	0	2	2	1	0	1
15 – 19	4	15	19	26	32	58	39	40	80	36	49	85	41	44	85
20 – 29	57	26	83	97	74	172	133	57	190	113	102	215	184	115	299
30 - 39	27	11	38	47	23	71	53	21	75	55	36	91	94	59	153
40 – 49	7	4	11	19	14	33	21	12	33	31	9	40	24	11	35
50 – 59	0	1	1	5	2	7	5	2	7	4	1	5	5	1	6
60+	0	1	1	1	3	4	2	4	6	1	1	2	4	1	5
Not reported	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Total	95	59	154	198	149	349	255	139	396	241	200	441	355	232	587

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 2.1.9 Number of diagnoses of newly acquired hepatitis C infection, 1997 – 2000, by year and exposure category

Exposure category	1997	1998	1999	2000	Total
Injecting drug use	92	207	254	188	741
Sexual transmission	6	7	4	2	19
Tattoos	4	2	5	5	16
Body piercing/acupuncture	2	3	3	0	8
Surgery/dental treatment	1	2	1	0	4
Needlestick injury	2	0	0	2	4
Household contact	2	1	0	0	3
Other	1	1	2	1	5
Undetermined	8	40	35	16	99
Total	118	263	304	214	899

## 2.2 National surveillance for viral hepatitis in Indigenous people

Table 2.2.1 Number (percent) of diagnoses of hepatitis A infection, 2001, by State/Territory and Indigenous status

ln	dic	ıΔr	10	110	cto	itus

State/Territory	Indigenous		Non-Indigenous		Not reported		Total	
ACT	0	(0.0)	6	(42.9)	8	(57.1)	14	
NSW	5	(2.5)	141	(70.9)	53	(26.6)	199	
NT	17	(44.7)	17	(44.7)	4	(10.5)	38	
QLD	4	(3.3)	73	(60.8)	43	(35.8)	120	
SA	2	(10.0)	16	(80.0)	2	(10.0)	20	
TAS	0	(0.0)	0	(0.0)	4	(100.0)	4	
VIC	0	(0.0)	71	(69.6)	31	(30.4)	102	
WA	1	(2.7)	26	(70.3)	10	(27.0)	37	
Total	29	(5.4)	350	(65.5)	155	(29.0)	534	

Source: National Notifiable Diseases Surveillance System

Table 2.2.2 Number (percent) of diagnoses of newly diagnosed hepatitis B infection, 2001, by State/Territory and Indigenous status

#### Indigenous status

State/Territory	Indigenous		Non-Indigenous		Not reported		Total	
ACT	0	(0.0)	1	(50.0)	1	(50.0)	2	
NSW	8	(9.1)	42	(47.7)	38	(43.2)	88	
NT	1	(33.3)	1	(33.3)	1	(33.3)	3	
QLD	5	(10.2)	4	(8.2)	40	(81.6)	49	
SA	2	(8.7)	21	(91.3)	0	(0.0)	23	
TAS	0	(0.0)	8	(36.4)	14	(63.6)	22	
VIC	1	(0.5)	168	(86.6)	25	(12.9)	194	
WA	3	(7.7)	20	(51.3)	16	(41.0)	39	
Total	20	(4.8)	265	(63.1)	135	(32.1)	420	

Source: National Notifiable Diseases Surveillance System

Table 2.2.3 Number (percent) of diagnoses of hepatitis C infection, 2001, by State/Territory and Indigenous status

India	neno	IIS S	tatus

State/Territory	Indigenous		Non-Indigenous		Not reported		Total	
ACT	6	(2.6)	43	(18.5)	184	(79.0)	233	
NSW	185	(3.6)	544	(10.6)	4 398	(85.8)	5 127	
NT	20	(9.1)	134	(61.2)	65	(29.7)	219	
QLD	63	(2.0)	92	(2.9)	3 012	(95.1)	3 167	
SA	80	(9.2)	757	(87.4)	29	(3.3)	866	
TAS	9	(2.3)	139	(35.9)	239	(61.8)	387	
VIC	21	(0.4)	589	(11.2)	4 638	(88.4)	5 248	
WA	48	(3.2)	343	(23.1)	1 096	(73.7)	1 487	
Total	432	(2.6)	2 641	(15.8)	13 661	(81.6)	16 734	

## 2.3 Long term outcomes among people with chronic viral hepatitis

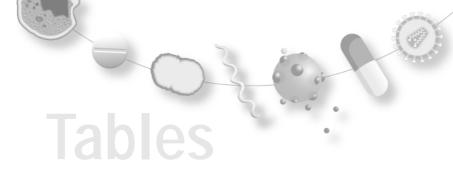
Table 2.3.1 Number (percent) of liver transplants, 1985 – 2001, by year and primary cause of liver disease

Year	hepatitis B	hepatitis C	hepatitis B and C	hepatocell carcin		other¹	Total
	•	•					
1985 – 1991	23 (8.7)	11 (4.2)	2 (0.7)	9	(3.4)	220 (83.0)	265
1992	9 (10.0)	4 (4.4)	_	1	(1.1)	76 (84.4)	90
1993	10 (11.4)	10 (11.4)	_		-	68 (77.3)	88
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 (16.2)	2 (1.6)	4	(3.3)	84 (68.3)	123
1998	14 (10.5)	29 (21.8)	1 (0.8)	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 <sup>2</sup>	9 (13.0)	14 (20.3)	2 (2.9)	4	(5.8)	40 (58.0)	69
Total	141 (10.5)	195 (14.5)	8 (0.6)	39 (	(2.9)	965 (71.6)	1 348

<sup>1</sup> Includes other causes of chronic liver disease and fulminant hepatitis.

Source: Australia and New Zealand Liver Transplant Register

<sup>2</sup> Data available to 30 June 2001.



2002

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

# **Annual Surveillance Report**

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, 1997 – 2001, by State/Territory and year	60
Table 3.1.2	Number of diagnoses of chlamydia, 1997 – 2001, by age group, year and sex	60
Table 3.1.3	Number of diagnoses of donovanosis, 1997 – 2001, by State/Territory and year	61
Table 3.1.4	Number of diagnoses of donovanosis, 1997 – 2001, by age group, year and sex	61
Table 3.1.5	Number and rate of diagnosis of gonorrhoea, 1997 – 2001, by State/Territory and year	61
Table 3.1.6	Number of diagnoses of gonorrhoea, 1997 – 2001, by age group, year and sex	62
Table 3.1.7	Number and rate of diagnosis of syphilis, 1997 – 2001, by State/Territory and year	62
Table 3.1.8	Number of diagnoses of syphilis, 1997 – 2001, by age group, year and sex	63
3.2	National surveillance for sexually transmissible infections in Indigenous people	
Table 3.2.1	Number and rate of diagnosis of chlamydia, 1997 – 2001, by State/Territory, Indigenous status and year	64
Table 3.2.2	Number (percent) of diagnoses of chlamydia, 2001, by State/Territory and Indigenous status	64
Table 3.2.3	Number and rate of diagnosis of gonorrhoea, 1997 – 2001, by State/Territory, Indigenous status and year	65
Table 3.2.4	Number (percent) of diagnoses of gonorrhoea, 2001, by State/Territory and Indigenous status	65
Table 3.2.5	Number and rate of diagnosis of syphilis, 1997 – 2001, by State/Territory, Indigenous status and year	66
Table 3.2.6	Number (percent) of diagnoses of syphilis, 2001, by State/Territory and Indigenous status	66
3.3	Gonococcal isolates	
Table 3.3.1	Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2001 by State/Territory, sex and site, and antibiotic sensitivity by State/Territory	67
Table 3.3.2	Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1997 – 2001, by sex, site and year	67

## 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 diagnoses of chlamydia, 1997 – 2001, by State/Territory and year

Year		

	19	97	19	98	19	99	20	000	20	01
State/Territory	Number	Rate								
ACT	142	40.3	194	55.9	177	51.5	243	70.2	301	86.5
NSW <sup>2</sup>	_	_	_	-	2 461	39.5	3 480	55.5	4 482	70.7
NT	621	288.5	773	354.5	850	383.5	943	421.3	1 246	559.0
QLD	3 507	100.5	4 076	116.2	4 474	127.1	4 929	138.9	5 594	156.1
SA	994	70.7	1 019	72.9	968	69.7	1 016	73.4	1 469	106.7
TAS	247	55.2	200	45.6	254	58.9	331	77.2	377	88.6
VIC	2 106	45.4	2 441	52.4	2 859	60.8	3 331	70.4	3 914	81.9
WA	1 589	86.0	2 058	109.9	1 893	100.1	2 556	133.6	2 724	141.1
Total	9 206	74.1	10 761	86.2	13 936	74.2	16 829	89.0	20 107	105.8

<sup>1</sup> 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, 1997 – 2001, by age group, year and sex

	nosis

Age group		1997	7		199	8		199	9		200	0		200	1
(years)	M	F	T¹	M	F	T¹	M	F	T¹	М	F	T¹	M	F	T1
0 – 4	17	18	35	34	41	75	24	35	59	31	37	68	20	25	45
5 – 14	21	89	110	35	132	167	28	162	190	18	182	201	25	201	226
15 – 19	487	1 893	2 385	593	2 074	2 670	700	2 491	3 196	903	3 084	3 992	1 050	3 805	4 865
20 - 29	1 857	3 184	5 051	2 287	3 534	5 833	2 917	4 475	7 402	3 548	5 193	8 754	4 355	6 213	10 582
30 - 39	548	605	1 154	754	688	1 443	1 234	980	2 215	1 513	1 134	2 650	1 739	1 377	3 117
40 - 49	205	146	351	255	165	420	386	226	613	540	310	853	579	328	908
50 - 59	52	29	81	69	30	100	137	50	187	154	64	218	209	70	280
60+	14	10	24	21	13	34	43	21	64	62	22	86	52	16	68
Not reported	5	10	15	7	11	19	4	6	10	3	4	7	13	2	16
Total	3 206	5 984	9 206	4 055	6 688	10 761	5 473	8 446	13 936	6 772	10 030	16 829	8 042	12 037	20 107

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

<sup>2</sup> Chlamydia was a notifiable condition in New South Wales from 1998.

Table 3.1.3 Number of diagnoses of donovanosis, 1997 – 2001, by State/Territory<sup>1</sup> and year

State/Territory	1997	1998	1999	2000	2001
NT	32	18	6	5	13
QLD	4	5	4	6	11
WA	12	8	7	1	10
Total	48	31	17	12	34

<sup>1</sup> State/Territory with reported cases of donovanosis.

Source: National Notifiable Diseases Surveillance System

Table 3.1.4 Number of diagnoses of donovanosis, 1997–2001, by age group, year and sex

Year of diagnosis

Age group		1997			1998			1999			2000			2001	
(years)	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 – 14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
15 – 19	1	11	12	0	9	9	1	2	3	0	0	0	0	4	4
20 – 29	4	15	19	1	9	10	0	6	6	2	3	5	4	8	12
30 - 39	4	4	8	2	2	4	0	1	1	1	3	4	4	5	9
40 – 49	1	4	5	0	2	2	1	3	4	3	0	3	2	3	5
50+	2	2	4	1	5	6	0	3	3	0	0	0	2	1	3
Not reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	12	36	48	4	27	31	2	15	17	6	6	12	12	22	34

Source: National Notifiable Diseases Surveillance System

Table 3.1.5 Number and rate¹ of diagnoses of gonorrhoea, 1997 – 2001, by State/Territory and year

Year of diagnosis

	19	97	19	98	19	99	20	00	20	01
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	21	6.2	28	8.4	20	6.2	14	4.4	20	6.0
NSW	636	10.2	1 051	16.8	1 286	20.4	1 060	16.7	1 361	21.2
NT	1 080	506.9	1 196	556.3	1 129	517	1 103	496.0	1 428	641.9
QLD	934	26.7	1 119	31.8	1 185	33.6	1 137	32.0	1 102	30.7
SA	292	20.7	212	15.0	213	15.1	269	19.1	220	15.8
TAS	6	1.3	12	2.7	19	4.4	17	4.0	21	5.1
VIC	364	7.8	576	12.3	767	16.3	711	14.9	851	17.7
WA	1 307	71.0	1 211	64.8	989	52.4	1 317	68.8	1 352	69.9
Total	4 640	25.0	5 405	28.9	5 608	29.9	5 628	29.7	6 355	33.4

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

Table 3.1.6 Number of diagnoses of gonorrhoea, 1997 – 2001, by age group, year and sex

Age group		1997	7		1998	3		1999	)		2000	)		2001	
(years)	M	F	T¹	M	F	<b>T</b> <sup>1</sup>									
0 – 4	49	55	104	11	23	34	11	19	30	7	10	17	7	14	21
5 – 14	84	138	222	39	97	136	31	92	123	18	111	129	27	93	120
15 – 19	409	508	919	481	540	1 024	505	563	1 069	502	636	1 138	532	690	1 225
20 - 29	1 189	722	1 914	1 432	788	2 227	1 504	713	2 222	1 494	717	2 213	1 703	822	2 527
30 - 39	766	248	1 016	1 038	307	1 346	1 166	277	1 452	1 124	264	1 388	1 302	311	1 615
40 - 49	264	61	325	367	85	453	434	69	505	429	78	507	488	80	569
50 - 59	84	14	98	101	21	123	139	17	158	155	29	185	193	24	217
60+	29	4	33	47	7	54	44	3	47	42	8	50	49	10	59
Not reported	6	3	9	4	3	8	1	0	2	1	0	1	2	0	2
Total	2 880	1 753	4 640	3 520	1 871	5 405	3 835	1 753	5 608	3 772	1 853	5 628	4 303	2 044	6 355

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

Source: National Notifiable Diseases Surveillance System

Table 3.1.7 Number and rate of diagnoses of syphilis, 1997 – 2001, by State/Territory and year

Year of diagnosis

	19	97	19	98	19	99	20	00	20	01
State/Territory	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
ACT	8	2.6	18	6.5	10	3.2	13	4.1	11	3.7
NSW	513	8.1	601	9.4	522	8.1	541	8.2	522	7.8
NT	270	131.4	342	179.9	335	172.6	172	88.3	413	200.8
QLD	314	9.1	579	16.7	827	23.5	887	24.9	168	4.7
SA	23	1.6	18	1.3	11	0.8	13	0.9	24	1.7
TAS	9	1.9	7	1.4	9	1.8	8	1.7	16	3.3
VIC	15	0.3	8	0.2	6	0.1	8	0.2	15	0.3
WA	102	5.6	99	5.3	118	6.3	109	5.7	206	10.6
Total	1 254	6.7	1 672	8.9	1 838	9.7	1 751	9.1	1 375	7.1

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

Table 3.1.8 Number of diagnoses of syphilis, 1997 – 2001, by age group, year and sex

Age group		1997	7		1998	3		1999	9		2000	)		2001	
(years)	M	F	T¹												
0 – 4	6	3	10	7	4	12	6	7	13	3	1	4	10	10	21
5 – 14	3	10	13	4	21	25	6	12	18	5	9	14	6	9	15
15 – 19	53	112	165	98	107	206	74	105	180	52	62	114	80	101	181
20 – 29	173	194	368	194	262	462	230	307	537	157	280	437	194	169	363
30 - 39	151	141	293	184	193	378	219	198	422	202	199	401	171	127	298
40 – 49	96	62	158	149	75	227	180	93	273	171	107	279	105	53	161
50 - 59	93	13	108	110	31	142	110	48	159	167	52	219	97	41	138
60+	99	36	135	152	64	218	136	93	232	192	89	281	132	65	198
Not reported	1	2	4	0	1	2	2	2	4	1	1	2	0	0	0
Total	675	573	1 254	898	758	1 672	963	865	1 838	950	800	1 751	795	575	1 375

<sup>1</sup> Totals include diagnoses in people whose sex was not reported.

## 3.2 National surveillance for sexually transmissible infections in Indigenous Australians

Table 3.2.1 Number and rate¹ of diagnosis of chlamydia, 1997 – 2001, by State/Territory², Indigenous status and year

			NT		SA		WA		Total
Year		Indigenous	Non- Indigenous <sup>3</sup>	Indigenous	Non- Indigenous³	Indigenous	Non- Indigenous <sup>3</sup>	Indigenous	Non- Indigenous <sup>3</sup>
1997	Number	377	244	187	807	430	1 159	994	2 210
	Rate	597	163	696	59	653	65	636	67
1998	Number	470	303	138	881	619	1 439	1 227	2 623
	Rate	735	197	503	64	885	80	758	79
1999	Number	525	325	125	843	506	1 387	1 156	2 555
	Rate	795	212	452	62	720	76	704	76
2000	Number	617	326	166	850	656	1 900	1 439	3 076
	Rate	933	209	601	63	906	103	866	92
2001	Number	807	439	136	1 333	581	2 143	1 524	3 915
	Rate	1 173	288	462	99	768	115	880	117

<sup>1</sup> 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).

Source: National Notifiable Diseases Surveillance System

Table 3.2.2 Number (percent) of diagnoses of chlamydia, 2001, by State/Territory and Indigenous status

	Indigenous statu	IS		
State/Territory	Indigenous	Non-Indigenous	Not reported	Total
ACT	2 (0.7)	80 (26.6)	219 (72.8)	301
NSW	187 (4.2)	251 (5.6)	4 044 (90.2)	4 482
NT	807 (64.8)	296 (23.8)	143 (11.5)	1 246
QLD	784 (14.0)	173 (3.1)	4 637 (82.9)	5 594
SA	136 (9.3)	1 315 (89.5)	18 (1.2)	1 469
TAS	9 (2.4)	260 (69.0)	108 (28.6)	377
VIC	0 (0.0)	0 (0.0)	3 914(100.0)	3 914
WA	581 (21.3)	832 (30.5)	1 311 (48.1)	2 724
Total	2 506 (12.5)	3 207 (15.9)	14 394 (71.6)	20 107

<sup>2</sup> State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

<sup>3</sup> Includes diagnoses in people whose Indigenous status was not reported.

Table 3.2.3 Number and rate¹ of diagnosis of gonorrhoea, 1997 – 2001, by State/Territory², Indigenous status and year

			NT		SA		WA		Total
Year		Indigenous	Non- Indigenous <sup>3</sup>	Indigenous	Non- Indigenous³	Indigenous	Non- Indigenous <sup>3</sup>	Indigenous	Non- Indigenous <sup>3</sup>
1997	Number	821	259	191	101	822	485	1 834	845
	Rate	1 341	175	736	7	1 241	27	1 192	25
1998	Number	886	310	133	79	865	346	1 884	735
	Rate	1 475	203	513	6	1 300	19	1 234	22
1999	Number	910	219	131	82	701	288	1 742	589
	Rate	1 433	145	490	6	1 013	16	1 093	17
2000	Number	927	176	173	96	821	496	1 921	768
	Rate	1 379	115	640	7	1 176	27	1 168	23
2001	Number	1 157	271	115	105	869	483	2 141	859
	Rate	1 741	174	406	8	1 212	26	1 290	25

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).

Source: National Notifiable Diseases Surveillance System

Table 3.2.4 Number (percent) of diagnoses of gonorrhoea, 2001, by State/Territory and Indigenous status

Indigenous	status
------------	--------

State/Territory	Indigenous	Non-Indigenous	Not reported	Total
ACT	0 (0.0)	14 (70.0)	6 (30.0)	20
NSW	50 (3.7)	66 (4.8)	1 245 (91.5)	1 361
NT	1 157 (81.0)	153 (10.7)	118 (8.3)	1 428
QLD	386 (35.0)	34 (3.1)	682 (61.9)	1 102
SA	115 (52.3)	103 (46.8)	2 (0.9)	220
TAS	0 (0.0)	19 (90.5)	2 (9.5)	21
VIC	0 (0.0)	609 (71.6)	242 (28.4)	851
WA	869 (64.3)	197 (14.6)	286 (21.2)	1 352
Total	2 577 (40.6)	1 195 (18.8)	2 583 (40.6)	6 355

<sup>2</sup> State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

<sup>3</sup> Includes diagnoses in people whose Indigenous status was not reported.

Table 3.2.5 Number and rate<sup>1</sup> of diagnosis of syphilis, 1997 – 2001, by State/Territory<sup>2</sup>, Indigenous status and year

			NT		SA		WA		Total
Year		Indigenous	Non- Indigenous <sup>3</sup>						
1997	Number	250	20	23	0	36	66	309	86
	Rate	444	14	86	0	65	4	221	3
1998	Number	318	24	18	0	46	53	382	77
	Rate	654	16	63	0	82	3	309	2
1999	Number	303	32	9	2	46	72	358	106
	Rate	645	21	32	0.1	84	4	302	3
2000	Number	146	26	13	0	53	56	212	82
	Rate	295	19	48	0	102	3	171	2
2001	Number	364	49	24	0	121	85	509	134
	Rate	662	36	80	0	265	5	394	4

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).

Source: National Notifiable Diseases Surveillance System

Table 3.2.6 Number (percent) of diagnoses of syphilis, 2001, by State/Territory and Indigenous status

	Indigenous status					
State/Territory	Indigenous	Non-Indigenous	Not reported	Total		
ACT	0 (0.0)	4 (36.4)	7 (63.6)	11		
NSW	49 (9.4)	277 (53.1)	196 (37.5)	522		
NT	364 (88.1)	26 (6.3)	23 (5.6)	413		
QLD	68 (40.5)	2 (1.2)	98 (58.3)	168		
SA	24(100.0)	0 (0.0)	0 (0.0)	24		
TAS	0 (0.0)	9 (56.3)	7 (43.8)	16		
VIC	0 (0.0)	0.0)	15(100.0)	15		
WA	121 (58.7)	61 (29.6)	24 (11.7)	206		
Total	626 (45.5)	379 (27.6)	370 (26.9)	1 375		

<sup>2</sup> State/Territory health authorities with Indigenous status recorded in more than 50% of diagnoses.

<sup>3</sup> Includes diagnoses in people whose Indigenous status was not reported.

# 3.3 Gonococcal isolates

Table 3.3.1 Number of gonococcal isolates referred to the Australian Gonococcal Surveillance Programme in 2001 by State/Territory, sex and site and antibiotic sensitivity

	State/Teri	ritory					
Sex and Site	NSW	NT	QLD	SA	VIC	WA	Total <sup>1</sup>
Males							
Urethra	1 040	270	408	61	539	222	2 550
Rectal	206	1	26	13	50	9	308
Pharynx	126	3	9	11	35	0	186
Other/not specified	34	47	16	7	22	2	130
Total	1 406	321	459	92	646	233	3 174
Females							
Cervix	87	129	153	30	44	62	507
Other/not specified	12	10	7	2	11	2	44
Total	99	139	160	32	55	64	551
Antibiotic sensitivity (%)							
PPNG	5.7	2.7	7.7	6.5	14.2	9.3	7.5
RR	21.5	2.9	17.3	9.7	13.4	6.9	15.3
LS	57.5	88.0	68.7	67.7	54.8	80.0	64.5
FS	15.3	6.4	6.3	16.1	17.6	3.8	12.6
Total <sup>1</sup>	1 505	460	619	124	701	297	3 725

<sup>1</sup> Total includes gonococcal isolates from ACT and TAS.

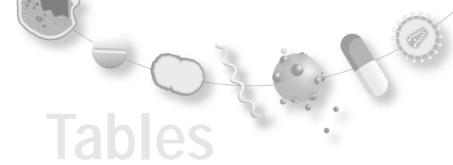
PPNG penicillinase producing N. gonorrhoeae, RR relatively resistant, LS less sensitive, FS fully sensitive

Source: Australian Gonococcal Surveillance Programme

Table 3.3.2 Number of gonococcal isolates in New South Wales referred to the Australian Gonococcal Surveillance Programme, 1997 – 2001, by sex, site and year

	Year of dia	gnosis				
Sex and Site	1997	1998	1999	2000	2001	
Males						
Urethra	706	1 023	1 133	892	1 040	
Rectal	72	158	195	182	206	
Pharynx	52	63	80	91	126	
Other/not specified	3	6	6	22	34	
Total	833	1 250	1 414	1 187	1 406	
Females						
Cervix	63	121	103	57	87	
Rectal	0	3	4	2	1	
Pharynx	6	12	4	5	4	
Other/not specified	0	0	3	4	7	
Total	69	136	114	68	99	
Total	902	1 386	1 528	1 255	1 505	

Source: Australian Gonococcal Surveillance Programme



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

# **Annual Surveillance Report**

4	Surveillance for HIV and viral hepatitis in sentinel populations	
4.1	HIV and hepatitis C seroprevalence among people who have injected drugs	
Table 4.1.1	Number of participating needle and syringe programs (NSP), 1997 – 2001, 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 4.1.2	Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1997 – 2001, and percent with HIV or hepatitis C antibody by year, history of injecting drug use, type of drug last injected among those reporting less than 3 years of drug injection, and sex	72
Table 4.1.3	Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, $1997 - 2001$ , and number with HIV or hepatitis C antibody by year, sexual orientation, age group and sex	74
4.2	Incidence of hepatitis C infection among people who have injected drugs	
Table 4.2.1	Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1997 – 2001	76
4.3	HIV infection among entrants into Australian prisons	
Table 4.3.1	Number of receptions into Australian prisons, 1997 – 2001, proportion tested for HIV antibody at reception and number (percent) with diagnosed HIV infection by year and Corrections jurisdiction of reception	77
4.4	HIV and hepatitis C seroprevalence among people seen at sexual health clinics	
Table 4.4.1	Number of people seen at selected metropolitan sexual health clinics in Australia, 1997 – 2001, 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	78
Table 4.4.2	Number of people seen at selected metropolitan sexual health clinics in Australia, 1997 – 2001, 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	80
Table 4.4.3	Number of people seen at selected metropolitan sexual health clinics in Australia, 1997 – 2001, 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	82
Table 4.4.4	Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and clinic	84
Table 4.4.5	Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and exposure category	85
Table 4.4.6	Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and age group	86
4.5	HIV, hepatitis B surface antigen and hepatitis C antibody in blood donors	
Table 4.5.1	Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody, 1985 – 2001, by State/Territory and years of donation	87
Table 4.5.2	Number of blood donors in Australia with HIV antibody, 1985 – 2001, 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	88
Table 4.5.3	Number of donations tested for hepatitis B surface antigen at blood services, number of donations positive for hepatitis B surface antigen and prevalence of hepatitis B surface antigen, by State/Territory and year of donation	89
Table 4.5.4	Number of donations tested for hepatitis C antibody at blood services, number of donations positive for hepatitis C antibody and prevalence of hepatitis C antibody, by State/Territory and year of donation	90

# 4 Surveillance for HIV and viral hepatitis in sentinel populations

# 4.1 HIV and hepatitis C seroprevalence among people who have injected drugs

Table 4.1.1 Number of participating needle and syringe programs (NSP), 1997 – 2001, 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

		Num	ber of clien	ts tested		Number wi	th	Number with				
State/	Number	(%	6 of clients	seen)	Н	IV antibody	(%)	hep	atitis C antil	oody (%)		
Territory	of NSP	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>		
NSW	7	384 (61)	254 (79)	639 (66)	6 (1.6)	1 (0.4)	7 (1.1)	259 (67)	176 (69)	436 (68)		
QLD	5	327 (72)	150 (76)	479 (74)	7 (2.1)	2 (1.3)	9 (1.9)	86 (26)	51 (34)	138 (29)		
VIC	4	294 (39)	141 (61)	436 (44)	4 (1.4)	1 (0.7)	5 (1.1)	140 (48)	81 (57)	221 (51)		
Other	8	182 (69)	76 (64)	260 (64)	7 (3.8)	0 (0.0)	7 (2.7)	84 (46)	35 (46)	120 (46)		
Total	24	1 187 (57)	621 (72)	1 814 (60)	24 (2.0)	4 (0.6)	28 (1.5)	569 (48)	343 (55)	915 (50)		
Prevalence <sup>2</sup>		-	-	_	2.0	0.5	1.5	52	57	54		

### 1998

		Num	ber of clien	ts tested		Number wi	th		Number v	vith
State/	Number	(%	6 of clients	seen)	Н	IV antibody	(%)	hep	atitis C anti	body (%)
Territory	of NSP	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
ACT	1	87 (73)	50 (85)	137 (77)	0 (0.0)	0 (0.0)	0 (0.0)	46 (53)	22 (44)	68 (50)
NSW	11	542 (32)	368 (48)	916 (37)	5 (0.9)	1 (0.3)	6 (0.7)	368 (68)	264 (72)	635 (69)
NT	2	65 (61)	22 (69)	87 (62)	4 (6.2)	0 (0.0)	4 (4.6)	28 (43)	6 (27)	34 (39)
QLD	5	472 (48)	196 (56)	670 (50)	4 (0.8)	1 (0.5)	5 (0.7)	114 (24)	76 (39)	192 (29)
SA	5	96 (44)	71 (50)	168 (46)	1 (1.0)	1 (1.4)	2 (1.2)	28 (29)	17 (24)	45 (27)
TAS	2	35 (59)	8 (47)	43 (52)	1 (2.9)	0 (0.0)	1 (2.3)	14 (40)	4 (50)	18 (42)
VIC	4	193 (30)	90 (45)	283 (35)	0 (0.0)	0 (0.0)	0 (0.0)	104 (54)	48 (53)	152 (54)
WA	2	76 (37)	48 (45)	126 (40)	1 (1.3)	1 (2.0)	2 (1.6)	32 (42)	19 (40)	52 (41)
Total	32	1 566 (40)	853 (51)	2 430 (42)	16 (1.0)	4 (0.5)	20 (0.8)	734 (47)	456 (53)	1 196 (49)
$\textbf{Prevalence}^{2}$		-	_	-	0.7	0.4	0.6	53	56	54

#### 1999

		Num	ber of clien	its tested		Number wi	th		Number v	with
State/	Number	(%	6 of clients	seen)	H	IIV antibody	(%)	h	epatitis C a	ntibody
Territory	of NSP	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
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)
Prevalence <sup>2</sup>		-	-	-	1.4	0.5	1.1	55	56	56

		Num	ber of clien	ts tested		Number wi	th		Number v	vith
State/	Number	(%	6 of clients	seen)	H	IIV antibody	(%)	h	epatitis C a	ntibody
Territory	of NSP	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
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)	249 (58)	719 (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)	869 (55)	2 523 (50)	21 (1.3)	0 (0.0)	22 (0.9)	859 (52)	481 (55)	1 348 (53)
Prevalence <sup>2</sup>		_	_	-	1.3	0.0	0.8	58	57	57

#### 2001

		Num	ber of clien	ts tested		Number wi	th		Number v	vith
State/	Number	(%	6 of clients	seen)	Н	IV antibody	(%)		<b>HCV</b> antibo	dy(%)
Territory	of NSP	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
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)
Adjusted <sup>2</sup>		_	-	-	1.2	0.6	0.8	63	66	64

<sup>1</sup> Totals include people whose sex was reported as transgender and people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

<sup>2</sup> Prevalence adjusted using the estimated prevalence of injecting drug use in each State/Territory.

<sup>3</sup> Additional sites surveyed in Queensland in 2001 were not included to facilitate comparison with previous years.

Table 4.1.2 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1997 – 2001, and percent with HIV or hepatitis C antibody by year, number of years of injecting drug use, type of drug last injected among those reporting less than 3 years of drug injection, and sex

History of		Numbe	r tested	Percent	with HIV a	antibody	Percent with he	patitis C a	ntibody
injecting drug use	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
Less than 3 years	193	126	320	1.0	0.0	0.6	12	16	13
3 to 5 years	234	132	366	0.8	0.0	0.5	21	36	26
6 to 10 years	250	143	393	2.4	0.7	1.8	36	58	44
11 or more years	477	212	694	2.7	1.4	2.3	82	59	84
Not reported	33	8	41	3.0	0.0	2.4	48	50	49
Total	1 187	621	1 814	2.0	0.6	1.5	48	55	50
Last drug injected among those re	eporting less t	han 3 year	s of drug i	injection					
Amphetamines	80	39	120	0.0	0.0	0.0	6	8	7
Heroin	80	70	150	1.3	0.0	0.7	21	20	21
Other opiates	3	7	10	0.0	0.0	0.0	0	29	10
Combination	10	7	17	10.0	0.0	5.9	0	14	6
Other/not reported	20	3	23	0.0	0.0	0.0	5	0	4
Total	193	126	320	1.0	0.0	0.6	12	16	13

#### 1998

History of		Numbe	r tested	Percent	with HIV a	ntibody	Percent with he	patitis C a	ntibody
injecting drug use	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
Less than 3 years	273	182	457	0.7	0.5	0.7	15	20	17
3 to 5 years	298	178	476	0.0	0.0	0.0	25	34	29
6 to 10 years	361	186	549	0.8	0.0	0.5	38	56	44
11 or more years	598	296	899	1.8	1.0	1.6	77	84	80
Not reported	36	11	49	0.0	0.0	0.0	50	55	53
Total	1 566	853	2 430	1.0	0.5	0.8	47	53	49
Last drug injected among thos	se reporting less t	han 3 year	s of drug injec	tion					
Amphetamines	96	59	156	2.1	1.7	1.9	4	7	5
Heroin	121	91	213	0.0	0.0	0.0	23	25	24
Other opiates	7	13	20	0.0	0.0	0.0	0	31	20
Combination	29	18	47	0.0	0.0	0.0	24	28	26
Other/not reported	20	1	21	0.0	0.0	0.0	10	0	10
Total	273	182	457	0.7	0.5	0.7	15	20	17

History of		Numbe	r tested	Percent	with HIV a	antibody	Percent with he	patitis C a	ntibody
injecting drug use	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
Less than 3 years	238	155	393	0.9	0.7	0.8	16	28	20
3 to 5 years	297	177	475	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
11 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
Last drug injected among those	e reporting less t	han 3 year	s of drug in	njection					
Amphetamines	110	57	167	1.8	1.7	1.8	4	9	5
Heroin	84	85	169	0.0	0.0	0.0	32	39	36
Other opiates	5	3	8	0.0	0.0	0.0	20	0	13
Combination	15	5	20	0.0	0.0	0.0	33	40	35
Other/not reported	24	5	29	0.0	0.0	0.0	0	50	7
Total	238	154	392	0.9	0.7	0.8	16	28	20

### 2000

History of		Numbe	rtested	Percent	with HIV a	ntibody	Percent with he	patitis C a	ntibody
injecting drug use	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
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	8.0	33	48	39
6 to 10 years	400	235	639	0.5	0.0	0.3	47	54	50
11 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
Last drug injected among those re	eporting less to	han 3 years	s of drug injec	tion					
Amphetamines	66	39	105	1.5	0.0	1.0	12	8	10
Heroin	97	69	166	3.1	0.0	1.8	35	35	35
Other opiates	4	2	6	0.0	0.0	0.0	25	0	17
Combination	20	12	32	0.0	0.0	0.0	40	58	47
Other/not reported	21	6	27	0.0	0.0	0.0	5	20	8
Total	208	128	336	1.9	0.0	1.2	25	28	26

### 2001

History of		Numbe	r tested	Percent	with HIV a	ntibody	Percent w	vith HCV a	ntibody
injecting drug use	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>	Male	Female	Total <sup>1</sup>
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
11 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
Last drug injected among those	reporting less to	han 3 year	s of drug injectio	n					
Amphetamines	86	59	146	3.5	0.0	2.1	14	27	19
Heroin	35	31	67	0.0	0.0	0.0	43	45	43
Other opiates	5	6	11	0.0	0.0	0.0	40	17	27
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

<sup>1</sup> Totals include people whose sex was reported as transgender and people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

Table 4.1.3 Number of injecting drug users seen at needle and syringe programs who were tested for HIV or hepatitis C antibody, 1997 – 2001, and number with HIV or hepatitis C antibody by year, sexual orientation, age group and sex

		Numbe	r tested	Percent v	with HIV a	ntibody	Percent with he	patitis C a	ntibody
Sexual orientation/Age group	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
Heterosexual	1 004	418	1 426	0.5	0.7	0.6	49	58	52
Bisexual	77	130	208	2.6	8.0	1.4	42	49	47
Homosexual	54	58	112	31.5	0.0	15.2	37	41	39
Not reported	52	15	68	0.0	0.0	0.0	46	93	57
Age group									
Less than 20 years	96	91	187	0.0	0.0	0.0	15	22	19
20 to 24 years	306	158	465	0.3	0.0	0.2	18	34	23
25 to 29 years	250	149	402	2.4	0.7	1.7	39	58	47
30 to 34 years	210	103	313	2.9	2.9	2.9	62	75	66
35+ years	324	120	446	3.4	0.0	2.5	84	87	84
Not reported	1	0	1	0.0	_	0.0	_	_	_
Total	1 187	621	1 814	2.0	0.6	1.5	48	55	50

#### 1998

		Numbe	r tested	Percent	with HIV a	ntibody	Percent with he	patitis C a	ntibody
Sexual orientation/Age group	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
Heterosexual	1 339	620	1 963	0.3	0.3	0.3	48	56	51
Bisexual	88	139	228	2.3	1.4	1.7	42	45	43
Homosexual	69	74	144	14.5	0.0	6.9	32	45	39
Not reported	70	20	95	0.0	0.0	0.0	47	60	51
Age group									
Less than 20 years	138	117	255	0.0	0.0	0.0	20	26	22
20 to 24 years	386	235	622	0.0	0.4	0.2	22	31	25
25 to 29 years	353	176	533	0.9	0.0	0.6	38	53	43
30 to 34 years	273	124	400	2.2	1.6	2.0	58	78	64
35+ years	414	201	618	1.7	0.5	1.3	80	81	81
Not reported	2	0	2	0.0	-	0.0	0	-	0
Total	1 566	853	2 430	1.0	0.5	8.0	47	53	49

### 1999

		Numbe	r tested	Percent v	with HIV a	ntibody	Percent with he	patitis C a	ntibody
Sexual orientation/Age group	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
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
Age group									
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
Total	1 527	840	2 378	1.7	1.0	1.4	49	52	50

		Numbe	r tested	Percent	with HIV a	ntibody	Percent with he	patitis C a	ntibody
Sexual orientation/Age group	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
Heterosexual	1 374	556	1 933	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
Age group									
Less than 20 years	111	111	222	0.0	0.0	0.0	24	44	34
20 to 24 years	326	235	564	0.3	0.0	0.2	34	46	39
25 to 29 years	389	189	579	1.5	0.0	1.0	43	48	45
30 to 34 years	295	143	442	2.0	0.0	1.4	56	72	61
35+ years	507	190	700	1.6	0.0	1.3	75	68	73
Not reported	11	1	16	0.0	0.0	0.0	45	-	50
Total	1 639	869	2 523	1.3	0.0	0.9	52	55	53

### 2001

		Numbe	r tested	Percent	with HIV a	ntibody	Percent w	ith HCV a	ntibody
Sexual orientation/Age group	Male	Female	Total <sup>1</sup>	Male	Female	Total	Male	Female	Total
Heterosexual	1 268	529	1 808	0.4	0.2	0.3	57	60	58
Bisexual	69	152	225	2.9	0.0	0.9	58	63	62
Homosexual	80	47	129	16.3	0.0	10.1	48	66	56
Not reported	123	50	180	0.0	0.0	0.0	50	58	53
Age group									
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
Total	1 540	778	2 342	1.3	0.1	0.9	56	61	58

<sup>1</sup> Totals include people whose sex was reported as transgender and people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs

# 4.2 Incidence of hepatitis C infection among injecting drug users

Table 4.2.1 Incidence of hepatitis C infection among injecting drug users seen at the Kirketon Road Centre, Sydney, 1997 – 2001

	Person years	Number	Incidence per	
Year/Age group	at risk	newly diagnosed	100 person years	
1997				
less than 20 years	23.3	6	25.7	
20 – 29 years	71.0	12	16.9	
30+ years	24.1	4	16.6	
Total	118.5	22	18.6	
1998				
less than 20 years	17.0	8	47.0	
20 – 29 years	64.6	14	21.7	
30+ years	19.7	2	10.2	
Total	101.3	24	23.6	
1999				
less than 20 years	12.6	4	31.7	
20 – 29 years	48.9	6	12.2	
30+ years	23.1	3	13.0	
Total	84.7	13	15.3	
2000				
less than 20 years	7.3	1	13.7	
20 – 29 years	32.0	9	28.1	
30+ years	20.4	2	9.8	
Total	59.7	12	20.1	
2001				
less than 20 years	4.8	2	41.8	
20 – 29 years	15.9	4	25.1	
30+ years	9.0	2	22.2	
Total	29.7	8	26.9	

Source: Kirketon Road Centre

# 4.3 National monitoring of HIV infection among entrants into Australian prisons

Table 4.3.1 Number of receptions into Australian prisons, 1997 – 2001, proportion tested for HIV antibody at reception and number (%) with diagnosed HIV infection by year and Corrections jurisdiction of reception

**State/Territory Corrections jurisdiction** 

Year of reception	ACT <sup>1</sup>	NSW	NT	QLD	SA	TAS	VIC <sup>2</sup>	WA	Total
1997									
Number of receptions	387	9 767	2 165	8 073	4 224	1 010	3 031	4 560	33 217
Number (%) male	339 (88)	8 995 (92)	1 954 (90)	7 196 (89)	3 789 (90)	945 (94)	3 031 (100)	3 969 (87)	30 218 (91)
Tested for HIV antibody (%)	2.8	44.5	100.0	100.0	85.6	64.9	64.2	44.7	78.7
% males tested	3.2	44.5	100.0	100.0	74.2	66.5	64.2	64.2	67.4
Number (%) with HIV	0 (0.0)	9 (0.2)	4 (0.2)	14 (0.2)	2 (0.1)	1 (0.2)	3 (0.2)	2 (0.1)	35 (0.1)
Number (%) male	0 (0.0)	9 (0.2)	4 (0.2)	11 (0.2)	2 (0.1)	1 (0.2)	3 (0.2)	2 (0.1)	32 (0.2)
1998									
Number of receptions	_	10 253	2 607	10 123	4 356	1 950	4 519	5 276	39 084
Number (%) male	-	9 304 (91)	2 284 (88)	9 074 (90)	3 883 (89)	1 881 (96)	4 519 (100)	4 594 (87)	35 539 (91)
Tested for HIV antibody (%)	_	41.0	100.0	100.0	28.3	70.9	59.7	40.0	60.7
% males tested	-	41.6	100.0	100.0	30.2	70.1	100.0	40.8	62.7
Number (%) with HIV	_	19 (0.5)	2 (0.1)	15 (0.2)	3 (0.5)	0 (0.0)	_	0 (0.0)	39 (0.2)
Number (%) male	-	19 (0.5)	2 (0.1)	14 (0.2)	3 (0.5)	0 (0.0)	-	0 (0.0)	38 (0.2)
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)

<sup>1</sup> The corrections centre in the ACT is a remand centre only. HIV antibody testing is carried out on prisoner request. Data not available for 1998, the first 6 months of 1999 and 2000, and for 2001.

Source: State/Territory Departments of Corrections

<sup>2</sup> Data available from VIC on males only in the interval 1 January – 30 September 1997,1 January – 31 December 1998 and 1 January 1999 – 30 June 1999. Information on number of HIV diagnoses not available in 1998. Data not available for 2000 and 2001.

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

Table 4.4.1 Number of people seen at selected metropolitan sexual health clinics in Australia<sup>1</sup>, 1997 – 2001, 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

Covuol	Health	Clinia
Sexual	ntailli	GIIIIIG

Vlales		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	Melbourne Sexual Health Centre, VIC	Total
1997	Seen	4 721	_	2 776	1 145	3 485	6 419	18 546
	Tested	2 491	-	1 214	687	2 766	4 303	11 461
	Newly diagnosed (%)	27 (1.1)	-	5 (0.4)	5 (0.7)	8 (0.3)	18 (0.4)	63 (0.5)
	Previously negative (%)	14 (1.0)	-	5 (0.7)	1 (0.9)	6 (0.4)	3 (0.2)	29 (0.3)
998	Seen	4 433	_	2 579	1 084	3 604	6 138	17 838
	Tested	2 152	-	1 057	665	2 823	3 747	10 444
	Newly diagnosed (%)	15 (0.7)	-	3 (0.3)	1 (0.1)	5 (0.2)	16 (0.4)	40 (0.4)
	Previously negative (%)	8 (0.7)	-	2 (0.3)	0 (0.0)	5 (0.3)	5 (0.3)	20 (0.2)
999	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)
000	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)
001	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)

# **Sexual Health Clinic**

Females		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	Melbourne Sexual Health Centre, VIC	Total
1997	Seen	3 177	_	1 733	1 198	2 321	4 574	13 003
	Tested	1 668	_	644	707	1 751	3 790	8 560
	Newly diagnosed (%)	4 (0.2)	-	0 (0.0)	0 (0.0)	1 (0.1)	3 (0.1)	8 (0.1)
	Previously negative (%)	2 (0.2)	_	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.03)
1998	Seen	2 915	-	1 632	1 363	2 475	4 732	13 117
	Tested	1 364	-	563	905	1 832	3 230	7 894
	Newly diagnosed (%)	5 (0.4)	-	1 (0.2)	0 (0.0)	1 (0.1)	1 (0.03)	8 (0.1)
	Previously negative (%)	2 (0.3)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.03)
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 (0.7)	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)
000	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)
001	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)

<sup>1</sup> Livingstone Road Sexual Health Centre joined the network in 1999.

Table 4.4.2 Number of people seen at selected metropolitan sexual health clinics in Australia, 1997 – 2001, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, HIV exposure category and year

### **HIV** exposure category

Males		Male homosexual contact <sup>1</sup>	Male homosexual contact¹, age < 25 years	Injecting drug use	Heterosexual contact overseas	Heterosexual contact in Australia	Other males	Total
1997	Seen	3 805	728	1 009	1 232	10 524	1 976	18 546
	Tested	2 568	561	744	789	6 526	834	11 461
	Newly diagnosed (%)	50 (1.9)	7 (1.2)	0 (0.0)	0 (0.0)	6 (0.09)	7 (0.8)	63 (0.5)
	Previously negative (%)	27 (0.8)	6 (1.0)	0 (0.0)	0 (0.0)	2 (0.07)	0 (0.0)	29 (0.3)
998	Seen	3 936	739	1 021	1 226	9 928	1 727	17 838
	Tested	2 448	561	753	707	5 868	668	10 444
	Newly diagnosed (%)	28 (1.1)	2 (0.4)	0 (0.0)	0 (0.0)	6 (0.10)	6 (0.9)	40 (0.4)
	Previously negative (%)	16 (0.5)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.07)	2 (0.5)	20 (0.2)
999	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)
000	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)
001	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)

# HIV exposure category

				Heterosexual	Heterosexual		
Females		Sex worker <sup>2</sup>	Injecting drug use	contact overseas	contact in Australia	Other females	Total
1997	Seen	991	684	820	8 869	1 639	13 003
	Tested	893	496	464	5 793	914	8 560
	Newly diagnosed (%)	1 (0.1)	1 (0.2)	2 (0.4)	3 (0.1)	1 (0.1)	8 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.2)	1 (0.4)	0 (0.0)	0 (0.0)	2 (0.03)
998	Seen	858	708	908	8 894	1 749	13 117
	Tested	700	521	493	5 397	783	7 894
	Newly diagnosed (%)	2 (0.3)	0 (0.0)	1 (0.2)	3 (0.1)	2 (0.3)	8 (0.10)
	Previously negative (%)	2 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.03)
999	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 (0.3)	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)
000	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)
001	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 (0.4)	8 (0.1)
	Previously negative (%)	1 (0.1)	0 (0.0)	1 (0.4)	1 (0.1)	0 (0.0)	3 (0.1)

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

<sup>2</sup> Includes females who also reported a history of injecting drug use.

**Table 4.4.3** Number of people seen at selected metropolitan sexual health clinics in Australia, 1997 – 2001, number tested for HIV antibody, number (percent) newly diagnosed with HIV infection and number (percent) newly diagnosed with HIV infection following a previous negative test by sex, age group and year

Age	group	(years)
-----	-------	---------

Males		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported	Total
1997	Seen	708	8 131	5 687	2 603	975	440	2	18 546
	Tested	478	5 387	3 354	1 466	547	229	0	11 461
	Newly diagnosed (%)	0 (0.0)	24 (0.4)	21 (0.6)	11(0.8)	5 (0.9)	2 (0.9)	_	63 (0.5)
	Previously negative (%)	0 (0.0)	14 (0.3)	11 (0.3)	2 (0.3)	1 (0.2)	1 (0.4)	-	29 (0.3)
1998	Seen	678	7 801	5 512	2 378	1 035	428	6	17 838
	Tested	449	5 006	3 016	1 219	529	222	3	10 444
	Newly diagnosed (%)	0 (0.0)	7 (0.1)	21 (0.7)	8 (0.7)	2 (0.4)	2 (0.9)	0 (0.0)	40 (0.4)
	Previously negative (%)	0 (0.0)	2 (0.04)	8 (0.2)	7 (0.5)	2 (0.3)	1 (0.4)	0 (0.0)	20 (0.2)
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)

Age group (	(years)
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Females		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Not reported	Total
1997	Seen	1 580	7 294	2 702	1 051	306	64	6	13 003
	Tested	931	4 929	1 791	697	183	29	0	8 560
	Newly diagnosed (%)	0 (0.0)	6 (0.1)	1 (0.06)	1 (0.2)	0 (0.0)	0 (0.0)	_	8 (0.1)
	Previously negative (%)	0 (0.0)	1 (0.02)	1 (0.05)	0 (0.0)	0 (0.0)	0 (0.0)	-	2 (0.03)
998	Seen	1 586	7 260	2 757	1 132	307	70	5	13 117
	Tested	870	4 453	1 664	707	175	25	0	7 894
	Newly diagnosed (%)	0 (0.0)	6 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	_	8 (0.1)
	Previously negative (%)	0 (0.0)	2 (0.04)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-	2 (0.03)
999	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)	0 (0.0)	3 (0.1)

Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly **Table 4.4.4** diagnosed with hepatitis C antibody, by sex and clinic

#### **Sexual Health Centre**

Males		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	Melbourne Sexual Health Centre, VIC	Total
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)
emales								
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)

**Table 4.4.5** Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and exposure category

#### **Exposure category**

			Male homosexual					
		Male homosexual	contact and injecting		Heterosexual	Heterosexual		
Males		contact	drug use	Injecting drug use	contact overseas	contact in Australia	Other males	Total
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)

#### **Exposure category**

				Heterosexual	Heterosexual		
Females		Sex worker <sup>1</sup>	Injecting drug use	contact overseas	contact in Australia	Other females	Total
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)

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

Table 4.4.6 Number of people seen in 2001 at selected metropolitan sexual health clinics in Australia, number tested for hepatitis C antibody and number (percent) newly diagnosed with hepatitis C antibody, by sex and age group

		Age group						
Males		13 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60+	Total <sup>1</sup>
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)
Females								
2001	Seen	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)

<sup>1</sup> Totals include 2 women whose age was not reported.

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

Table 4.5.1 Number of donations tested for HIV antibody at blood services, number of donations positive for HIV antibody and prevalence of HIV antibody', 1985 – 2001, by State/Territory and years of donation

		1985² – 1991			1992 – 1993			1994 – 1995	
State/Territory	Tests	Positive Pro	evalence	Tests	Positive Pre	evalence	Tests	Positive Pre	evalence
ACT	119 722	0	0.0	30 688	1	3.3	31 766	0	0.0
NSW	1 989 724	28	1.4	589 457	3	0.5	556 337	4	0.7
NT	59 517	0	0.0	18 854	0	0.0	17 621	0	0.0
QLD	1 102 387	11	1.0	383 396	4	1.0	349 888	7	2.0
SA	660 623	2	0.3	192 325	1	0.5	180 769	0	0.0
TAS	168 191	0	0.0	52 411	0	0.0	50 659	0	0.0
VIC	1 774 112	10	0.6	524 210	2	0.4	462 582	2	0.4
WA	503 697	5	1.0	161 823	1	0.6	159 153	0	0.0
Total	6 377 973	56	0.9	1 953 164	12	0.6	1 808 775	13	0.7

0		1996 – 1997			1998 – 1999			2000 – 2001 <sup>3</sup> Tests Positive Prevalence			All years		
State/Territory	Tests	Positive Pro	evalence	ence Tests	Positive Pro	Positive Prevalence		Positive Prevalence		Tests	Positive Pr	evalence	
ACT	4 377	0	0.0	9 080	0	0.0	_	_	-	195 633	1	0.5	
NSW	562 880	2	0.4	540 888	0	0.0	609 047	2	0.3	4 848 333	39	0.8	
NT	15 064	1	0.6	18 854	0	0.0	15 834	0	0.0	145 744	1	0.7	
QLD	313 840	1	0.3	381 527	4	1.0	386 060	3	0.8	2 917 098	30	1.0	
SA	162 406	1	0.6	175 752	2	1.1	176 018	0	0.0	1 547 893	6	0.4	
TAS	48 483	1	2.1	39 232	0	0.0	25 849	0	0.0	384 825	1	0.3	
VIC	410 157	2	0.5	475 212	1	0.2	505 937	0	0.0	4 152 210	17	0.4	
WA	169 445	1	0.6	192 380	2	1.0	196 489	1	0.5	1 382 987	10	0.7	
Total	1 686 652	9	0.5	1 832 925	9	0.5	1 915 234	6	0.3	15 574 723	105	0.7	

<sup>1</sup> Prevalence per 100 000 donations.

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

<sup>2</sup> From 1 May 1985.

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

Table 4.5.2 Number of blood donors in Australia with HIV antibody, 1985 – 2001, by HIV exposure category and sex, and number of new HIV infections in blood donors with a previous donation negative for HIV antibody by years of donation

	1985 -	- 1991	1992 -	- 1993	1994 -	- 1995	1996 -	- 1997	1998 -	- 1999	2000 -	2001		All year	rs
HIV exposure category	M	F	M	F	M	F	М	F	M	F	М	F	M	F	Total
Male homosexual contact	14¹	_	2	_	1	_	<b>2</b> ¹	_	0	_	1	_	20	_	20
Injecting drug use	1	0	0	0	0	0	1	0	1	0	1	0	4	0	4
Heterosexual contact	15	12	1	1	3	2	2	1	0	4	1	2	22	22	44
Person from a high prevalence country	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Receipt of blood/tissue	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Other	0	1	0	1	0	1	0	1	0	1	0	0	0	5	5
Undetermined	9	2	7	0	6	0	2	0	1	1	1	0	26	3	29
Total	40	16	10	2	10	3	7	2	2	7	4	2	73	32	105
New HIV infection <sup>2</sup>	18	8	2	0	3	4	1	1	1	1	1	2	27	15	42

<sup>1</sup> Includes one male who also reported a history of injecting drug use.

Source: Australian Red Cross Blood Service

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

Table 4.5.3 Number of donations tested for hepatitis B surface antigen at blood services, number of donations positive for hepatitis B surface antigen and prevalence of hepatitis B surface antigen<sup>1</sup>, by State/Territory and year of donation

		1998			1999			2000			2001	
State/Territory	Tests	Positive Pr	revalence	Tests	Positive Pr	evalence	Tests	Positive Pr	evalence	Tests	Positive Pr	evalence
ACT <sup>2</sup>	9 080	2	22.0	_	_	_	_	_	_	_	_	_
NSW	269 226	31	11.5	271 622	52	19.1	305 769	39	12.8	303 278	48	15.8
NT	9 140	2	21.9	9 714	0	0.0	8 715	2	22.9	7 119	3	42.1
QLD	192 138	29	15.1	189 468	26	13.7	195 940	22	11.2	190 120	21	11.0
SA	87 280	10	11.5	88 529	4	4.5	87 828	1	1.1	88 190	5	5.7
TAS <sup>3</sup>	26 219	0	0.0	13 013	0	0.0	_	_	_	25 849	2	7.7
VIC	233 181	35	15.0	242 543	27	11.1	258 014	24	9.3	247 923	35	14.1
WA	92 001	11	12.0	100 379	16	15.9	99 718	17	17.0	96 771	9	9.3
Total	918 265	120	13.1	915 268	125	13.7	955 984	105	11.0	959 250	123	12.8

<sup>1</sup> Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

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

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

Table 4.5.4 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

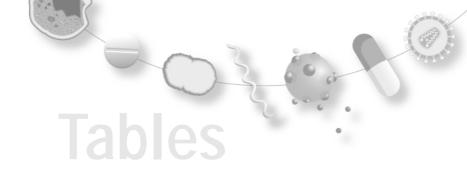
		1998			1999			2000			2001	
State/Territory	Tests	Positive	Prevalence	Tests	Positive Pr	evalence	Tests	Positive Pr	evalence	Tests	Positive Pr	evalence
ACT <sup>2</sup>	9 080	0	0.0	_	-	-	_	_	_	_	_	_
NSW	268 226	63	23.5	271 662	61	22.5	305 769	40	13.1	303 278	36	11.9
NT	9 140	1	10.9	9 714	0	0.0	8 715	6	68.8	7 119	1	14.0
QLD	192 254	85	44.3	189 392	53	28.0	195 940	41	20.9	190 120	49	25.8
SA	87 843	11	12.5	88 549	6	6.8	87 828	7	8.0	88 190	9	10.2
TAS <sup>3</sup>	26 219	5	19.1	13 013	0	0.0	_	-	-	25 849	6	23.2
VIC	234 721	50	21.4	243 126	27	11.1	258 014	39	15.1	247 923	45	18.2
WA	92 001	24	26.1	100 379	21	20.9	99 718	19	19.0	96 771	13	13.4
Total	919 484	239	26.0	915 835	168	18.3	955 984	152	15.9	959 250	159	15.6

<sup>1</sup> Prevalence per 100 000 donations.

Source: Australian Red Cross Blood Service

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

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



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

# **Annual Surveillance Report**

Risk behaviour	
Sexual, injecting and HIV antibody testing behaviour among gay and other homosexually active men	
Number of gay and other homosexually active men participating in the Periodic Surveys, $1997 - 2001$ , prevalence of anal intercourse by city and year of survey, partner type and condom use, and prevalence of injecting drug use and HIV antibody testing by city and year of survey	93
Sexual and injecting behaviour among people who have injected drugs	
Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1997 – 2001, 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 last month by year, sex, history of injecting drug use and last drug injected	94
Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1997 – 2001, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting sexual intercourse in the last month, and percent reporting condom use at last intercourse by year, sex, age group and sexual identity	96
	Sexual, injecting and HIV antibody testing behaviour among gay and other homosexually active men  Number of gay and other homosexually active men participating in the Periodic Surveys, 1997 – 2001, prevalence of anal intercourse by city and year of survey, partner type and condom use, and prevalence of injecting drug use and HIV antibody testing by city and year of survey  Sexual and injecting behaviour among people who have injected drugs  Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1997 – 2001, 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 last month by year, sex, history of injecting drug use and last drug injected  Number of injecting drug users participating in surveys carried out at needle and syringe programs (NSP), 1997 – 2001, percent reporting HIV and hepatitis C tests within the past twelve months, number reporting sexual intercourse in the last month, and percent reporting condom use at last intercourse by year, sex,

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# 5 Risk behaviour

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

Table 5.1.1 Number of gay and other homosexually active men participating in the Periodic Surveys, 1997 – 2001, prevalence of anal intercourse by city and year of survey, partner type and condom use, and prevalence of injecting drug use and HIV antibody testing by city and year of survey

			Sydney				Bris	bane			Melbourne			Adelaide	
	1997	1998	1999	2000	2001	1998	1999	2000	2001	1998	2000	2001	1998	1999	2001
Sample size	2 630	3 037	3 343	2 916	2 862	1 341	1 225	1 285	1 570	1 891	1 578	1 830	552	463	565
Anal intercourse with regular partners															
No regular partner	38.2	38.7	34.2	36.0	35.8	38.4	29.6	37.5	38.3	35.7	36.2	34.5	34.6	36.5	34.3
No anal intercourse	7.4	6.0	8.2	7.8	7.1	7.5	14.0	6.8	6.6	8.9	7.2	10.1	10.0	8.6	9.7
Always with condom	26.0	25.5	24.9	21.2	21.3	23.4	26.6	20.8	21.6	26.3	23.4	18.0	21.0	21.8	21.2
Any without condom	28.4	30.3	32.5	35.0	35.7	30.6	29.8	34.2	33.4	29.1	33.2	37.5	29.8	34.4	34.7
Anal intercourse with casual partners															
No casual partners	27.7	24.7	29.9	27.2	26.7	28.3	26.4	29.3	28.4	28.0	29.6	33.9	39.5	38.2	33.6
No anal intercourse	17.2	18.9	16.9	14.9	13.4	21.6	19.7	18.4	17.2	21.0	17.6	16.8	17.9	17.5	17.9
Always with condom	37.0	38.3	34.7	34.9	34.2	36.2	39.2	33.9	35.2	37.7	36.1	32.3	28.4	32.2	32.6
Any without condom	18.2	18.2	18.6	22.9	25.7	14.0	14.7	18.4	19.2	13.4	16.6	17.0	14.1	12.1	15.9
Injecting drug use¹	_	-	7.0	6.9	7.0	8.7	9.1	8.6	8.2	-	4.9	3.8	-	7.5	4.1
HIV antibody testing <sup>2</sup>	64.3	63.3	63.2	62.4	59.2	61.0	59.9	61.1	59.2	51.0	53.2	52.0	55.2	54.0	54.7

<sup>1</sup> Injecting drug use in the previous 6 months.

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

<sup>2</sup> HIV antibody testing in the previous 12 months among men not diagnosed with HIV infection.

# 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), 1997 – 2001, 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 last month by year, sex, history of injecting drug use (IDU) and last drug injected

### 1997

History of	-	Numbe articip			report ent HIV	•		nber re U last i	porting month		using a	
injecting drug use	M	F	T¹	М	F	T	M	F	T¹	M	F	T
Less than 3 years	193	126	320	46	63	53	171	122	294	11	24	16
3 to 5 years	234	132	366	69	77	72	212	123	335	16	20	18
6 to 10 years	250	143	393	72	76	74	236	136	372	17	20	18
11 or more years	477	212	694	71	71	71	446	196	646	15	16	15
Not reported	33	8	41	73	75	73	26	7	33	12	14	12
Last drug injected												
Heroin/opiates	647	359	1 008	71	74	72	601	337	939	18	22	20
Amphetamines	219	104	325	50	62	54	190	92	284	9	12	10
Combination	79	43	122	78	81	80	76	43	119	29	24	28
Other/not reported	242	115	359	66	70	68	224	112	338	5	16	9
Total <sup>1</sup>	1 187	621	1 814	67	72	68	1 091	584	1 680	15	19	17

#### 1998

History of		Numbe articip			report ent HIV	_		orting atitis C				porting month		using a	
injecting drug use	M	F	T¹	M	F	T	M	F	T	M	F	Τ¹	M	F	T
Less than 3 years	273	182	457	52	63	56	50	65	56	257	173	432	13	25	18
3 to 5 years	298	178	476	59	72	64	62	71	65	285	170	455	18	32	23
6 to 10 years	361	186	549	67	70	68	65	71	67	339	177	517	19	18	19
11 or more years	598	296	899	67	71	69	67	68	68	569	277	851	15	14	15
Not reported	36	11	49	58	55	55	50	82	55	28	7	35	20	14	19
Last drug injected															
Heroin/opiates	978	581	1 562	66	71	68	68	73	70	946	559	1 508	16	21	18
Amphetamines	354	155	510	52	62	55	47	55	49	315	137	453	9	12	10
Combination	155	88	247	68	67	68	68	64	69	152	83	239	29	29	29
Other/not reported	79	29	111	64	76	67	54	76	59	65	25	90	17	24	19
Total <sup>1</sup>	1 566	853	2 430	63	69	65	62	69	65	1 478	804	2 290	16	21	18

		Numbe			report	•		oorting				porting	%	using a	after
History of	р	articip	ants	rec	ent HIV	test	hep	oatitis C	test	IDI	J last ı	nonth	SO	meone	else
injecting drug use	M	F	T¹	M	F	T	M	F	T	M	F	T¹	M	F	<u>T</u>
Less than 3 years	238	154	392	52	66	57	52	67	58	218	145	363	20	25	22
3 to 5 years	297	178	476	59	68	62	61	68	64	271	170	442	18	27	21
6 to 10 years	360	211	575	65	66	66	66	70	68	333	195	532	26	22	25
11 or more years	591	280	873	65	66	65	65	70	67	551	261	814	20	21	20
Not reported	41	17	62	49	71	53	44	65	50	29	11	40	24	36	28
Last drug injected															
Heroin/opiates	896	522	1 424	67	69	68	67	73	69	848	500	1 354	20	22	21
Amphetamines	401	212	614	52	60	55	52	60	55	363	190	554	19	16	18
Combination	121	70	192	42	73	66	66	71	68	114	66	180	29	39	33
Other	109	36	148	67	64	47	51	64	53	77	26	103	15	15	15
Total <sup>1</sup>	1 527	840	2 378	61	67	63	62	69	65	1 402	782	2 191	21	23	22

# 2000

History of	-	Numbe articip			report	•		orting atitis C				porting month		using a meone	
injecting drug use	M	F	T¹	M	F	T	M	F	T	M	F	T¹	M	F	T
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	22	17
6 to 10 years	400	235	639	67	73	69	68	75	71	375	219	598	16	29	21
11 or more years	691	276	971	66	68	67	68	73	69	645	255	903	15	15	15
Not reported	37	17	59	51	53	49	57	47	51	28	13	41	11	23	15
Last drug injected															
Heroin/opiates	893	542	1 436	68	70	69	71	78	74	857	518	1 376	16	23	19
Amphetamines	373	162	538	55	58	56	57	58	57	332	141	476	8	14	9
Combination	182	73	256	73	75	74	77	78	78	170	68	239	24	32	26
Other	191	93	294	57	68	61	59	73	63	160	84	248	11	20	14
Total <sup>1</sup>	1 639	870	2 524	64	68	66	67	74	69	1 519	811	2 339	15	22	17

# 2001

	I	Numbe	er of	%	report	ing	% rep	orting	recent	Nun	iber re	porting	%	using a	ıfter
History of	р	articip	ants	rec	ent HIV	test	hep	atitis C	test	IDI	J last ı	nonth	SO	meone	else
injecting drug use	M	F	Τ¹	M	F	T	M	F	T	M	F	T¹	M	F	T
Less than 3 years	169	110	282	41	61	49	48	68	55	146	98	246	12	18	14
3 to 5 years	258	151	412	55	65	59	59	71	64	236	135	374	8	18	12
6 to 10 years	383	223	607	63	70	66	66	72	68	347	199	547	19	13	17
11 or more years	683	277	972	64	62	63	68	67	68	625	251	887	15	11	13
Not reported	47	17	69	58	53	58	49	47	49	25	8	34	7	10	8
Last drug injected															
Heroin	453	269	725	60	67	63	65	72	68	404	246	652	16	15	15
Amphetamines	591	263	865	54	60	56	57	63	59	536	239	785	12	9	11
Combination	166	78	244	74	74	74	75	78	76	148	70	218	22	23	23
Other/not reported	330	168	508	61	63	62	66	69	68	291	136	433	12	16	13
Total <sup>1</sup>	1 540	778	2 342	59	64	61	63	69	65	1 379	691	2 088	14	14	14

<sup>1</sup> Totals include 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), 1997 – 2001, 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, sex, age group and sexual identity

		Numb			6 report	-		eporting			nber re			sing con	
		partici			cent HIV	test		patitis (	; test			rcourse		st interc	ourse
	M	F	<b>T</b> ¹	M	F	T	M	F	T	M	F	T¹	M	F	T
Age group															
Less than 20 years	96	91	187	53	67	60	48	69	58	55	75	130	51	37	44
20 - 24 years	306	158	465	63	76	68	62	75	66	201	122	324	41	33	39
25 - 34 years	460	252	715	74	76	74	73	73	72	308	177	486	38	29	35
35+ years	324	120	446	64	63	63	67	67	67	173	72	246	33	25	31
Not reported	1	0	1	0	-	0	0	-	0	1	0	1	0	_	36
Sexual identity															
Heterosexual	1 004	418	1 426	66	72	68	66	72	68	637	307	945	36	29	34
Bisexual	77	130	208	69	71	70	69	69	69	48	101	150	57	38	46
Homosexual	54	58	112	72	71	71	76	72	74	26	29	55	53	20	36
Not reported	52	15	68	69	93	75	62	80	66	27	9	37	31	29	32
Total <sup>1</sup>	1 187	621	1 814	67	72	68	66	72	68	738	446	1 187	38	30	36

1998

		Numb	er of	9	% report	ing	% r	eporting	recent	Nur	nber re	porting	% us	sing con	doms
		particip	oants	re	cent HIV	test	he	patitis (	C test	sexi	ual inte	rcourse	at la	st interc	ourse
	M	F	T¹	M	F	T	M	F	T	M	F	T¹	M	F	T
Age group															
Less than 20 years	138	117	255	54	70	61	49	71	59	94	87	181	44	20	32
20 - 24 years	386	235	622	64	74	68	63	71	66	290	179	470	41	25	35
25 - 34 years	626	300	933	65	71	67	64	69	66	435	215	656	31	29	30
35+ years	414	201	618	62	61	61	63	64	63	220	106	328	25	21	23
Not reported	2	0	2	0	-	0	0	-	0	1	0	1	0	_	0
Sexual identity															
Heterosexual	1 339	620	1 963	63	68	65	63	69	65	885	424	1 313	31	23	28
Bisexual	88	139	228	69	73	71	68	73	71	62	99	162	48	38	43
Homosexual	69	74	144	65	70	68	65	66	66	53	52	106	53	17	36
Not reported	70	20	95	54	60	56	46	55	62	40	12	55	40	25	38
Total <sup>1</sup>	1 566	853	2 430	63	69	65	62	69	65	1 040	587	1 636	34	25	31

	Number of participants			% reporting recent HIV test		% r	eporting	recent	Nun	nber re	porting	% using condoms			
						hepatitis C test		sexual intercourse			at last intercourse				
	M	F	T¹	M	F	T	M	F	T	M	F	T	M	F	T
Age group															
Less than 20 years	130	114	244	48	67	57	50	75	62	93	92	185	55	41	48
20 - 24 years	324	201	527	59	70	63	61	68	64	249	170	420	38	26	33
25 - 34 years	665	331	1 000	64	68	66	64	68	66	449	243	696	29	31	30
35+ years	408	194	607	63	61	62	63	68	65	205	128	337	33	26	30
Sexual identity															
Heterosexual	1 242	553	1 795	60	63	61	62	66	63	787	419	1 206	32	25	30
Bisexual	104	187	297	66	77	74	61	77	71	74	148	227	38	49	45
Homosexual	70	52	124	74	75	75	61	77	69	50	33	84	60	15	42
Not reported	111	48	162	65	56	61	63	60	62	85	33	121	40	36	36
Total <sup>1</sup>	1 527	840	2 378	61	67	63	62	69	65	996	633	1 638	34	30	33

# 2000

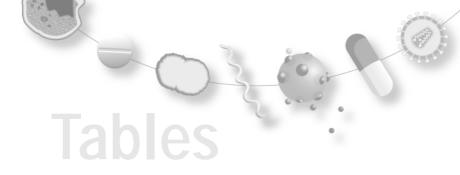
	Number of			9	% reporting			% reporting recent			Number reporting			% using condoms		
	participants		recent HIV test		hepatitis C test		sexual intercourse			at last intercourse						
	M	F	T¹	M	F	T	M	F	T	M	F	T	M	F	<u>T</u>	
Age group																
Less than 20 years	111	111	222	44	65	55	56	77	66	78	88	166	47	42	45	
20 - 24 years	330	235	569	68	76	72	71	77	74	235	183	421	44	35	41	
25 - 34 years	688	333	1 026	67	70	68	68	76	70	452	237	691	36	31	35	
35+ years	509	191	705	63	58	62	66	64	65	259	114	375	36	35	36	
Not reported	1	0	2	0	_	0	0	-	0	1	0	1	0	_	0	
Sexual identity																
Heterosexual	1 374	557	1 934	64	66	64	66	72	68	851	392	1 243	36	32	35	
Bisexual	77	196	275	75	82	80	71	84	81	53	148	203	51	46	47	
Homosexual	84	71	160	65	54	61	63	65	64	58	50	112	61	22	44	
Not reported	104	46	155	63	67	63	73	72	71	63	32	96	39	31	37	
Total <sup>1</sup>	1 639	870	2 524	64	68	66	67	74	69	1 025	622	1 654	39	34	37	

### 2001

	Number of Participants			% reporting recent HIV test		% reporting recent hepatitis C test		Number reporting sexual intercourse			% using condoms at last intercourse				
	M	F	T¹	M	F	Т	M	F	T	M	F	Τ¹	M	F	T
Age group															
Less than 20 years	92	74	168	46	77	60	53	74	63	65	58	125	57	28	45
20 - 24 years	289	191	484	57	68	62	60	73	66	208	151	362	41	30	37
25 – 34 years	628	307	940	64	64	64	65	68	66	435	243	683	33	25	30
35+ 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
Sexual identity															
Heterosexual	1 268	529	1 808	58	63	60	62	69	64	828	399	1 237	33	23	30
Bisexual	69	152	225	70	70	70	68	72	71	49	118	170	38	42	41
Homosexual	80	47	129	68	60	65	66	72	69	58	30	90	54	13	38
Not reported	123	50	180	58	66	61	69	58	66	79	38	122	37	28	35
Total¹	1 540	778	2 342	59	64	61	63	69	65	1 014	585	1 619	35	26	32

<sup>1</sup> Totals include people whose sex was not reported.

Source: Collaboration of Australian Needle and Syringe Programs



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

# **Annual Surveillance Report**

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, 2001 – 2005	101
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 2001 by stage of liver disease	101

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

# 6.1 Estimates of the number of living with HIV infection

Table 6.1.1 Estimated number of people living with HIV<sup>1</sup> by HIV disease stage, 2001 – 2005

### **Estimated number of people**

			CD4<500 cells/µl	
Year	Living with HIV	CD4>500 cells/µl	without AIDS	Living with AIDS <sup>2</sup>
2001	12 730	2 050	8 050	2 640
2002	13 090	2 040	8 330	2 720
2003	13 440	2 030	8 610	2 800
2004	13 790	2 020	8 890	2 880
2005	14 150	2 020	9 170	2 960

<sup>1</sup> Estimated numbers based on back-projection analyses, including people with diagnosed and undiagnosed HIV infection, and assuming 450 new infections per year since 2001.

Source: State/Territory health authorities

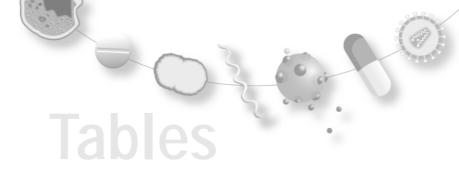
# 6.2 Estimates of the number of people living with hepatitis C infection

Table 6.2.1 Estimated number of people living with hepatitis C virus infection in 2001 by stage of liver disease

Characteristic	Number	(plausible range)
Hepatitis C virus prevalence in 2001	210 000	(157 000 – 252 000)
Exposed to hepatitis C virus but not chronically infected	53 000	(39 000 – 64 000)
Chronic hepatitis C infection with stage 0/1 liver disease	124 000	(92 000 – 149 000)
Chronic hepatitis C infection with stage 2/3 liver disease	27 000	(20 000 – 32 000)
Living with hepatitis C-related cirrhosis	6 500	(5 000 – 8 000)
During 2001		
Incident hepatitis C infection	16 000	(11 000 – 19 000)
Hepatitis C-related liver failure	175	(130 - 210)
Hepatitis C-related hepatocellular carcinoma	50	(40 - 60)

Source: Hepatitis C Virus Projections Working Group 2002

<sup>2</sup> In 2001, 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 2001.



2002

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

### **Annual Surveillance Report**

7 U	lptake of treatment for HIV and hepatitis C infection	
7.1 U	lptake of antiretroviral treatment for HIV infection	
Table 7.1.1 Ar	ntiretroviral treatment among people enrolled in the Australian HIV Observational Database in 2001	104
Pe	umber of gay and other homosexually active men with diagnosed HIV infection participating in the eriodic Surveys, 1997 – 2001, and percent reporting use of combination antiretroviral therapy for IV infection, by city and year of survey	105
	umber of people enrolled in Positive Health and percent reporting use of combination antiretroviral nerapy, by year and city	105
7.2 N	Nonitoring prescriptions for HIV treatments	
	umber of people prescribed antiretroviral treatment through the Highly Specialised Drugs (S100) Program y year and antiretroviral agent	106
	umber of people prescribed drugs for HIV/AIDS related conditions through the Highly Specialised Drugs 6100) Program, by year	106
7.3 N	Nonitoring prescriptions for hepatitis C treatments	
	umber of people prescribed drugs for hepatitis C infection through the Highly specialised Drugs (S100) rogram, by year	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 2001

Current antiretroviral treatment<sup>1</sup>

	Nama	Mana/Daubla	3+ (NRTI +/-	3+ (NRTI +	3+ (NNRTI +	Tata
	None	Mono/Double	PI, no NNRTI)	NNRTI , no PI)	PI, +/- NRTI)	Tota
Total	570 (28%)	125 (6%)	597 (30%)	603 (30%)	126 (6%)	2 021
Sex						
Male	543 (28%)	115 (6%)	566 (30%)	562 (29%)	125 (7%)	1 911
Female	27 (25%)	10 (9%)	31 (28%)	41 (37%)	1 (1%)	110
Age at enrolment (years)						
<30	89 (50%)	6 (3%)	32 (18%)	47 (26%)	4 (2%)	178
30 – 39	278 (33%)	48 (6%)	241 (28%)	240 (28%)	40 (5%)	847
40 – 49	144 (23%)	42 (7%)	194 (31%)	193 (31%)	50 (8%)	623
50+	59 (16%)	29 (8%)	130 (35%)	123 (33%)	32 (9%)	373
Exposure category						
Male homosexual contact	419 (28%)	94 (6%)	435 (29%)	444 (30%)	111 (7%)	1 503
Other/not reported	151 (29%)	31 (6%)	162 (31%)	159 (31%)	15 (3%)	518
Viral load (copies/ml)						
<400	171 (16%)	62 (6%)	347 (32%)	421 (39%)	71 (7%)	1 072
400 – 10 000	135 (34%)	29 (7%)	129 (32%)	76 (19%)	29 (7%)	398
10 000+	208 (47%)	31 (7%)	100 (23%)	83 (19%)	20 (4%)	442
Not reported	56	3	21	23	6	109
CD4+ count (cells/µl)						
<200	59 (23%)	24 (9%)	93 (36%)	60 (23%)	21 (8%)	257
200 – 500	184 (24%)	49 (6%)	254 (34%)	219 (29%)	51 (7%)	757
500+	265 (31%)	48 (6%)	219 (25%)	290 (33%)	44 (5%)	866
Not reported	62	4	31	34	10	141
AIDS prior to enrolment						
No	511 (31%)	94 (6%)	450 (27%)	507 (31%)	86 (5%)	1 648
Yes	59 (16%)	31 (8%)	147 (39%)	96 (26%)	40 (11%)	373
Previous treatment						
None	365 (81%)	9 (2%)	31 (7%)	42 (9%)	5 (1%)	452
Mono/Double	23 (14%)	86 (53%)	14 (9%)	30 (19%)	8 (5%)	161
3 + (NRTI +/- PI, not NNRTI)	89 (13%)	18 (3%)	481 (72%)	60 (9%)	19 (3%)	667
3 + (NRTI + NNRTI, not PI)	70 (12%)	7 (1%)	51 (9%)	452 (77%)	7 (1%)	587
3 + (PI + NNRTI, +/- NRTI)	23 (15%)	5 (3%)	20 (13%)	19 (12%)	87 (56%)	154

<sup>1</sup> 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, 1997 – 2001, and proportion reporting use of combination antiretroviral therapy for HIV infection, by city and year of survey

			Sydne	у			Bris	bane		N	/lelbour	ne	P	Adelaid	е
	1997	1998	1999	2000	2001	1998	1999	2000	2001	1998	2000	2001	1998	2000	2001
Sample size	265	606	602	504	453	112	100	77	90	138	151	153	34	34	33
Proportion reporting use of antiretroviral therapy	74.7	72.4	71.3	75.2	65.5	68.8	67.0	66.2	59.1	78.3	66.9	66.9	64.7	73.5	57.6

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

	Syd	ney	Melt	ourne
	1998 – 1999	2000 – 2001	1998 – 1999	2000 – 2001
Sample size	362	260	56	103
Proportion reporting use of any antiretroviral therapy	79.0	71.2	83.9	72.8
Treatment combinations				
Mono/Double	8.6	5.4	7.1	6.8
3+ (NRTI +/- PI, no NNRTI)	35.1	27.7	42.9	29.1
3+ (NRTI + NNRTI, no PI)	24.6	30.0	23.2	26.2
3+ (NNRTI + PI, no NRTI)	10.8	8.1	10.7	10.7

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	1997	1998	1999	2000	2001
Nucleoside analogue reverse transcriptase inhib	itors				
Abacavir	n/a	n/a	709	1 090	1 421
Didanosine	923	1 407	1 464	1 283	1 219
Lamivudine <sup>1</sup>	4 430	4 093	3 109	3 387	3 429
Stavudine	3 236	3 753	3 632	3 208	2 656
Zalcitabine	559	219	150	117	108
Zidovudine	2 431	1 644	720	525	579
Lamivudine & Zidovudine	n/a	220	1 120	1 640	1 910
Abacavir, Lamivudine & Zidovudine	n/a	n/a	n/a	n/a	177
Non-nucleoside analogue reverse transcriptase i	inhibitors				
Delavirdine	n/a	91	86	59	70
Efavirenz	n/a	n/a	710	1 020	1 119
Nevirapine	1 157	1 800	2 120	2 250	2 389
Protease inhibitors					
Indinavir	1 678	1 656	1 289	1 237	1 015
Nelfinavir	n/a	1 243	1 353	1 112	864
Ritonavir	787	734	621	1 001	942
Saquinavir	2 276	1 502	1 180	864	712
Total patients <sup>2</sup>	6 061	6 059	6 114	6 233	6 771
Total cost <sup>3</sup> (\$'000s)	58 865	66 360	67 623	69 321	67 085

<sup>1</sup> Includes patients treated with lamivudine for hepatitis B infection.

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

	1997	1998	1999	2000	2001
Azithromycin	89	271	285	255	200
Cidofovir	n/a	9	6	4	2
Clarithromycin	289	187	153	227	246
Doxorubicin	n/a	n/a	10	16	13
Foscarnet	31	27	13	7	8
Ganciclovir	160	106	79	145	188
Rifabutin	218	90	64	65	64
Valaciclovir	n/a	n/a	n/a	145	142
Total cost¹ (\$'000s)	3 399	2 700	2 125	2 528	3 615

<sup>1</sup> Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

Source: Highly Specialised Drugs (S100) Program

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.

<sup>3</sup> Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

## 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 year

Treatment	1997	1998	1999	2000	2001
Interferon Alfa 2A	402	445	340	183	72
Interferon Alfa 2B	617	782	876	1 195	640
Ribavirin & Interferon	n/a	n/a	269	412	930
Total cost¹ (\$'000s)	6 678	8 163	8 158	12 255	17 183

<sup>1</sup> Private hospital expenditure is included with public hospital expenditure, until 1 November 2000.

Source: Highly Specialised Drugs (S100) Program

**Annual Surveillance Report** 

## **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 was defined as HIV infection newly diagnosed within three months of AIDS diagnosis (Kaldor and French 1993). 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 (Australian National Council on AIDS 1994). AIDS defining illnesses were grouped, in Figure 37, as *Pneumocystis carinii* pneumonia (PCP) only, other opportunistic infections (OI) only, Kaposi's sarcoma (KS) only, other cancers only, central nervous system (CNS) conditions (HIV encephalopathy, toxoplasmosis and cryptococcosis) and other multiple illnesses.

#### Adjusting AIDS incidence for reporting delay

Reporting delay, the interval between the date of AIDS diagnosis and date of entry of the AIDS notification onto the *National AIDS Registry*, was calculated for AIDS cases diagnosed from 1 January 1999 to 31 December 2001 and notified by 31 March 2002. 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 1999 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 2001 and reported to the *National AIDS Registry* by 31 March 2002. Cases without any follow-up information after AIDS diagnosis were excluded from the analysis. Crude 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 2001, whichever came first. Survival rates at 1 and 2 years following AIDS diagnosis, and median survival, were estimated by the Kaplan-Meier method. No adjustment was made for the background mortality rate, due to the relatively young median age at AIDS. 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.

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 Vandenbelt 1993), carried out monitoring of HIV antibody testing.

#### Adjusting the number of HIV diagnoses for multiple reports

The number of diagnoses of HIV infection reported to the *National HIV 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 2002. 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 1992 – 2001, 93% 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 patient report of exposure to HIV

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:

- AIDS Epidemiology Group, Department of Preventive and Social Medicine, University of Otago Medical School, Dunedin, New Zealand. AIDS – New Zealand 2001; 48
- Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2001; 13(1)
- European Centre of the Epidemiological Monitoring of AIDS. *HIV/AIDS Surveillance in Europe:* Surveillance Report, mid-year report 2001. Saint-Maurice, Institut de Veille Sanitaire, 2002. No 65.
- Health Canada. HIV and AIDS in Canada. Surveillance report to December 31, 2001. Division of HIV/AIDS
   Epidemiology and Surveillance, Centre for Infectious Disease Prevention and Control, Health Canada, 2002
- Unlinked Anonymous Surveys Steering Group. Prevalence of HIV and hepatitis infections in the United Kingdom 2000. London: Department of Health 2001.
- WHO Western Pacific Region. Report of the Regional Director, 1 July 2000 30 June 2001
- WHO South-East Asia 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. The number of diagnosed cases by State/Territory, age group and sex was counted based on the date of diagnosis reported to the National Notifiable Diseases Surveillance System. Population rates of diagnoses of viral hepatitis were calculated for each State/Territory using yearly population estimates, provided by the Australian Bureau of Statistics.

Cases of hepatitis C infection classified as newly acquired infection, on the basis of hepatitis C antibody testing history and clinical presentation, were recorded in all health jurisdictions other than the Northern Territory and Queensland. Exposure to hepatitis C was categorised into a hierarchy of risks for infection. For example, if injecting drug use as well as a history of surgery, blood transfusion or tattoos was reported, exposure was categorised as injecting drug use. Exposure to hepatitis C was categorised as household transmission if 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 population estimates, provided by the Australian Bureau of Statistics (*Population Distribution, Indigenous Australians, 1996*).

#### 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 Commonwealth 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).

Table Source of notification of specific sexually transmissible infections to the National Notifiable Diseases Surveillance System by State/Territory

Diagnosis	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Gonorrhoea	Doctor Laboratory Hospital	Laboratory	Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor	Doctor Laboratory	Doctor Laboratory
Syphilis	Doctor Laboratory Hospital	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Doctor Laboratory
Chlamydia	Doctor Laboratory Hospital	Laboratory	Laboratory	Doctor Laboratory Hospital	Doctor Laboratory	Laboratory	Doctor Laboratory	Doctor

#### 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 2002.

Population rates of diagnosis of specific sexually transmissible infections were calculated by year and State/Territory of diagnosis using population estimates, provided by the Australian Bureau of Statistics (*Population Distribution, Indigenous Australians, 1996*).

#### 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 2002).

#### 4 Surveillance for HIV and viral hepatitis in sentinel populations

#### 4.1 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 (33 fixed sites and 2 mobile sites) and 2001 (36 sites and 2 mobile 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. Prevalence estimates for HIV and hepatitis C antibody were adjusted for the estimated prevalence of injecting drug use in each State/Territory jurisdiction (ANCAHRD 2002). Further information is available in MacDonald *et al* (1997 and 2000).

#### 4.2 Incidence of hepatitis C infection among people who have injected drugs

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

#### 4.3 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).

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

A network of selected metropolitan sexual health clinics provided annual 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 most recent HIV antibody test. Further information is available in McDonald *et al* (2001).

The network of clinics also provided tabulations summarising the number of people seen at the clinic in 2001, the number tested for hepatitis C antibody and the number newly diagnosed with hepatitis C antibody, broken down by sex, age group and exposure category.

#### 4.5 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, hepatitis B surface antigen 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 broader cross section of Sydney gay men than was available through earlier cohort studies. In February 1997, 1998, 1999, 2000 and 2001, 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 and Melbourne Gay Community Periodic Surveys commenced in 1998 using similar recruitment strategies to the Sydney surveys 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 21 needle and syringe programs in 1995, 20 in 1996, 24 in 1997, 32 in 1998, 34 in 1999, 35 sites in 2000 and 38 sites in 2001. 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/ $\mu$ l, a CD4+ cell count of less than 500/ $\mu$ l and AIDS free, or living with AIDS) between 2001 and 2005 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 2001 onwards. The rate of progression to a CD4+ cell count of fewer than 500/ $\mu$ 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/ $\mu$ l of 4 years, with 95% below 500/ $\mu$ l by 10 years. The number of AIDS diagnoses and deaths in 2000 were based on reported numbers of cases adjusted for reporting delays. From 2001 onwards, AIDS incidence and deaths were assumed to continue at the same rate as 2000.

#### 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 2001 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 2002, 25 participating clinical sites had enrolled a total of 2,021 people into the AHOD.

A detailed summary of treatments data from the AHOD is published in the *Australian HIV Observational Database Biannual Report* (NCHECR 2001). Further information is available in Australian HIV Observational Database (2001, 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, Melbourne and Sydney. Reported use of antiretroviral treatment was also monitored among people with HIV infection participating in Positive Health.

#### 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 Commonwealth Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Commonwealth 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 Commonwealth 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 93% in July – December 1997 to 79% in July – December 2001. 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 Alfa 2A, interferon Alfa 2B and ribavirin was monitored through the Highly Specialised Drugs (HSDs) Program, a joint Commonwealth Government and State/Territory mechanism for the supply of HSDs. The HSDs Program is coordinated federally by the Commonwealth Department of Health and Ageing. The number of people treated for hepatitis C infection has increased by 60% from 1997 to approximately 1,640 in 2001.

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**Annual Surveillance Report** 

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